

Lifting the lens: developing a logic for a complicated policy

A new intervention that is designed to be adaptive presents a challenge for evaluators when developing a logic model at the start of a government policy evaluation. Our task became more problematic when the early data collection identified that participant groups had differing ideas about what the policy was intended to achieve. Participants also tended to ‘deconstruct’ the policy and focus only on the parts for which they were responsible. Realising that traditional logic modelling (that is, a linear approach to describing policy inputs and outcomes developed at the beginning of the evaluation) would provide a simplified picture of the policy, we decided to ground the logic in the evidence. This approach provided a more in-depth understanding of how the policy components interact with each other. Our logic became a vehicle to reconceptualise the policy through presenting an alternative perspective to understanding and communicating how the policy works on the ground.

Introduction

The impetus for this article comes from the authors’ experience of developing an intervention logic during a two-year evaluation of a complicated government policy. It describes how traditional program logic modelling, that is, an approach to identifying program inputs and outcomes that is usually done at the beginning of an evaluation, failed to conceptualise the policy adequately. The article also shows how traditional logic modelling, which is based on linear and unidirectional approaches, failed to portray some of the complicated aspects of the policy. Our approach—an intervention logic grounded in evidence—provides a more in-depth understanding of how the policy components work together. In doing so, the logic became a vehicle to reconceptualise the policy through presenting an alternative perspective to understanding and communicating the policy.

A complicated policy

Policymakers in Aotearoa/New Zealand are responding to the challenges presented by complex social and economic issues, through adopting new approaches to policy development (Institute of Policy Studies 2008). The Recognised Seasonal Employer (RSE) policy is an example of such a policy. Rather than using a traditional policy development approach, the policymakers worked collaboratively with stakeholders to create a policy that is adaptive and able to be modified to meet emerging conditions.

Mathea Roorda

Heather Nunns



Mathea Roorda (top) is the principal evaluator at Evaluate Research, Wellington.

Email: <mathea@evalueresearch.co.nz>

Heather Nunns (bottom) is an independent evaluator based in Wellington.

Email: <heather.nunns@paradise.net.nz>

This approach recognises the complexity of the problems the policy is attempting to address and the complicated context within which it is being implemented.

The RSE policy allows for the temporary entry of workers, in the first instance from eligible Pacific Islands Forum countries into New Zealand, to work in the horticulture and viticulture industries. The policy has multiple objectives, including to: create a sustainable seasonal labour supply; protect New Zealanders’ access to seasonal employment; minimise immigration risk; assist with transforming the horticulture and viticulture sectors from low-cost industries, to industries based on quality, productivity and high value; and contribute to the economic goals of participating Pacific countries through labour mobility.

When the policy was developed, there was recognition by officials, industry and Pacific countries that some policy objectives did not sit easily alongside others, resulting in potential points of tension. One example of this tension is that RSE is an employer-led policy that also aims to assist Pacific economic development.

A number of features contribute to the RSE policy being ‘complicated’, a term used by Rogers (2008) to describe interventions that are implemented across different sites/governances and/or those that have two or more simultaneous causal strands that are required in order for the intervention to succeed.¹ Table 1 describes the features of RSE as a complicated policy. The appendix provides more information about the policy.

TABLE 1: FEATURES OF RSE AS A COMPLICATED POLICY

'Complicated' policy features		Implications
Policy objectives		Multiple and potentially conflicting policy objectives.
Multiple participants	Two industries—horticulture and viticulture	Differences between industries in respect of age, histories, relationship to labour, timing of labour demand, industry cohesion. Difference in regionality—location, temporal demands for labour, community composition and reactions, historical experiences. Numerous sectors within the horticulture industry.
	Different types of RSE employers	Growers and contractors (different sizes, varying levels of experience with managing seasonal labour) plus one grower-cooperative.
	Multiple Pacific countries	Each Pacific government has its own priorities and objectives for participating in RSE, plus varying cultural and political contexts. The New Zealand Government has separate relationships with each Pacific country, articulated in an Inter-agency Understanding (IAU) document. Workers from each country have distinctive cultures.
	Cuts across New Zealand government agencies	The policy cuts across a number of agencies’ areas of responsibility. These include separate departments responsible for immigration and employment; New Zealand labour market; foreign policy and development assistance.
Implemented across different regions and communities in New Zealand		Differences in respect of: <ul style="list-style-type: none"> ■ main industry in region (horticulture or viticulture) ■ community response to newcomers ■ existing Pacific communities in New Zealand region ■ availability of short-term accommodation for workers ■ availability of New Zealand labour.
Focused on immediate results, in addition to long-term change		There was an immediate demand for workers for the 2007–08 season to address labour shortages. This meant that the policy was implemented in a short time frame. The policy aims to support the Horticulture and Viticulture Seasonal Labour Strategy’s long-term objective to transform the industries’ business model from low cost to one based on quality, productivity and high value. However, there is a need for short-term results (that is, trained return labour to meet immediate labour needs). The desired long-term change will not happen if the short-term results are not achieved. Need to be sensitive to, and monitor, new issues and risks associated with years two to five of RSE.

The evaluation

Independent evaluators had the task of describing and assessing the first two seasons of the RSE policy at the same time as the new policy was being implemented. A mixed methods design was employed, with two reporting phases over two years. In both phases qualitative interviews were conducted with Pacific workers, employers, officials, industry and community participants in New Zealand and each of the Pacific countries. Quantitative data included an online survey of employers and analysis of administrative data held by the lead government agency, the New Zealand Department of Labour. Government and industry documents were also reviewed.

In Phase One, data from each of the participant groups were analysed and reported separately, primarily to 'hold in balance' their different perspectives. A synthesis report brought together findings from Phase One. A final report at the end of the evaluation reported on both phases (Department of Labour 2010).

Initial logic model

One of the first tasks undertaken by the evaluators was to review a logic model developed by the lead government agency (see Figure 1). The RSE logic diagram consisted of a hierarchy of lower level inputs leading to higher level outcomes and an overarching outcome. At the time the logic was developed there was a lack of clarity about how the policy aims connected. Thus the logic was intended to be a starting point for further work.

Two limitations of the initial RSE logic were identified by the evaluators. The logic included only one high level outcome (industry transformation) yet the policy documents referred to a second high-level outcome that was to support Pacific economic development. In addition, the logic model focused primarily on compliance activities and outcomes that were the responsibility of the agency commissioning the evaluation.

Our view was that other key stakeholders should be consulted, to develop a common, shared understanding of how the policy was intended to work and why (that is, the theory-of-change), thereby modelling the collaborative approach by which the policy had been developed. However, with stakeholders scattered across five Pacific countries and New Zealand, it was not possible to gain their input prior to the evaluation starting. Field work had to commence within weeks of the evaluation contract commencing because the RSE workers were about to return home to their respective Pacific countries as the picking and pruning season came to an end. The original logic was therefore set aside and the evaluators set out to describe the policy based on participants' perspectives and experiences of the first season.

At this point it should be noted that there is a proliferation of terminology in the evaluation literature around the concept of program theory.

The terms 'program theory', 'program logic', 'intervention logic', 'causal model', 'theory-of-change', to name just a few, all refer to the cause-and-effect relationships that link activities to outputs, immediate and intermediate outcomes and goals (Rogers 2008; Dart & McGarry 2006; Davidson 2005). We found Rogers' (2009) differentiation between the terms 'intervention theory', 'theory-of-change' and 'logic model' useful as she makes explicit the two types of theory that are 'at play' in a program. Intervention theory refers to 'how the intervention is constructed to activate the theory of change' while theory-of-change is 'the process by which change comes about (for an individual, organisation or community)' (Rogers 2009, p. 3). In this respect, 'theory-of-change' is similar to Pawson and Tilley's (1997, p. 65) 'explanatory mechanisms' and Leeuw's (2009, p. 6) reference to 'behavioural mechanisms'. A logic model is defined as 'a visual representation of a program theory, usually in a diagram' (Rogers 2009, p. 3).

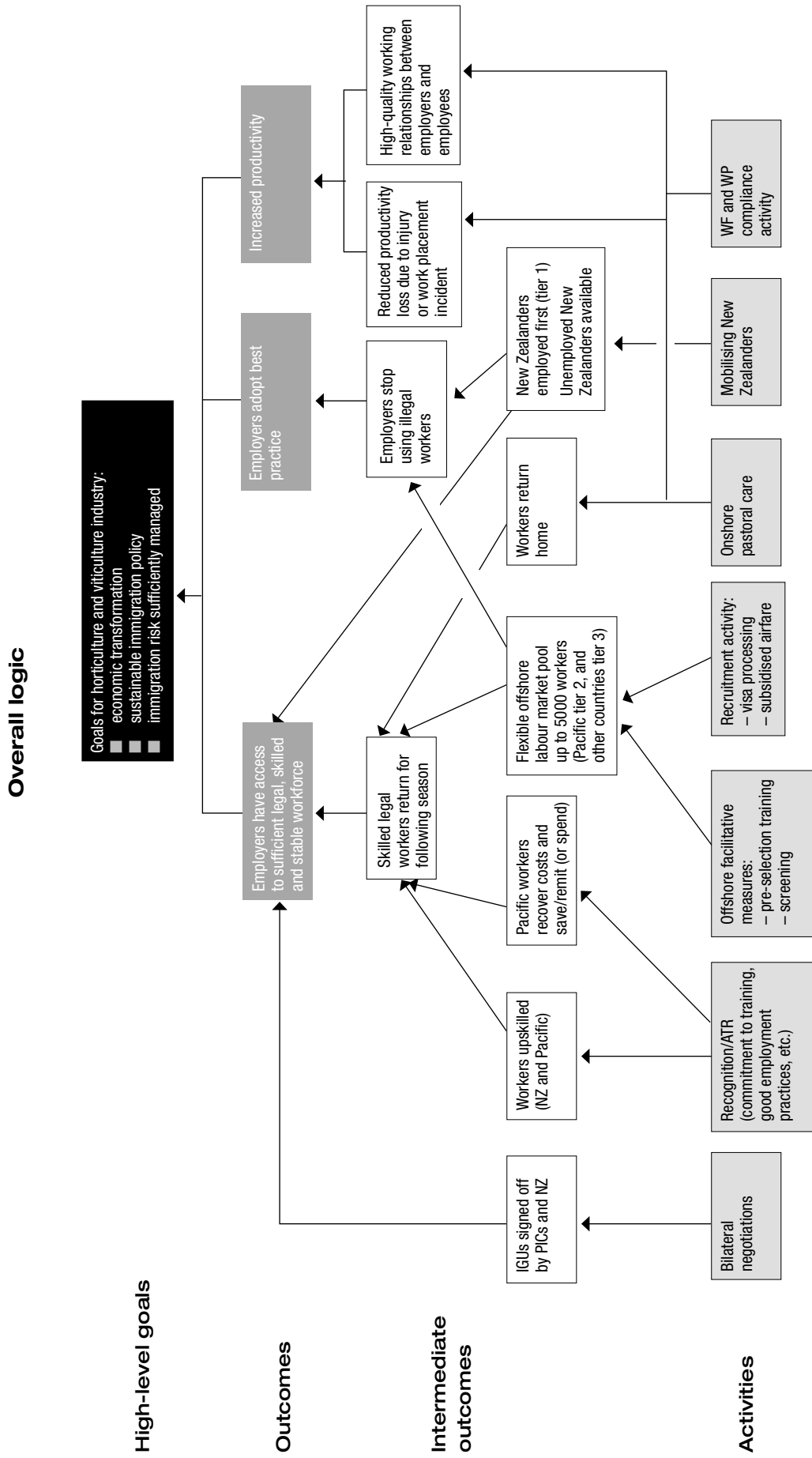
Analysis of participants' experiences of RSE

Two findings emerged during the first phase of field work. First, it became obvious that the RSE policy meant different things to different participants. Officials, for example, had differing views about the primary objective(s) of the policy. Some New Zealand officials referred to RSE as an immigration policy, while others viewed it as a policy to access seasonal labour. However, there was consistency (in New Zealand) in the way the Pacific economic development aspect of the policy was described—this was viewed as a secondary aim or spin-off. Within the Pacific, this aspect of the policy was also viewed in different ways—with two Pacific countries expecting a stronger emphasis on 'traditional development', while the other three viewed the policy as an economic development opportunity.

The problem with officials having different views about policy objectives is that they then had a tendency to 'deconstruct' the policy into its component parts and focus on the activities for which they were responsible. There were also expectations (not always shared) about how other agencies involved in RSE should respond. To some extent this was understandable given the scale of the policy, the disparate policy aims and the diverse participant groups. During the field work it became obvious that respondents' foci tended to be on individual policy components or participant groups, particularly those that were regarded as not working well.

Evidence also emerged about components of the policy that were working well, and under what circumstances, as well as those aspects that were not working so well. The RSE policy was described in official documents as a 'win/win' arrangement for horticulture and viticulture businesses, Pacific workers and Pacific countries. In general, this

FIGURE 1: INITIAL LOGIC MODEL DEVELOPED FOR THE RSE POLICY



description mirrored the evaluation findings. Most employers and workers interviewed benefited financially and were keen for the policy to continue.

However, overall, the evidence suggested that the ‘wins’ were weighted on the side of employers. In parts of the horticulture and viticulture industries where the policy worked very well, there were ‘wins’ for both employers and workers. In a few cases where the employers’ interests dominated at the expense of workers, the policy did not work well.

Developing a ‘grounded’ logic

Based on the initial evaluation findings we concluded that the different aims of RSE participants needed to be kept in balance so that all parties benefited. While it is recognised that the employer is the primary driver of the RSE policy, the data indicated that workers’ goals and interests also had to be taken into account for the scheme to be sustainable and for the longer term outcomes to be achieved.

The findings indicated that there were multiple cause-and-effect relationships that were not linear or unidirectional. For example, a central design feature of the RSE policy is that workers will have an economically worthwhile experience in New Zealand so that they will want to return in following seasons. From the perspective of employers, this circular migration results in workers returning with the skills and level of productivity they need. This cause-and-effect relationship, which is reinforcing in nature, is referred to as a reinforcing loop (Rogers 2008, p. 38). Other reinforcing mechanisms were identified that have the potential to contribute to (or impair) the success of the policy.

The findings also indicated a number of significant cause-and-effect relationships (referred to as ‘causal strands’) that needed to occur at the same time and in a balanced way for the policy to be successful. Rogers (2008, p. 36) refers to such causal strands as ‘simultaneous causal strands’. The failure or dominance of one or more causal strands could impact negatively on other causal strands.


The analysis showed that RSE consists of two disparate subsystems that through their interaction with each other form a larger system. The RSE policy is not the sum of two individual systems, but rather the interaction of these subsystems. Some of the outcomes of this interaction were anticipated while others have been (and will continue to be) emergent. The RSE policy has to be understood as an entire system made up of interrelationships and inter-dependencies among the disparate subsystems. For the policy to be successful, the subsystems have to work ‘in balance’ with each other.

The challenge was to develop a logic that could portray these features. It needed to illustrate the balance required between the two disparate components. The logic had to have the capacity to demonstrate reinforcing loops. It also had to be able to portray the fact that the RSE policy had been designed to be an adaptive intervention (as opposed to a static policy).

Our view was that a linear, hierarchical logic could not portray these requirements adequately. We responded by developing a high-level intervention theory that depicted two interrelated subsystems (see Figure 2). The left subsystem represents the New Zealand horticulture and viticulture industries, and the right subsystem represents the participating Pacific countries and their workers.

The six simultaneous causal strands² identified are described as follows:

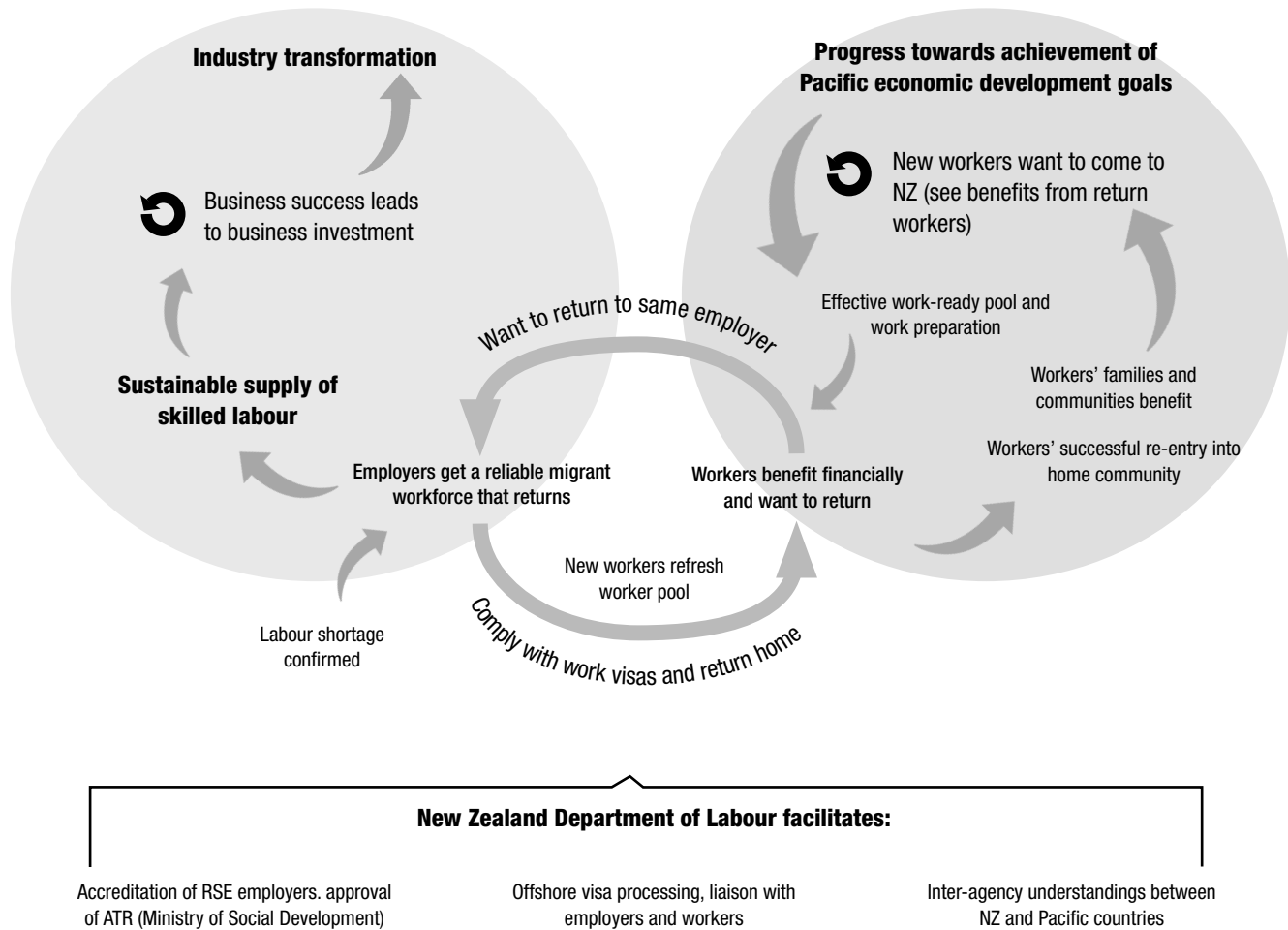
- The policy is based on the circular migration of trained workers who return to the same employer season after season.
- Workers benefit financially (and in other ways) from their New Zealand employment. This has a positive impact on their families and communities, which in turn assists Pacific countries to progress towards economic goals.
- Pacific countries must provide employers with suitable workers and ensure workers are prepared for work and life in New Zealand through effective pre-departure orientation.
- Increased productivity, as skilled workers return, together with certainty of labour supply enables employers to focus on production.
- Improved business practices and increased business investment by employers enables structural change to occur at the industry level in the longer term.
- The RSE systems set up to ensure New Zealand workers have first access to seasonal work opportunities work effectively.

The reinforcing loops in Figure 2 are depicted with the symbol  as well as the two larger arrows that connect the subsystems. Reinforcing loops are where initial success creates the conditions for further success. The reinforcing loops are (shown from left to right in the logic):

- productivity increases by RSE employers will encourage further investment and business growth
- circular migration of workers from one season to the next
- the success of return workers will encourage other people to join RSE.

In summary, the logic was grounded in evidence and became a vehicle, through an interim report part way through the evaluation, to reconceptualise the policy. During the second phase of data collection, we introduced and discussed the logic during interviews with a range of participants. This process confirmed the validity of the model, and gave us the opportunity to refine it further. We also noticed a change in the way some stakeholders viewed the policy. For example, one government respondent interviewed during the second phase of field work, emphasised the need for ‘balance’. On completion of the evaluation, the RSE logic was described by a senior government official as

FIGURE 2: LOGIC DEPICTING HIGH-LEVEL INTERVENTION THEORY



providing a ‘big picture’ snapshot of RSE (personal communication to the evaluators). It succeeded in providing a visual representation of the high-level RSE intervention theory, capturing all the key components of the policy. More importantly, it described how the main components of the policy work together. This included raising the profile of the Pacific dimension of the policy and recognising the unequal power relations that were occurring.

Discussion

Developing a logic diagram for the RSE policy challenged us in several ways. First, we had to reconsider our usual approach to logic model development. We were also confronted by the limitations of traditional logic models in our attempts to portray the complexity of the RSE policy. Another challenge was to develop a one-page

diagram illustrating a complicated policy that could be accessible to key stakeholders.

Approach to logic model development

Developing a logic model is common practice at the scoping phase of an evaluation (Owen 2006; Rogers 2009; Patton 2008). Logic models can help to clarify the various components of the initiative (inputs, results, outcomes). They provide a framework to identify the data that need to be collected to establish a trail of evidence between activities and outcomes.

In New Zealand public sector evaluation, the most usual approach to developing a logic model is to use source documents such as policy papers combined with key informant interviews with staff from the commissioning agency. However, using this approach can pose significant risks for a policy that is complicated. Unless deliberate efforts have been made to collect the perspectives of key

participant groups involved in the policy, a logic model that has been developed prior to, or at the start of an evaluation, may capture only the official discourse about the intervention. A complicated policy is likely to have multiple and potentially conflicting discourses of different participant and stakeholder groups. Such discourses need to be identified and understood as part of the evaluation. Where the scope of an evaluation has been shaped only by the official discourse, the evaluation may have serious shortcomings, including the delivery of evaluative information that is not credible to key stakeholder groups.

Further, a logic that is developed at the start of a new policy may represent a theoretical understanding that is based on policymakers' and/or decision-makers' assumptions about the 'problem', and how it should be addressed (Weiss 1999). By its nature, a complicated policy is likely to be embedded in a range of contextual factors that will influence how the policy 'plays out' in practice.³ A logic that is developed for a new policy is likely to be limited in the extent to which it can 'forecast' the likely effects of such contextual factors on the way the policy will work in practice. This view is not new. In 1994 Smith argued that an inductive approach to developing a logic may be most appropriate for programs that are dynamic, emergent or undergoing constant change and adaptation. His suggestion was that, in such situations, a program theory should reflect 'the program as it is, rather than as it should be according to some preset definition of program as technical intervention' (Smith 1994, p. 86).

This is the approach used to develop the RSE's intervention logic. In essence our logic was 'data informed' rather than theory driven. We drew on our practical knowledge (based on past evaluations) to conclude that it was inappropriate to use the initial logic and unfeasible to wait until it was developed further. We also acknowledged that this approach had a fit with our ontological perspective and the way we have been trained as researchers—our preference is to generate theory once we have collected the data rather than test whether experience 'fits' the theory. The result was that our inductive approach to developing a logic identified causal mechanisms that were not anticipated or identified by key stakeholders, but which were integral to the success of the policy and thus important to capture in our program theory.

Limitations of traditional logics for complicated policy

A second challenge was to portray the complexity of the RSE policy in a logic diagram. Traditional approaches to logic modelling produce logic diagrams that are linear and unidirectional (usually portrayed as a hierarchy). As noted, we wanted to develop a logic diagram that could portray two key findings related to the complicated nature of the policy—first, the RSE policy is not the sum of its individual components, but has to be understood as

an entire system made up of interrelationships and inter-dependencies among the disparate components/participant groups. Second, these disparate components/participant groups need to be 'in balance' for the policy to be successful. Further, the logic model had to have the capacity to demonstrate reinforcing loops. It also had to be able to portray the fact that RSE policy had been designed to be an adaptive intervention, as opposed to a static entity.

We concluded that a traditional logic model could not adequately portray these requirements. This type of model suggests stability as opposed to an evolving state. It also has limited capacity to portray the dynamics of inter-dependencies among the components. Such logics encourage a perspective that deconstructs components, with the result that stakeholders may (as was the case in this evaluation) focus primarily on those aspects for which they are responsible.

Portraying complication

Another challenge was to develop a one-page logic diagram that would illustrate the complication, but be easily understood by readers, that is, portraying complication in a non-complicated way. A difficulty we had was deciding what to include and what omit. We gave priority to the key elements of the policy and success factors. We based the logic diagram (and the accompanying explanation) on visual representations—circular arrows to represent the migration of workers each season, and two concentric systems to represent the balance that is required between the employer-led aspect of the policy, and the Pacific labour response. We also focused on the intervention theory and purposefully did not include text describing the behavioural mechanisms that are implicit in the arrows. Although we tried, we concluded that a diagram that included both the intervention theory and a theory-of-change would have made the RSE logic overly complicated. Rather, the behavioural mechanisms were described in detail in the main body of the report.

Limitations of the logic

There were a number of contextual factors such as political factors and differences in industry sectors that contributed to RSE being a complicated policy. We were unable to portray such contextual factors and their potential effects in the logic. Doing so would have made the logic too 'busy' and difficult to read.

Despite our efforts to portray the dynamic nature of the policy, committing the logic to paper makes the policy appear static. This is problematic given the emergent nature of the policy.

A general limitation of all approaches to portraying policies in a diagrammatic form is that they are not easily understood without verbal or written explanation. This is more pronounced for logics of complicated policies such as ours where we were attempting to reconceptualise the policy. In light of this, we concluded that we

could not rely on the logic ‘standing alone’. We responded to this challenge in three ways. First, we introduced the logic to individual stakeholders during our Phase Two interviews. This gave respondents the opportunity to discuss and provide feedback on the logic. For larger audiences we developed a PowerPoint presentation in which the logic ‘unfolded’ over several slides. Finally, the intervention theory and behavioural mechanisms were described in detail in the final evaluation report, with reference to the high-level logic model (Department of Labour 2010).

Conclusion

What have we learnt from this experience that may be useful in future evaluations of complicated interventions? When presented with a logic model, it is important to be explicit about whose perspective(s) are represented and for evaluators to consider whose perspectives may need to be included. All logics are theoretical to some extent—the risk is that they are viewed as representing ‘reality’. However, a logic based on grounded data, while still theoretical, provides a strong basis from which to assess a policy robustly.

When interventions are complicated, designed to be adaptive, or operating in dynamic environments it may be more appropriate to build the theory and develop the logic once initial descriptive data have been analysed. There is also merit in developing logics that describe how the different components of a policy need to work together to achieve the specified outcomes. This approach has particular merit as it encourages decision-makers to shift their focus beyond individual components, to understand how they work with each other. Such an approach also assists decision-makers to understand how proposed changes to one part of the policy may impact on other parts and enables the ‘lens to be lifted’.

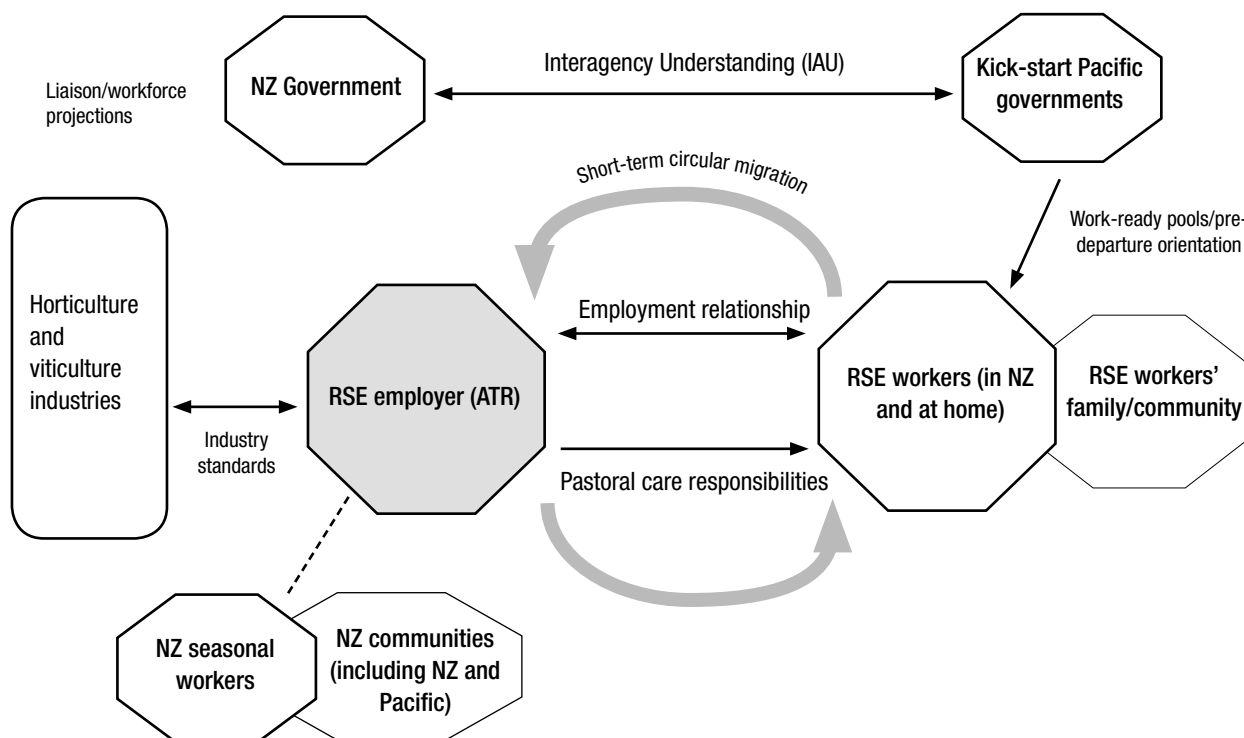
Notes

- 1 Rogers differentiates between ‘complicated’ programs and ‘complex’ programs where outcomes are uncertain and emergent.
- 2 The arrows were colour coded in the logic diagram that was given to participants and provided in the report.
- 3 Such contextual factors include macro factors (e.g. economic, political) and micro factors (e.g. how the policy operates in different sites).

References

- Dart, J & McGarry, P 2006, ‘People-centred evaluation’, paper presented to Australasian Evaluation Society 2006 International Conference, Darwin, 4–7 September, viewed 26 October 2009, <<http://aes.asn.au/conferences>>.
- Davidson, EJ 2005, *Evaluation methodology basics: the nuts and bolts of sound evaluation*, Sage, Thousand Oaks, California.
- Department of Labour 2010, *Final evaluation report of the Recognised Seasonal Employer policy (2007–2009)*, Wellington.
- Institute of Policy Studies 2008, *Better connected services for Kiwis: a discussion document for managers and front-line staff on better joining up the horizontal and the vertical*, School of Government, Victoria University of Wellington.
- Leeuw, FL 2009, ‘Evaluation: a booming business but is it adding value?’, *Evaluation Journal of Australasia*, vol. 9, no. 1, pp. 3–9.
- Owen, JM 2006, *Program evaluation, forms and approaches*, Allen & Unwin, St Leonards, New South Wales.
- Patton, MQ 2008, *Utilization-focused evaluation: the new century text*, 3rd edn, Sage, Thousand Oaks, California.
- Pawson, R & Tilley, N 1997, *Realistic evaluation*, Sage, London.
- Rogers, PJ 2008, ‘Using programme theory to evaluate complicated and complex aspects of interventions’, *Evaluation*, vol. 14, no. 1, pp. 29–48.
- Rogers, PJ 2009, ‘Using purposeful program theory and logic models for evidence-based policy and practice’, notes presented at Australasian Evaluation Society pre-conference workshop, 1 September.
- Smith, NL 1994, ‘Clarifying and expanding the application of program theory-driven evaluations’, *Evaluation Practice*, vol. 15, no. 1, pp. 83–87.
- Weiss, CH 1999, ‘The interface between evaluation and public policy’, *Evaluation*, vol. 5, no. 4, pp. 468–486.

APPENDIX: PRIMARY RSE PARTICIPANTS AND THEIR RELATIONSHIPS



In brief, the main aspects of the policy are:

- Agency-to-agency relationship** An Inter-agency Understanding (IAU) between participating Pacific government agencies and the New Zealand Department of Labour sets out the respective obligations of the parties and arrangements for Recognised Seasonal Employer (RSE) policy. Pacific government agencies are responsible for worker screening and selection into a work ready pool and worker pre-departure orientation.
- Employer recognition** Employers who wish to participate in the RSE policy must first gain recognition by complying with good employer and other requirements. Once they have achieved RSE status, the employer applies for an Agreement to Recruit (ATR) a specified number of RSE workers (for a specific time frame and location and specified work tasks).
- New Zealanders first principle** ATRs are only approved on confirmation that no New Zealand workers are available.
- Employer driven** The selection of workers and the re-employment of return workers are determined by employers based on their requirements. The relationship between the employer and worker is an employment one.
- Short-term migration** Worker applicants who have an offer of employment from an RSE employer and who meet the RSE worker criteria are granted a seven-month Limited Purpose Entry visa in any 11-month period (except nationals of Kiribati and Tuvalu where the duration is nine months in an 11-month period).
- Circular migration** The policy provides for the return of trained workers (who have an offer of employment) in future seasons.
- Pastoral care** The RSE employer is responsible for the pastoral care of workers.