



# Telford

Rural Polytechnic

*Te Whare Wanaka O Puerua*

# Investment Plan 2008-2010

# INTRODUCTION

1. Situated on a commercial farm in South Otago, Telford Rural Polytechnic (TRP) is a specialist polytechnic recognised for its applied approach to teaching its core competencies, agriculture, horticulture, forestry, equine studies, rural business, rural safety and rural fire and rescue, all at sub degree level. Owing to the specialised nature of its activity base, TRP has a unique role in supporting the rural sector as part of the Tertiary Education Network of Provision.
2. This Investment Plan is prepared in a time of unparalleled change in the sector and against a new policy framework. The Tertiary Education Commission (TEC) has planned a full review of agriculture provision across the tertiary sector to be completed by June 2008, as a result a significant change to this plan may be necessary for 2009/10. The Plan is in four parts.
  - **Context.** This part will outline the economic, social, environmental, political and technological factors that impact on rural education, consider the sector's needs both regionally and nationally, stakeholder needs, TRP's contribution to date, and TRP's alignment to the TES.
  - **Three-Year Outlook.** This part will look at how TRP will meet the requirements in the future including types of programme, delivery methods, new initiatives including demand, anticipated outcomes and areas needing development.
  - **Summary of Activity.** EFTS and funding for 2008-2010 are given.
  - **Key Performance Indicators.** KPI to achieve the shifts and demands discussed previously are developed

## CONTEXT

### ECONOMIC

3. **NZ Economy.** The New Zealand economy is strongly reliant on the land-based economy which includes the agricultural, horticultural, forestry and related land-based service sectors. These sectors:
  - use 52 percent of the total land area;
  - contribute an estimated 20 percent of real GDP, 65 percent of merchandise exports, and around 47 percent of total exports.
  - Employ 10.9 percent of the workforce, with agribusiness employment at 9.6 percent.<sup>1</sup> (MAF p2)

The land-based sector is a driving force for the NZ economy.

*The sectors are scientifically sophisticated, dynamic, market oriented and are underpinned by rapidly advancing biological sciences that drive productivity gains, product development and significant market and industry diversifications. They include some of New Zealand's largest companies and dominate our private sector R&D investment. They are a core part of New Zealand's system of innovation and have key intersects with the public science system.*

*In addition to their direct economic contribution, the agriculture and food sectors, and to some extent the forestry industry, have provided the discriminating local demand that has driven the growth of many New Zealand Agritech, manufacturing, processing machinery, technology and service businesses. There are also substantial synergies between New Zealand's agriculture, food and forestry industries and tourism. The agriculture and forestry industries are dependent on the sustainable development of land, water and biological resources. The sustainability of resource use, animal welfare and compliance with regulatory and other requirements relating to product safety and surety and the manner in which products are produced are critical to market access and competitive performance.<sup>2</sup> (MAF Brief p8)*

4. **Productivity.** Within New Zealand's primary sector giant leaps in productivity have been almost taken for granted – more lambs from fewer sheep and more milk from every cow. This has come as a result of technological change, effective targeting of investment, cost cutting and efficiency gains, and scale of

<sup>1</sup> MAF: "Contribution of the Land-based Primary Industries to New Zealand's Economic Growth."

<sup>2</sup> Extract MAF Briefing to Incoming Govt page 8 <http://www.maf.govt.nz/mafnet/publications/2005-briefing-for-incoming-ministers/overview-briefing.pdf>

economics through the expansion of the average size of farms and orchards (MAF p5).<sup>3</sup> For New Zealand's real per capita income level to be in the top half of the OECD, within 10 years, will take an average real growth rate of about 6%, substantially in excess of historical and projected growth rates, and will necessarily require transformation of the NZ economy (Skilling p1).<sup>4</sup> Skilling is clear that "we need the primary sector to start acting as more of the engine and the power house of economic growth in NZ. It's already pulling its weight in terms of productivity numbers...but in terms of really driving economic transformation, I think the primary sector has got a really significant role to play" (Country Wide).<sup>5</sup> The response to this challenge has been AgResearch's vision of doubling productivity by 2020 (AgResearch p3)<sup>6</sup> and Dairy 21 setting targets for the dairy industry by 2015 raising productivity by 50% and growth in milk solids by 35% (Dairy 21).<sup>7</sup> To achieve this, research by BERL<sup>8 9</sup> and NZIER<sup>10</sup> is predicting employment growth of 2.2-2.3%pa in the agricultural and horticultural sectors and 1.65-2.3% in the forestry sector. To achieve this transformation will require targeted investment, research, education and training at all levels. TRP's graduates, many of whom hold senior positions within the sector and own farms, play an active role in increasing productivity in the sector.

- 5. Regional Importance.** Many regions are heavily dependent on the primary sector for local employment and contribution to local economic and social success. This is evidenced in Regional Strategy documents where agriculture, forestry and horticulture are highlighted as key economic drivers; notably but not exclusively, Northland (forestry, dairy), Thames (dairy), Central Waikato (dairy, thoroughbred breeding), Waitomo-King Country (dairy, forestry), Manawatu (agriculture), Taupo (forestry, pastoral agriculture), West Bay of Plenty (agriculture, horticulture), Rotorua (forestry), East Bay of Plenty (agriculture, horticulture, forestry), Taranaki (dairy), Hawkes Bay (horticulture, forestry) – the list is endless and includes nearly every region in the country. Manawatu (agriculture, horticulture), Wairarapa (agriculture, forestry, horticulture), West Coast (dairy, forestry), Canterbury (agriculture, intensive land use), Otago (agriculture, horticulture, forestry), Southland (farming, forestry, horticulture).

## SOCIAL

- 6. Corporate Ownership.** The demographics of land-based industries are changing. Increasingly land based operations are becoming multi-site and more technologically complex. Corporate ownership has resulted in an increase in farm and orchard sizes<sup>11</sup>. The increased scale contributes to efficiencies. Larger units require employment and business skills not normally required for smaller groups and not normally associated with the rural sector; this is exemplified by Meat & Wool's Skills and Education Strategy<sup>12</sup> including HR and employer training as key, and the Dairy Industry focusing its improvements on managers and their skills many of which are common to most industries. Another major shift is the continuing large numbers of dairy conversions with the increased labour demands and potential environmental impact which comes from this.
- 7. Life Style Blocks.** The increasing desire of urban populations to have a better life/work balance is increasing the number of lifestyle blocks which by 2004 accounted for 753,000 ha.<sup>13</sup> Lifestylers usually produce from the land, however are not solely dedicated to production. Lifestylers need basic skills to meet their individual needs. The small size of the blocks negates any potential efficiency for contractors, such as shearers and wool-handlers, and hence to meet this demand will require more contractor employees: this in turn will require additional training.
- 8. Rural Communities.** In the 19<sup>th</sup> Century most New Zealanders lived in the rural areas. By 2001 New Zealand was one of the most heavily urbanised countries in the world with 85.7% of population living in

<sup>3</sup> MAF: "Contribution of the Land-based Primary Industries to New Zealand's Economic Growth."

<sup>4</sup> Skilling (2001). "The Pursuit of Growth: Some thoughts on Transforming the NZ Economy."

<sup>5</sup> Country Wide (1 June 2007). "New Golden Age for Agriculture."

<sup>6</sup> AgResearch (March 2006). "New 2020 Science AgResearch's vision for a prosperous New Zealand."

<sup>7</sup> Dairy 21 – "Strategic Framework for Dairy Farming's Future 2005-2015."

<sup>8</sup> BERL (2004) (2006) "Employment and Training in Horticulture 2005-2011". NZ Horticulture ITO.

<sup>9</sup> BERL (March 2006) "Employment Projections by Occupation and Industry 2005-2011." TANZ.

<sup>10</sup> NZIER (April 2000) "Research to support the ITO Leadership Role." ITF.

<sup>11</sup> MAF: "Contribution of the Land-based Primary Industries to New Zealand's Economic Growth."

<sup>12</sup> Meat & Wool NZ March (2007). Skills and Education.

<sup>13</sup> MAF. [http://www.maf.govt.nz/statistics/primary\\_industries/small\\_holdings/discussion.htm](http://www.maf.govt.nz/statistics/primary_industries/small_holdings/discussion.htm)

urban areas<sup>14</sup>. The movement of young away from the rural areas is resulting in an aging of the rural workforce. This is reducing the traditional pool of labour at a time “*projected labour demand under a number of scenarios has indicated that under current trends and taking into consideration only a moderate rate of milk supply growth (2.75% overall) the demand for employees will increase by 25% by 2015.*” (Dairy InSight p4)<sup>15</sup>. The potential shortage is being addressed sector wide through demonstrating the opportunity to follow worthwhile career pathways; however these are dependent on the individuals acquiring knowledge and skills. In spite of the trend towards corporate ownership about 58% of all people in the agriculture sector are self employed or unpaid family workers and growth in the sector is driven by these self-employed individuals operating small to medium sized businesses. (BERL p25)<sup>16</sup>. These small firms are largely absent from thinking about economic transformation or dismissed as unimportant while we focus narrowly on finding the next generation of winners. As a result we fail to connect with those who make up the bulk of the economy.<sup>17</sup> This poses issues for training as there are genuine opportunity cost associated with attending training, for example during the milking and feeding out seasons: training must follow the learner and be delivered in a manner that meets their needs if life long learning is to be encouraged. The upshot is that the demand for education and skills provision at all levels is increasing.

**9. Social Pressures.** Social conventions guide communities on what is acceptable and beneficial to the people within them. Urbanisation, carbon credits, water availability, water quality, high country tenure review and access are all concerns to rural communities. The urban community is becoming more aware of the impact of farming on the environment. To meet these pressures and growth sustainable development is the key. *It’s easy to suppose that “sustainability” means ring-fencing parts of the environment and preventing its commercial development. In fact, sustainability – at least as it relates to farming – is built on the notion that good science and good farming practices can allow us to extract greater value from the land while also reducing our impact on the environment. The term “sustainable development” is increasingly used to describe this approach.*” (AgResearch p16).<sup>18</sup> Education and skills provision is needed to raise awareness of these issues and to provide the ability to meet the demands they place on the rural industries.

**10. Consumer Awareness.** NZ has a range of industries which require “transport” in the chain and this includes tourism as well as most industries associated with the rural sector. Other industries such as IT are not dependent to any extent on “transport.” This dependence leaves NZ very exposed in the ever more environmentally friendly society we live in, hence we need to be cognisant of the impacts this may have. Food Miles is an expression for the concept that the mileage of food before it reaches the consumer is an indicator for the environmental impact of the food. This concept is part of the broader issue of sustainability. Food Miles has been used in UK for a reason not to buy NZ produce and if such an attitude continues New Zealand’s ability to earn export dollars will be seriously questioned. However *“New Zealand has greater production efficiency in many food commodities compared to the UK. For example New Zealand agriculture tends to apply less fertiliser (which require large amounts of energy to produce and cause significant CO2 emissions) and animals are able to graze year round outside eating grass instead of large quantities of brought-in feed such as concentrates. In the case of dairy and sheep meat production NZ is by far more energy efficient, even including the transport cost, than the UK, twice as efficient in the case of dairy, and four times as efficient in case of sheep meat. In the case of apples NZ is more energy efficient even though the energy embodied in capital items and other inputs data was not available for the UK.”* (Food Miles).<sup>19</sup> The increasing consumer awareness makes it essential that the rural industries move to adopting environmentally sustainable policies and this may require a balance with the desire to increase production and productivity.

## POLITICAL AND REGULATORY

<sup>14</sup> Bayley A, Goodyear R(2002). An Urban/Rural Profile. Stats NZ. <http://www.stats.govt.nz/urban-rural-profiles/default/htm>

<sup>15</sup> Dairy InSight (2007). Dairy Industry Strategy for its People and their Capability

<sup>16</sup> BERL (September 2003). “Self Employment and Small Business Succession.”

<sup>17</sup> [http://maseynews.masey.ac.nz/2007/press\\_relaeses/08-02-07.htm](http://maseynews.masey.ac.nz/2007/press_relaeses/08-02-07.htm)

<sup>18</sup> AgResearch (March 2006). “Now 2020 Science AgResearch’s vision for a prosperous New Zealand.

<sup>19</sup> ^Food Miles – Comparative Energy/Emissions Performance of New Zealand’s Agriculture Industry.

([http://www.lincoln.ac.nz/story\\_images/2328\\_RR285\\_s6508.pdf](http://www.lincoln.ac.nz/story_images/2328_RR285_s6508.pdf))

**11. Environment Issues** – The image of New Zealand is of green and productive farmland, tall pine plantations and blue lakes and stream. Major sources of environmental pressure including agriculture increased between 1996 and 2006 and whilst the intensity of fertiliser and pesticide use remains on the low side for OECD countries the period saw significant increases with consequent growth in pressures on the environment (OECD p1)<sup>20</sup>. The Ministry of Environment includes as environmental issues for New Zealand hazardous substances, water, land and sustainable industry. Dairy farming in particular is increasing its use of synthetic fertilisers, nitrogen based, as a means to improve productivity, which is in turn causing waterways to become nutrient rich and degraded. The Farming community needs to take steps which include:<sup>21</sup>

- Better nutrient management
- Reduction of runoff especially faecal contamination into waterways
- Improved pest control and management of hazardous waste
- Identify and fill knowledge gaps to support the ongoing dialogue and to promote strategies to address changing needs.

The recently introduced “Agrichemical Handler Certificate” and Fonterra’s policy on fencing off waterways are examples of actions being taken to alleviate the issues.

**12. Health and Safety.** *“On average; four people die each day from injury and about 3,800 people are injured badly enough to seek medical help.”* (Ruth Dyson 2003).<sup>22</sup> The vision for the NZ Injury Prevention Strategy is *“A Safe New Zealand, becoming injury free.”* The strategy includes a number of goals and objectives which include:

- Objective 1: Raise awareness and commitment to injury prevention.
- Objective 2: Strengthen Injury Prevention capacity and capability by promoting the development of personal skills in injury prevention within the wide community through the education sector, workplaces, public campaigns and community-based programmes.
- Objective 7: Develop and implement effective injury prevention interventions
- Objective 8: Ensure appropriate resource levels for injury prevention.

Farming and Forestry have traditionally been relatively unsafe work environments. In the two years to January 2007 Department of Labour recorded 44 work related deaths in the agricultural sector and 9 in the forestry sector compared to two in mining, 15 in construction and 45 in the industrial/commercial sector. Of the agriculture sector, all but 9, involved a vehicle. Department of Labour Acting Chief Advisory Safe and Healthy Workplaces Bob Hill states *“current farm safety initiatives are already making “substantial” progress in raising industry awareness in health and safety issues, however a lot more needs to be done to translate awareness to practice.”*<sup>23</sup> 50% of farmers have made Health and Safety changes in the last year with 38% of changes being in response to a training course attended by someone on the farm: FarmSafe has 85% brand recognition with farmers with 75% stating FarmSafe programmes were useful.<sup>24</sup> FarmSafe is arguably the best vehicle to deliver relevant training to the rural sector.

## TECHNOLOGY

**13.** Since the late 1980s, more farmers have adopted best practice approaches to farming. The challenge is to innovate and move the production frontier to a new level by using new technology in a sustainable way, for example consumers want to know where the meat comes from, hence bar-coding and tracking measures have been introduced. Technology transfer and best practice farming are key to sustainability.

**14.** New technologies are regularly introduced, for example robotic milking. The outcomes of new technology tend to be transferred to the farmer through field days, normally by the supplier. It is important that any new technology is assessed for the requirement for new skills or techniques and TRP is well placed through its links with the sector to contribute to this.

<sup>20</sup> OECD (2007). Environmental Performance Review of New Zealand (2007)

<sup>21</sup> Parliamentary Commissioner for the Environment (Oct 2004). Growing for Good

<sup>22</sup> Ministry for ACC (2003): “NZ Injury Prevention Strategy”

<sup>23</sup> Safeguard Issue 307 (12 February 2007)

<sup>24</sup> Research NZ (June 2007) “Agriculture Sector Survey”

15. It is vital that research is assessed to ascertain educational and skill needs, this is normally carried out by the extension arms of the dairy and sheep industries. TRP through funding from Dairy InSight is developing better systems for dairy farming in the South Otago region and the results will be shared with others through Field Days. TRP is associated with MWNZ and DINZ monitor farms and with Sustainable Farming Fund projects associated with Bio-controls, Environment and Water quality. TRP regularly demonstrates good practice in farming and in vocational on-farm training. TRP includes environmental best practice and sustainability in all training and has specific programmes aimed at these issues for new and existing farmers.
16. Whilst TRP is not a research agency, research is being carried out at a low level. Where possible TRP will support research carried out by research agencies, and the farm has been used by Lincoln and Seed/Tree suppliers for such purposes.

## RURAL NEEDS

17. *“The land-based sector has been considered a declining, “old economy” sector. This perception has detrimental impacts on the sector because it makes it more difficult to encourage young and skilled people into careers in it, as illustrated by declining tertiary enrolments in agricultural and horticultural sciences”.* (MAF p4)<sup>25</sup> This historical perception is changing. The recent improvement to the profitability of the deer industry and the improved payouts in the dairy industry combined with the increasing capital value of land is encouraging young persons to enter the sector for lifelong employment.
18. **National Skill Needs.** It is clear from National Bodies that basic technical skills are needed to be maintained and improved, however the driver for continued increase in performance is improved management skills. The Dairy Industry prefers a national programme with a lead provider, not necessarily the same lead provider for all aspects. This view is supported by other national bodies. TRP is not able to meet the requirements in regard to management skills, however is able to meet the requirements for basic employment skills. For a large number the basic skills and experience provided by TRP are a prerequisite before they can move on to developing higher level skills. Specific needs have been identified for:
- **Agriculture.** The dairy industry in the form of Dexcel highlights the need for training in Animal Management, Animal Welfare, Animal Nutrition, Animal Reproduction, Pasture Management, Soil Fertility and Stocking Rates. Meat and Wool has specified the need for Shearing and Wool Handling<sup>26</sup> where much of the training occurs through the ITO, however there is a group of low knowledge new entrants estimated at 900pa needing high levels of initial training. This training is at Levels 1 and 2 and utilises Telford Certificates and Short Courses as entry level training since entry level training was removed from the NQF Framework some years ago. The Dexcel Draft “Human Capability Programme of Work” (April 2007) identifies FarmSafe delivered programmes as important for the training of the workforce.
  - **Horticulture.** The BERL<sup>27</sup> report would suggest that provision of “*Plant Production and Supply*” is core to most activities. High demand for pest control, parks and gardens (including arboriculture) garden retailing and landscaping (Production and Supply) exists.
  - **Rural Sector.** There is also a requirement to meet the increasing demands of the Equine industries, Rural Fire and Rescue/Rural Safety groups and to maintain the existing forestry/wood processing that industry needs.
19. **Regional Skill Needs.** The skill needs have been extracted from ITP “Statement of Tertiary Education Needs” and page numbers refer to the paper provided by that ITP.
- **NORTHLAND.** Tertiary needs include Health and Safety, Agriculture, Horticulture and General Services – landscaping (North Tec p24)
  - **AUCKLAND** – Possible increase for Equine, Horticulture and Dairy (MIT p29). Agriculture employment decreasing (UNITEC p20).

<sup>25</sup> Contribution of the Land-based Primary Industries to New Zealand’s Economic Growth. www.maf.govt.nz

<sup>26</sup> Meat and Wool (24 April 2006) – Letter to TEC.

<sup>27</sup> BERL (2004) (2006) “Employment and Training in Horticulture 2005-2011”. NZ Horticulture ITO

- WAIKATO – Low levels of provision include Agriculture (WINTEC p29) with Waikato being heavily influenced by the primary industries (WINTEC p16).
- BAY OF PLENTY – Agriculture and Forestry growth with Forestry, Agriculture, Horticulture key employers (Waiariki p 16, 18, 19). Enhancement in Horticulture teaching provision required (BOPP p14) and short Health and Safety and Compliance programmes needed (BOPP p16).
- GISBORNE – (Extracted from Draft Strategic Plan – statement not available). Agriculture, Horticulture and Forestry including regulatory, core skills require additional provision of training (Tairāwhiti p20).
- HAWKES BAY – Economy heavily dependent on primary production with pressures on sustainability and environmental practices (EIT p5).
- TARANAKI – Dairy is the third major industry, however there is a decline in Agriculture workers (WITT p16).
- WANGANUI/MANAWATU – Decreases within the wider Manawatu region in Forestry and Agriculture (UCOL p25) but still the greatest number of industries (UCOL p27). For Wanganui the only area of increase is Agriculture with related environmental studies (UCOL p37). Gaps include Agriculture training provision(UCOL p44).
- WELLINGTON – Needs exist in HSNO and Environmental Safety (Whiteria/Weltec P26). Primary industries are the mainstay of Wairarapa (UCOL p10).
- NELSON/MARLBOROUGH/TASMAN – Need for diverse training in Horticulture and Agriculture and requires provision of training pathways (NMIT p39).
- WEST COAST – Unmet basic (L2/L3) skills in Agriculture including Health and Safety, Tractors etc. (TPP p8).
- CANTERBURY – Needs for skill development identified for Horticulture and Dairy (CPIT p28) and Equine (CPIT p30). Needs include Agriculture and related services (Aoraki p9).
- OTAGO – Shortages in Agriculture and Horticulture (OP p45).
- SOUTHLAND – Priorities for provision includes practical training/short courses for seasonal employees, Practical Farm Management and skill gaps exist in Agriculture and Fire and Rescue (SIT p19/20).

**20. Education for Economic Transformation.** The critical element in achieving economic transformation is an increased supply of people with specific human capital in the targeted sectors. This targeting applies to vocational training where specific training institutes support clusters and there is a need for highly specialised educational facilities to provide a steady stream of skilled individuals, such training institutes are commonly co-located with the firms<sup>28</sup>. NZ has institutions which meet the requirements including, Lincoln University, Telford Rural Polytechnic and Taratahi Agricultural Training Institute (PTE); the challenge is how best to utilise them.

## LEARNER NEEDS

**21. Programme Delivery.** Land-Based Industries’ training needs have been well researched and overwhelmingly result in the same conclusions as to how student learning should be structured to be effective. The AgITO has summarised research and found:

- **Time and location** - Ideally, training should be close to home or work and delivered so it does not conflict with essential farming operations e.g. milking, lambing or harvesting: for example in the dairy industry, between 9am and 3pm to get around milking and predominantly in winter
- **Mode of Delivery** - Many workers in land-based industry are kinaesthetic learners so practical activities are essential for effective learning to take place. At lower levels of training, literacy and numeracy often require additional tutor support.
- **Course length** - Limiting time away from the business is essential for all employees and self-employed. Longer courses are best delivered as block courses of no more than 2-3 days or as a series of part-time sessions. Flexibility to meet a variety of delivery formats is essential. *“The industry needs access to intensive short course learning opportunities with low barriers to access and high specificity to the practical needs of local farmers.”* (Dairy InSight p19).<sup>29</sup>

<sup>28</sup> Skilling (2001). “The Pursuit of Growth: Some thoughts on Transforming the NZ Economy.”

<sup>29</sup> Dairy InSight (2007). Dairy Industry Strategy for its People and their Capability

- **Qualifications** - These are seen as more important for employees but less so for the self-employed, who focus more on the relevance and quality of a programmes' content. (Meat & Wool).<sup>30</sup> Research showed 45% of employers and 33% of employees believe qualifications are unimportant and with <30% believing they are very important.
- **Learning Pathways.** These are not seen as important by farmers; more important is the access to training for the identified "skill" needed to improve outcomes. Progression exists through qualifications from level 1 through to level 7 both for on and off job training. The challenge is to ensure individuals know it exists and where to go.

## 22. Learner Types.

Participants in land-based industry can be classified into a number of groups:

- **New entrants** are very diverse in terms of their level of knowledge, skills, experience, life skills and attitude to work. Each of these groups has different learning needs and capabilities; consequently, a variety of training options are required to meet industry needs. They can be grouped as following:
  - Very low levels of knowledge, industry skills and experience, limited life skills and motivation, unsure of opportunities and future in industry e.g. some school leavers and unemployed. Some will find employment but most would benefit from full-time training programmes.
  - Low to moderate levels of knowledge, industry skills and experience, a variety of life skills, good motivation as many expect to become self employed owner /operators e.g. family members of land-based business operators or career change adults. They require industry skills at all levels through paid time or full time study.
  - High academic knowledge with limited practical experience and industry skills, reasonable life skills and high motivations e.g. university graduates. They require very defined industry skills that may be at Levels 2 and 3.
- **Employees with some experience** -their needs can generally be met by ITO training programmes (where their industry is catered for). Those looking to move into higher skilled positions or self-employment are very focused and specific, in terms of the qualifications and skills that they require, regardless of academic level of the qualification.
- **Self-employed** make up the majority of land-based industry workers. They are the drivers of industry production and innovation. They require skills that 'add value' to their businesses, irrespective of the academic level of the skill. However, they cannot take time out from their businesses for long-term full-time on-campus programmes. To effectively support learning amongst the self employed, funding needs to be available for a wide range of qualifications, covering a range of levels.

## 23. Qualification Progression.

Three factors mitigate against qualification progression within the rural community.

- The perception that qualifications are not important – rather a transferable certified skill is required.
- Short bursts of modular training meets the time availability for rural industries; this time being weather driven. This reduces the ability to complete a full qualification, already seen as not being needed.
- Most general employment qualifications are at Levels 1-3 on the NQF, hence making progression, within TRP, almost impossible.
  - **Forestry:** All above Level 3 must be "in work" and are often highly specialised "log making." Changes by FITEC to the National Qualifications in Forestry will preclude ITPs offering Level 4 and higher skills training, with progression within the ITP sector being restricted to Forest Business. FITEC has committed itself to working with a few ITPs, including TRP, to deliver training throughout NZ.
  - **Equine:** All general qualifications needed for employment including basic coaching are at Level 3. The Equine ITO restricts training providers to specific programmes through controlling accreditation; hence Level 4 will be restricted by Equine ITO to a small number of providers.
  - **Agriculture:** General qualifications are Levels 2-3 with Level 4 teaching being more specialist, i.e. artificial insemination, production management, rural servicing. Those in the Wool Handling/Shearing industry have few entry training opportunities with Level 3 being more than adequate for all in the industry. The AgITO is changing all qualifications to better suit on-job training. This will reduce the opportunity for ITPs to deliver Level 4+ qualifications.
  - **Fire & Rescue:** Good progressions Levels 2 to 5 but for a mainly "volunteer" rural service there is little need for a full qualification.

<sup>30</sup> Meat & Wool NZ (March 2007). Skills and Education.

**24. Value for Money/Economies of Scale.** Small class sizes and dispersed learning requires efficiencies to be in place to make delivery, in the way demanded by industry, affordable. Such efficiencies include centralised administration, central material development and consistent delivery and assessment. In addition labour movement within parts to the sector makes it critical to have centralised learning. Delivery of many programmes is regionally very small and hence not economic to deliver on a regional basis.

## TELFORD

**25. The Objects of the Institute set out by Parliament are:**

- a) *To provide such students...with a basic training in the arts and skills of farming.*
- b) *To conduct experiments and research into the breeding, handling and management of sheep, cattle and pigs and into the growing, control, and management of pastures and crops. (Telford Act Third Schedule).<sup>31</sup>*

TRP now sees its mission as being a national leader in the delivery of quality applied education and training for the primary sector and the local leader for community education."<sup>32</sup>

**26. Overview.** Situated in South Otago, TRP is a specialised Polytechnic focussed on providing the best learning to meet the needs of the primary sector. With over 42 years of service, TRP is recognised for its applied approach to teaching in its core competencies; agriculture including apiculture, forestry and wood manufacturing, horticulture, equine study, rural fire and rescue, rural safety and rural business, all at sub degree level. Owing to the specialised nature of its activity base, TRP has a unique role to play in the national educational and economic system, and accepts the responsibilities for the creation and application of knowledge in several areas crucial for the sustainable development of New Zealand. TRP has strong and active links with its communities, particularly those involved in the land-based industries, which reinforce the importance of its applied approach. Further, the teaching delivery style instils in graduates an ability to apply knowledge, in addition to achieving. As a result, TRP's staff and graduates are outward looking, creative individuals who achieve in regional and national contexts and environments. The Polytechnic is proud of its contributions to bettering the lives of thousands of individuals through education, and by extension the rural communities in which they live and work. To achieve this TRP remains committed to a range of primary sector programmes at certificate and diploma level, utilising a variety of teaching methodologies in. Details of the mix of provision are at Appendix 1.

**27. Telford Performance.** TRP has maintained close relationships with industry bodies for many years and has aimed to meet an identified demand anywhere in NZ quickly through strategically relevant, industry approved, quality programmes delivered in a manner demanded by the sector in an appropriate manner to the type of learner. In this way TRP has contributed to the economic, social, environmental and political imperatives placed on the sector and to the needs identified nationally and regionally. This has involved identifying local demand through a network of regional coordinators and national demand through close relationships with industry, developing a large suite of qualifications and short courses to meet the demand, delivering close to a persons work/home, using industry specialists and providing literacy/numeracy support on all courses. The result has been that TRP and the FarmSafe Brand are now recognised by industry as critical to the ongoing delivery of relevant quality training and education.

**28. Industry Support.** TRPs delivery of vocational training was supported by business in 2006 (TRP)<sup>33</sup> and the Cretney Study funded by QRPF to Terms of Reference supplied by the TEC (Cretney)<sup>34</sup>. Industry bodies have stated clearly that they support the notion of specialism and that changes to provision must not have an adverse impact on existing provision. It is clear that TRP is seen as having unique capabilities and competencies to deliver relative training to those in the rural sector. This specialism of provision supports Skilling's premise that economic transformation needs specific training institutes co-located with a firm (farm). The 2007 Federated Farmers Annual Conference formally endorsed TRP's

<sup>31</sup> NZ Government (1963) "Telford Farming Training Institute 1963 No. 5 Private."

<sup>32</sup> Telford Rural Polytechnic Annual Report 2006

<sup>33</sup> TRP (2006) ITP Business Links 2005 Final Report

<sup>34</sup> Cretney (2006) Best Meeting Agriculture Training Needs in New Zealand

role. *“The Federated Farmers National Council support and endorse Telford Rural Polytechnic as an on going provider of sub degree education for the agricultural sector of New Zealand, and that growth in equivalent full-time students (EFTS) should not be hindered by Government Policy.”*

- 29. TES/STEP Alignment.** TRP is a specialist provider of sub-degree vocational training to the rural sector. Delivery is predominantly at Levels 1-3, the levels required for skilled employment in an industry where there is little recognition of qualifications and little incentive for higher levels of learning. However TRP delivers programmes at Levels 4 and 5 both on campus and off campus through correspondence and through face to face part time study and is developing new programmes predominantly in the areas of environmental and sustainable farming. Students in full time study have a pathway into University and ITO training. A large proportion of the training is aimed at meeting the skill needs of those in work in a manner they demand, with only a small proportion delivered in a Full Time manner to those aged 25 and below. TRP sees that it can best contribute to the TES in 4 areas.
- **Increasing Educational Success.** TRP aims to encourage life long learning of those in work through the increased provision of higher level specifically orientated qualifications and encouragement of those undergoing skills training to continue such training into other important skills areas. TRP aims to target young persons into Full Time training through improved alignment with schools and provision of pathways into higher levels of study.
  - **Increasing Literacy and Numeracy.** TRP already assesses all residential full time students for their needs and then provides support both in class and for assignments. For those undergoing skills training delivered in periods of short duration a support person is available if required. TRP aims to embed literacy and numeracy in all Level 1-3 qualifications by 2010 and have trained persons delivering those components of the qualification.
  - **Improved network of provision through collaboration.** TRP has protocols with many ITP under which TRP’s specialist delivery contributes to the regional need. TRP commits to enhancing such protocols to support the network of provision.
  - **Regulatory Harmonisation.** TRP is committed to the NQF and to deliver Unit Standard based training. It will ensure that local qualifications embed NQF Qualifications and that those completing them are appropriately recognised. The next 3 years will bring changes both regulatory and in policy and could include harmonisation between ITF and ITPNZ rules such as, short courses with limited programme delivery. TRP commits itself to adapting its provision to meet these changes within a realistic timeframe.

## THREE YEAR OUTLOOK

- 30.** The challenge facing TRP is matching the activities presently being undertaken with the expectations set out in the TES/STEP which is aimed at higher-level qualification, participation and completion. Industry skill needs are predominantly at Levels 1-3 and TRP will concentrate its delivery at this level however will take steps to increase participation in lifelong learning and to encourage higher level learning.
- 31. Historical Provision.** Provision over the last two years does not indicate that demand has been met. The need to complete regulatory requirements has taken precedence over other upskilling needs. In addition caps on growth by programme and out of area provision have not allowed demand to be met and this demand has not been taken up by regional ITPs. Specifically for TRP these caps have resulted in:
- No ability to progress students to higher qualifications. ie Level 2 completions in 2005 were not able to do Level 3 in 2006
  - Lack of ability to meet Shearing/Wool handling needs.
  - Clients with limited time for training have concentrated on regulatory requirements rather than training to improve production.

**It is clear from National and Regional analysis that there is an increased demand for basic skills training in Agriculture, Horticulture, and Forestry and associated rural industries as well as people management training.**

**32. New Initiatives in 2008.** A major initiative is working with TPK mentors to encourage and support Maori into agriculture. The first stage will be to set up an Agricultural Contracting Centre at Dannevirke. A second major innovation is working with farmers, to investigate the potential to reactivate Flock House. The requirement for more farm based Smedley type training is a desired outcome for East Coast Farmers.<sup>35</sup> These two initiatives are farm based and contribute to meeting this demand. The Flock house initiative involves general low level agriculture whilst the Dannevirke initiative will be specific in agriculture contracting. It is not possible to develop fully these initiatives until the TEC lead agricultural review is completed, however work will continue in developing the programmes needed for agricultural contracting.

**33. Demand 2008.** The mix of provision moving forward does not move out of the core areas outlined previously. Details of the provision are at Appendix 1 where delivery and levels of qualification are discussed in more detail. Demand for particular programmes changes regularly, however there are trends.

- **Decrease.** The requirement for Growsafe/Agrichemical Handler training has decreased considerably as the regulation required persons to be qualified by 1 January 2007. We are now seeing a return to training aimed at improving skills and hence production.
- **Increase.**
  - **Shearing/Wool Handling.** To meet the demands of 900 lowly educated entries into the sector and to “catch up” with a back log of training it is estimated that 148 EFTS are required. This industry group tends to move into a second career after 10-15 years and skills training is required to enable them to transition smoothly into small farm ownership: the training for this is NC Agriculture L2 and Certificate in Small Block Farming and estimated at 78 EFTS. Whilst TRP intends to increase its provision in this area the total demand cannot be met at the level of funding for 2008.
  - **Agriculture/General.** Industry groups and the ITP Regional Skills Analysis have highlighted that there is a shortage of delivery in basic skills for all sectors in the rural community. The demand is for modular training and the challenge is to encourage qualification completions.
  - **FarmSafe.** The demand for FarmSafe Brand delivered training is between 1000-1100 EFTS. Within the total the programme mix changes to meet regional demand. Farmsafe Brand acknowledges that it must prioritise demand within the capped environment and will concentrate on encouraging returnees rather than access. FarmSafe is cognisant of high opportunity costs, however has fees for some programmes.
  - **On-Campus.** Initial enrolments would suggest a further growth in on-campus pre-trade training. With improved Dairy/Deer payouts the rural industries are now being seen as a decent career with real opportunities for success, hence full time courses are more attractive to school leavers and are more affordable to their parents.

#### 34. 2006 Outline Provision (SCF Funded less ACE)

Item	On Campus Direct Delivery	National			Farmsafe Brand Direct Delivery
		Correspondence	Contracted	Direct Delivery	
Subject/ Provision 2006	Agriculture General Shearing	Agriculture (19)	Ag General Shearing Stock & Stn Smedley Compliance		All 1,071
	Horticulture Production		Hort Organics Hort Product.	Hort Organics Arboriculture	
	Forestry	Forestry		Forestry	
	Apiculture	Apiculture		Apiculture	
	Equine	Equine	Equine		
	Fire & Rescue			Fire & Resc	
	Rural Business/Mgt				
	ACE				
LEVEL	1-3 except L5 Diploma Rural Bus L4 Farm Mgt L4 QBR	1-3 except L4 Ag	L1-3 except L4 Equine L4 Organics L4 Smedley	1-3 except L4 Arboriculture	1-3

<sup>35</sup> Nimmo-Bell (May 2007). “Increasing the Potential of the Sheep and Beef Sector”.

			L4 Stock/Stn (11)		
HOW	<ul style="list-style-type: none"> <li>• FT Residential Qual</li> <li>• Face to Face</li> <li>• On farm</li> <li>• PT Modular in Agriculture and Fire &amp; Rescue</li> </ul>	<ul style="list-style-type: none"> <li>• Hard copy</li> <li>• Correspondence</li> <li>• Qualifications</li> <li>• In Work</li> </ul>	<ul style="list-style-type: none"> <li>• PT mixed</li> <li>• Qual/Modular</li> <li>• In Work</li> <li>• Face to Face</li> </ul>	<ul style="list-style-type: none"> <li>• PT Qual</li> <li>• Except F &amp; R (PT Modular)</li> <li>• In Work</li> <li>• Face to Face</li> </ul>	<ul style="list-style-type: none"> <li>• PT Modular</li> <li>• In Work</li> <li>• Face to Face</li> </ul>
FACTORS	<ul style="list-style-type: none"> <li>• Targeted &lt;20 age</li> <li>• Local Qual incorp. NC</li> <li>• Small class size</li> <li>• Intensive study</li> <li>• High literacy support needed</li> </ul>	<ul style="list-style-type: none"> <li>• No age target</li> <li>• Local Qual.</li> </ul>	<ul style="list-style-type: none"> <li>• Age. 40+ except Smedley</li> <li>• NC or local incorp. NC</li> <li>• Shearing multi regional labour movement</li> <li>• Small class sizes</li> </ul>	<ul style="list-style-type: none"> <li>• In work av. Age 40+</li> <li>• Local Qual incorp. NC</li> <li>• Small class sizes</li> </ul>	<ul style="list-style-type: none"> <li>• True Network Market</li> <li>• 85% Brand Recognition</li> <li>• Highly dispersed</li> <li>• Small class sizes</li> <li>• Industry specialist tutors</li> <li>• High level literacy support needed</li> <li>• High course pass &gt;90%</li> <li>• National consistency</li> <li>• Strong national network dedicated to meeting local demands</li> <li>• Modules 8-15 credits</li> </ul>
ISSUES	<ul style="list-style-type: none"> <li>• High cost provision</li> <li>• Low retention as FT move into work</li> <li>• Progression to higher learning</li> </ul>	<ul style="list-style-type: none"> <li>• Low Qual pass</li> </ul>	<ul style="list-style-type: none"> <li>• Low Qual pass rates for those in work notably in Horticulture</li> </ul>	<ul style="list-style-type: none"> <li>• Qual pass rate variable but generally reasonable</li> <li>• Good progression in Arboriculture to higher levels</li> <li>• High modular study pass rates</li> </ul>	<ul style="list-style-type: none"> <li>• Who pays compliance?</li> <li>• Validation of learning</li> <li>• Fees versus opportunity costs</li> <li>• Number doing more modules</li> <li>• Relative high cost delivery</li> </ul>

**35. Other Delivery.** TRP provides training in other areas. International students are not targeted, those that enrol do so through word of mouth: TRP is a signatory of the Code of Practice for Pastoral Care of International Students.

- **ITO.** Off job training is provided in support of FITEC, NZ Horticulture ITO, Agriculture ITO and TRP is presently in discussions with FRSITO. TRP has become the NZ Horticulture ITO Centre for Landscape Training.
- **STAR.** TRP provides both hard copy support (79 schools) and Video Conferencing Support (35 schools). TRP is the ITP of choice for rural studies support of 30% of Secondary Schools and this is increasing as more schools adopt Video Conferencing. The programmes were developed as part of the Curriculum Alignment Project. Holiday camps are utilised for practical skills. 21<sup>st</sup> Century Schools strongly supports this work and through working with the school principals TRP will identify ways to improve support for high school rural studies classes.
- **ACE.** TRP supports the communities of Tapanui through using Blue Mountain College as a centre and the development of “women’s” self-esteem through Positively Clutha Women, a Clutha District Initiative. The outcomes include introduction to learning, new skills, and social cohesion.

**36. Impact on Land Based Sector/Community.** Many outcomes are long term and outside the ability of a TEI to measure. In addition some outcomes are not solely as a result of education and training. TRP delivery of training will contribute to and result in a number of outcomes.

a) Economic

- Higher productivity of the work force leading to higher outputs by the rural sector. This is measured by MAF, DOL and Statistics NZ. TRP graduates are an integral part of the farming community

- Lower skills shortage, measured by DoL.
- b) Social
- ACE leads to greater social cohesion and improved foundation skills. At the size of TRP's contribution this will be hard to measure.
  - Safer Rural Community. The Farmsafe Brand aims to increase safe practices. This can be measured by
    - ACC research into injuries and attitude changes.
    - FarmSafe validation of the take up of learning in the workplace.
- c) Educational
- Increased rates of life long learning evidenced by the number continuing training either with TRP, another TEO or ITO. This can only be monitored by the TEC.
  - Increased provision and completion at higher levels. Aimed to increase from 1.6% in 2006 to >10% in 2010.
  - Improved qualification completions through better support services. This may require RPL from other TEI for the majority part time students.

## SUMMARY OF ACTIVITY

### TELFORD RURAL POLYTECHNIC INVESTMENT PLAN 2008-10 ADDENDUM ONE dated 22 November 2007

This Addendum reflects changes to the Investment plan submitted in September 2007 which have occurred as a result of dialogue with the TEC and other ITPs. It replaces paragraphs 37 and 38 of the submitted plan

**37. SAC Student Numbers by NQF Level.** Industry stated demand is considerably higher than that below. TRP acknowledges that the sector is capped and that higher priorities may exist and that there is to be a review of agriculture training in 2008. The table below restricts itself to 1299 EFTS.

2008	Agriculture			Horticulture Incl. Arb		Forestry		Equine		Fire & Rescue		TOTAL 1299
	On-Cmps	F/Safe	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	
L1-2	25	489	44						5			563
L3	143		235	8	95	6	21	25	61	10	30	634
L4	6		6		35		9	10				66
L5	19		7		10							36
ACE												As per 07

2009	Agriculture			Horticulture Incl. Arb		Forestry		Equine		Fire & Rescue		TOTAL 1299
	On-Cmps	F/Safe	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	
L1-2	25	489	44						5			563
L3	143		235	8	95	6	21	25	61	10	30	634
L4	6		6		35		9	10				66
L5	19		7		10							36

2010	Agriculture			Horticulture Incl. Arb		Forestry		Equine		Fire & Rescue		TOTAL 1299
	On-Cmps	F/Safe	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	On-Cmps	Other	
L1-2	25	489	44						5			563
L3	143		235	8	95	6	21	25	61	10	30	634
L4	6		6		35		9	10				66
L5	19		7		10							36

Notes:

**ACE.** TRP supports delivery in South Otago to meet identified shortfalls in that provided through the High Schools.

**Distribution.** Delivery may not exactly match demand projections with some movement between domains expected, especially within agriculture and horticulture where demand fluctuates.

### 38. TEC Funding

#### a) SAC – gst exclusive

Funding Category	2008		2009		2010	
	EFTS	Amount \$	EFTS	Amount \$	EFTS	Amount \$
Category A	267.5	1,163,358	267.5	1,163,358	267.5	1,163,358
Category L	1,031.5	7,714,589	1,031.5	7,714,589	1,031.5	7,714,589
<b>TOTAL ex gst</b>		<b>\$8,877,946</b>		<b>\$8,877,946</b>		<b>\$8,877,946</b>

**Notes:**

**Higher Levels** of provision bring in more Category A management units hence a shift from Category L to Category A over time

**Rates:** 2009/10 at 2008 funding rates

#### b) TEOC Component – gst exclusive

Item	2008	2009	2010
Top Slice	\$2,599,683	\$2,599,683	\$2,599,683
Base Grant	\$ 222,222	\$222,222	\$222,222
Business links	\$ 100,016	\$100,016	\$100,016
PBRF (change)	\$ 88,889		
Equity Loading	\$ 37,151	\$37,151	\$37,151
Supporting Change (1)			
<b>TOTAL ex gst</b>	<b>\$3,047,961</b>	<b>\$2,959,072</b>	<b>\$2,959,072</b>

**Notes**

(1)Supporting Change: TRP is in discussion with TEC Investment manager suitable QRP Stage 2 and 3 applications in the areas of:

- Improving in-house capability to work with land based sector on future training needs
- Improved in house capacity and capability in the areas of environmental and sustainability in regard to land use.
- Improved capacity and capability in regard to literacy and numeracy delivery at Levels 1-3.

c) **ACE. Non Plan Funding** \$79,204 ex gst

## KEY PERFORMANCE INDICATORS

**Objective 1.** To maximise TRP's support to the rural community through utilising its specialist skills in support of the Network of Provision via collaboration with industry and other TEOs.

**Alignment with TES.**

1. Increase the achievement of Advanced Trade ... to meet regional and national needs. Through
  - Identifying pathways to ITO and University training aimed at increasing progression rates to higher learning.
  - Industry being involved in qualification design
2. Increasing education success for young New Zealanders. Through:
  - Collaborative arrangements with ITPs, Wananga and Universities to strengthen network of provision.
  - Identifying national needs through strong industry relationships
  - Identifying technology transfer opportunities
  - Supporting High School rural studies

Indicators	2008	2009	2010
Increased collaboration and cooperation with ITP and Wananga to enhance Network of Provision. (7 in 2006)	<ul style="list-style-type: none"> <li>• Protocols developed which enhance network of provision with all appropriate ITP/Wananga by 2009.</li> </ul>		
Develop relationships with Lincoln University and Massey University. (nil in 2006)	<ul style="list-style-type: none"> <li>• Progression pathways to be formalised by 2009.</li> <li>• Identify technology transfer opportunities</li> </ul>		
Improved working relationships with relevant ITOs. (No formal relationships in 2006)	<ul style="list-style-type: none"> <li>• Progression to higher levels of learning identified</li> <li>• To ensure consistency of resources and suitability of National Qualifications for ITP delivery.</li> </ul>		
Enhanced Industry stakeholder consultation . ( No formal relationships in 2006)	<ul style="list-style-type: none"> <li>• Industry approve TRP programmes</li> <li>• To identify national industry needs</li> <li>• To identify technology transfer opportunities</li> </ul>		
Enhanced support for High School Rural Studies ( 91 High Schools on STAR correspondence contracts in 2006)	<ul style="list-style-type: none"> <li>• Additional High Schools utilise TRP video conferencing in lieu of correspondence</li> <li>• Introduce professional development programmes for High School teachers moving into rural studies</li> <li>• Enhance Curriculum alignment so students can progress into ITO or ITP study at Levels 1-4 as appropriate</li> </ul>		

**Key Initiatives**

- Increased regular dialogue leading to clear protocols with TEOs which enhance the Network of Provision, improve progression of students to higher levels of learning and ease technology transfer.
- Improved industry stakeholder links to identify industry needs and areas of technology transfer and to ensure TRP programmes meet industry expectations.
- Develop programmes and delivery methods to improve and enhance support to high schools

**Objective 2.** To increase opportunities for life long learning for the rural sector focused on environmental issues and sustainability.

**Alignment with TES.**

This KPI is aimed at encouraging rurally based students into lifelong learning in areas which contribute to the social and economic well being of the rural community

Indicators	2008	2009	2010
Increase in ongoing engagement in education and training beyond first time opportunity. (2006 shows minimal reengagement)	<ul style="list-style-type: none"> <li>• Develop new training opportunities in areas of sustainability, environmental awareness, water quality and agriculture engineering/technology</li> <li>• Increase those students in-work who reengage in training.</li> <li>• Move mix of training away from general subjects to more specialised subjects.</li> </ul>		
Validate that training is being taken up in the work place. (No formal validation in 2006)	<ul style="list-style-type: none"> <li>• In house monitoring demonstrates &gt;50% apply learning in work.</li> <li>• ACC research shows changes to attitudes and/or reduction in value of first time claims.</li> </ul>		
Increase qualification completions through multiple module completion within TRP or with other TEI study being recognised. (214 in 2006 covering	<ul style="list-style-type: none"> <li>• Increase qualification completions by 1% annually.</li> </ul>		

2003-2006 or <1% of enrollees).	
Short Award/Programme rationalisation. (70% of delivery in 2006)	<ul style="list-style-type: none"> <li>Reduce short programme delivery by 10% by 2010 where such programmes do not cross credit to larger qualifications or articulate to higher level qualifications.</li> </ul>
<b>Key Initiatives</b> <ul style="list-style-type: none"> <li>Develop and set up networks which will encourage reengagement in training and increased qualification completion.</li> <li>Develop and set up processes which will validate that training is being transferred to the work place</li> <li>Increase the mix of training to specialist skills at higher level.</li> </ul>	

<b>Objective 3.</b> To enhance the academic achievements of students. <b>Alignment with TES.</b>			
1. Increase the achievement of Advanced Trade ... to meet regional and national needs. Through <ul style="list-style-type: none"> <li>Increasing the proportion of EFTS at Levels 4 and higher.</li> <li>Improving qualification completion rates for those enrolling on a qualification</li> <li>Ensure all National Qualification completions are captured and reported</li> </ul> 2. Increasing literacy, numeracy and language levels in the work force. Through <ul style="list-style-type: none"> <li>Building capability to effectively deliver literacy and numeracy</li> <li>Improving completion rates for those identified as needing improvement</li> </ul> 3. Increasing education success for young New Zealanders. Through: <ul style="list-style-type: none"> <li>Improving number of Full Time Students studying at Level 4+ and their completion rates</li> <li>TRP's qualifications are supported by its students and graduates as being relevant and of quality</li> </ul>			
<b>Indicators</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
To increase the proportion of SCF EFTS at level 4 and level 5 (1.6% in 2006) of the total SCF EFTS	5%	8%	10%
Student surveys with programmes generating ≥0.33 EFTS or enrolling >10EFTS reveal 80% average satisfaction. (≥3 on a 5 point scale) that course meets their needs. ( 2006 varies from 70%-85%)	>80%	>80%	>80%
<b>Full Time Study</b>			
To increase number of students under 25 enrolled at Level ≥4 on full time study (7 in 2006 (3%)).	12	14	16
To maintain completion rates of students under 25 enrolled at Level ≥4 on full time study. (100% in 2006)	>90%	>90%	>90%
>90% of students identified as needing literacy/numeracy support pass their course (2006 92%).	>90%	90%	90%
Build capability to effectively deliver literacy and numeracy. (0.4 FTE specialist in 2006).	<ul style="list-style-type: none"> <li>Full Time learners are appropriately screened</li> <li>Full Time students identified as in need are provided support appropriate to their need</li> <li>Level 1-3 qualifications to have literacy/numeracy embedded in the qualification by 2010</li> <li>Tutors to be appropriately qualified by 2010</li> </ul>		
TRP full time graduates support rural sector. (nil review in 2006)	<ul style="list-style-type: none"> <li>75% or graduates reengage in training or employed in rural sector.</li> <li>75% of graduates state their qualification is relevant.</li> </ul>		
<b>Part Time Study</b>			
To improve qualification completion rates for those who are in work and/or study part time for a qualification (<60% in 2006). <ul style="list-style-type: none"> <li>≥ Level 4 (Varied from 25%-50% in 2006)</li> <li>Levels 1-3 (Varied from 45%-65% in 2006)</li> </ul>	60% 60%	60% 65%	65% 70%
To identify and report qualifications not presently reported through SDR which are encompassed within another qualification or are completed through a combination of PT study at TRP or in combination with study at another TEI. (na in 2006)	Annual capture and reported in Annual Report.		

**Key Initiatives**

- Put in better support for those in work studying for a qualification either part time face to face or by correspondence to increase completion rates
- Put in processes to monitor graduate “post programme” input into rural sector
- Initiate process to improve literacy/numeracy embedding into qualifications delivery of teaching.
- Put in capability to identify and report qualifications not captured by SDR

**Objective 4.** To maintain academic quality.

**Alignment with TES**

These are supporting KPI which underpin the ability to meet TES Priorities

Indicators	2008	2009	2010
Review policies and procedures on a triennial basis against Quality Standards and legal requirements.	• Triennial review		
Review courses in line with P & P for relevance and quality.	<ul style="list-style-type: none"> <li>• Qualifications and programmes delivering &gt; 10 EFTS reviewed each year.</li> <li>• Through Advisory Committees that courses are industry relevant</li> <li>• Monitor and maintain harmonisation with ITO, NZQA and TEC requirements</li> </ul>		
Show academic quality through external and internal academic audit and external and internal moderation.	<ul style="list-style-type: none"> <li>• Annual Internal Audit findings are implemented</li> <li>• Annual External ITO Moderation findings are implemented</li> <li>• ITPQ External Audit findings are implemented</li> </ul>		
Staff are provided with professional development and in house training.	• Ensure staff are provided and supported with relevant Professional Development each year		
Staff are satisfied with the support given and the environment (3 or better on 5 point scale).	75%	80%	80%

**Key Initiatives**

- Ensure we have robust Academic Board and Programme Advisory Committee structure
- Ensure we have robust relevant QMS
- Ensure Quality assurance measures are in place and adhered to, changes are appropriately introduced.
- Staff performance review process identifies professional development needs

**Objective 5.** Remove barriers for targeted groups.

**Alignment with TES**

1. These are supporting KPI which underpin the ability to meet TES 1 and 2 KPI

Indicators	2008	2009	2010
Encourage Maori to study through TRP	5% → 7% annually		
Maori students to achieve similar completion rates to all student groups.	% as for all students		

**Key Initiatives**

- Work with TPK mentors where possible
- Develop a relationship with Wananga.

## MIX OF PROVISION

## AGRICULTURE

1. **Present.** TRP has an extensive menu of programmes at Levels 1-5. These have been developed in consultation with industry stakeholders and many are specific to parts of the sector ie stock and station. Short programmes have been developed specifically for the deer industry and for the dairy industry. TRP has the capability to deliver nationally through face to face, correspondence and video link delivery, predominantly part time but including full year programmes. TRP was the largest provider to the sector in 2005/2006 and is the only polytechnic to operate on a commercial farm
2. **On Campus.** Full time programmes in the period 1999-2005 were at a low ebb. The on-campus programme has specific streams for deer, dairy and sheep. The sector is now being seen as one that provides a career so more young persons are entering study straight from school. TRP saw an increase in enrolments in 2007 including the reintroduction of a mid year programme. Early enrolments for 2008 suggest that this increase will be retained. This is encouraging but will be adversely affected if pre-trade courses are offered by additional TEOs. PT study has also seen an increase. On campus provision is cross subsidised from off-campus provision.
3. **Farmsafe Brand.** A network of regional co-ordinators reacts to local demand by putting together a course. These courses are delivered by industry specialists, in a part time capacity, close to the student's place of work utilising local halls, dairy sheds or other suitable facilities. Each course is hosted and literacy/numeracy support provided. The low class sizes and the often non attendance results in marginal viability in many areas. All equipment, ATV etc, are provided and are normally hired for the day from a national distributor hence ensuring quality safe equipment.  
Farmsafe delivers TRP skills training programmes in a modular form. Modular training provides an economic return of >3:1<sup>36</sup> and is key to the economic transformation of the rural sector. In 2006 and 2007 the delivery by Farmsafe will be over 1000 EFTS per year. However with the reduced need for agrichemicals the demand will drop in 2008 and revert back to the skills needed for safe working and improved production. Industry has identified other skill shortages and TRP is developing packages, predominantly in the environmental and sustainable farming field, to meet these needs which will be delivered by the FarmSafe Brand.
4. **National Face to Face.** TRP has developed a number of programmes to meet demand. Demand is assessed by local co-ordinators, mostly from within PGG Wrightson and the Shearing Contractors Association. Individuals are encouraged to enrol on a qualification under PT study, these normally result in poor completions, however many do modular training towards a qualification with anticipated completions 5-7 years distant. Support mechanisms are being put in place to encourage completion rates. Those in the wool handling and shearing profession move region as much as 5 times a year, tracking is hard, and delivery is a mixture of short awards and qualifications. Tutors tend to be Part Time industry specialists. The next 3 years will see development of new courses around sustainability and organics and a move to greater delivery at Level 4 as these new programmes come on line. At the same time short modular delivery will be focused for delivery under the Farmsafe Brand.
5. **Apiculture.** TRP is the niche provider for training in this very small area delivering the only full time programmes in apiculture and queen bee rearing, and part time study through correspondence and face to face in partnership with local ITPs.
6. **Correspondence.** There is a group of people in work who require knowledge which can be delivered through correspondence. TRP has developed knowledge qualifications at levels 1-5 across most areas we teach. Qualification completion is improving as we put more support in place

---

<sup>36</sup> AgITO (2007). "The Return on Investment in Training."

## HORTICULTURE

- 7. Present.** TRP has concentrated on Arboriculture, Organic Horticulture and Production and Supply Horticulture. In 2007 Telford became the centre for ITO Landscape training. Development of programmes has been at the direct request of NZ Horticulture ITO, NZ Arboriculture Association, Organic Horticulture bodies and the Landscaping Association. Whilst there is delivery on campus the delivery is predominantly ex campus through face to face delivery and whilst concentrated at Levels 3 and 4, Level 5 qualifications have been developed and delivery started in 2007.
- 8. Future.** The demand for TRP programmes has increased and more horticulture associations are asking for help, at present this is being resisted until TRP's future is better defined. Additional programmes are being developed in organics, water control, and sustainability for this sector. All students enrol in qualifications, tutors tend to be Part Time industry specialists and support mechanisms are being put in place to encourage completion rates.

## EQUINE STUDIES

- 9. Present.** TRP is the only ITP delivering equine studies, this it does directly on its campus and in the Waikato, and through another organisation in Canterbury. In addition there is an extensive correspondence delivery. The Equine ITO has a large input into which provider delivers where and this has ensured that there is little overlap geographically. Wintec has facilities but has leased them leaving TRP as the only ITP delivering equine studies. On campus delivery has traditionally been at Level 3 but has been elevated in 2007 to Level 4.
- 10. Future.** There is little scope to change direction as the Equine ITO controls delivery closely through accreditation and moderation. However, Equine correspondence programmes at Level 5 will be developed and subject to demand, the TRP Diploma in Rural Business will be redeveloped to include an equine stream.

## FORESTRY and WOOD PROCESSING

- 11. Forestry/Wood Manufacturing.** The last 4 years has seen a major decline in this sector and this has been mirrored by a decline in those undergoing training. TRP runs a full time programme on campus, has ITO delivery throughout the South Island and delivers Level 3 and 4 qualifications in the Lower East Coast in support of the region. There is some correspondence delivery.
- 12. Forestry Strategy.** FITEC is developing a Forestry and Wood Processing strategy which will see Waiariki Institute of Technology having a lead role. TRP has committed to reducing ITP/ITF overlap and support this strategy, which is aimed at forming supra-regions.

## RURAL FIRE and RESCUE

- 13. Present.** TRP is one of the few accredited providers and has been delivering to the forestry sector in the South Island and lower North Island and to a number of Rural Fire Authorities. A high proportion of volunteers are farmers and those employed on the land. Fire and Rescue is an integral part of rural safety. Most rural fire staff are volunteers and require specific skill training, hence qualification completion is rare.
- 14. Future.** The future of the rural fire service is uncertain as there is a review underway looking at whether it should combine with the Fire Service. Rural Fire Districts are actively supporting TRP and Tai Poutini in delivering highly specialised training. TRP will encourage students towards life long learning.

## RURAL SAFETY

- 15. Rural Safety** – The rural sector has some of the worst work place injury and death statistics in the country. TRP's response to the NZ Injury Prevention Strategy has been to ensure its programmes delivered under the Farmsafe Brand are relevant, high quality and meet the strategy's aims.

## DELIVERY CHANGES

- 16. Modular Delivery.** The two largest areas of delivery by modular/short award training are Fire and Rescue and FarmSafe. There is some modular training in Agriculture Level 1-3 and Equine Level 1-3, however it is intended to reduce such training over the next 3 years where appropriate. Agricultural modular delivery will be progressively aligned to that on campus, beginner shearing and that delivered under the FarmSafe Brand. Equine will be restricted to existing levels, Fire and Rescue will continue to be delivered using modular delivery. Short programme delivery will account for about 60% of the total in 2008 dropping to about 55% in 2010.
- 17. Level 4+.** With the large majority of individuals not valuing higher qualifications and with about 60% of delivery through modular delivery, progression to Level 4+ will be hard to achieve. It is intended to increase Level 4+ attendance and completion from 1.4% in 2006 to 10% in 2010. This will involve developing and delivering new industry specified Level 4 and 5 programme at the expense of programmes at lower levels. However, TRP's main focus will remain at foundation level skills training.
- 18. Specialist Training.** Over the 3 years of this plan TRP proposes to reduce the levels of delivery in general skills required for employment for those in work, ie ATV, tractors etc and develop more delivery in specialist areas such as livestock handling, water quality, organics, sustainability, contracting, agrichemical engineering/technology.
- 19. Off-Campus.** Growth in directly employed tutor delivery has not matched the decrease in subcontracted delivery caused by the programme caps. With few exceptions the lack of provision has not been picked up by regional ITPs as many acknowledge that they do not have the reputation, capabilities or economies of scale to deliver education to the rural community in the format that is demanded by industry. TRP will over the next 3 years focus on more specialist, niche delivery leaving more general delivery to others. This will ensure best utility of the funding allocated to TRP in its support to the rural communities it serves.
- 20. Programme Attrition.** The shortage of skilled labour has a direct impact on full time programmes where employers actively poach students. Whilst this is of concern in regards to completion rates, these students tend to progress into ITO training. The 60% of delivery by short programme has no attrition by course. However, low qualification completions reflect industry needs. Those in work who study for a qualification have high attrition rates. Much of this is due to changing employers and locations, changing career direction (viticulture to plant production), family and social pressures and hence is understandable. More support is being put in place to encourage completion of the qualification.