



# Prospects update

## March 2011

### Natural disasters cause large losses, downward revision to GVP

Early estimates of the effects of recent natural disasters and adverse weather, including unseasonal rainfall since September 2010, the December 2010–January 2011 floods and Cyclone Yasi in February 2011, suggest that Queensland’s primary producers will lose up to \$1.7 billion in total.

Losses such as destroyed crops, inability to plant, disruptions to harvests, waterlogging, yield reductions, quality downgrading and lack of access to markets due to flooded roads, are captured in the March revisions to the 2010–11 forecasts of gross value of production (GVP). However, some of these losses are offset by price increases caused by limited supply, as well as increased production in the regions where better than expected growing conditions emerged.

More losses will extend into 2011–12 and, for some horticultural crops and forestry, possibly even further. Other losses, including reduced profit margins due to higher costs of transport, and the costs of repairing and rebuilding damaged transport and farm equipment and infrastructure (storage facilities, fences etc), are not captured in the GVP figures at all.

As a result of the above factors, total GVP for Queensland’s primary industry commodities for 2010–11 is forecast at \$13.76 billion, which is a downgrade of \$629 million, or 4%, compared with DEEDI’s September forecast of \$14.39 billion. A more in-depth analysis of the impacts of the recent natural disasters is included in ‘Mixed fortunes: a sequence of natural disasters affecting Queensland’s agriculture sector’ on page 10.

### At a glance

#### Total value of Queensland’s primary industries

In March 2011, the total value of Queensland’s primary industry commodities—comprising gross value of production (GVP) at the farm gate and first-round processing—is forecast at \$13.76 billion. This is 2% lower than the Department of Employment, Economic Development and Innovation’s (DEEDI) final estimate for 2009–10 and 4% lower than the September 2010 forecast of \$14.39 billion.

#### Gross value of production at the farm gate

In March 2011, the GVP of Queensland’s primary industry commodities at the farm gate is forecast at nearly \$10.77 billion. This is 1% lower than DEEDI’s final estimate for 2009–10 and 4% lower than the September forecast of \$11.23 billion.

Forecasts that have been revised **up** from previous forecasts for 2010–11 are:

- macadamias
- mandarins
- beans
- sweet corn
- tomatoes
- capsicums and chillies
- peanuts
- sorghum
- maize
- crustaceans

Forecasts that have been revised **down** from previous forecasts for 2010–11 are:

- sugar
- cotton
- milk
- pigs
- bananas
- lettuce
- pumpkins
- carrots
- rockmelons
- watermelons
- zucchini
- sweet potatoes
- chickpeas
- soybeans
- sunflowers
- wheat
- barley
- molluscs
- finfish
- aquaculture

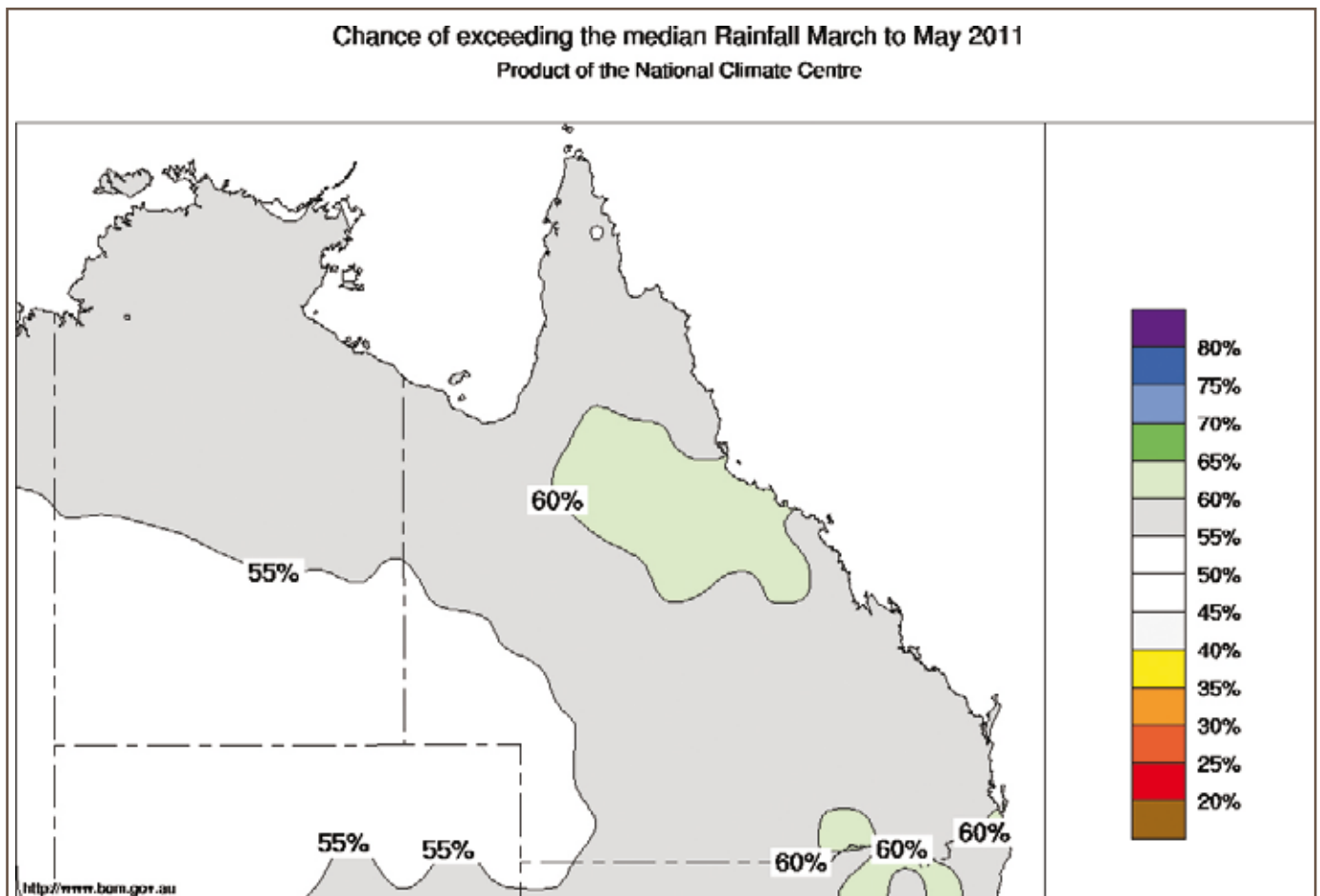
#### First-round processing

In 2010–11, the value of first-round processing (or value-added production) is forecast at \$2.99 billion.

## Autumn 2011 climate forecast

According to the National Climate Centre forecast, 'the north Australian outlook for the March to May period favours wetter conditions over parts of eastern Australia'.

The Climate Centre states, 'the pattern of seasonal rainfall odds across northern Australia is mainly a result of cool conditions in the central equatorial Pacific Ocean, whilst recent warm conditions in the Indian Ocean have also contributed'.



**Figure 1.** Chance of exceeding median rainfall, March to May 2011 (National Climate Centre)

The Climate Centre continues by forecasting, 'the chances of receiving above median rainfall during the March to May period are between 60 and 65% in a region centred on Townsville, as well as parts of far southern Queensland' (see map). They explain this by stating, 'for every ten years with similar ocean patterns to those currently observed, about six March to May periods would be expected to be wetter than average over these areas, while about four years would be expected to be drier'.

For the rest of Queensland, the outlook favours average conditions for most areas, with 'the odds of exceeding the median rainfall ... between 50 and 60%'. This means that 'the chances of above average rainfall are about equal to the chances of below average rainfall'. However, the Climate Centre warns that confidence levels are moderate in the northern half of Queensland but low in the southern half.

# Primary industries estimates and forecasts

Table 1. GVP and first stage processing 2008-09 to 2010-11

Commodity GVP (a)	2008-09 (b) \$m	2009-10 (c) \$m	DEEDI forecasts			Change 2009-10 to 2010-11 %
			2010-11 Sept (previous) (d) \$m	2010-11 March (current) (d) \$m	Revision Sept to March %	
<b>Livestock disposals</b>						
Cattle and calves	3366	3380	3310	3310	0	-2
Sheep and lambs	60	45	58	58	0	29
Pigs	242	235	232	222	-4	-6
Poultry	351	355	370	370	0	4
Kangaroos	-	15	20	20	0	33
Other livestock	16	16	16	16	0	-1
<b>Total livestock disposals</b>	<b>4033</b>	<b>4046</b>	<b>4006</b>	<b>3996</b>	<b>0</b>	<b>-1</b>
<b>Livestock products</b>						
Wool	87	100	90	90	0	-10
Milk (all-purpose)	293	295	272	241	-11	-18
Eggs	109	110	112	112	0	2
<b>Total livestock products (e)</b>	<b>489</b>	<b>505</b>	<b>474</b>	<b>443</b>	<b>-7</b>	<b>-12</b>
<b>Total livestock</b>	<b>4522</b>	<b>4551</b>	<b>4480</b>	<b>4439</b>	<b>-1</b>	<b>-2</b>
<b>Horticulture</b>						
Fruit and nuts						
Bananas	390	460	360	280	-22	-39
Pineapples	88	70	70	70	0	0
Mangoes	83	70	70	70	0	0
Mandarins	64	70	65	70	8	0
Strawberries	87	145	145	145	0	0
Avocados	60	80	95	95	0	19
Macadamias	16	34	31	40	29	18
Apples	33	40	40	40	0	0
Table grapes	24	50	50	50	0	0
Other fruit and nuts	126	135	138	136	-1	1
<b>Total fruit</b>	<b>971</b>	<b>1154</b>	<b>1064</b>	<b>996</b>	<b>-6</b>	<b>-14</b>
Vegetables						
Potatoes	54.1	45	50	50	0	11
Beans	50.3	50	50	80	61	61
Carrots	22	25	25	24	-5	-5
Lettuce	70.6	65	68	62	-10	-5
Melons (rockmelon and cantaloupe)	30.5	30	36	35	-4	15
Melons (watermelon)	41.7	44	39	37	-6	-17
Mushrooms	21.5	60	64	64	0	7
Pumpkin	29.7	30	30	21	-31	-31
Onions	28.3	25	25	25	0	0

Commodity GVP (a)	2008–09 (b) \$m	2009–10 (c) \$m	DEEDI forecasts			Change 2009–10 to 2010–11 %
			2010–11 Sept (previous) (d) \$m	2010–11 March (current) (d) \$m	Revision Sept to March %	
Sweet corn	17.9	30	30	36	18	18
Tomatoes	187.7	180	236	271	15	51
Capsicums and chillies (f)	92	100	120	129	8	29
Zucchini and button squash	49.4	45	34	33	-2	-26
Sweet potatoes	44	55	55	53	-4	-4
Other vegetables	211.9	200	216	230	6	15
Total vegetables	952	984	1079	1150	7	17
<b>Total fruit and vegetables</b>	<b>1923</b>	<b>2138</b>	<b>2143</b>	<b>2146</b>	<b>0</b>	<b>0</b>
<b>Lifestyle horticulture production</b>						
Nurseries (c)	788	788	788	788	0	0
Turf (c)	110	105	116	116	0	10
Cut flowers (c)	81	81	85	85	0	5
<b>Total lifestyle horticulture production</b>	<b>979</b>	<b>974</b>	<b>989</b>	<b>989</b>	<b>0</b>	<b>2</b>
<b>Total horticulture</b>	<b>2902</b>	<b>3112</b>	<b>3132</b>	<b>3135</b>	<b>0</b>	<b>1</b>
<b>Other field crops</b>						
Sugarcane (g)	968	1425	1240	940	-24	-34
Cotton (raw) (h)	325	355	710	660	-7	86
Other crops (c)	355	255	128	79	-38	-69
<b>Total other crops</b>	<b>1648</b>	<b>2035</b>	<b>2078</b>	<b>1679</b>	<b>-19</b>	<b>-18</b>
<b>Cereal grains</b>						
Wheat	536	265	450	302	-33	14
Barley	43	31	37	33	-11	6
Grain sorghum	356	155	239	320	34	106
Maize	60	37	53	136	157	268
Other cereal grains	81	89	127	111	-38	-11
<b>Total cereal grains</b>	<b>1075</b>	<b>577</b>	<b>906</b>	<b>902</b>	<b>0</b>	<b>56</b>
<b>Total crops</b>	<b>5625</b>	<b>5724</b>	<b>6115</b>	<b>5715</b>	<b>-7</b>	<b>0</b>
<b>Total agriculture</b>	<b>10 148</b>	<b>10 274</b>	<b>10 595</b>	<b>10 154</b>	<b>-4</b>	<b>-1</b>
<b>Fisheries (c) (i)</b>						
Commercial fishing						
Crustaceans	161	166	145	151	4	-9
Molluscs	9	10	11	9	-18	-10
Finfish	103	108	113	100	-12	-7
Total commercial fishing	273	284	269	260	-3	-8
Recreational fishing		73	73	73	0	0
Aquaculture	85	102	105	94	-11	-8
<b>Total fisheries</b>	<b>358</b>	<b>459</b>	<b>447</b>	<b>427</b>	<b>-5</b>	<b>-7</b>
<b>Forestry and logging (c) (j)</b>	<b>162</b>	<b>171</b>	<b>187</b>	<b>187</b>	<b>0</b>	<b>9</b>
<b>Total primary industries (farm gate)</b>	<b>10 668</b>	<b>10 904</b>	<b>11 229</b>	<b>10 768</b>	<b>-4</b>	<b>-1</b>

Commodity GVP (a)	2008–09 (b) \$m	2009–10 (c) \$m	DEEDI forecasts			Change 2009–10 to 2010–11 %
			2010–11 Sept (previous) (d) \$m	2010–11 March (current) (d) \$m	Revision Sept to March %	
<b>First-round processing value-added (k)</b>						
Meat processing (c)	1547	1552	1536	1533	0	-1
Sugar processing (c)	406	722	688	550	-20	-24
Milk and cream processing (c)	155	156	144	127	-11	-18
Fruit and vegetables processing (c)	166	184	184	185	0	0
Flour mill and feed processing (c)	87	47	74	73	0	56
Seafood processing (c)	54	69	67	64	-5	-7
Log sawmilling and timber dressing and plywood and veneer manufacturing (c)	334	353	386	386	0	9
Cotton ginning (c)	37	40	81	75	-7	86
<b>Total primary industries (first-round processing)</b>	<b>2786</b>	<b>3123</b>	<b>3160</b>	<b>2993</b>	<b>-5</b>	<b>-4</b>
<b>Total primary industries</b>	<b>13 454</b>	<b>14 027</b>	<b>14 389</b>	<b>13 760</b>	<b>-4</b>	<b>-2</b>

(a) GVP is defined as the 'gross value of commodities produced'. It is a measure of economic output. In this publication, GVP relates to the output of primary industry commercial operations only. The GVP is the value of recorded production at wholesale prices realised in the market place (e.g. cattle sold at saleyards, sugarcane at the mill door, fruit and vegetables at the wholesale market). It is derived by multiplying the output from each primary industry by the average wholesale price paid to producers.

(b) ABS final estimates for 2008–09 unless otherwise indicated.

(c) DEEDI estimates.

(d) DEEDI forecasts.

(e) Excludes minor commodities such as honey, beeswax, mohair.

(f) DEEDI estimate does not include chillies.

(g) Gross value of sugarcane at mill door.

(h) Includes value of cotton seed and lint.

(i) Includes catches from both Commonwealth-managed (including Torres Strait, Gulf of Carpentaria and East Coast tuna fisheries) and state-managed fisheries.

(j) Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES).

(k) See Notes section for definition of 'value-added'.

(l) The value of the lifestyle horticulture services sector has been calculated on a gross turnover basis rather than a value-added basis and therefore will contain elements of 'double counting'.

# Primary industry forecasts revised since September 2010 *Prospects*

## Livestock disposals

### Pigs

#### Forecast

The gross value of Queensland's **pig** production in 2010–11 is forecast at \$222 million, a 4% decrease on DEEDI's September estimate for 2010–11 and a 6% decrease on the final estimate for 2009–10.

#### Discussion

Increased imports of processed pig meat from Denmark, Canada and the United States are expected to drive down the average price of domestic pig meat throughout 2010–11. Production numbers are also forecast to decline in 2010–11 in line with the long-term steady downward trend in ABS slaughter data. The net effect of these two impacts is a minor downward revision in the forecast gross value of pig production for 2010–11.

## Livestock products

### Milk

#### Forecast

The gross value of Queensland's **milk** production for 2010–11 is forecast at \$241 million, an 11% decrease on the September forecast for 2010–11 and 18% lower than the final estimate for 2009–10.

#### Discussion

With the cumulative impact of lower production from herds, higher culling and drying off rates, disposal of milk and increased farm exits, it is estimated that milk production will drop over the next 12 months by between 48 million litres and 70 million litres. This equates to a loss of approximately \$25 million to \$37 million in farm-gate value.

On top of that, it is estimated that the cost of damage and additional operational costs incurred by Queensland dairy farmers as a result of the floods will be more than double that of the value of milk loss, although this is not included in the GVP figure.

## Fruit and nuts

### Bananas

#### Forecast

The gross value of **banana** production for 2010–11 is forecast at \$280 million, a 22% decrease on the September forecast for 2010–11 and a 39% decrease on the 2009–10 final estimate.

#### Discussion

An estimated 75% of the Queensland banana crop was affected following Tropical Cyclone Yasi in February, particularly around Innisfail and Tully. The sharp reduction in volume for the remainder of 2010–11 is expected to be partially offset by higher prices, although recovery in supply is not expected to begin until the second half of 2011. This will be reflected in the 2011–12 forecast in the September 2011 issue of *Prospects*.

### Avocados

#### Forecast

The gross value of **avocado** production forecast for 2010–11 remains unchanged at \$95 million, a 19% increase on the final estimate for 2009–10.

#### Discussion

Tropical Cyclone Yasi resulted in approximately 20% of the crop on the Atherton Tablelands being lost, while extended wet weather contributed to minor losses in other regions. However, a higher than expected yield in the main production regions of Isis and Burnett in the second half of 2010 has compensated for these losses and resulted in an unchanged forecast for 2010–11.

### Macadamias

#### Forecast

The gross value of Queensland's **macadamia** production for 2010–11 is forecast at \$40 million, a 29% increase on the September forecast for 2010–11 and 18% higher than the final estimate for 2009–10.

#### Discussion

The increase in GVP is due primarily to higher yields than initially forecast and a firming in prices. The 2011 crop sustained minor damage from flooding, but this is not expected to have a major impact on the harvest.

### Mandarins

#### Forecast

The gross value of Queensland's **mandarin** production for 2010–11 is forecast at \$70 million, an 8% increase on the September forecast for 2010–11 and the same as the final estimate for 2009–10.

#### Discussion

The increase in GVP is based on revised quantity and price estimates which are both marginally higher than initial forecasts. Most mandarin crops in flood-affected areas (particularly Gayndah, Mundubbera and Emerald) escaped major damage and supply is not expected to be affected.

# Vegetables

## Lettuce

### Forecast

The gross value of Queensland **lettuce** production for 2010–11 is forecast at \$62 million, a 10% decrease on the September forecast for 2010–11 and a 5% decrease on the final estimate for 2009–10.

### Discussion

As a result of the flooding in the Lockyer Valley the lettuce forecasts were revised down by 10%.

## Pumpkins

### Forecast

The gross value of Queensland **pumpkin** production for 2010–11 is forecast at \$21 million, a 31% decrease on the September forecast for 2010–11 and a 31% decrease on the final estimate for 2009–10.

### Discussion

As a result of the flooding in the Lockyer Valley, the forecast volume of pumpkin production has been revised downward by 50%. However, this has been somewhat offset by a forecast increase in prices brought about by tight supply.

## Tomatoes

### Forecast

The gross value of Queensland **tomato** production for 2010–11 is forecast at \$271 million, a 15% increase on the September 2010–11 forecast and a 51% increase on the final estimate for 2009–10.

### Discussion

Whilst there were some losses in the tomato crop from flooding in the Bundaberg region, there has been a significant expansion in the area of tomatoes grown in the Bowen region of nearly 500 hectares in recent months.

## Beans

### Forecast

The gross value of Queensland **bean** production for 2010–11 is forecast at \$80 million, a 61% increase on the September 2010–11 forecast and a 61% increase on the final estimate for 2009–10.

### Discussion

Whilst there were some losses in the bean crop from flooding in the Lockyer Valley, there has been a doubling in the area of beans grown in the Bowen region in recent months.

## Sweet corn

### Forecast

The gross value of Queensland **sweet corn** production for 2010–11 is forecast at \$36 million, an 18% increase on the September 2010–11 forecast and an 18% increase on the final estimate for 2009–10.

## Discussion

The area set aside for sweet corn production in the Bowen region has increased by nearly one-third over recent months.

# Other field crops

## Sugarcane

### Forecast

The gross value of Queensland **sugarcane** production for 2010 is forecast at \$940 million, a 24% decrease on the September 2010–11 forecast and a 34% decrease on the final estimate for 2009–10 (2009 crop).

### Discussion

Exceptionally wet weather caused a reduction of the cane crop from an expected 30 million tonnes to 25.9 million tonnes, and the average CCS (commercial cane sugar) from 13.5 tonnes to 12.9 tonnes. The large shortfall in sugar production has left some sales contracts impossible to fill, with the unwinding of these contracts costing the industry around \$105 million.

Sugar prices have also decreased compared to those forecast in September. Queensland Sugar Limited's 2010 indicative Seasonal Pool price was \$435 to \$460 on 3 February 2011, against the \$450 to \$510 expected on 1 September 2010.

Initial reports indicate that the full damage from Cyclone Yasi, combined with the ongoing agronomic impacts of the 2010 rains (i.e. cane unharvested in 2010 stood over giving lower sugar and disrupting the ratoon cycle), could reduce the value of the 2011 sugarcane crop by \$500 million. This impact will be reflected in the 2011–12 forecast in the September 2011 issue of *Prospects*.

## Cotton

### Forecast

The gross value of Queensland **cotton** production in 2011 is forecast at \$660 million, a 7% decrease on the September 2010–11 forecast but an 86% increase on the final estimate for 2009–10.

### Discussion

The expected reduction in GVP is a consequence of two situations; firstly, the flood inundation of crops for a significant period of time and secondly, the prolonged water logging and associated cool, cloudy weather both in the Darling Downs and around Theodore. In addition, most crops, particularly on the Darling Downs, were significantly late as a consequence of cool cloudy weather prior to the flood events.

Recovery will depend on an extended summer season of hot, cloud-free days, as virtually all crops will only be setting crop from late January and early February onwards. At this stage, crops are making very slow progress and many may well cut out quickly. Central Queensland growers have a longer season to produce a crop, but rainfall poses a higher threat prior to harvest when bolls are opening, due to the high risk of boll rot.

Crops grown in the Border Rivers and in the St George and Dirranbandi regions are facing minimal crop losses from their recent floods and may actually experience increased yields, which will compensate for losses on the Darling Downs and in Central Queensland to some extent. Since the previous September forecast for 2010–11, the price estimates have marginally increased, which will also help to cushion some of the impact of the floods. In addition, the expected total area of cotton has increased when compared with the September forecast.

## Other major field crops

### Chickpeas

#### Forecast

The gross value of **chickpea** production in Queensland in 2010–11 is forecast at \$49 million, a 39% decrease on the September 2010–11 forecast and an 18% decrease on the final estimate for 2009–10.

#### Discussion

The estimated area sown for 2010–11 has remained about the same as the September estimate of 148 500 hectares. However, yields have been revised downwards by 47% due to the water logging problems associated with the flooding at harvest time. The price per tonne has increased by 15% over the same period from \$400 to \$460, but this is not enough to offset the forecast fall in production.

### Peanuts

#### Forecast

The gross value of **peanut** production in Queensland in 2010–11 is forecast at \$21.6 million, an 11% increase on the September 2010–11 forecast and an 8% increase on the final estimate for 2009–10.

#### Discussion

A 4% reduction in area sown is expected to be outweighed by a 13% increase in yields, generating an 8% increase in production to 27 000 tonnes. Combined with a slight 3% increase in price, this is forecast to increase peanut GVP compared with the September forecast.

### Soybeans

#### Forecast

The gross value of **soybean** production in Queensland in 2010–11 is forecast to be just \$0.675 million. This is significantly lower than the September 2010–11 forecast of \$7.5 million and 93% lower than the final estimate for 2009–10.

### Discussion

The reason for the drastic decline in forecast GVP for soybeans is the estimated 93% decline in area sown from 7250 to just 500 hectares. Yields have also fallen by 23% due to excessively wet conditions, which saw expected production decrease to 1000 tonnes from the September 2010–11 forecast of 18 800 tonnes.

### Sunflowers

#### Forecast

The gross value of **sunflower** production in Queensland in 2010–11 is forecast at \$7.5 million, a 63% reduction on the September 2010–11 forecast and 25% less than the final estimate for 2009–10.

#### Discussion

The reason for the large decline in GVP is due to the estimated 50% reduction in area planted, falling from 21 800 hectares forecast in September 2010 to 11 000 hectares forecast in March 2011. This reduction is due to the excessive flooding at planting time, particularly in Central Queensland, which has also resulted in the yield forecast per hectare being adjusted downward by 30%.

## Winter cereal grains

### Wheat

#### Forecast

The gross value of **wheat** production in Queensland in 2010–11 is forecast at \$302 million, a 33% reduction on the September 2010–11 forecast but a 14% increase on the final estimate for 2009–10.

#### Discussion

Despite a small increase in the estimated wheat price (APW) to \$306 per tonne, there has been a 9% reduction in area sown, combined with a 36% fall in production brought about by a wet finish at harvest, which caused significant downgrading in the Darling Downs and Central Queensland.

### Barley

#### Forecast

The gross value of **barley** production in Queensland in 2010–11 is forecast at \$33 million, an 11% decrease on the September 2010–11 forecast but a 6% increase on the final estimate for 2009–10.

#### Discussion

Due to a wet finish at harvest, there was a reduction in the area sown and subsequent production, combined with a 6% decline in price.

# Summer cereal grains

## Sorghum

### Forecast

The gross value of **sorghum** production in Queensland in 2010–11 is forecast at \$320 million, a 34% increase on the September 2010–11 forecast and a 106% increase on the final estimate for 2009–10.

### Discussion

Due to increased area sown and yields, production is forecast to increase by 27% to 1 347 000 tonnes. Combined with a slight increase in price, sorghum GVP is projected to increase substantially. This expected increase in GVP disguises the loss of early planted sorghum crops on the Darling Downs and Central Queensland as a result of the recent floods.

## Maize

### Forecast

The gross value of **maize** production in Queensland in 2010–11 is forecast at \$136 million, a 157% increase on the September 2010–11 forecast and a 268% increase on the final estimate for 2009–10.

### Discussion

A nearly 60% increase in area sown, combined with a 50% increase in yields, is estimated to increase production by nearly 1.4 times. Together with a 9% increase in price, this is forecast to increase maize GVP significantly.

# Fisheries

## Commercial Fishing

### Forecast

The gross value of production of **commercial fishing** in Queensland (**State and Commonwealth-managed**) for 2010–11 is forecast at \$260 million, which is a decline of 3% from the September 2010–11 forecast and a decline of 8% on the final estimate for 2009–10.

Total **commercial fishing** GVP for specific **Queensland-managed fisheries** for 2010–11 is forecast at \$206 million, a decline of 4% on the September 2010–11 forecast and a decline of 5% on the final 2009–10 estimate.

### Discussion

The effects of the January flooding (predominantly from south of Rockhampton) are likely to have a greater impact on commercial fishing GVP than the effects of Cyclone Yasi, although better indications of the cyclone's impact will become clearer in the coming months.

For the **trawl** sector, a good banana prawn season and a good tiger/endeavour prawn season are expected, while the king prawn harvest is expected to be slightly lower than previous years. Beam trawling production is also expected to be down until the later part of the year, while the gross value of scallops is expected to decline as a result of a decrease in both production and the level of demand.

In the **net fishery** sector, the largest effects from recent weather events are expected to be the detritus in fishing grounds, as well as damage to nets and the subsequent decreasing efficiency of their use. Meanwhile, it is currently difficult to judge the effects of the flooding and Cyclone Yasi on the **line fishery** sector. The industry has experienced a weaker season due to unfavourable fishing weather during the peaks in demand for species such as coral trout; hence overall production is slightly down.

A major study into the state's **recreational fishing** industry has recently been undertaken by Fisheries Queensland, where it is hoped that data collected can be used to provide updated estimates (proxies) for the gross value of production. The current estimate of \$73 million represents a commercial value-equivalent figure.

## Aquaculture

### Forecast

In 2010–11 the value of the Queensland **aquaculture** industry is expected to decrease by 11% to \$93.5 million compared with the September 2010–11 forecast and fall by 8% compared with the final 2009–10 estimate.

### Discussion

Generally unfavourable weather conditions, combined with specific flood and cyclone events, have resulted in a significant reduction to aquaculture production expectations.

**Prawn farming** is the largest aquaculture sector and one of the sectors most affected by the adverse weather. Compared with the previous September forecast for 2010–11, prawn production is predicted to decrease by 16% to 4400 tonnes, with a farm-gate value of \$63.5 million.

**Barramundi**, the second-largest sector, has also been affected by unfavourable weather. Barramundi production is expected to decrease by 9%, with the farm-gate value dropping to \$22 million. Meanwhile, **freshwater fish** production (primarily silver perch, Murray cod and jade perch) is estimated to decrease in value by 4%. **Oyster** production is also expected to decrease, while **red claw** and the **hatchery** sectors are expected to increase slightly on the production levels achieved in 2009–10.

## Mixed fortunes: a sequence of natural disasters affecting Queensland's agriculture sector

The combined effects of unseasonal rainfall before summer, the December 2010–January 2011 floods and Cyclone Yasi have caused significant damage to Queensland's primary industries and food sectors, with direct losses sustained through reduced production of some commodities.

The agricultural sectors hardest hit by floods were horticulture, cereal grains, cotton, sugar cane and fisheries. Major issues for these sectors included crop loss, inability to plant, disruptions to harvesting, waterlogging, yield reductions and quality downgrading, as well as lack of access to markets due to flooded roads and other infrastructure damage. The full impact of these issues may not be directly distinguished in the changes to 2010–11 GVP estimates given in this *Prospects update*. This is due to a range of factors, most notably price adjustments caused by limited supply, as well as increased plantings in other regions that experienced better than expected growing conditions for non-traditional crops.

In addition to the direct losses to production, a significant loss of output will have flow-on effects to other industries. Suppliers who sell goods and services to affected primary industries will sustain losses, as will the suppliers to suppliers, and so on up the supply chain. The supplier industries that will be most impacted by a reduction in agriculture output include finance, property and business services, transport and storage and wholesale and retail trade. Queensland's agriculture industry will also experience flow-on effects as a result of direct damage to transport and storage companies. Infrastructure damage and losses, including damage to transport fleets, will indirectly affect the agricultural sector via higher transportation prices, in addition to the short-term losses sustained due to transportation access issues.

Whilst in some instances the impacts of the recent adverse weather will be far reaching and continue into crops in the years to come, not all the news is bad. Some unaffected growers have been able to sell their crops at a premium, and earlier expansion of some crops out of their traditional areas has limited the overall impact. Additionally, the wet conditions have provided improved soil moisture for future crops. The remainder of this section discusses the impacts of the unseasonal wet, floods and Cyclone Yasi on specific agricultural sectors.

**Sugarcane:** The sugarcane harvest (June to December) was severely hampered by excessive rainfall in the later part of 2010. Sugarcane crops were subsequently damaged by Cyclone Yasi in early February 2011. The industry has estimated that 5.3 million tonnes of sugar cane intended to be harvested in 2010 was stood over. The sugar content of cane was also down sharply in 2010 as a result of the excessive rain. Furthermore, flooding caused problems with the 2010 plantings, which will reduce the 2011–12 cane harvest since plant cane is the highest yielding.

**Cotton:** Cotton crops in the Darling Downs and Central Queensland were inundated by flood waters for a significant period of time, and faced waterlogging associated with unseasonal prolonged wet and cloudy conditions. However, these losses are expected to be mostly offset by price increases and possible yield increases in the Borders Rivers and St George and Dirranbandi regions. These areas faced minimal crop losses from flooding, but experienced improved soil moisture and the replenishment of irrigation dams.

**Grains:** Winter crops and some summer crops have been hit hard by the adverse weather, with chickpeas, soybeans, sunflowers, wheat and barley suffering major losses. Although the areas planted were unaffected, excessively wet conditions at harvest time prevented or delayed harvesting and caused extensive downgrading of crops. The wet conditions also affected summer sorghum plantings, but these losses were more than offset by the ability to undertake late season sorghum plantings on an improved soil profile.

**Fruit and vegetables:** The banana industry has suffered extensive losses to the 2010–11 crop as a result of Cyclone Yasi, with losses to extend into the 2011–12 crop. However, the losses in quantity are expected to be partially offset by price increases, which will benefit farmers outside of the affected area, such as those who diversified into the Atherton Tablelands region. Melons have also been hit hard by the natural disasters, with flooding in the Chinchilla region causing losses to rockmelon and watermelon crops of up to 50%.

**Dairy:** With no electricity and a lack of market access due to road closures from the floods, dairy producers were forced to dry off cattle and discard milk. This has resulted in short term production losses.

**Forestry:** The recent high rainfall and flooding has had a significant disruptive impact on the Queensland forest industry due to the inability to safely access and harvest log timber. However, this is not expected to reduce DEEDI's 2010–11 forestry forecasts, as the industry was able to relatively quickly reorganise harvesting operations to utilise the drier or undamaged parts of the forest estate, and much of the flooding occurred during the traditional Christmas shut-down period. Cyclone Yasi has also reportedly caused severe damage to the timber plantation estate in the Tully-Ingham-Cardwell region, but this is expected to be more of a long term nature, since the region is not currently supplying significant volumes of log timber to the processing sector.

**Fisheries:** Marked losses to fisheries production were experienced in the Brisbane-Moreton region due to the flooding of streams and rivers down the Queensland coast south from Rockhampton. Impacts are being felt in the net, prawn, crab and scallop fisheries. Beyond 2010–11, the impacts of the floods and Cyclone Yasi will continue to be felt, as debris needs to be cleared and fishing grounds need to be re-established. Some fishers will also face substantial infrastructure bills to repair and replace damaged and lost equipment.

**Lifestyle horticulture:** The lifestyle horticulture industries, which include nursery, turf production and cut flowers, experienced stock losses, damage to property and equipment and subsequent reductions in sales during the recent floods. The recovery process has begun and it is anticipated that these industries will bounce back over the coming months.

## Key assumptions

When calculating these forecasts, the department follows the convention used by all government forecasting agencies that ‘normal’ seasonal conditions will occur across Queensland throughout the forecast year (2010–11) or that part of the forecast year yet to be completed. This sets a benchmark for measuring variations from ‘normal’ as the season unfolds.

The prices of all internationally traded commodities are responsive to changes in the exchange rate of the Australian dollar (A\$) relative to the currencies of our trading partners. Prices to primary producers (and therefore gross unit values) decline when the A\$ exchange rate increases and vice versa.

The impacts of the recent flooding rains across the state have been factored into these current projections.

## Notes

**Gross value of commodities produced (GVP).** GVP is a measure of economic output. In this publication, GVP relates to the output of primary industry commercial operations only. The GVP is the value of recorded production at wholesale prices realised in the market place (e.g. cattle sold at saleyards, sugarcane at the mill door, fruit and vegetables at the wholesale market). It is derived by multiplying the output from each primary industry by the average wholesale price paid to producers. Note that gross values of production are not the measures used to represent sectoral contributions to the gross domestic (or state) product.

**Value-added production** is measured as the value of the output produced minus the costs of the intermediate inputs.

## Acknowledgements

DEEDI acknowledges the contributions to the report from Science, Agriculture, Food and Regional Services researchers and industry experts, the Office of Economic and Statistical Research (OESR), the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), the Australian Bureau of Statistics (ABS), Meat and Livestock Australia (MLA), the National Climate Centre, various industry representatives, and various market commentators and industry media.

## Disclaimer

DEEDI advises that this particular publication should not be relied upon as financial advice and that you should seek your own independent financial advice. DEEDI disclaims all liability for all claims, loss, damages, cost or expense of whatever nature, howsoever occurring as a result of reliance upon the information contained in this report.

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained in this report.

## Contact

Contact us on 13 25 23.

Visit [www.deedi.qld.gov.au](http://www.deedi.qld.gov.au) for this and previous editions of *Prospects update* and *Prospects for Queensland's primary industries* (click on ‘Information about’ > ‘Queensland industries’ > ‘Agriculture’ > ‘Business and trade’ > ‘Industry trends’).

© The State of Queensland, Department of Employment, Economic Development and Innovation, 2011.

Enquiries about reproduction, including downloading or printing the web version, should be directed to [SAFTRSCopyright@deedi.qld.gov.au](mailto:SAFTRSCopyright@deedi.qld.gov.au) or telephone 13 25 23 (Queensland residents) or +61 7 3404 6999.

CS0058 03/11