

FINNISH DEVELOPMENTAL WORK RESEARCH (DWR) – A POWERFUL RESEARCH PARADIGM WITH POLICY POSSIBILITIES?

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Abstract

Finnish Developmental Work Research (DWR) has been used in New Zealand by WEB Research, who have been world leading exponents of the approach. Over a twenty year period they used the approach in such varied research locales as the public sector (IRD, Immigration, NZQA), public/private organizations (Dutch Rail; the New Zealand Pip Fruit and Dairy Industries), and the private sector (a furniture manufacturer, two meat companies; and in the Wool and Meat Industries).

However, the requirements of the approach, and of Cultural Historical Activity Theory (CHAT) on which it is based, often did not sit comfortably with the New Zealand research environment at the end of the twentieth century. Consequently, sometimes research was foreclosed early before full results were apparent.

This presentation will review the original DWR research approach and WEB's use of it. It will then contrast two recent New Zealand primary industry applications in the Pip Fruit and Dairy Industries. The former led to spectacular policy success with the development and adoption of the Recognised Seasonal Employer scheme. The latter's research component has been terminated. Application of the research results now rests with DairyNZ, the sponsors of the project, who have taken the extension of the research into their own hands. Conclusions are drawn on the key components of a successful application of the approach

Introduction

What is Developmental Work Research (DWR)? According to Engeström (1996), it is "A systematic application of a learning/ intervention method based on Cultural Historical Activity Theory" (CHAT). Activity Theory is defined as being based on five principles (Engeström, 2000; Seppänen, 2000):

- The unit of analysis is the Activity System, not individual informants.
- Multivoicedness – Activity theory is based on many points of view, not just one powerful one.

- It is the result of historical development, which is explored through approaches like ethnographic methods, which are good at explaining why something has happened.
- From the analysis of the historical development of the subject matter and identification of the patterns of activities Contradictions are highlighted. These are structural tensions between elements of the system often long accepted and not seriously challenged.
- From the disassembly of these activities there is a possibility of expansive transformation or learning – a shared journey towards new objects.

Managing change using an expansive learning cycle through change laboratories has been described by Hill *et al.*, 2007. The change laboratories are made up of people who contribute intimately to the subject of the analysis who have the motivation to be involved and seek improvements. Please note that the researchers are there only to facilitate the processes of change laboratory operation. The participants are there as the active ingredient who have the expertise on the topic. Figure 1 is a simple matrix of Level of Focus on the 'Y' axis from highly visible actions like events, through to invisible forms of system activity. On the 'X' axis problems and solutions are contrasted. In New Zealand typically problem identification (Box 1) leads pragmatically (Siegfried, 1904) to a 'simple', obvious but easily implemented solution (Box 4) Unfortunately, such 'sticking plaster' type solutions only operate at a surface level and are often not lasting.

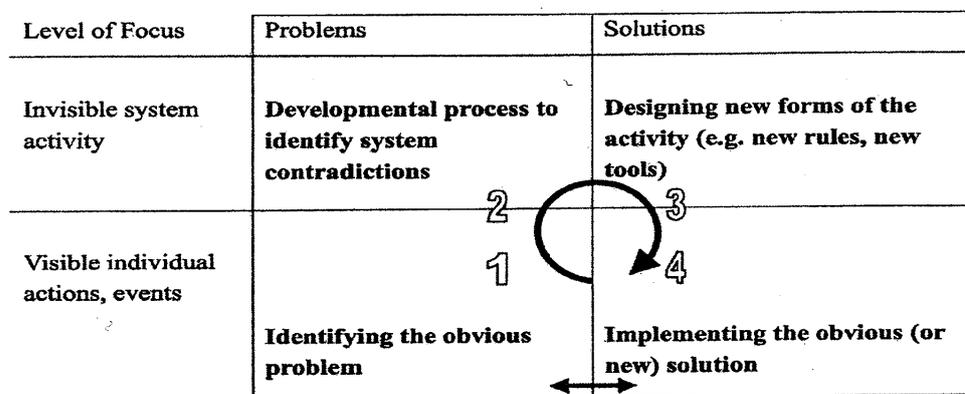


Figure 1. Managing change using an expansive learning cycle

How did WEB get into DWR?

The Centre for Research on Work, Education and Business (WEB Research) had its roots in the former DSIR Social Science section in the 1990s. However, it experienced frustrations with operating as a small research centre in the 1990s environment of changing policy and funding arrangements. So it evolved into more of a servicing research consultancy, rather than a stand-alone-research centre seeking major project funding in its own right. Its principals, Roberta Hill, Ken Wilson and Philip Capper, saw potential in Developmental Work Research as an interdisciplinary research approach facilitating lasting change, and undertook the necessary training to fully grasp its potential and how to apply it. At the same time they were rejecting the fashionable management paradigms of the day: Lean manufacturing; JIT techniques; business practice re-engineering; and workplace reform. The latter may seem surprising with hindsight as they had been fully engaged in the workplace reform conferences of the early 1990s (Perry, Davidson & Hill, 1995). However, their focus had moved to what they believed was an even better approach.

Sectors	Within firm/organization	Across an industry
Private sector	Furniture manufacturer Meat company	Wool industry – across firms in value chain Meat industry – across firms, government agencies, Meat Industry Ass., Meat Unions
Public/Private Organizations	Dutch Rail	Pip fruit industry – across government agencies of labour, immigration, tax & social welfare; apple growers, labour contractors, technical experts Dairy industry – milk supply contractors, investors, dairy farms, rural financial and other advisers, vets, health professionals
Public sector	Inland Revenue Immigration NZ Qualifications Authority	

Table 1. WEB Research’s DWR and Change laboratory experiments 1996-2014

The remaining parts of the paper are a comparison of two different interventions in two sectors of New Zealand’s primary industries, which involved DWR and the utilization of the Change Laboratory methodology, one of which resulted in a successful policy development and one of

which did not. The first of these was the Pip fruit industry, which became incorporated in the Department of Labour's *Pure Business Project* (2003-2006), which had a focus of improving compliance among small businesses, reducing their compliance costs and improving their productivity. This occurred at a time when there were major upheavals in the Pip Fruit sector because of the unavailability of adequate seasonal labour, which threatened the very existence of it as an export industry. Acknowledgement must be given here to Richard Whatman, then of the Department of Labour, who saw the potential of DWR for addressing the 'wicked' problems of the sector. His skills as a policy entrepreneur, as a key coordinator and networker, and pragmatic state servant, played a major part in the establishment and subsequent success of the Recognised Seasonal Employer policy. Without his invitation to the launch of the first Horticultural/Viticultural Labour Strategy in 2005, the writer's interest would have not been engaged. That led to a cooperative co-authorship of related papers (Tipples and Whatman, 2009a; 2009b; 2009c; and 2010), and more importantly to an attempt to introduce DWR into the dairy sector to solve some intractable problems of staff recruitment and turnover leading to fatigue and poor productivity. The Developmental Work Research into Fatigue issues in dairy industry became part of DairyNZ's *Farmer Wellness and Wellbeing* PGP programme (2010-2014), when another serendipitous factor came into play. The writer had taught Mark Paine, Dairy NZ's People Investment Manager back in the early 1980s when he was a student at the then Lincoln College. He and DairyNZ were amenable to funding the DWR work, which made the comparison which follows possible and must also be acknowledged.

Pipfruit Developmental Work Research

The path of policy evolution on seasonal labour is difficult to follow because a number of separate themes are developing all at the same time. WEB Research's DWR Change Labs became part of a co-design process to help small and medium employers, increasingly burdened by compliance costs, develop better government actions on the pipfruit sector, which suffered from the tricky problem of needing a large, quality, seasonal labour force for late summer and early autumn. Such a 'wicked' problem was not readily treated by conventionally developed public policies and had serious overlapping implications for the tax, immigration and employment services. The Department of Labour established what became known as the Pure Business Project (2004-2006) to analyse the problem using an activity based focus (Hill, Capper, Wilson, Whatman & Wong, 2007; Whatman *et al.*, 2005; Whatman and Van der Beek, 2008).

'The initial crisis'

In 2004 at the same time as the Minister of Immigration was confronted on TV that Thai immigrants worked better than NZ unemployed by a squash grower, the Pure business Project was getting underway. The relationships formed in the co-design experiment helped at this politically sensitive time when the Minister called the parties together to work out what could be done about the labour shortage: Two distinct areas of responsibility were identified:

- That government was responsible for absolute staff shortages
- That industry was responsible for improved employment practices

A second potential crisis was perceived - poor labour, giving poor untimely quality for supermarket purchase, which would undermine New Zealand's position as a major international horticultural exporter.

Changes in horticultural employment were considerable. The industry diagnosis was that they were moving from a state of seeking high numbers of seasonal employees for harvesting type operations, but that their current applicants were likely to turnover quite quickly thus creating anxieties for growers with the uncertainty of whether they would complete their harvest in the deadlines required by purchasers such as supermarkets to ensure high quality produce (Tipples and Whatman, 2010). Rewards were typically based on volume of work through piece rates and there was little staff development. Employer practices were often poor, for example, employing illegal migrants or dubious labour contractors, and staff planning was almost impossible. Staff were a major cost and problem for employers.

When the industry began to consider how they would like to see the situation develop into the future, bearing in mind the Department of Labour's need to encourage compliance with employment standards, they focused on productivity as the key to their future. To achieve this they believed they would need a more loyal, stable workforce, whether full time or returning from year to year. Then investments in training and skills development would be most beneficial. Further rewards needed to be modified to reflect and reinforce this productivity focus. As the minister had suggested employers needed to improve their practices, not employing illegals, but recruiting from offshore on a planned basis. Overall staff were to be seen to be the key to future success.

First Horticulture Labour Strategy 2005

These details were hammered out between state departments, growers, unions and other interested parties in the first Horticulture/Viticulture Seasonal Labour Strategy of 2005, which had the subtitle of "Supporting Industries with Seasonal Labour Demands to Achieve Sustainable Growth". It had five key features:

1. Work available must be offered to New Zealanders first
2. When it had been and demands were still not satisfied access might be given to global labour
3. The supply and demand of Seasonal Labour would need to be considered on a regional basis
4. The resultant employed workforce was to be skill and productivity focused
5. Contractors were to be more closely monitored and encouraged to improve themselves (Tipples and Whatman, 2010).

One of the benefits which flowed from the Strategy after considerable inter industry and government and inter-government negotiations, and the background research conducted by WEB Research, was the Recognised Seasonal Employer (RSE) policy. The fortuitous

circumstances supporting the development of such a policy included have been discussed elsewhere but included interventions by the United Nations, World Bank and Pacific Forum. The policy was announced by the New Zealand Prime Minister, Helen Clarke, at the 2006 Pacific forum (Tipples and Whatman, 2010).

The policy was to come into operation in April 2007. Initially it was to allow the temporary entry of 5,000 Pacific workers to work in horticulture/viticulture to 'pick, pack, prune or maintain crops'. It was only to operate once all suitable New Zealand labour supplies had been exhausted, but where pre-existing relationships with other non-Pacific countries existed they could continue. RSE employers and employees had to be approved, and in the case of the former to including pastoral care of Pacific migrants

In 2009 the RSE policy was seen as bigger than new variety profile of New Zealand pipfruit in helping to give high quality fruit to market at a time when harvesting was particularly time constrained for achieving best quality. That in turn led to New Zealand replacing other southern hemisphere producers in the world marketplace. The RSE's Pacific labour had helped delivering fruit at exactly the right time for best fruit maturity, which led to best keeping fruit and a great condition for its transport. Pacific islanders' soft hands used to handling more delicate tropical fruits also proved to be a contributing factor (Hammond, 2009). Consequently the Minister announced the continuance of an improved RSE scheme from 4 June 2009. Then the maximum numbers were allowed to increase in 2011 to 8,000 p.a. and in 2013 to 9,000 p.a.

Looking back over the period 2007-2014 we may conclude the RSE Scheme provided New Zealand horticulture and viticulture's need for seasonal labour in a way to ensure quality and certificated production. The large and relatively under-employed labour force around the Pacific solved New Zealand's seasonal needs for workers. Further, the Recognised Seasonal Employer scheme deliver Win: Win: Win outcomes for stakeholders in New Zealand and the Pacific:

Wins for governments – New Zealand was able to access global labour. Pacific Islands were given work, not aid, and a further source of remittances and foreign exchange.

Wins for growers – apples were picked on time in best conditions, with growers enjoying labour supply certainty.

Wins for workers – they had well paid seasonal work. They were able to make savings and send remittances to families and communities.

Public recognition of RSE

The Recognised Seasonal Employer Scheme was so effective that it became a joint winner of the Excellence in Working Together for Better Services Award in the IPANZ Gen-I Public Sector Excellence Awards, 2011 (Tolerton, 2011). It has continued to go from strength to strength and was still going strong in late 2014, when Richard Bedford described it as the 'gold standard' for international seasonal worker schemes (Bedford, Didham & Bedford, 2014).

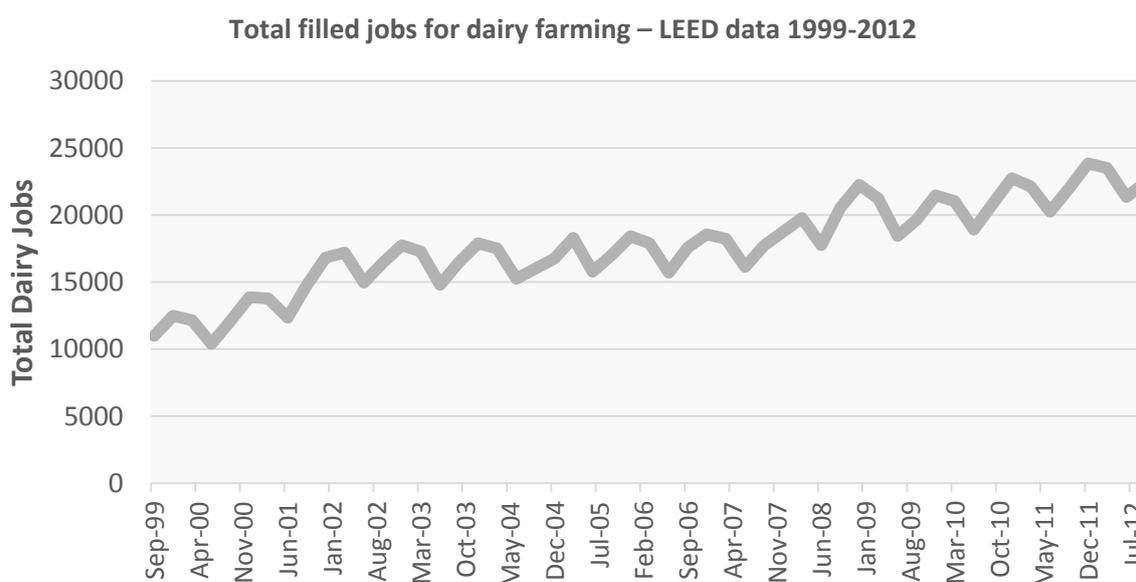
Dairy Farming Developmental Work Research in Canterbury 2011-2014

Overcoming dairy staffing problems

Dairy farming's staffing problems have been particularly apparent since the rapid growth in South Island dairying during the 1990s. Personal involvement began in 1998 with a study of dairy farming psychological contracts in Canterbury (Tipples, Hoogeveen & Gould, 2000), then a study of the future dairy farm labour force was conducted for *Dairy InSight* (Tipples, Wilson, Edkins, & Xiaomeng, 2004). That highlighted the advantages of 'Once-a-day' milking and reduced hours of work (Verwoerd and Tipples, 2007), but still the problems of long hours of work, fatigue and high accident rates did not go away as revealed by a dairy farming self-analysis in 2007 (*Dairy InSight*, 2007). Recruitment and retention problems still remained. Dairy farming was:

- Not attractive compared to other industries
- The hours were long
- The staff turnover was high, recruitment and retention continued to be problematic
- The accident rate was third worst in terms of injuries per person employed
- Dairy staff were required to live on-farm and as such were socially isolated
- There was a lack of rural support networks (Self-diagnosis, *Dairy InSight*, 2007); and
- Had anything changed?

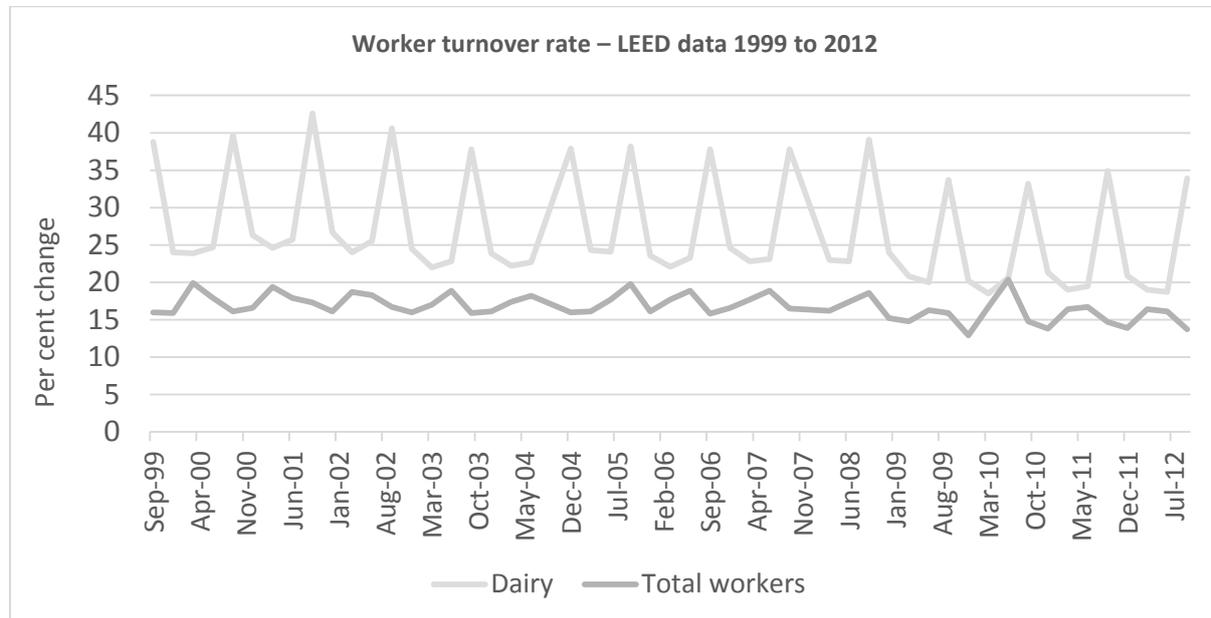
Figure 2. On-going growth in dairy employment (LEED data, StatisticsNZ)



While the number of employees in the dairy sector continued to grow (Figure 2) there were still problems with on-going staff turnover. Retaining staff continued to prove difficult as shown in

Figure 3, a comparison using Linked employer Employee data, which shows the respective rates across the economy at large and in dairy farming.

Figure 3. Recruitment and Retention Problems of staff in dairy and jobs as a whole (LEED data, StatisticsNZ)



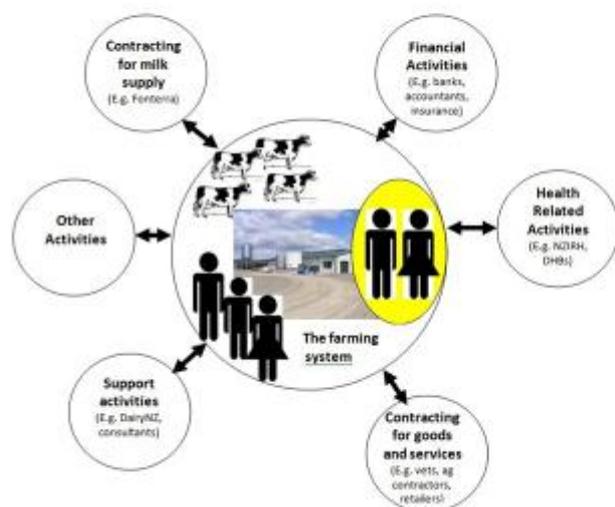
This on-going concern was highlighted again in a further study funded by Lincoln University Research Fund (Award INTE 013) 'Fatigue in dairy farming – an exploratory study' of 2009, which led to substantive research as part of Dairy NZ's Primary Growth Partnership funded *Farmer Wellness and Wellbeing* programme 2010-2017 (Tipples, 2011). The research sought to get away from the regular reciting of the problems of the dairy farming sector and get it involved in a new approach based on Finnish Developmental work Research (*ibid.*, 2011). That was built on a knowledge of the early success of the RSE model and the hope to achieve something similar with the wicked problems in the intractable dairy farming sector.

What we did in Canterbury

Initial plans saw a three pronged set of Change Laboratories in Canterbury, Waikato and Southland to pick up on significant regional differences. Field work began in Canterbury close to Lincoln in early 2011. We visited a range of farms during January, May, and June 2011, interviewed all kinds of on farm dairy people and also interviewed off farm people as well including: Consulting Officers, a banker, an accountant, a vet, health professionals etc. We heard of overwork, work-related stress, injury and clinical depression, which were triangulated with on and off farm data.

Figure 4.

Dairy farming activities represented at the Change labs



Examples of Emergent themes

From the initial Canterbury Change Labs a number of themes emerged. These included: What motivates dairy people to work 16-19 hour days, for weeks on end from July – December with no meaningful break? They suggested young, highly-motivated, entrepreneurial men and women were seeking farm ownership, but that a large debt was necessary to do this, which created huge pressures. These were complicated by the need to manage more people, in a more diverse workforce e.g. often with English as second language.

Outcomes of Canterbury Change Laboratories

Participants began to focus on three questions by the end of the change laboratories:

- What a 'decent' dairy farm has?

It provides good accommodation, which is comfortable, well maintained, safe, warm, and well fenced; good working hours that are fair, with regular time off, which is negotiable and with enough employees; operating in a safe working environment with a active health and safety plan, hazards map and relevant training and appropriate safety gear.

- What a 'decent' dairy farm does?

It was thought to provide good leadership, with employees knowing the targets of the business, and fairness, with each getting home on-time. Clear expectations also featured. In terms of rewards a decent dairy farm was one which told its employees when they had done well, and which provided job variety and flexible rosters, with the chance of increased responsibilities.

- What characterises a 'decent' employee?

They could explain why they wanted to work on their farm and knew what that required. They were healthy: physically, emotionally, psychologically robust and drug free. Some previous work experience was seen as good but it was not essential. Where they were in a relationship valuing family life was seen as important together with being 'house proud'. (Tipples, Hill, Wilson and Greenhalgh, 2013)

Outcomes of Change Labs - What happened subsequently?

DairyNZ reviewed the *Farmer Wellness and Wellbeing* programme 2010-17 in late 2013 using consultants, the Harris Park Group from Melbourne (Harris Park Group, 2014). Our fundamental research component did well – we were acting well before the 'top of the cliff', where farmers in crisis were in danger of falling off. Subsequently discussions with DairyNZ were on-going in the period March – May 2014. New personnel became involved from the DairyNZ end who had not been part of the initial setting up of the project, who did not seem to understand what we were trying to achieve with dairy farmers. Then in May 2014 DairyNZ's mandate to have a Commodity Levy was renewed with a successful vote for DairyNZ's continuance. In the new dairy financial year from 31 May 2014 we were advised there would be no new contracts. In effect our contract had been terminated but only after DairyNZ's mandate had been renewed. DairyNZ has claimed it is taking much of the work of the *Farmer Wellness and Wellbeing* program back 'in-house', but there is little sign that they are continuing the previous Lincoln Consortium Developmental Work Research focus on fatigue and stress in the dairy industry (Jago, 2014a; 2014b). They have no staff with expertise in this field, nor the established relationships to make it possible along the lines originally conceived. In fact, the relationships formed have been broken e.g. with the Filipino Dairy Workers in New Zealand Inc. Thus there is a further example of a failed dairy people initiative. Further, the industry continues to ignore the impending dairy employment crisis (Tipples & Trafford, 2011), hoping perhaps the problem will be overcome by new technology (Automatic Milking Systems) which needs less people. While the dairy industry still has *Making Dairy Farming Work for Everyone* as its national strategy for sustainable dairy farming 2013-2020, in the light of its previous history Objective 8 seems unrealistic – 'Provide a world class work environment 'on farm', where that addresses the physical workplace, the employment conditions and the employment relationships.

If we compare the two industries – Pipfruit and Dairy (Table 2), we find one industry which has made a serious attempt at changing itself with the help of government and the introduction of the Recognised Seasonal Employer scheme, and the other which has carefully nipped in the bud the prospect of the development of decent dairy farming. Crisis, which is a much more potent force with a perishable crop than a processed crop stimulated industry action which was more focused on the need to achieve a short term outcome. That combined with a serendipitous set of contextual variables and forces facilitated an optimum policy outcome (RSE) which has survived changes in government and now sets the 'gold standard' for seasonal worker migrations schemes internationally (R. Bedford, LEW 16, 28 November 2014). Developmental Work Research delivered the desired objects when allowed to run its full course.

Table 2. DWR Context – Policy variables

Industry Characteristics	Apples	Dairy
Perishability	Fruit, quite long lived, but specific harvest timing for best condition	High, liquid milk
Processing	None, refrigeration for preservation to market	Yes, intermediate food ingredients – butter, cheese, milk powder etc.
Policy World		
DWR Context	Imminent crisis	LT Potential crisis
Involvement of Government	Several departments: IRD, DoL, Immigration...	Only DoL
External factors	UN, World Bank, Pacific Forum	None
Change Lab Organization		
Number of Labs	One national meeting 8 times	Canterbury meeting 9 times Waikato meeting 8 Times Southland, planned but did not happen
Personnel	Employers, employees, Government depts. etc.	Local dairy industry – employers, sharemilkers, Consultants etc., DoL only
Outcomes		

	Set up national RSE scheme, applied to other horticulture industries subsequently	Terminated before completion, serious provincial differences
	Wins for governments, growers, migrant workers/communities	No beneficiaries, relationships broken, migrants' needs ignored; dairy drops the ball again!

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