Sector survey indicator results: Comparing management systems within horticultural sector

John Fairweather, Lesley Hunt and Jayson Benge

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Survey objectives

• To assess how farmers responded to a number of important issues emerging from our research to date.

• Survey designed to compare management systems
  - Conventional (CV)
  - Modified conventional (MCV)
  - Organic (Org)

• And sectors
  - sheep/beef
  - horticulture
  - dairy
Topics of interest

• Indicators (financial, production, environmental and social).
• Approach to management.
• Connections between practices and social and environmental wellbeing.
• Community participation.
• Bird diversity and management.
• Trees and shrubs.
Response rate

- Average response rate was 22 per cent.
Horticultural sector: financial indicators

• Important to all: cash surplus/deficit, net profit/loss, money available to cover cash needs, gross income.

• More important to MCV than Organic: working expenses.
KF financial indicators

- Return on capital
- Changes in equity
- Ratio of working expenses to gross
- Money is available to cover cash needs
- Gross income
- Working expenses
- Net profit/loss
- Cash surplus/deficit

Legend:
- Very important
- Neither important or unimportant
- Very unimportant
Horticultural sector: production indicators

- Important to all: yields/ha., volume of production.
- Very important to all: quality.
- More important to Conventional than Organic: neat & tidy landscape, minimum weeds.
- More important to MCV than Organic: health of plants in productive performance, no productive land going to waste.
- Less important to MCV than Organic: reducing C emissions.
- More important to conventional than MCV: mixture of productive uses.
KF production indicators

- Reducing carbon emissions
- Minimum weeds
- The orchard has a good mixture of productive...
- No potentially productive land is going to waste
- Volume of production is at a maximum
- Yields per hectare compared to other similar orchardists
- Quality of production is at a maximum
- The health of plants
Horticulture sector: environmental indicators

- Very important to all: soil fertility, water quality.
- Important to all: water and nutrient budgeting, energy use.
- More important to Organic farmers:
  - Soil biological activity
  - Soil health
  - Biodiversity, presence of prod. and non-prod. species, number of bird species-native or other, number of plant and tree species, native or other.
- Less important to Organic farmers:
  - Pesticide use, tidy well-maintained orchard.
KF environmental indicators

The amount of carbon stored (sequestered)
The number of native plant or tree species
The number of plant or tree species, native and other
Presence of both productive and non-productive species
The level of biodiversity on my orchard
Water budgeting
Energy use
The number of native bird species
A tidy, well maintained orchard
Nutrient budgeting
Water quality in nearby streams and waterways
Pesticide use
Soil biological activity
Soil fertility levels
The health of plants
Horticultural sector: social indicators

• Important to all that neighbours considered them to be a good orchardist.

• Conventional orchardists rated highest the importance of ‘my neighbours approve of my orcharding practices’.

• MCV orchardists rated lowest the importance of creating an attractive place to live (on the orchard).

• Conventional orchardists rated the importance of their family’s reputation more highly than Organic orchardists.
KF social indicators

My orcharding helps to create an attractive place to live
My neighbours approve of my orcharding practices
My orcharding helps me to develop a connection to the place where it is...
My family has a good reputation in the local community
I have enough time to participate in activities and recreation off orchard
Orchard workers are treated well
I have enough time to devote to family & friends

My orcharding helps me to consider me to be a good orchardist
My neighbours consider me to be a good orchardist
I have enough time to participate in community activities
My orcharding is scope for orchard to the local community
The children are involved in the orchard
Members of my orchard family will be able to contribute to local traditions, festivals or customs

Very important

Neither important or unimportant

Very unimportant
KF: Differences between management systems

• Very few differences
  – Green cf. Green Organic orchardists placed more importance on having a tidy orchard (5.8 vs 4.2)
  – Gold orchardists neutral on birds and biodiversity (~4). Green/Green Organic saw these as more important (> 5.0)
Meta-analysis of indicators by management system (across all sectors)

Key:
Financial indicators (11 variables)
Production indicators (9 variables)
Environmental indicators (17 variables)
Social indicators (14 variables)

Organic
Modified
Conventional

Conventional
Meta-analysis of indicators by sector (across management systems)

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