

ORC Evidence Requirements for the Banana Industry

The Banana Industry Owner Reimbursement Costs (ORC) Evidence Framework only applies to Owners from the Banana Industry.

ORCs for the Banana Industry are calculated using the formula for Broad Acre Perennial Crops (*schedule 6, part 4.4.14 of the Emergency Plant Pest Response Deed, 22 August 2018*). This formula is: **ORC = (A - H) + B + C + D + E + F + G**

A definition for each component of this formula is provided in the following table.

Regional differences will need to be taken into account throughout the Evidence Framework. These are further elaborated in Appendices to this Evidence Framework.

Key terms used in this Evidence Framework

Term	Definition
Authorised Person(s)	Where key variables of the ORC need to be assessed, potentially having significant financial or 'moral hazard' implications, an Authorised Person should be used in the determination of the appropriate value. Such persons: (a) should be appropriately authorised under relevant legislation and procedures (usually of the Affected jurisdiction); (b) may be involved in (without limitation) certification, audit or determination of key information as appropriate; (c) should be appropriately qualified for the specified roles; (d) need not be a government employee, but must meet relevant independence and other relevant probity requirements; (e) should be sourced from existing expertise, such as qualified agronomists or hail assessors, where possible and appropriate.
Jurisdictional legislative instrument	A State or Territory's gazetted notice of a regulation.
Lead Agency	The agency(s) of the State(s) or Territory(s) which are responsible for leading the conduct of a Response Plan (because of the occurrence of an Incident within their State(s) or Territory(s)).
Owner(s)	Owner(s) of a Crop, Crops or sub-group of Crops, or a property, which is/are subject to a Response Plan, or their authorised representative(s).
Relevant Parties	In respect of the taking of a decision or action, the Parties which may be affected (or, where they are an Industry Party, the members of which may be affected) by the decision or action.

Note this list is not comprehensive. Refer to clause 1.1 of the EPPRD for definitions of capitalised words/terms (excluding names) used in this framework

Broad Acre Perennial Crops

Revision history

Version	Date issued	Amendment Details	
		Element(s)	Details
1.0	20 March 2014	All	'Endorsed Draft' approved only for use in the Banana Freckle Incident in the Northern Territory only.
Draft		All	Full revision of all elements of the Evidence Framework and development of appendices.
2.0	8 July 2019	All	Endorsed by the Australian Banana Growers' Council, government Parties and the Plant Health Australia Board.

Costs which may be paid as Owner Reimbursement Costs are to be calculated as follows: $ORC = (A-H) + B + C + D + E + F + G$

A = Value of the Crop destroyed

$$= a * y * p$$

where

a = Area of Crop destroyed

y = Yield which depends on the type of Crop destroyed — for sugar, for example, whether it is a plant Crop or ratoon Crop as yields vary from year to year. For this reason, yield y is to be based on distinct average yields for the type of Crop destroyed — for example, ratoon or plant Crop.

p = market price of the product

= The average regional market price over the previous 12 months valued at farm gate.

B = Any costs of Crop destruction 'depreciated' in the same way as for perennial tree Crops.

C = Any other costs incurred by the Owner as a direct result of the Response Plan and not normally incurred as a production cost.

D = 'Depreciated' Crop replanting costs as for perennial tree Crops.

E = Loss of net profit from compulsory fallow, where fallow would not normally be part of the rotation cycle. Net profit to be standardised and based on regional gross margin estimates by State/Territory departments of agriculture averaged over the rotation cycle. A maximum of three years fallow is to be included.

F = Replacement value of any capital items destroyed as part of the Response Plan.

G = Value of any stored produce on farm destroyed as a directive of the Response Plan — as for annual broadacre Crops.

H = 'Best practice' harvesting costs plus any other costs normally associated with Crop production between the time of Crop destruction and harvest. Such costs are to be standardised for the region based on estimates by State/Territory departments of agriculture.

Note: The depreciation methodology that applies is Method 2 as agreed by EPPRD Parties in early 2007 following a review of the methodology. The details of Method 2 (difference between the sums of two discounted net profit/cost streams) are described in the *Guidelines for owner reimbursement costs under the plant pest deed* (Centre for International Economics, June 2004) available on the Plant Health Australia website.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
A	Value of the Crop destroyed = $a * y * p$		
	a = Area of Crop destroyed	<p>Certification/assessment by an Authorised Person of the variety, area and age of the Crop to be destroyed, using one of the following methods:</p> <ol style="list-style-type: none"> 1. Accurate property maps 2. Satellite imagery or aerial photography if accurate property maps are not available 3. On ground surveys conducted using GPS data if the previous options are not available at the time of Crop destruction 	<ul style="list-style-type: none"> • An on the ground survey, plant count and variety verification will be required to verify the type of Crop being grown on the area at the time of the incursion. This will be carried out by an Authorised Person.
	<p>y = Yield</p> <p>which depends on the type of Crop destroyed — for sugar, for example, whether it is a plant Crop or ratoon Crop as yields vary from year to year. For this reason, yield y is to be based on distinct average yields for the type of Crop destroyed — for example, ratoon or plant Crop.</p>	<p>Certification/assessment by an Authorised Person of the yield of the Crop to be destroyed, using one of the following methods:</p> <ol style="list-style-type: none"> 1. Actual yield determined by harvesting and grading the Crop using normal practices 2. If actual yield cannot be determined by harvesting the crop, expected yield calculated from Owners' auditable yield data for the plant or ratoon Crop averaged over previous 3 years 3. The 3 year average for the region for a plant or ratoon Crop will be used if the above options are not available, based on <ol style="list-style-type: none"> a. banana industry benchmarking data; or if not available b. local packer information 	<ul style="list-style-type: none"> • Yield refers to the marketable yield only. • Yield should be specified as plant or ratoon Crop, and will take into account the variety, for example, Cavendish or Lady Finger. • Yields recovered through insurance policies and any insurance premiums are not to form part of ORCs. • Owners claiming above expected average yields must produce auditable records of above average returns to justify additional amounts in ORCs. • New property Owners will need to obtain permission from previous Owners for data release if they wish to use records for the property for their ORC assessment. • Yield data may be supplied in cartons, kilograms or tonnes per hectare or per year.
	p = market price of the product.	<ol style="list-style-type: none"> 1. If there is a contract in place this will be used for Crops applicable under the contract. This will be adjusted, according 	<ul style="list-style-type: none"> • There are 2 main avenues for selling bananas: <ul style="list-style-type: none"> ○ Via wholesale markets; or

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
	= The average regional market price over the previous 12 months valued at farm gate.	<p>to contract terms, using the quality and grading values of the previous season.</p> <p>2. If there is no contract price, the prevailing market price for the Crop will be sourced from wholesale markets or retailers, depending on the market usually accessed by the Owner.</p> <p>Owners claiming above the prevailing market price must produce auditable records of above market prices in previous years to justify additional amounts in ORCs. For example, organic or sustainably produced bananas may have a different market price than the prevailing market price.</p>	<ul style="list-style-type: none"> ○ Direct to retail supermarkets Direct sales to local stores and markets is a small channel, but more relevant for growing areas outside of FNQ. ● If there are Crops grown on the same property that fall under contract and non-contract arrangements, the contract price will be paid for the volume of Crop in the contract and the price for the remaining Crop will be the prevailing market price.
B	Any costs of Crop destruction 'depreciated' in the same way as for perennial tree Crops.	<p>Where the grower is directed by the Lead Agency to destroy the crop, costs will be determined with reference to the lowest of 3 reasonable quotes from local suppliers for any external inputs / services required and reasonable estimates of internal / operational costs incurred</p> <p>The standard period of rotation will be used (as specified for main varieties in <i>Appendix 3</i>), unless an Owner can provide evidence of a different intention.</p>	<ul style="list-style-type: none"> ● Destruction is normally carried out by the Lead Agency. In this case, costs associated with destruction will not be included as part of the ORC calculation ● Crop rotation will vary depending on the variety, region and growing system employed by the grower. <i>Appendix 3</i> provides the standard Crop rotations for leading varieties. ● The main variety and region for banana production is Cavendish in the wet tropics region. A standard rotation for this variety is one (1) year plant crop, 7 years' for ratoon cropping and one (1) year fallow prior to replanting. ● If the rotation period for Crops is different to the standard, the Owner will need to provide sufficient evidence to the Authorised Person for verification.

	Definition of elements from the EPPRD	Evidence requirements (in hierarchical order)	Additional information
C	Any other costs incurred by the Owner as a direct result of the Response Plan and not normally incurred as a production cost.	<p>For actions/treatments specified in the Response Plan, costs will need to be calculated on an Incident by Incident basis.</p> <p>Normal costs are to be determined in accordance with <i>Appendix 1: Schedule of Costs for elements C, E and H - normal production and harvesting costs, based on 'best practice' incurred by the Owner.</i></p> <p>A schedule of costs additional to these that are required by the Response Plan will be developed by the Lead Agency at the time of the Incident.</p>	<ul style="list-style-type: none"> • The legislative order needs to specify the actions/treatments required by the Owner. • Estimates of cost will need to be verified by an Authorised Person
D	'Depreciated' Crop replanting costs as for perennial tree Crops.	<ol style="list-style-type: none"> 1. Where an Owner has auditable records from within the last 3 years for actual replanting costs, these can be used for the calculation of Costs. 2. If no records are available, costs for inputs and services normally used to plant a new Crop to be determined with reference to the lowest of 3 reasonable quotes from local suppliers and service providers and reasonable estimates of internal /operational costs incurred. 	<ul style="list-style-type: none"> • If a fallow period different to Owners' normal practices is required, replanting costs will be determined using an inflation value estimated to the time replanting is allowed. • In assessing reasonable quotes, reference can also be made to the information in <i>Appendix 2.</i> • Replanting costs are based on "like-for-like" replanting costs. If changes to plantation design, such as mounding or higher density plantings are included as new improvements, then the additional expense is at the owner's cost. Costs such as royalty payments for protected varieties are only included if these are replacing existing trees with a royalty type cost included at replanting.
E	Loss of net profit from compulsory fallow, where fallow would not normally be part of the rotation cycle. Net profit to be standardised and based on regional gross	<ol style="list-style-type: none"> 1. Where they exist, the Owner's auditable records from 3 prior years of production used to define future costs and value of Crop. 	<ul style="list-style-type: none"> • If a fallow is not specified in the Response Plan, E does not apply to ORC. • Crop rotation will vary depending on the variety, region and growing system

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
	<p>margin estimates by State/Territory departments of agriculture averaged over the rotation cycle.</p> <p>A maximum of three years fallow is to be included.</p>	<p>2. If auditable records are not available, a standard Schedule of regional gross margins will be used to estimate costs based on “best practice” and determined by State/Territory departments in consultation with Australian Banana Growers’ Council and against banana industry benchmarking data.</p> <p>The standard period of rotation (as specified in <i>Appendix 3</i>) will be used, unless an Owner can provide evidence of a different intention.</p>	<p>employed by the grower. <i>Appendix 3</i> provides the standard Crop rotations for leading varieties.</p> <ul style="list-style-type: none"> • The main variety and region for banana production is Cavendish in the wet tropics region. The standard cropping cycle for this variety is defined as being 1 plant Crop followed by 7 years of ratoon Crops and a 1 year fallow period. • If the rotation period for Crops is different to the standard, the Owner will need to provide sufficient evidence to the Authorised Person for verification. • The primary goal should be to reduce the costs of the response to all Parties. Unless bare fallow is specified in the Response Plan, it will be assumed that an Owner will grow the next most profitable enterprise with existing capital equipment and knowledge. • Where the response allows, suitable alternative crops will be identified and income from the crop deducted from the amount payable under the ORC for a compulsory fallow. • Refer <i>Appendices 1.1 to 1.4</i> for examples of gross margins. • The most current benchmarking data must be referred to and is available from ‘Banana Enterprise Performance Comparison 2016/17’ (Hort Innovation project BA16009).

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
F	Replacement value of any capital items destroyed as part of the Response Plan.	<p>Replacement value of any capital items destroyed will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <p>Costs are to be determined in accordance with a schedule of market values for items expected to be destroyed, replacing like with like, and agreed by Relevant Parties at the time of developing a Response Plan.</p> <p>Prices will be sourced from local/district suppliers at the time of Response Plan development.</p>	<ul style="list-style-type: none"> • The legislative order needs to identify the items requiring destruction. • Capital items for the banana industries could potentially include: <ul style="list-style-type: none"> ○ In field picking and harvesting equipment (for example, picking bins, picking trailers/platforms) • Replacement value of any capital items destroyed as an unintended consequence of an eradication program need to be included in this element but will not necessarily be specified in the Response Plan. Unintended destruction of capital items will be dealt with on an Owner-by-Owner basis. • Replacing 'like with like' means that the Owner is reimbursed for the value of the asset that was destroyed under the Response Plan – it is the cost to replace the same type of item (i.e. same make, model, size etc), and takes into account the age of the item destroyed through a method of depreciation. • If there is an opportunity following the Response Plan for modernising or upgrading the growing facilities – for example, new technologies or planting systems - the Owner must cover additional costs. • If items cannot be replaced until the fallow period ends, the price of these items is

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
			likely to increase during the fallow period. As such, an appropriate rate of input price inflation must be determined and applied to these prices. Subsequent values are then depreciated.
G	Value of any stored produce on farm destroyed as a directive of the Response Plan – as for annual broadacre Crops	<p>Assessment of the amount of any stored produce will be determined by an inspection undertaken by an Authorised Person at the time of the Incident.</p> <p>Price to be determined using:</p> <ol style="list-style-type: none"> 1. If there is a contract in place this will be used for Crops applicable under the contract. This will be adjusted, according to contract terms, using the quality and grading values of the previous season. 2. If there is no contract price, the prevailing market price for the Crop will be sourced from wholesale markets or retailers, depending on market usually accessed by the Owner 	<ul style="list-style-type: none"> • This will depend on what the Response Plan requires and will be calculated on an Incident by Incident basis. • Bananas may be stored in ripening rooms for up to 2 days prior to transportation.
H	'Best practice' harvesting costs plus any other costs normally associated with Crop production between the time of Crop destruction and harvest. Such costs are to be standardised for the region based on estimates by State/Territory departments of agriculture	<ol style="list-style-type: none"> 1. Where an Owner has auditable records for the previous 3 years, these will be used as appropriate. 2. If auditable records are not available, a standard Schedule of regional gross margins will be used to estimate costs based on "best practice" and determined by State/Territory departments in consultation with Australian Banana Growers' Council and against banana industry benchmarking data. 	<ul style="list-style-type: none"> • This element includes all production costs, including harvesting costs that would normally be incurred between the time of Crop destruction and harvesting if the Crop was not destroyed. It can include normal treatment and handling costs on farm for harvested Crops, for example dipping. • <i>Appendix 1</i> provides relevant information on production costs based on best practice. • The most current benchmarking data must be referred to and is available from 'Banana Enterprise Performance Comparison 2016/17' (Hort Innovation project BA16009).

Banana ORC Evidence Framework - Notes

Date appendices developed:
May 2018

This Evidence Framework is structured to be consistent with the Guidelines for Owner Reimbursement Costs, with the following Appendices relating to the evidence required in the framework

Costs which may be paid as Owner Reimbursement Costs are to be calculated as follows: $ORC = (A-H) + B + C + D + E + F + G$

- A Value of the Crop destroyed = $a * y * p$, where
- a = Area of Crop destroyed
- y = Yield which depends on the type of Crop destroyed — for sugar, for example, whether it is a plant Crop or ratoon Crop as yields vary from year to year. For this reason, yield is to be based on distinct average yields for the type of Crop destroyed — for example, ratoon or plant Crop.
- p = market price of the product, = The average regional market price over the previous 12 months valued at farm gate.
- B Any costs of Crop destruction 'depreciated' in the same way as for perennial tree Crops.
- C Any other costs incurred by the Owner as a direct result of the Response Plan and not normally incurred as a production cost.
- D 'Depreciated' Crop replanting costs as for perennial tree Crops.
- E Loss of net profit from compulsory fallow, where fallow would not normally be part of the rotation cycle. Net profit to be standardised and based on regional gross margin estimates by State/Territory departments of agriculture averaged over the rotation cycle. A maximum of three years fallow is to be included.
- F Replacement value of any capital items destroyed as part of the Response Plan.
- G Value of any stored produce on farm destroyed as a directive of the Response Plan — as for annual broadacre Crops.
- with such costs and values being determined in accordance with guidelines issued by Plant Health Australia as set out in Schedule 17.
- H 'Best practice' harvesting costs plus any other costs normally associated with Crop production between the time of Crop destruction and harvest. Such costs are to be standardised for the region based on estimates by State/Territory departments of agriculture.

Disclaimer

Information in the framework has been prepared as a guide to assessing Owner Reimbursement Costs in the case of a Response Plan. Based on the evidence hierarchy, these Appendices are used to guide costs only where verifiable records are not available. Nothing in this framework indicates a minimum payment to growers, or any responsibility on the part of Australian Banana Growers Council or Plant Health Australia or other signatories to the EPPRD to pay growers the estimated costs.

APPENDIX 1: Schedule of Costs for elements C, E and H - normal production and harvesting costs, based on 'best practice', incurred by the Owner

APPENDIX 1.1: Gross Margin for Banana (Cavendish) Crop in Wet Tropics

NOTE: These costs are estimates. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

DESCRIPTION	
Crop:	Banana (Cavendish)
Area (hectares):	1
Location:	Wet Tropics

INCOME:	
Gross value 2319 cartons (15kg) @ \$28.27	65,552
less Freight	6,695
less Marketing & Ripening Fees	5,697
Local value	53,160

VARIABLE COSTS	
Employment Costs	11,331
Packaging & Pallets	5,725
Chemicals & Fertilizers	5,133
Consultants & Contracting	2,964
Repairs & Replacements	2,157
Fuel & Oil	978
Power and Gas	664
Contract Packing Fees	542
Biosecurity Operating costs	546
Total variable Costs	30,040

GM Per Hectare	23,119
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FIXED COSTS	
Employment Costs	4,856
General Expenses	3,622
Rates, Levies & Fees	1,043
Finance Costs	689
Deprecation & Amortisation	585
Insurance	277
Motor Vehicle Expenses	186
Water	148
Biosecurity Capital Depreciation Costs	852
Total Fixed Costs	12,259

Net Profit	10,861
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APPENDIX 1: Schedule of Costs for C, E and H - normal production and harvesting costs, based on 'best practice' incurred by the Owner

APPENDIX 1.2: 8 Year Projections for Banana (Cavendish) Crop in Wet Tropics

NOTE: These costs are estimates. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

Additionally the 'Wet Tropics' scenario is based on a 9 month ratoon/harvest cycle (excluding the first harvest which occurs after 12 months). This complicates estimation of the ORC which is presented on a yearly basis (since years 4 and 7 will involve multiple harvests). Note that for years with additional harvest there will be only loss of one crop and its associated costs

Crop:	Banana (Cavendish)
Area (hectares):	1
Location:	Wet Tropics

YEAR	0	1	2	3	4	5	6	7	8	Fallow
YIELD (TONNES/HECTARE)	0	31	35	35	35	35	35	35	35	
HARVESTS	0	1	1	1	2	1	1	2	1	
PRICE (farm gate)	1,528	1,528	1,528	1,528	1,528	1,528	1,528	1,528	1,528	
INCOME (per harvest, per hectare)	0	47,844	53,160	53,160	53,160	53,160	53,160	53,160	53,160	0

DEVELOPMENT COSTS (refer to Appendix 2 - Replanting Costs)										
Planting costs	15,125									
Biosecurity capital costs	3,070									
Subtotal	18,195									

PRODUCTION COSTS (per harvest, per hectare)										
Employment Costs	0	14,568	16,187	16,187	16,187	16,187	16,187	16,187	16,187	0
Packaging & Pallets	0	5,153	5,725	5,725	5,725	5,725	5,725	5,725	5,725	0
Chemicals & Fertilizers	0	4,620	5,133	5,133	5,133	5,133	5,133	5,133	5,133	0
Consultants & Contracting	0	2,668	2,964	2,964	2,964	2,964	2,964	2,964	2,964	0
Repairs & Replacements	0	1,941	2,157	2,157	2,157	2,157	2,157	2,157	2,157	0
General Expenses	0	3,260	3,622	3,622	3,622	3,622	3,622	3,622	3,622	0
Rates, Levies & Fees	0	939	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,043
Finance Costs	0	620	689	689	689	689	689	689	689	689
Deprecation & Amortisation	0	527	585	585	585	585	585	585	585	585
Fuel & Oil	0	880	978	978	978	978	978	978	978	0
Power and Gas	0	598	664	664	664	664	664	664	664	0
Insurance	0	249	277	277	277	277	277	277	277	0
Motor Vehicle Expenses	0	167	186	186	186	186	186	186	186	0
Contract Packing Fees	0	488	542	542	542	542	542	542	542	0
Water	0	133	148	148	148	148	148	148	148	0
Biosecurity Operating costs	0	1,258	1,398	1,398	1,398	1,398	1,398	1,398	1,398	0
Total Production	18,195	38,069	42,299	42,299	42,299	42,299	42,299	42,299	42,299	2,317
Net cashflow per harvest, per hectare	-\$18,195	\$9,775	\$10,861	\$10,861	\$10,861	\$10,861	\$10,861	\$10,861	\$10,861	-\$2,317

Freight (per harvest, per hectare)	0	6,026	6,695	6,695	6,695	6,695	6,695	6,695	6,695	0
Marketing & Ripening Fees (per harvest, per hectare)	0	5,127	5,697	5,697	5,697	5,697	5,697	5,697	5,697	0

Assumptions

Column N allows for linking report data for ORC estimates. Column O estimates the equivalent per ha value of column N, and only serves as a comparison.
 Note the data below was only available on a per carton (15 kg) basis. Accordingly fixed costs such as insurance will be correlated to the production for each given year. Such costs should be distinguished and be estimated on a difference basis if alternate measures can be found (i.e. costs per hectare).

Industry average			Description										
			Planting Year	1	2	3	4	5	6	7	8 replant		
Area (ha)	1		a	1	1	1	1	1	1	1	1		
Industry average	(\$/carton)	(\$ 000/ha)											
Yield (t/ha) - at maturity	34.78151	34.78	y	90%	100%	100%	100%	100%	100%	100%	100%		
				Yield (t/ha)	31	35	35	35	35	35	35		
Time to harvest (months) - ratoon year	9	9		Number of harvest (calmative)	1	2	3	5	6	7	9	10	
Farmgate price	\$22.93	53.16		Number of harvest (in year)	1	1	1	2	1	1	2	1	
Gross price Kg/carton	\$28.27	65.55											
	15			Gross price (\$/carton)	\$28.27	28.27	28.27	28.27	28.27	28.27	28.27	28.27	
				Freight (\$/carton)	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	
				Marketing and ripening (\$/carton)	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	
Cost	(\$/carton)	(\$ 000/ha)											
Employment Costs	6.98	16.19		Farmgate price (\$/carton)	22.93	22.93	22.93	22.93	22.93	22.93	22.93	22.93	
Packaging & Pallets	2.47	5.73		kg/carton	15	15	15	15	15	15	15	15	
Chemicals & Fertilizers	2.21	5.13		CPI adjustments	1	1	1	1	1	1	1	1	
Consultants & Contracting	1.28	2.96											
Repairs & Replacements	0.93	2.16	p	price \$/t	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	\$ 1,528.39	
General Expenses	1.56	3.62											
Rates, Levies & Fees	0.45	1.04											
Finance Costs	0.30	0.69											
Deprecation & Amortisation	0.25	0.59											
Fuel & Oil	0.42	0.98											
Power and Gas	0.29	0.66											
Insurance	0.12	0.28											
Motor Vehicle Expenses	0.08	0.19											
Contract Packing Fees	0.23	0.54											
Water	0.06	0.15											
Total Biosecurity Costs	0.60	1.40											
Biosecurity Operating Costs	0.24	0.55											
Biosecurity Capital Deprecation Costs	0.37	0.85											
Biosecurity depreciation time (years)	10	10											
Freight	2.89	6.70											
Marketing & Ripening Fees	2.46	5.70											
		(\$ 000/ha)											
Land Holding Costs		0											
Land Management Costs		0											

Biosecurity related assumptions

Separate biosecurity costs were provided and added to the estimated banana production costs. Two alternative scenarios, where the farm is continuous or split into 3 segments, were considered. This assumption can be alternated with a True or False statement below (see the "Hypothetical BIO security costs" tab for source data)

Farm structure	TRUE or FALSE
Continuous parcel	TRUE
Separated	FALSE

APPENDIX 1: Schedule of Costs for C, E and H - normal production and harvesting costs, based on 'best practice' incurred by the Owner

APPENDIX 1.3: Gross Margin for Banana (Lady Finger) Crop in Dry Tropics

NOTE: These costs are estimates. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

DESCRIPTION	
Crop:	Banana (Lady Finger)
Area (hectares):	1
Location:	Dry Tropics

INCOME:	
Gross value 1500 cartons @ \$37.00	55,500
less Freight	6,006
less Marketing & Ripening Fees	2,527
Local value	46,967

VARIABLE COSTS	
Employment Costs	7,899
Packaging & Pallets	3,825
Chemicals & Fertilizers	3,462
Consultants & Contracting	2,267
Repairs & Replacements	1,506
Power and Gas	537
Fuel & Oil	588
Contract Packing Fees	173
Biosecurity Operating Costs	546
Total variable Costs	20,803

GM Per Hectare	26,164
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FIXED COSTS	
Employment Costs	3,385
General Expenses	1,229
Rates, Levies & Fees	1,160
Finance Costs	675
Deprecation & Amortisation	658
Insurance	381
Motor Vehicle Expenses	346
Water	121
Biosecurity Capital Depreciation Costs	852
Total Fixed Costs	8,807

Net Profit	17,357
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APPENDIX 1: Schedule of Costs for C, E and H - normal production and harvesting costs, based on 'best practice' incurred by the Owner

APPENDIX 1.4: 15 Year Projections for Banana (Lady Finger) Crop in Dry Tropics

NOTE: These costs are estimates. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

Crop:	Banana (Lady Finger)
Area (hectares):	1
Location:	Dry Tropics

YEAR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Fallow
YIELD (TONNES/HECTARE)	0	20.25	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
HARVESTS	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
PRICE (farm gate)	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	2,087	
INCOME (per harvest)	0	42,271	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	46,967	0

DEVELOPMENT COSTS (refer to Appendix 2 - Replanting Costs)																	
Planting costs	15,125																
Biosecurity capital costs	3,070																
Subtotal	18,195																

PRODUCTION COSTS (per harvest)																	
Employment Costs	0	10,156	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	11,285	0
Packaging & Pallets	0	3,443	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	0
Chemicals & Fertilizers	0	3,115	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	3,462	0
Consultants & Contracting	0	2,041	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	2,267	0
Repairs & Replacements	0	1,355	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	1,506	0
General Expenses	0	1,106	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	1,229	0
Rates, Levies & Fees	0	1,044	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160	1,160
Finance Costs	0	608	675	675	675	675	675	675	675	675	675	675	675	675	675	675	675
Deprecation & Amortisation	0	592	658	658	658	658	658	658	658	658	658	658	658	658	658	658	658
Fuel & Oil	0	530	588	588	588	588	588	588	588	588	588	588	588	588	588	588	0
Power and Gas	0	483	537	537	537	537	537	537	537	537	537	537	537	537	537	537	0
Insurance	0	343	381	381	381	381	381	381	381	381	381	381	381	381	381	381	0
Motor Vehicle Expenses	0	312	346	346	346	346	346	346	346	346	346	346	346	346	346	346	0
Contract Packing Fees	0	156	173	173	173	173	173	173	173	173	173	173	173	173	173	173	0
Water	0	109	121	121	121	121	121	121	121	121	121	121	121	121	121	121	0
Biosecurity Operating costs	0	1,258	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	1,398	0
Total Production	18,195	26,649	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	29,610	2,492
Net cashflow per hectare	-\$18,195	\$15,622	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	\$17,357	-\$2,492

Freight	0	5,405	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	6,006	0
Marketing & Ripening Fees	0	2,274	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	2,527	0

Assumptions

Note the data below was only available on a per carton (13 kg) basis. Accordingly fixed costs such as insurance will be correlated to the production for each given year. Such costs should be distinguished and be estimated on a difference basis if alternate measures can be found (i.e. costs per hectare).

	Industry average		Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 replant
Area (ha)	1		Code a Planting Year	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Industry average	(\$/carton) (\$ 000/ha)		Yield adjustme	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Yield (t/ha) - at maturity	22.5	22.50	y Yield (t/ha)	20.25	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Time to harvest (months) - ratoon y	12	12	Number of harv	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Farmgate price	\$27.14	46.97	Number of harv	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gross price	\$32.07	55.50																
Kg/carton	13																	
			Gross price (\$/c	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32
			Freight (\$/carto	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3
			Marketing and i	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Cost	(\$/carton) (\$ 000/ha)																	
Employment Costs	6.52	11.28	Farmgate price	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27
Packaging & Pallets	2.21	3.83	kg/carton	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13	\$13
Chemicals & Fertilizers	2	3.46	CPI adjustment	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Consultants & Contracting	1.31	2.27																
Repairs & Replacements	0.87	1.51	p price \$/t	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087	\$2,087
General Expenses	0.71	1.23																
Rates, Levies & Fees	0.67	1.16																
Finance Costs	0.39	0.68																
Deprecation & Amortisation	0.38	0.66																
Fuel & Oil	0.34	0.59																
Power and Gas	0.31	0.54																
Insurance	0.22	0.38																
Motor Vehicle Expenses	0.2	0.35																
Contract Packing Fees	0.1	0.17																
Water	0.07	0.12																
Total Biosecurity Costs	0.81	1.40																
Biosecurity Operating Costs	0.32	0.55																
Biosecurity Capital Deprecation Co:	0.49	0.85																
Biosecurity depreciation time (years)	10	10																
Freight	3.47	6.01																
Marketing & Ripening Fees	1.46	2.53																
		(\$ 000/ha)																
Land Holding Costs		0																
Land Management Costs		0																
Biosecurity related assumptions																		
Separate biosecurity costs were																		
Farm structure	TRUE or FALSE																	
Continuous parcel	TRUE																	
Separated	FALSE																	

APPENDIX 2: Schedule of costs for D - Crop replanting costs

NOTE 1: These costs are estimates. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used. In particular, the number of plants per hectare will vary depending on the variety and region, and will need to be verified at the time of a plan being implemented

NOTE 2: Replanting cost does not include land and water costs. Land preparation assumes tree and irrigation removal has been paid for under the tree destruction costs.

NOTE 3: Replanting costs are based on "like-for-like" replanting costs. If changes to plantation design, such as mounding or higher density plantings are included as new improvements, then the additional expense is at the owner's cost. Costs such as royalty payments for protected varieties are only included if these are replacing existing trees with a royalty type cost included at replanting.

A. Banana (assumed uniform between varieties)

ASSUMPTIONS: 1500 plants per hectare, drip irrigation, bananas

Item	Cost/Hectare	Comments
Ground preparation	\$1,875	Ripping, mounding, levelling - 15 hours per hectare @ \$125.00/hour
Soil improvements	\$500	Gypsum, lime, organic matter etc.
Pegging, Layout	\$250	
Irrigation (including installation)	\$5,000	Assumes drip irrigation, headworks etc. all re-used
Trees	\$4,500	1500 trees at \$3.00 per tree delivered
Planting	\$3,000	1500 trees at \$2.00 per tree, including staking/tree guards
Total	\$15,125	

Assumptions

Ground preparation

Time (hours/hectare)	15
Cost (\$/hour)	125

Soil improvements

Enhancements	500
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Pegging, Layout

Pegging	250
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Irrigation (including installation)

Capital	5000
Installation (hours/hectare)	0
Cost (\$/hour)	125

Trees

Plant spacing (per m2)	12
Plants per ha	1500
Cost (\$/plant)	\$3

Planting

Cost (\$/plant)	2
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APPENDIX 3: Yield curves for banana regions - indicative planting cycles and yields

Tree Age (Years)	Cavendish - Wet Tropics (t/ha)	Lady Finger - Dry Tropics (t/ha)	Cavendish - Sub Tropics (t/ha)	Ducasse - Sub Tropics (t/ha)	Cavendish - Dry Tropics (t/ha)	Cavendish - Desert/WA (t/ha)
	8 year rotation	15 year rotation	15 year rotation	15 year rotation	15 year rotation	8 year rotation
	cropping cycle = 9 months	cropping cycle = 12 months	cropping cycle = 12 months	cropping cycle = 12 months	cropping cycle = 12 months	cropping cycle = 9 months
	1 year fallow	1 year fallow	1 year fallow	1 year fallow	1 year fallow	1 year fallow
	yield = 35 t/ha per cycle	yield = 22.5 t/ha per cycle	yield = 15 t/ha per cycle	yield = 10 t/ha per cycle	yield = 29 t/ha per cycle	yield = 26 t/ha per cycle
0	0.0	0.0	0.0	0.0	0.0	0.0
1 (plant crop)	31.3	20.3	11.3	7.5	26.1	19.7
2	46.4	22.5	15.0	10.0	29.0	34.9
3	46.4	22.5	15.0	10.0	29.0	34.9
4	46.4	22.5	15.0	10.0	29.0	34.9
5	46.4	22.5	15.0	10.0	29.0	34.9
6	46.4	22.5	15.0	10.0	29.0	34.9
7	46.4	22.5	15.0	10.0	29.0	34.9
8	46.4	22.5	15.0	10.0	29.0	34.9
9	0.0	22.5	15.0	10.0	29.0	0.0
10		22.5	15.0	10.0	29.0	
11		22.5	15.0	10.0	29.0	
12		22.5	15.0	10.0	29.0	
13		22.5	15.0	10.0	29.0	
14		22.5	15.0	10.0	29.0	
15		22.5	15.0	10.0	29.0	
16		0	0.0	0.0	0	

This worksheet provides hypothetical costs for banana bio security measures. Provided to Ag Dynamics via email correspondence from Biosecurity Queensland Tegan Kukulies on 6 Nov 2017. Two options are presented, basing costs on one continuous 56 ha farm and the other on a same sized farm separated into three segments.

56 Ha hypothetical farm

Key Changes	Scenario – contiguous			
	Description	Units	\$/Units	Total
Duplication of machinery	Lime spreader	1	35000	35000
	Farm vehicle	1	\$30,000	\$30,000
Fencing	Boundary fencing undertaken by contractor, 3510m at \$8/m -	3510	\$8	\$28,080
Washing/boot change facilities	Compliant wash-down -	1	50000	\$50,000
	Earthworks/ballast/concrete -	1	17000	\$17,000
	Footbaths – 3 at \$1100	3	\$1,100	\$3,300
	Shuttle and electric pump -	1	700	\$700
	Boot room (shipping container) -	1	6000	\$6,000
	Boot change points (internal) -	1	500	\$500
Provision of footwear	1.75 sets of rubber boots at \$25/pair for 30 staff - \$	52.5	25	\$1,312.50
Capital costs	\$172,000			\$171,893
	\$1230/acre; \$3070/ha			\$3,069.51 \$/ha

Disinfectant product	Spray application - 6000L/yr at \$0.14/L of 1% mixture of DDAC - \$840	6000	0.14	840
	Footbath sanitiser replacement – 3 footbaths at 100L replaced weekly at \$0.14/L - \$2184	15600	0.14	2184
Labour inputs	Wash down, 4 hours per week at \$21.45/hr - \$4462	208	21.45	4461.6

Operating costs	\$7,500			\$7,486
	\$53/acre; \$134/ha			\$133.67

Scenario – 3 separate parcels				
Description	Units	\$/Units	Total	
Lime spreader	1	35000	\$	35,000
Farm vehicle	1	\$30,000	\$	30,000
Bagging machine	1	100000	\$	100,000
Tractor	1	45000	\$	45,000
Quad bike	1	15000	\$	15,000
Picking trailer modifications	1	1200	\$	1,200
Boundary fencing undertaken by contractor, 5820m at \$8/m -	5820	\$8		\$46,560
Compliant wash-down X 3 - \$150000	3	50000		\$150,000
Earthworks/ballast/concrete X 3 - \$35000	3	11667		\$35,000
Footbaths – \$1100 X 6 - \$6600	6	\$1,100		\$6,600
Shuttle and electric pump X 3 - \$2100	3	700		\$2,100
Boot room (shipping container) - \$6000	1	6000		\$6,000
Boot change points (internal) X 3 - \$1500	3	500		\$1,500
4.3 sets of rubber boots at \$25/pair for 30 staff - \$3225	25	129		3225
		\$477,000		\$477,185
		\$3405/acre; \$8512/ha		\$8,521.16 \$/ha

Spray application - 12000L/yr at \$0.14/L of 1% mixture of DDAC - \$1680	12000	0.14		1680
Footbath sanitiser replacement – 6 footbaths at 100L replaced weekly at \$0.14/L - \$4368	31200	0.14		4368
Wash down, 22 hours per week at \$21.45/hr - \$24540	1144	21.45		24538.8

	\$30,590			\$30,587
	\$218/acre; \$546/ha			\$546.19

This worksheet contains extracted data tables from the 2014 "Banana Enterprise Performance Comparison Report" (Project BA11026). Note: The most up to date benchmarking data must be used. Updated data is available from the 'Banana Enterprise Performance Comparison 2016/17' (Hort Innovation project BA16009).

Table 4: Participants in Each Year of Data Collection

	2009	2010	2013	TOTAL
Total Participants	49	60	46	211
Hectares	2,089	2,983	2,623	10,883
Cartons	4,703,409	6,747,001	6,518,568	23,954,121
% of Industry Production Ca	30%	35%	27%	28%
Yield	2,252	2,262	2,485	2,201

Table 7: Farm productivity of participant group

	Group	Top 10
Average Tones / Ha	30	36
Median Tones / Ha	29	36
Average Carton / Ha	2331	2748
Median Carton / Ha	2263	2796

Table 16: Top 10 - Detailed differential analysis of key outcomes

	Total BM Group	Top 10
Employment Costs	6.52	4.93
Packaging & Pallets	2.21	2.31
Chemicals & Fertilizers	2	2.05
Consultants & Contracting	1.31	1.21
Repairs & Replacements	0.87	0.69
General Expenses	0.71	0.59
Rates, Levies & Fees	0.67	0.32
Finance Costs	0.39	0.3
Deprecation & Amortisation	0.38	0.22
Fuel & Oil	0.34	0.21
Power and Gas	0.31	0.13
Insurance	0.22	0.06
Motor Vehicle Expenses	0.2	0.05
Contract Packing Fees	0.1	0
Water	0.07	0
Freight	3.47	2.56
Marketing & Ripening Fees	1.46	1.3
Produce Sales	22.24	22.61

Only used for data linked in this sheet (i.e. newer data should be based on 15 kg cartons)

kg/carton 13

ADDITIONAL DATA SOURCES

Email communication with Stuart Pettigrew - 03/04/2018	Data Table Report (2012/2013) - Conventional Cavendish Only Growers in Tropical Far North QLD Financial Years ended June 30 2012 and June 30 2013
Based on personal communication with growers	Email communication with Stuart Pettigrew - 03/04/2018

		ENTERPRISE INFORMATION					
			Group Average	Group Median	Group High	Group Low	
Kg per carton	15	Total KGS Harvested per Producing Hectare	34,781.51	34,021.74	58,490.91	16,836.43	
Replanting costs:		Kgs / Ha					
Plants per hectare	1500	Total 15 KG Cartons(Equivalent) Harvested per Producing Hectare	2,318.77	2,268.12	3,899.39	1,122.43	
Price per plant	\$3						
Lady Finger (return/yield)		Average Price Achieved \$ / 15 KG Equivalent of Market Fruit	\$28.27	\$24.11	\$51.55	\$14.13	
Cartons per year	1,500						
Price per carton	\$37	Total Costs per 15 KG Carton Equivalent Sold	\$23.73	\$23.23	\$44.12	\$15.75	
Plants life expectancy	years	Average EBITDA per 15 KG Carton Equivalent Sold	\$5.63	\$2.79	\$15.26	-\$22.96	
Dry tropics/sub-tropics adjustments	15						
Wet tropics	7.5	% of Market Fruit Sold as XLarge %	71.09%	74.33%	100.00%	24.43%	

kg/carton 15

		SELECTED LABOUR USE MEASURES					
			Group Average	Group Median	Group High	Group Low	
Email communication with Stuart Pettigrew - 04/04/2018		Total FTEs Employed / Producing Ha	FTE / Ha	0.34	0.29	0.62	0.11
Cost adjustments		Total Producing Hectares Managed per FTE	Ha / FTE	2.94	3.45	9.09	1.61
Employment		Gross Sales Revenue Achieved Per Total FTE	\$ / FTE	\$198,479.01	\$184,369.86	\$474,343.40	\$60,216.28
Fixed	30%	EBITDA Achieved Per Total FTE	\$ / FTE	\$38,759.12	\$24,270.80	\$100,852.69	-\$80,717.38
Variable	70%						

		PROFITABILITY PER PRODUCING HA					
			Group Average	Group Median	Group High	Group Low	
Total Sales Revenue	\$ / Producing Ha	\$66,793.39	\$54,058.44	\$116,531.91	\$21,758.64		
Total Costs	\$ / Producing Ha	\$55,024	\$51,311	\$87,728	\$23,280		
Net Profit (Before Tax)	\$ / Producing Ha	\$11,770	\$5,870	\$41,894	-\$46,992		
EBIT	\$ / Producing Ha	\$12,459	\$6,374	\$42,204	-\$46,629		
Total Operating Costs (Excluding Interest and Depreciation)	\$ / Producing Ha	\$53,750	\$51,301	\$84,574	\$21,733		
EBITDA	\$ / Producing Ha	\$13,043	\$6,374	\$42,204	-\$43,086		
Total Farm Gate Operating Revenue (After Freight, Marketing, Ripening Costs Deducted) (FARM GATE CASH REVENUE	\$ / Producing Ha	\$52,368	\$44,114	\$89,146	\$15,135		
Total Farm Gate Operating Costs (Excl. Freight, Marketing, Ripening Costs Deducted)(FARM GATE CASH COST)	\$ / Producing Ha	\$39,324	\$38,031	\$67,058	\$15,109		

		PROFITABILITY PER 15 Kg CARTON EQUIVALENT					
			Group Average	Group Median	Group High	Group Low	
Total Sales Revenue	\$ / 15 Kg Carton Sold	\$28.81	\$24.85	\$51.58	\$14.32		
Total Costs	\$ / 15 Kg Carton Sold	\$23.73	\$23.23	\$44.12	\$15.75		
Net Profit Before Tax	\$ / 15 Kg Carton Sold	\$5.08	\$2.74	\$15.15	-\$25.04		
EBIT	\$ / 15 Kg Carton Sold	\$5.37	\$2.76	\$15.26	-\$24.85		
Total Operating Costs (Excluding Interest and Depreciation)	\$ / 15 Kg Carton Sold	\$23.18	\$22.64	\$41.71	\$15.67		
EBITDA	\$ / 15 Kg Carton Sold	\$5.63	\$2.79	\$15.26	-\$22.96		
Total Operating Costs as % of Gross Sales Revenue	%	80.47%	87.23%	234.05%	59.72%		
EBITDA as % of Gross Sales Revenue	%	19.53%	12.77%	40.28%	-134.05%		

COSTS PER PRODUCING HA		Group Average	Group Median	Group High	Group Low
General Expenses	\$ / Producing Ha	\$3,622	\$2,632	\$18,387	\$201
Consultants And Contractor Fees	\$ / Producing Ha	\$2,964	\$2,703	\$7,471	\$140
Contract Packing Fees	\$ / Producing Ha	\$542	\$2,279	\$10,524	\$13
Chemical and Fertiliser Costs	\$ / Producing Ha	\$5,133	\$5,233	\$13,267	\$778
Power & Gas Costs	\$ / Producing Ha	\$664	\$446	\$1,841	\$79
Freight Costs	\$ / Producing Ha	\$8,327	\$6,695	\$16,880	\$2,929
Fuel & Oil Costs	\$ / Producing Ha	\$978	\$869	\$1,960	\$218
Marketing & Ripening Costs	\$ / Producing Ha	\$6,099	\$5,697	\$10,506	\$1,423
Packaging and Pallet Costs	\$ / Producing Ha	\$5,725	\$5,651	\$9,635	\$2,089
Employment / Labour Costs	\$ / Producing Ha	\$16,187	\$13,462	\$30,555	\$4,661
Water Costs	\$ / Producing Ha	\$148	\$251	\$1,192	\$1
Insurance Costs	\$ / Producing Ha	\$277	\$305	\$1,546	\$27
Finance Costs	\$ / Producing Ha	\$689	\$406	\$5,202	\$4
Depreciation and Amortisation Costs	\$ / Producing Ha	\$585	\$966	\$4,483	\$181
Rates Levies, Licenses, Memberships, Registrations	\$ / Producing Ha	\$1,043	\$780	\$1,557	\$348
Motor Vehicles	\$ / Producing Ha	\$186	\$207	\$803	\$24
Repairs & Replacements	\$ / Producing Ha	\$2,157	\$2,094	\$9,858	\$275
Royalties & PVR Costs	\$ / Producing Ha				

COSTS PER 15 Kg CARTON EQUIVALENT		Group Average	Group Median	Group High	Group Low	Check Value	Carton Equiv estimated
General Expenses	\$ / 15 Kg Carton Sold	\$1.56	\$1.05	\$7.67	\$0.08	\$1.56	\$1.56
Consultants And Contractor Fees	\$ / 15 Kg Carton Sold	\$1.28	\$1.24	\$3.47	\$0.05	\$1.28	\$1.28
Contract Packing Costs	\$ / 15 Kg Carton Sold	\$0.23	\$1.37	\$4.66	\$0.00	\$0.23	\$0.23
Chemical and Fertiliser Costs	\$ / 15 Kg Carton Sold	\$2.21	\$2.45	\$4.92	\$0.60	\$2.21	\$2.21
Power and Gas Costs	\$ / 15 Kg Carton Sold	\$0.29	\$0.19	\$0.81	\$0.05	\$0.29	\$0.29
Freight Costs	\$ / 15 Kg Carton Sold	\$3.59	\$3.19	\$6.45	\$1.23	\$3.59	\$3.59
Fuel & Oil Costs	\$ / 15 Kg Carton Sold	\$0.42	\$0.39	\$1.54	\$0.13	\$0.42	\$0.42
Marketing and Ripening Costs	\$ / 15 Kg Carton Sold	\$2.63	\$2.66	\$5.79	\$0.53	\$2.63	\$2.63
Employment / Labour Costs	\$ / 15 Kg Carton Sold	\$3.31	\$2.81	\$13.02	\$1.13	\$3.31	\$2.47
Total Labour Costs	\$ / 15 Kg Carton Sold	\$6.98	\$5.78	\$15.37	\$2.19	\$6.98	\$6.98
Water Costs	\$ / 15 Kg Carton Sold	\$0.06	\$0.11	\$0.64	\$0.00	\$0.06	\$0.06
Insurance Costs	\$ / 15 Kg Carton Sold	\$0.12	\$0.15	\$0.67	\$0.01	\$0.12	\$0.12
Finance Costs	\$ / 15 Kg Carton Sold	\$0.30	\$0.24	\$2.16	\$0.00	\$0.30	\$0.30
Depreciation and Amortisation Costs	\$ / 15 Kg Carton Sold	\$0.25	\$0.54	\$2.40	\$0.06	\$0.25	\$0.25
Rates, Levies, Licenses, Memberships, Registrations	\$ / 15 Kg Carton Sold	\$0.45	\$0.35	\$1.03	\$0.20	\$0.45	\$0.45
Motor Vehicles	\$ / 15 Kg Carton Sold	\$0.08	\$0.10	\$0.37	\$0.01	\$0.08	\$0.08
Repairs & Replacements	\$ / 15 Kg Carton Sold	\$0.93	\$1.06	\$4.35	\$0.16	\$0.93	\$0.93
Royalties & PVR Costs	\$ / 15 Kg Carton Sold					\$0.00	\$0.00