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Pricing an Extension Service for Organic Farmers and Growers

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Pricing an Extension Service for Organic Farmers and Growers

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Summary and Key Words

The organics sector is expanding rapidly and the Board of Organics Aotearoa New Zealand considers that the future provision of an extension service is needed to underpin the ability of producers to efficiently convert to organic systems and then to further develop the sustainability of their systems. This project commissioned by Organics Aotearoa New Zealand in 2008 considers four possible organisational structures for delivering such a service. The first possible structure is a complete extension service for organic producers that combines national coordination, standard setting and information management with a local problem-solving and sector development service. Option 2 is a more centralised option, especially useful for producers at the beginning of their system conversions to organics when advice to them can be more prescriptive. Option 3 provides decentralised learning opportunities for producers out in the regions and so is more of a "bottom-up" approach to extension. Option 4 is a user-pays option where only those people directly involved in a project need make any contribution to the costs of the extension service. Option 1 requires funding for each producer of more than $250 per annum and needs over $2 million gross income before the full service could be provided. Option 2 requires 2000 producers to be financially viable and funding of less than the equivalent of $250 per annum per grower. Option 3 requires 7000 producers involved before the costs are reduced to the equivalent of less than $250 per annum per grower. Option 4 would be viable with funding equivalent to less than $250 per annum per grower. The Board wanted an extension service that minimised central overheads, provided a variety of learning styles, and served the needs of both organic start-ups and established producers. It was recommended to the Board of Organics Aotearoa that they proceed with Option 3. The Board decided that Option 2 better fitted the resources that they had available, and this approach has been working well.

Organic, extension, governance, funding

Background on the Organics Sector

Organics Aotearoa New Zealand (OANZ) is an across-industry organisation that supports and encourages the development of supply chains for organic produce for everything from onions to milk powder. Organic production has been expanding rapidly in recent years from about $20 million dollars worth of exports in 2000 (Reider, 2007) to $170 million in 2009 (OANZ 2010). In 2003 OANZ set a target for 2013 of $1 billion dollars worth of exports. In 2000 there were about 500 commercial organic producers in New Zealand, with about two thirds of them certified. So, at current levels of export returns per producer, by 2013 this number will need to grow to about 3500 producers to achieve the export target.

Organic producers in the various industries are at different stages of development and each region of New Zealand from Northland to Southland has differing requirements for technical and management advice. Some industries such as apples have a long history of organic production. Other industries such as kiwifruit have been more recently developed. Producers also vary in their connectedness into networks of similar producers at the same stage of property development. Some producers are clustered together in specialist localities within an industry, all supplying the same processor, e.g. dairy farmers around Cambridge supplying Fonterra. Other processors may be more isolated and embedded in traditional production areas e.g. some organic kiwifruit orchards in parts of the Bay of Plenty. All of this variety in industry situations indicates differing requirements for extension support amongst producers.

In addition, sources of literature and industry key informants provided the authors with highly diverse descriptions of expectations for an extension service, reflecting the different technical needs within their industries e.g. pip fruit growers needing black spot and pest management advice, and livestock producers needing to maintain soil fertility and control parasites. Producers were at different stages in developing their production systems with some remaining producers of monocultures e.g. sweet corn, whilst others were integrating different production systems on their properties, e.g. combining pip fruit, lambs and cut-flowers.

OANZ established a nation-wide extension service in 2006, largely funded through Government investment. Government funding finished in 2009 (OANZ, 2009). In 2008 and as part of the process of strategic adaptation, the Board of OANZ asked the authors to examine and propose possible extension models for the sector beyond the date when Government funding was expected to finish (Parminter, Botha & Tanner, 2009).

Introduction to the Extension Services Provided by OANZ

Currently OANZ consists of a governance body, an executive team, and regional facilitators (Figure 1). The figure highlights the components of OANZ associated with providing governance, management and operational services. Governance is provided by the Board of OANZ.

The eight directors on the board are elected from 14 industry groups including OANZ, Te Waka Kia Ora and producer organisations (Martech Consulting Group, 2003). Corporations (e.g. Fonterra, ZESPRI, and Heinz-Wattie) play an important role in the organic sector and the work of OANZ. Involving an organisation such as Te Waka Kia Ora (TWKO) ensures that OANZ can meet the needs of Māori as well as non-Māori producers.

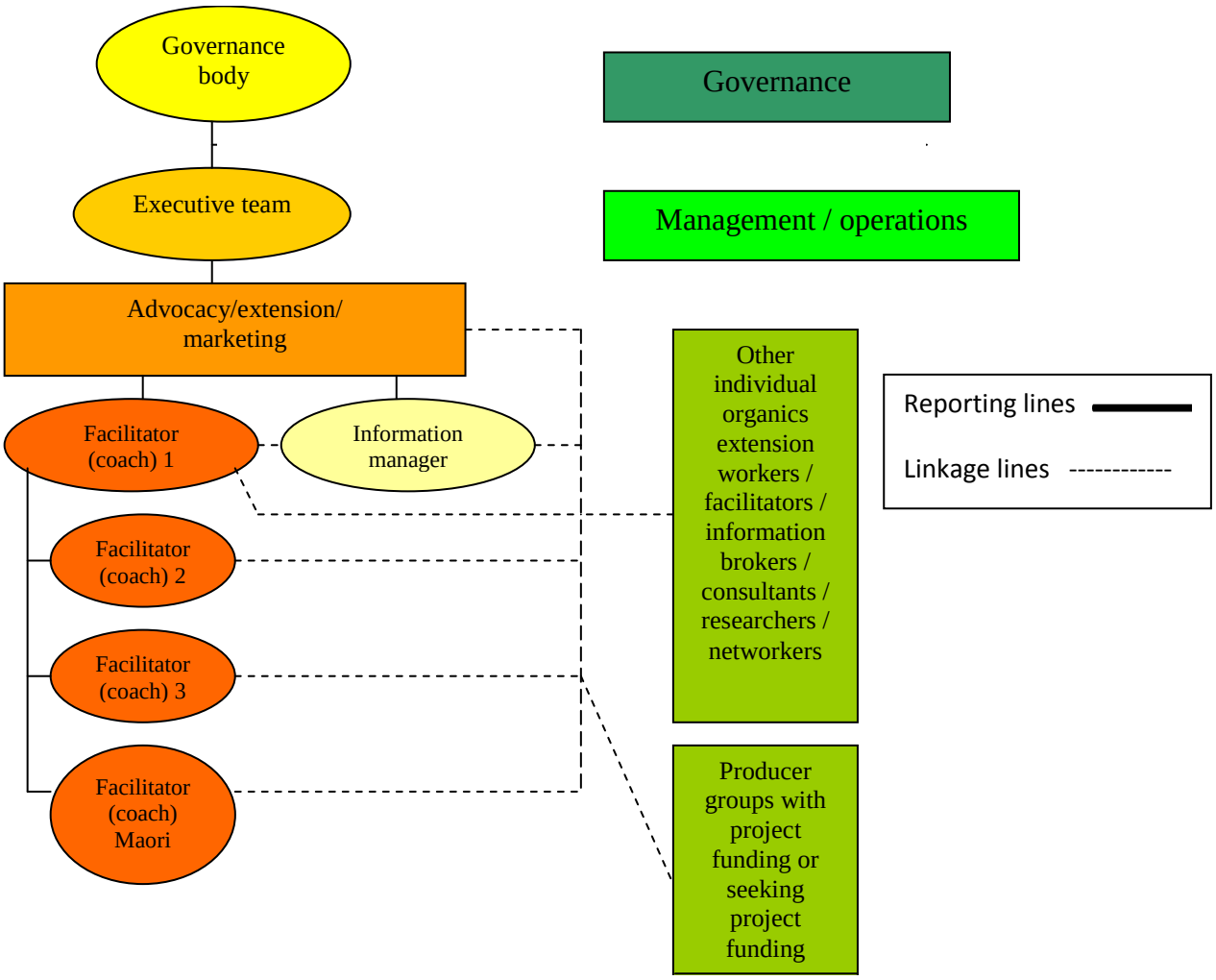
The executive team consists of a full time manager and a director (from industry or producers), supported by an administrative support person. The executive team is responsible for advocacy, extension and marketing of organic production.

Extension services are provided through an OANZ website and regional facilitators. The website provides the first port-of-call for producers who wish to link with other organic producers in their region and obtain information about establishment and transition to becoming an organic producer. Regional facilitators are available for producers in north, central and southern regions of New Zealand. The facilitators are competent in technical issues related to organic production systems. They also have project management and group facilitation skills.

The regional facilitators advocate for organic conversions and assist individuals establish themselves as producers. They work with groups of producers to solve production problems, and identify opportunities for expanding their production. The facilitators assist producer groups identify opportunities for research and development projects, and they can help with applying for funding and the administration of their projects.

OANZ has had to adapt to a changing political and economic environment and levels of encouragement to provide extension services.

Figure 1. The existing structure of OANZ for the provision of future organic extension



Project Problem

In 2008, OANZ approached AgResearch to provide the Board with extension options that could be used to plan the future extension service provided by the sector. The options needed to build upon the existing intellectual and skill capability of the staff. They were required to minimise overheads, and put most of the available resources into operational activities with producers. An extension service was needed that provided a mix of learning styles and could assist start-up operators as well as established organic producers.

The options were to be prepared based upon a desk-review of available extension examples and interviews with staff and producers in OANZ.

Extension Options

Four options have been prepared varying in their degree of centralisation, and ability to provide different learning styles and extension services. The range of expected income and costs for each of the extension options is shown in figures 2-5.

Income for industry self-funding is likely to be low if numbers of producers in the sector remain at existing levels (<1,000). This applies whether the income is obtained directly from producers via a levy or fee, or if it is obtained through a commercial company providing a service to its clients as part of its marketing arrangements. In this analysis the number of producers is varied from zero to 10,000. Income for the extension service is assessed as varying between $250 per year to $1,000 per year per producer. Costs are based upon those shown in Table 1.

The extension service costs are plotted in the figures as columns and income is plotted as lines on the same graphs. Where the columns are less than a specific income line, it has been calculated that income will be sufficient to cover costs at that point. Generally as the number of participating producers drops (moving from right to left along the bottom axis) a point is reached where the extension service costs are no longer covered by income even at $1,000 per producer, i.e. the column is greater than the line matching that income level.

Table 1: Estimated budget for structure in figure 1

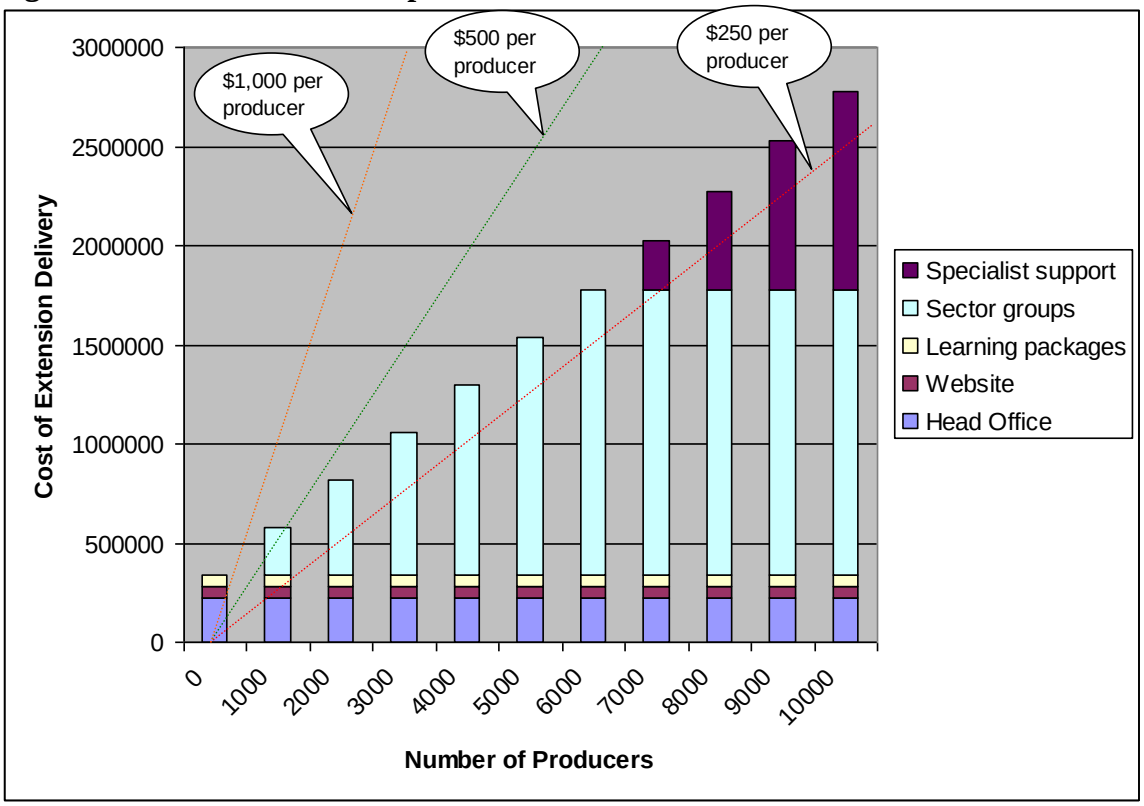
Activities		**FTE**	**Cost**	**Total ($)**
Executive support	Director	0.20	55,000	
	Leader/manager/CEO	0.50	180,000	
	Admin assistant	0.40 (9 mnths)	27,500	112,000
Extension activities	Regional facilitaters	4.0	110,000	440,000
Information management, web development	Information manager	0.5	110,000	55,000
Overheads	Insurance, office, vehicles, meetings, phone, general		100,000	100,000
Resource materials	computers, learning packages material		8,000	8,000
TOTAL COSTS				**$715,000**

Option 1, is a complete extension service for organic producers. It combines national coordination, standard setting and information management with local problem-solving in the regions and sector development for individual groups of producers. Of the four options, this one potentially provides the highest quality information and delivery processes. Similar to some government run extension services around the world this is the most expensive option to establish with central office costs and overheads of $790,000 per year.

If a comprehensive extension service is provided to address all the needs of the industry, it will require a combination of head office coordination, interactive information website, organic conversion learning packages and regional groups for problem-solving and learning. This would be sustainable for a sector that included over 2000 producers at a cost of $500 per producer (Figure 2).

When more than 3000 producers become involved, the prices per producer can begin to be reduced. When more than 7000 producers are contributing to the sector it would be possible to add technical specialists and researchers to the team of regional facilitators.

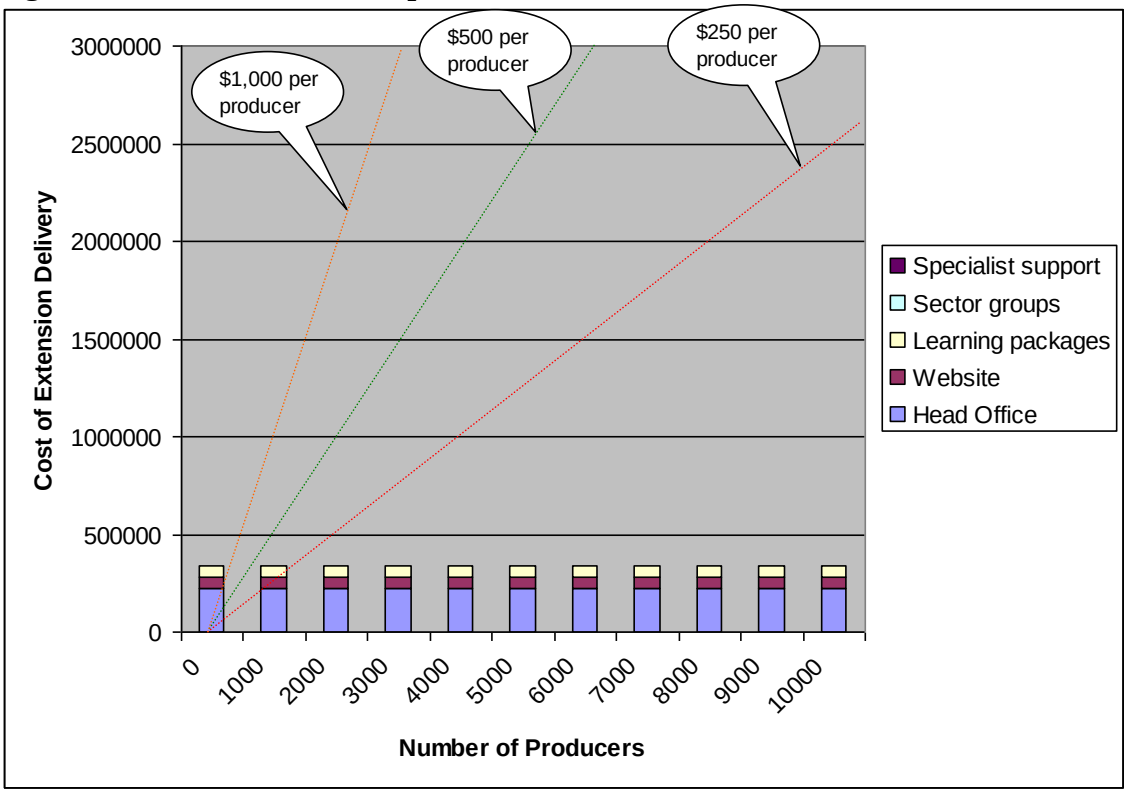
Figure 2: Costs of extension option 1



Option 2, is a more centralised option than option 1. It provides formal learning opportunities along with web-based access to information. Because option 2 is centralised it has to provide generic information that can be applied across a range of regions and producers. The quality of the information can be controlled easily, but the organisation will be less engaged with organic producers in the regions than option 1. This option may be most useful for producers at the beginning of converting their systems to organics when their advice can be more prescriptive. A centralised service is cheaper to operate than option 1, however, it provides limited opportunity for more experienced producers to learn from each other in the regions. The comparable costs of the central office and overheads are $365,000 per year. This option is used in countries with highly centralised knowledge services e.g. some countries in South America (Parminter, 2007).

This would not need any regional staff, instead it would be based upon an interactive information web-site and learning packages for organic conversions. This extension approach could be sustainably funded if the sector had 1000 or more producers and investors were prepared to contribute $500 per producer (Figure 3).

Figure 3: Costs of extension option 2



Option 3 (Figure 4), is a regional option. This option provides decentralised learning opportunities for producers. It is more flexible and interactive with producers than options 1 and 2 and is consistent with a "bottom-up" approach to extension and consultancy. The limitations of this option is that it is more fragmented than options 1&2 and so the integrity of its technical information and extension delivery is likely to be less consistent. It relies on few full time staff and so it is the cheapest option of the three with central office costs and overheads, at $276,000 per year.

Such a service could be funded by a producer levy of $500 per year if more than 1,000 producers contributed. Initially regional facilitators might not be able to provide support for individual producers, but as numbers increased individual visits could become possible or the annual fee reduced.

Option 4 (Figure 5), is a user-pays option. It is locally driven and initiated and the most flexible and least risky to the sector of any of the options. In this option, local groups apply for project funding to resource extension activities related to delivering specific project outputs. The project option has only operational costs, and each project includes a cost for coordination with other sector projects. These coordination costs can be as great or as small as the project budget allows. With this option only those people directly involved in a project need make any contribution to the costs of the extension service.

Figure 4: Costs of extension option 3

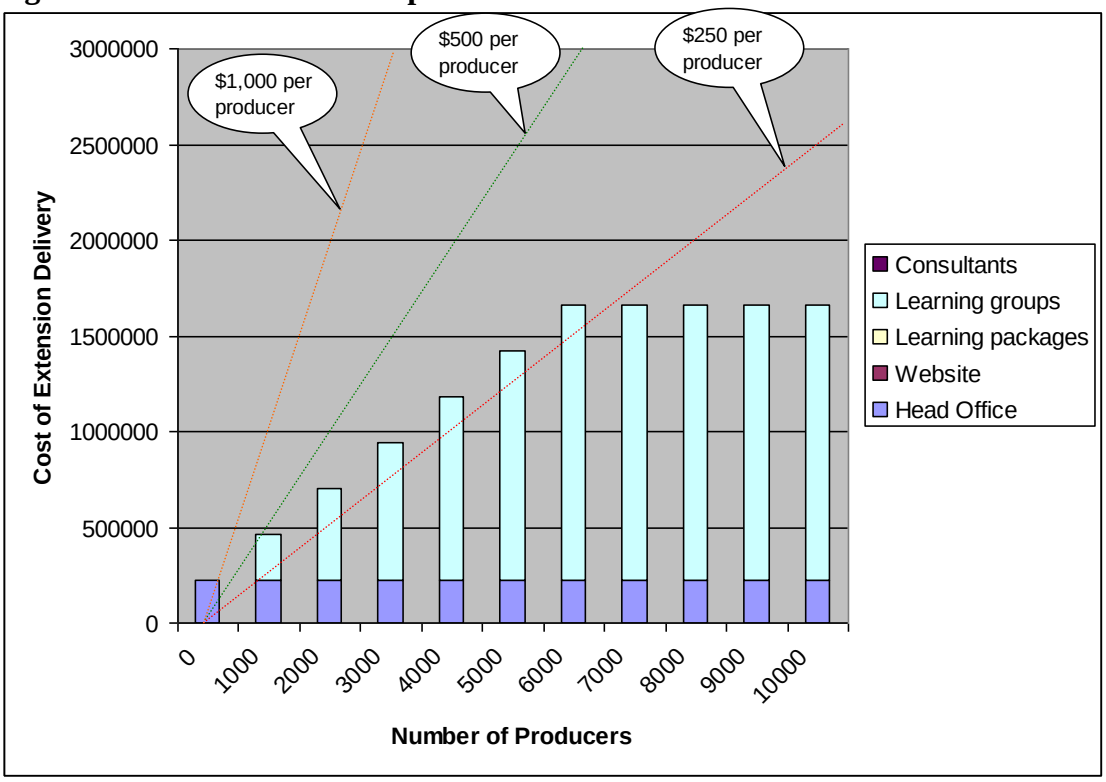
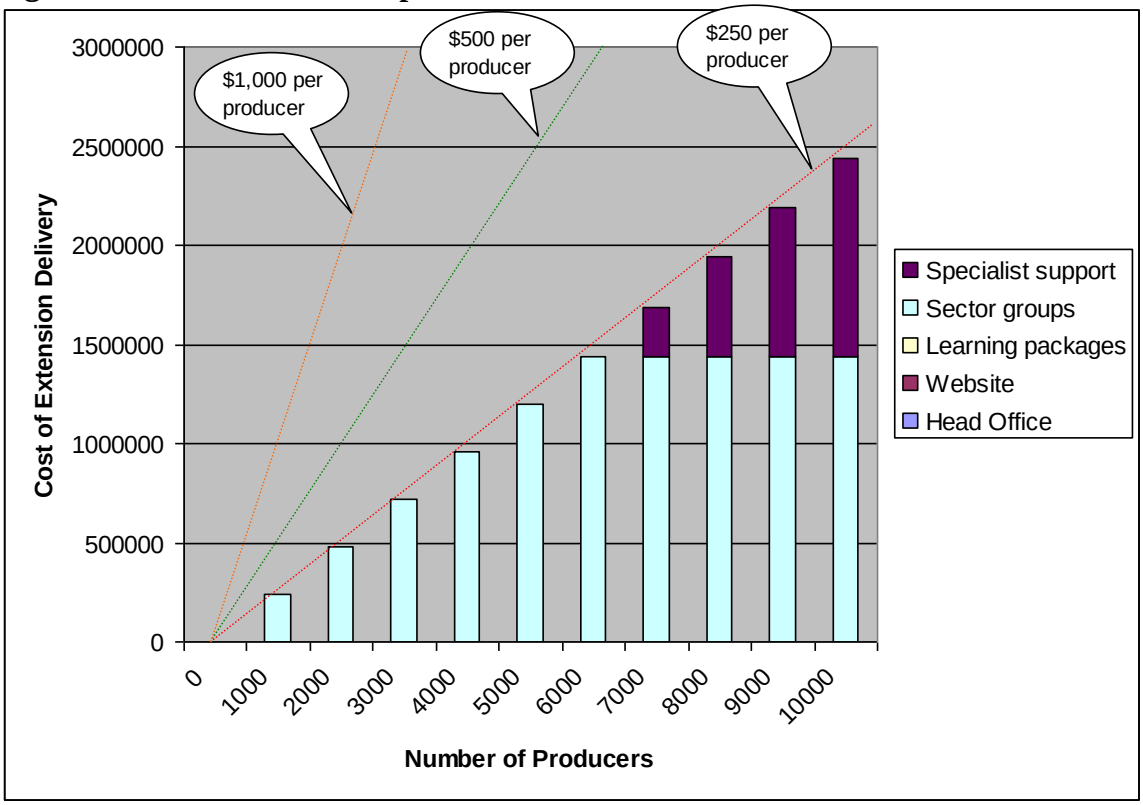


Figure 5: Costs of extension option 4



In Figure 5, it is assumed that funding is provided for technical projects only. There is no national body and so no sector overheads. Coordination between projects and across the sector is provided from within one of the projects. Producers and industry people working with them, identify key issues facing their industries and put together projects to address them. It is likely that producers and public-good agencies will need to jointly fund such projects. If the sector has less than 1000 producers or cannot bear an annual cost of $250 per producer, this is likely to be the most sustainable structure.

Recommended Option

The selection of a recommended extension option is underpinned by several premises.

The first is that the vision for the organic sector of achieving a target of $1 billion total sector sales by 2013 is important or will become important to the whole sector or at least the major stakeholders in the organic sector.

Secondly, the organic sector is emerging; hence it is quite diverse and fragmented. A national pan-organic industry body can assist it to gain government recognition and support from the major stakeholders in the organic sector to provide national sector-wide leadership, advocacy and extension support. Without a national pan-organic industry body, extension services will primarily be driven (as is currently the case); by small groups of producers in new areas of conversion such as hill country lamb

production. Alternatively it could rely upon small regional businesses and organic outlets (e.g. farmers' markets where information sharing take place), or certifiers or exporters (like Demeter and OPENZ) or food processors and corporations in the organic sector (e.g. Fonterra, ZESPRI, Heinz-Wattie's). Without a national pan-organic industry body (like OANZ) future organic extension services will most likely be self-funded, fragmented, diverse and ad hoc. Where large corporations or stakeholders take an interest and invest in extension services, e.g. Fonterra, Zespri and pack-houses, organic extension might be more co-ordinated within a part of an industry but not reach the whole sector.

Choosing an extension approach and establishing a way of funding it needed to go hand in hand. A good design on paper, couldn't get off the ground if it couldn't attract funding. The size of the organic export market is between $120 and $130 million per annum and growing, so relying upon funding through producer levies is possible. There are questions though about whether cross-subsiding in the organic sector would be acceptable or not. For example: using levy money from pip fruit to support organic vegetable or organic lamb producers; or using a non-organic commodity levy to support organic producers. If the sector couldn't agree to move ahead in a united front, cross-subsiding would be unacceptable.

The four options we have presented are based on our understanding of the future information and knowledge needs of the organic sector and our review of extension approaches and funding options for extension services.

The recommended option for OANZ is option 3 with the addition of a centralised website from option 2. Regional facilitators of local groups were expected to be paid directly by group members and where possible this is supplemented by project based funding. This recommendation minimised the size of the extension executive and so its overhead costs. It provided for regional learning amongst producers and added a web-site as an information resource for both producers and facilitators.

This recommendation had the advantage that it:

- fitted well with the sector's current vision
- utilised existing capability and capacity within the sector
- aligned with government and industry priorities and
- was flexible enough to adapt in future into another extension option should that become necessary

The recommended option had as a key underlying philosophy that rural industry participants are best served by providing them with a facilitative framework to allow them to define their own problems and opportunities and seek their own avenues to address them. This is about ownership and responsibility - but it is also a pragmatic understanding that it is the people in a specific situation that are best able to understand and act on issues directly concerning them. By encouraging people to work together in this way, more lasting and sustainable solutions could result.

The recommendation would strengthen the facilitated groups in option 3 with information access (part of option 2), providing producers with an OANZ dedicated website for information and linking them with other groups and websites for relevant information and resources.

In the recommended option there are facilitators, also acting as coaches, who work with groups of producers to empowering them through capacity and capability building.

The recommended option was about enabling organic producers to achieve their own goals, encouraging mutual learning whereby all participants learn, and striving to empower producers to improve their organic systems and outputs. Learning and facilitation resources were provided and links to researchers were fostered to encourage producer groups to resolve their own problems and opportunities. Hence this option was strongly based upon group learning and empowerment. But it also linked strongly with other individual organics extension workers, facilitators, information brokers and consultants. Consultants in particular could be important, because they can work with organic producers to build an understanding of their production systems and while doing so they can further build personal relationships of confidence and trust with producers.

It was indicated that Option 3 could be funded by the producers that directly benefited from its extension services. In addition, regional facilitators could be encouraged to apply for project grants where they could address issues of regional or national significance. This is similar to the funding approach in option 4. Project funding has already been able to be obtained in the organic sector by the AERU, Agribusiness Group and Groundwork Associates. The approach requires that producer groups apply for funding (e.g. UDP, Sustainable Farming Fund, TechNZ and so on) with or without external support, e.g. advisors, researchers, facilitators, to address their own issues. These groups could then affiliate, link, collaborate or work with OANZ facilitators (coaches) for the duration of their funding to access administrative and technical support and be guided in project management.

The OANZ Board considered the options presented in their report. Although their initial preference was Option 3 with its high level of personal interaction between producers and extensionists, they decided that the most cost effective approach was Option 2. Option 2 involved centralising extension management and making greater use of the OANZ electronic network. The Board developed this Option beyond what

was proposed in this paper to increase the level of interaction with regional growers. There are three components to their strategy.

A free toll-line is in place for people to make telephone inquiries to OANZ. The calls are referred on to the appropriate contacts with industry groups within OANZ or to the Organic Linkage Officer in OANZ. The Organic Linkage Office provides regular newsletters and advice notices to interested people in the regions keeping them up-to-date with local events and group activities in their areas. The Organic Linkage Officer has also brought together relevant technical information about topics of importance to the sector, e.g. wood preservatives used for treating posts, and organised a series of seminars through the regions. So far, the implementation of Option 2 has been effective at continuing to encourage the development of organic systems across industries. This would not have been possible without the regional networks previously established by the regional facilitator programme.

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