

Chapter 13 Agriculture, Forestry and Fisheries

Key Points

- Agriculture, forestry and fisheries accounted for 1.8 per cent of Territory GSP in 2007-08 and 2.6 per cent of resident employment.
- The value of agriculture, forestry and fisheries production is estimated to be \$698 million in 2008-09, an increase of 6.4 per cent from 2007-08.
- The cattle industry is the largest contributor to rural industries and fisheries in the Territory, comprising approximately 49 per cent of total estimated production value in 2008-09.

Background

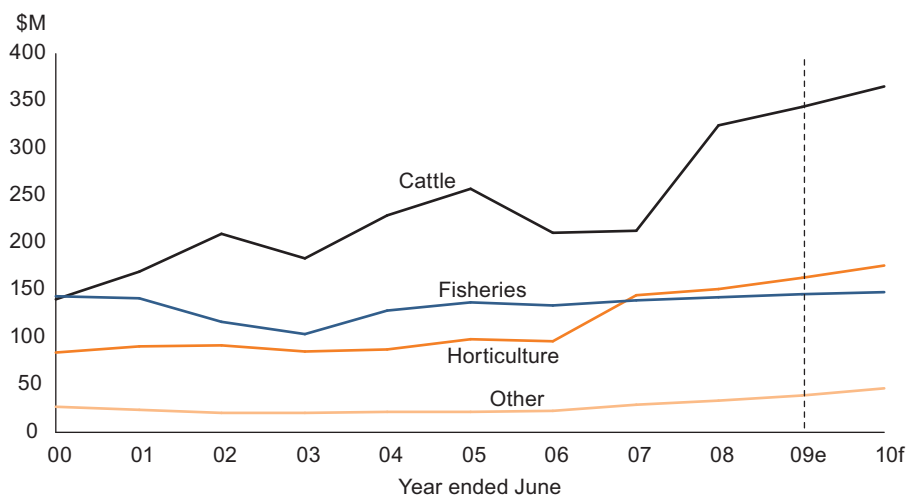
Agriculture and forestry includes the production of cattle and other livestock (such as buffalo, crocodiles, poultry, pigs and camels), horticulture (fruit, vegetables, nursery and cut flowers) and mixed farming (field crops, hay and seeds, and forestry). Fisheries includes the harvest of wild catch and aquaculture.

Agriculture, forestry and fisheries accounted for 1.8 per cent of Territory gross state product (GSP) in 2007-08 and 2.6 per cent of resident employment.

In regional and remote areas, these industries directly employ about 1330 people, or about 17 per cent of the workforce in those areas. Moreover, they contribute to retail and wholesale trade, manufacturing and construction activity in these areas. As such, this sector is crucial to economic activity in regional Territory centres, particularly Katherine, Alice Springs and Tennant Creek.

In 2007-08, the total value of agriculture, forestry and fisheries production was estimated at \$656 million. In the last five years, growth in the value of horticulture has increase by about 83 per cent, while growth in cattle production has increased by about 76 per cent (Chart 13.1). Export revenue from agriculture, forestry and fisheries production in 2007-08 was about \$254 million, or 5.6 per cent of Territory exports.

Chart 13.1: Agriculture, Forestry and Fisheries, Value of Production (nominal dollars)



e: estimate; f: forecast

Source: Department of Regional Development, Primary Industry, Fisheries and Resources

The value of agriculture, forestry and fisheries production is estimated to be \$698 million in 2008-09, an increase of 6.4 per cent from 2007-08.

Map 3: Northern Territory Agriculture, Forestry and Fisheries



While all care has been taken to ensure that agriculture, forestry and fisheries industry data is correct it should be noted that much of the information is obtained from voluntary reporting. Also, Territory horticulture statistics are collected on a calendar year basis corresponding to the harvesting season, not financial years.

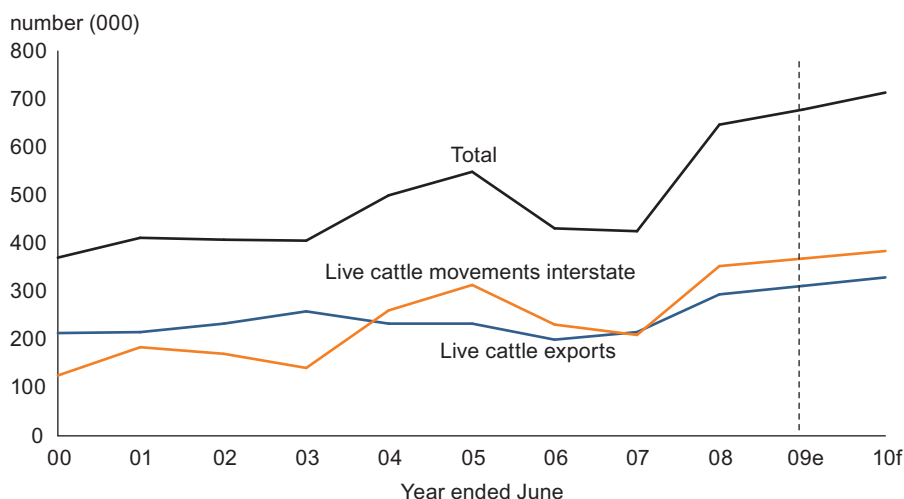
Cattle

Cattle production remains the largest rural industry in the Territory, contributing about 49 per cent of the total value of rural and fisheries production in 2007-08. Cattle numbers and production are influenced by seasonal and economic conditions in the Territory, elsewhere in Australia and overseas.

In 2007-08, an estimated 647 000 cattle were turned off Territory pastoral properties, an increase of 221 000, or 52 per cent from the previous year. The value of Territory cattle production for 2007-08 was about \$324 million, up \$111 million, or 52 per cent from the previous year.

In 2007-08, 55 per cent of cattle produced were sent to interstate markets, while the remaining 45 per cent were exported. Since the closure of the last commercial abattoir in the Territory in 2007, only a small number of cattle have been slaughtered locally for domestic consumption.

Chart 13.2: Cattle Movements out of the Territory



e: estimate; f: forecast

Source: Department of Regional Development, Primary Industry, Fisheries and Resources

Cattle production in the Territory in 2008-09 is expected to increase by around 5 per cent from 2007-08 with an estimated 680 000 cattle to be turned off Territory pastoral properties.

Interstate Trade

The majority of cattle that are moved interstate go into feedlots for fattening before slaughter and sale in both domestic and international markets. Changes in seasonal conditions and rainfall in the cattle producing regions of the Territory year to year affect herd growth and stocking rates, often causing significant fluctuation in the number of cattle sent interstate. For example, in 2007-08, low rainfall in the Barkly and Alice Springs regions led to a 69 per cent increase in interstate cattle movements.

Of the cattle sent interstate in 2007-08, 75 per cent went to Queensland, 15 per cent went to Western Australia and 11 per cent went to other jurisdictions.

In 2007-08, the value of interstate trade for Territory cattle was \$159 million. The average annual value of interstate trade between 2004-05 and 2007-08 was \$120 million.

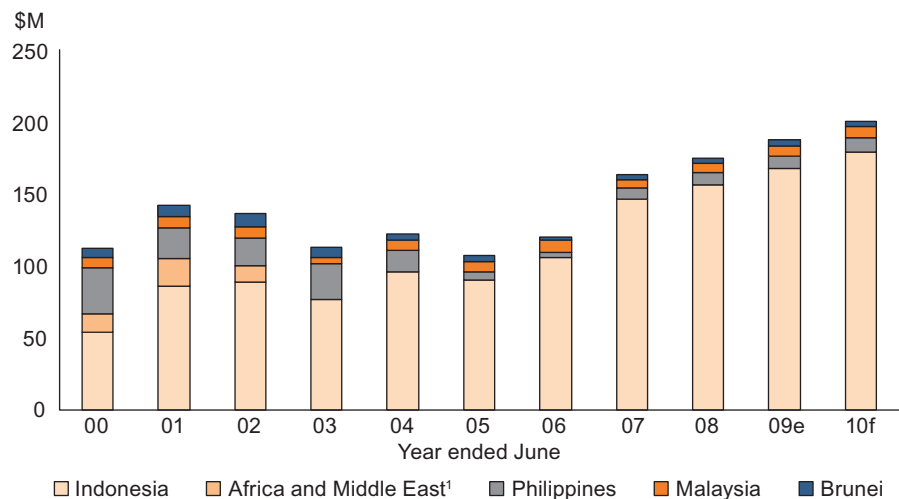
Cattle Exports

Australian beef export markets remain highly concentrated. About 80 per cent of all beef exports in 2007-08 were shipped to three main markets: the United States of America (US), Japan and Korea. However, over the past four years there has been increasing demand for Australian beef from emerging markets. In 2007-08, beef exports to Russia increased more than 400 per cent, while beef exports to Indonesia increased by 64 per cent.

In 2007-08, Australian live cattle exports increased by 12 per cent to an estimated 714 000 head and Territory cattle represented about 40 per cent of total Australian live cattle exports. About 293 000 head of Territory cattle were exported in 2007-08, an increase of 35 per cent over 2006-07 and the highest number recorded. In 2007-08, the Territory's live cattle exports were valued at \$164 million, up \$44 million from 2006-07.

Indonesia is the largest market for Territory live cattle, accounting for about 90 per cent of the total, while other main destinations for Territory live cattle exports are Malaysia, the Philippines and Brunei (Chart 13.3).

Chart 13.3: Territory Live Cattle Exports by Destination



e: estimate; f: forecast

¹ Africa and Middle East includes Egypt, Libya, Israel and Saudi Arabia

Source: Department of Regional Development, Primary Industry, Fisheries and Resources

Exports to Indonesia increased by 36.4 per cent to 264 500 head of cattle in 2007-08, while the value of exports increased by 37.7 per cent to almost \$147 million. The balance of exports were to Malaysia, the Philippines and Brunei. Gross domestic product (GDP) growth in the Philippines in 2007 increased by 7.3 per cent, the largest increase in 30 years. This contributed to a substantial increase in live cattle numbers exported to the Philippines, up 143 per cent from the previous year.

Factors contributing to the expansion of the Territory's live cattle exports are rising household incomes in key Asian markets, and the Territory being able to supply a less expensive product, due to depreciation of the Australian dollar, and lower transport costs compared to other live cattle exporters, such as South America.

The Territory competes with other states including Queensland for the South East Asian live cattle export market while the main sources of international competition come from cheaper South American beef and Indian buffalo meat.

Farm Performance

The financial performance of cattle producers in the Territory is estimated to have improved in 2008-09 as better seasonal conditions allowed increases in herd numbers and sales. Increased cattle sales are expected to boost farm incomes while farm cash costs are expected to decrease due to lower fuel prices and reduced spending on freight and fodder. However, considerable variation remains in farm financial performance between the pastoral regions and between large and small cattle enterprises.

Cattle Outlook

Territory Cattle

Many pastoralists are set to take advantage of recent good rains to rebuild herd numbers after drought. The number of Territory live cattle for export in 2009 is expected to be similar to 2008, at around 300 000 head of cattle, although there are signs emerging that demand from South East Asia, particularly Indonesia, may weaken in 2009-10 due to the downturn in the global economy.

The Territory cattle industry is largely dependent on the economic conditions in interstate and international markets. Exports also depend on exchange rate movements and price competition from cheaper substitutes (buffalo meat and lower quality beef imports) from the Asian subcontinent and locally supplied meats such as pork and chicken. In the short to medium term, competition in domestic and international markets will continue to maintain downward pressure on prices.

The free trade agreement between Korea and the US and weaker demand from Japan, are both likely to contribute to downward pressure on the export price of Territory beef. The lower export levels to Japan and Korea is likely to be partially offset by growth in the US market and growth in the South East Asian market, particularly from Indonesia.

The outlook for 2009-10 is expected to see the continuing recovery of herd numbers, rebuilding low numbers after slaughtering due to the drought conditions in recent years. In 2009-10, interstate cattle movements are expected to increase slightly, growing stronger over the period to 2010-11. The interstate movement of Territory cattle generally reflects demand for meat both domestically and in Australia's beef export markets, in particular Japan, the US, South Korea and Indonesia.

Future Market Developments

Territory live cattle exporters rely heavily on the Indonesian market and Indonesia remains a growth area for Territory producers. A large population and strong rate of economic development have seen beef consumption increase in the past decade as household incomes have increased.

While Indonesia continues to be a growth area for Territory live cattle exports, there is concern in the industry surrounding the over-reliance of Territory producers on one dominant export market, hence the need to develop new markets.

The Northern Territory's cattlemen's and livestock exporters association held meetings with Vietnamese officials during 2008 with a view to expanding the South East Asian market. There are positive signs that the first export of Territory live cattle to Vietnam could occur within a year.

Other Livestock Industries

Other livestock produced in the Territory include buffaloes, horses, camels, pigs and goats. Crocodile skins and flesh are produced for local and export markets, and live horses and camels are exported interstate.

In 2007-08, the value of production of other livestock in the Territory was about \$8.2 million, a 19 per cent decrease from 2006-07. The decrease is attributed mainly to a fall in exports of buffalo to Brunei, as well as fewer interstate sales of horses and camels.

Sales of other livestock contributed about 1.3 per cent to the total value of rural industries and fisheries production in 2007-08.

Buffalo

The Territory buffalo industry comprises both wild or 'swamp' buffalo and farmed buffalo. Indigenous community enterprises in Arnhem Land harvest wild buffalo for live export. Commercial buffalo farming in the Territory is not viable in the current economic climate. This is due to a number of factors including the closure of the local Darwin abattoir in 2007, cheaper low quality competition from India, and the loss of Brunei as an export market.

Some Territory producers have been considering developing stocks of riverine (premium) buffalo which offer faster growth rates. Other opportunities also lie in dairy buffalo for small scale cheese production to service a gourmet niche market.

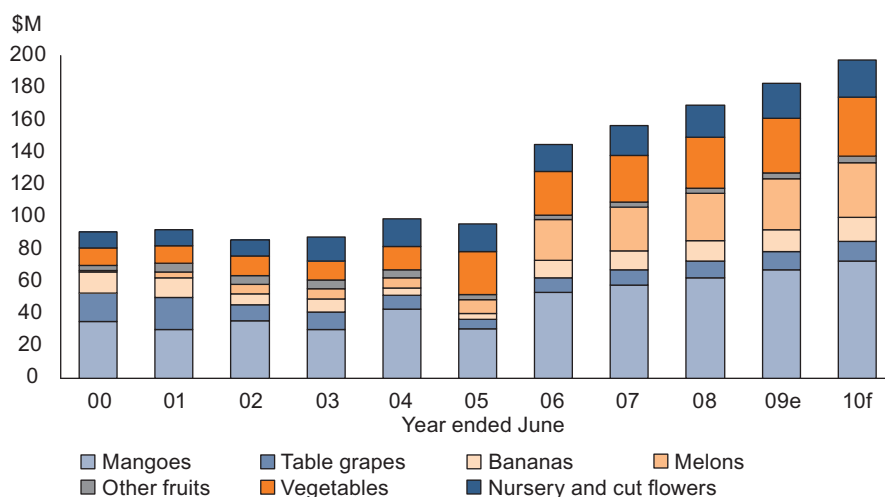
The outlook for production of other Territory livestock in 2009-10 and over the medium term is for stable levels of growth to be maintained. Lack of demand has forced the closure of the only local abattoir, which in turn has reduced the supply of local meats to market. Future growth will depend on the industry's ability to create demand for its product, develop new markets and meet the challenges of sustainable and economically sound farming practices in order to generate a return on investment.

Horticulture

The Territory horticulture industry includes fruit, vegetables, nursery products and cut flowers. In 2007-08, horticulture contributed \$157 million, or 29 per cent, to the total value of Territory rural industries and fisheries production. This is an increase of about 8 per cent from 2006-07.

The value of horticulture production increased during 2007-08, including higher melon production, and a small increase in mango production associated with the biennial production cycle of mango trees (Chart 13.4).

Chart 13.4: Value of Territory Horticultural Production



e: estimate; f: forecast

Source: Department of Regional Development, Primary Industry, Fisheries and Resources

Mangoes Mango production is the most valuable horticultural industry in the Territory. Early flowering means that Territory mangoes from Pine Creek are usually first to market and therefore fetch the best prices.

In 2007-08, the value of mango production in the Territory was about \$57.7 million, an increase of 8 per cent from the previous year. The mango industry continues to develop, with larger companies consolidating their market position. New late flowering varieties have also been introduced in the Territory such as Calypso™ and Honey Gold that extend the season and open up opportunities to develop new export markets.

Grapes Table grapes are mostly grown around Ti Tree, north of Alice Springs. In 2007-08 the value of table grapes was estimated at \$9.7 million, up from \$9 million in 2006-07.

The production of table grapes has suffered in recent years from nematode infestation, which has depressed yields. Established grape growers are implementing a five-year vine replacement program with nematode-tolerant root stock. The nematode problem, coupled with increased competition from interstate growers, has resulted in some Territory producers leaving the market.

Bananas The value of banana production in the Territory was about \$11.8 million in 2007-08, up from \$10.9 million in 2006-07. In 2008-09, the value of banana production in the Territory is estimated to increase to about \$12.7 million.

Panama disease tropical Race 4, the more virulent form of the pathogen) was identified in Territory banana plantations in 1997. The disease has decreased production over the last 11 years, causing a 60 per cent decline in the value of banana production in the Territory.

Melons The value of melon production is estimated to have increased from \$25 million in 2006-07 to \$27 million in 2007-08 (an increase of about 8 per cent) due to increased production and good prices.

The Territory produces melons to supply southern markets during winter months. Production of rockmelons and other melons in the Territory has risen in recent years, with large plantings in the Darwin and Katherine regions. Territory melons have been successfully exported to Singapore, Malaysia and Hong Kong.

- Exotic Fruits** Exotic fruits grown in the Greater Darwin and Katherine-Daly regions include rambutan, jackfruit, dragon fruit, guavas, carambolas, Fiji apples/hog plums and star apples. Production of exotic and other fruits in the Territory in 2007-08 was worth about \$3.1 million.
- Vegetables** Adverse weather conditions, including drought, fire and heavy rains with flooding, decreased vegetable production in some areas across Australia during 2008. This resulted in supply shortages in some southern states and benefited Territory growers. Despite production levels remaining largely unchanged in the 2006 and 2007 seasons, the value of vegetable production in the Territory in 2007-08 was \$29 million, an increase of about 8 per cent from 2006-07.
- Mixed Farming** Mixed farming includes hay and pasture seed production, cereal crops such as sorghum and maize, other crops such as peanuts, sesame and soybeans, and farm forestry. The value of field crop production in 2007-08 was about \$28 million, an increase of 23 per cent from 2006-07. Field crop production is dominated by hay and fodder grown in the Katherine, Douglas Daly and Darwin areas for the live cattle export industry.

Horticulture Outlook

In the short term, Territory horticultural production is expected to improve, driven mainly by an increase in mango and melon production. Some further consolidation within the industry may occur during 2009-10 as economic conditions tighten, with some smaller, less efficient producers leaving the market.

In the longer term, future growth in the horticulture industry will be underpinned by favourable climatic conditions, relatively disease-free status, improved product quality, and continuing efforts to expand both domestic and international markets.

- Mangoes** Mangoes will remain the foremost horticultural output in the Territory for the foreseeable future. Mango production is expected to increase in coming years as the large number of juvenile tree plantings reach maturity.
- Issues likely to affect continued expansion of mango production include availability of labour for harvesting, price competition and transport. Although the reliability of the supply chain has proved a problem for getting quality fruit to market in recent years, the ability of producers to transport large volumes of fruit to market by rail has improved price competitiveness.
- Bananas** Banana plantations in the Territory will continue to be affected by Panama disease until a disease-resistant strain of banana can be found. Production levels could dramatically improve if disease resistance could be introduced. Until this occurs, the ongoing commercial viability of the industry is in question. Nonetheless, production levels in the Territory are expected to remain stable in 2009-10.
- Banana growers have been able to remain in the horticulture industry by diversifying into other crops such as rockmelons and watermelons, and by using farming methods such as an annual crop rotation system to enhance disease resistance.

Queensland remains the largest banana producer in Australia, however the Philippines has been seeking access to the Australian market since 1995. Strong opposition by Australian banana growers and concerns over biosecurity have until now thwarted efforts by the Philippines to export bananas to Australia.

Grapes The outlook for table grape growers is also uncertain as lower prices from interstate producers and production problems due to the nematode infestation threaten the industry. Although replanting is taking place, several producers have left the industry and volumes are set to fall in the short to medium term.

Other Horticultural Developments Commercial growers of exotic fruits such as dragon fruit are continuing to consolidate a market position for their product in the short term, while searching for new viable markets.

The nursery and cut flower sectors also have good prospects for expansion, especially in the Top End, where climatic conditions provide distinct production advantages for a wide range of tropical varieties. In addition to current heliconia and orchid production for southern markets, there has been progress made in developing international markets, such as palm trees for the Dubai market.

The Territory's commercial forest plantations face a number of challenges including environmental issues, labour shortages and infrastructure. However, the long-term prospects for output from the Tiwi Islands in 2012 and Douglas Daly in 2028 look promising.

The Peanut Company of Australia's farm in Katherine is another promising horticulture industry in the Territory. The company is looking to introduce corn as a rotation crop to complement its current peanut production.

Located in the Kimberley region of Western Australia near Kununurra, the Ord Irrigation Area is among Australia's most productive agricultural areas. A proposal has been drawn up to expand the Ord's irrigated area by opening up a second stage. Known as the Ord River Irrigation Scheme Stage 2 (M2 Project), the proposal is to convert another 50 000 hectares of land into an area suitable for intensive agricultural production.

Of this land, about 14 000 hectares lies within the Northern Territory, hence the need for a joint undertaking by both the Western Australian and Northern Territory governments. Transforming this land into an area suitable for intensive agriculture will require the construction of new infrastructure. According to the Department of Natural Resources, Environment, the Arts and Sport, this would include the main M2 supply channel, additional channels, on-route storage, hillside drainage, farm drainage, tail water storage, pumping stations, flood levees and access roads. Currently, some areas of the proposed M2 expansion are under pastoral lease and Native title claims also exist over land in the M2 area.

Forestry

Forestry plantations continue to be a growth area for Territory rural industries. Companies are buying land to plant tropical hardwoods in the Territory for future harvest. Globally, demand for high value timbers has been booming in recent times as world supply dwindles as a result of years of deforestation and poor harvesting practices in native forests.

Hardwood plantation companies such as Great Southern made substantial investments in the Douglas Daly region in 2007-08 leading to a change in land use in the region. Previously cleared pastoral land has been planted with African mahogany. Plantings in the Douglas Daly will potentially exceed 40 000 hectares with harvesting forecast to begin in 2028. These hardwoods are expected to be exported to Asia.

Acacia plantations on the Tiwi Islands continue to grow towards maturity. Major constraints for expansion of the forestry industry in the Tiwi Islands include infrastructure and labour shortages. The initial harvest for the Tiwi Island plantations is forecast to occur in 2012.

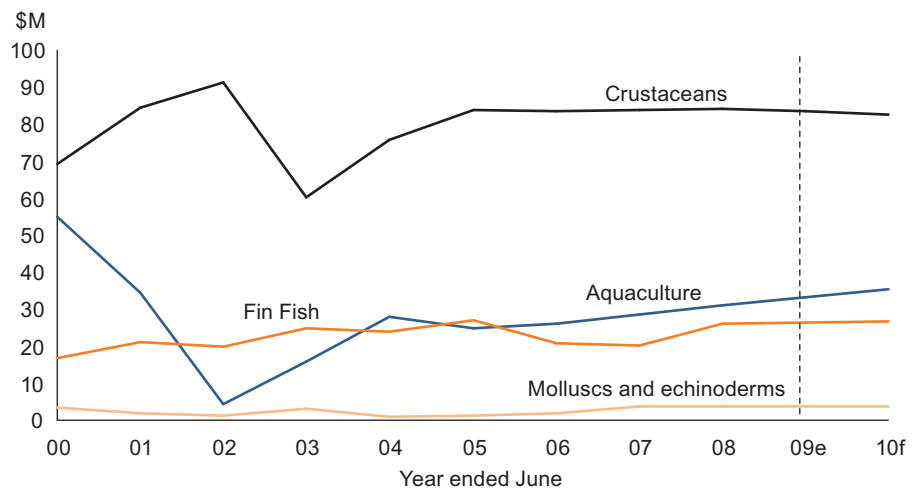
Fisheries

The Territory fishing industry comprises commercial, recreational and traditional Indigenous sectors. The commercial sector includes harvesting wild catch, fisheries and aquaculture as well as the processing, trade and retailing of seafood.

The value of fisheries production in 2007-08 was about \$144.9 million, contributing about 21 per cent of the total value of production of the rural industries and fisheries sector. Almost 57 per cent of the value of production is represented by the Commonwealth-managed Northern Prawn Fishery.

The value of Territory fisheries production has increased by about 50 per cent in the five years since 2003-04. However, the value of production of fisheries in the Territory has tended to fluctuate over time due to environmental conditions and consumer demand (Chart 13.5).

Chart 13.5: Value of Territory Fishing Production



e: estimate; f: forecast
 Source: Department of Regional Development, Primary Industry, Fisheries and Resources

Over the past decade, important changes have occurred in fisheries management. The Territory Government uses various adjustment mechanisms to ensure equitable resource sharing continues between commercial and recreational fishers. Components of the Territory’s long-term resource strategy and adjustment mechanisms include voluntary and compulsory reductions in the number of fishing licences, a voluntary buyback of coastal netting licences, gear restrictions, seasonal closures, river closures and minimum size limits.

The Federal Court decision on the Blue Mud Bay case in March 2007 granted traditional Indigenous owners freehold title to the low-water mark on Aboriginal land, and excluded people from waters overlying that land. This decision created uncertainty for commercial and recreational fishers in the Northern Territory.

However, in December 2007, the High Court of Australia determined that the Fisheries Act applies to all waters throughout the Territory, meaning that existing controls for recreational, fishing charter and commercial operators apply in all waters throughout the Territory, but permission is required from the relevant Land Council to permit entry into waters overlying Aboriginal land for fishing. The decision helped to remove uncertainty that existed for both commercial and recreational fishers.

In early 2008, the Territory Government and Northern Land Council agreed temporary arrangements permitting access to waters overlying Aboriginal land until permanent arrangements are finalised.

The closure of the McArthur River in 2002 and the Adelaide River in 2004 to commercial barramundi fishing were major initiatives, leaving these areas to the recreational sector. The closure of Darwin Harbour and Shoal Bay from coastal net fishing from February 2008 is the most recent measure to conserve Territory fish stock.

In recent times, the threat of illegal fishing within Territory waters has reduced due to ongoing monitoring of Australian waters by Australian customs and defence resources.

Assessment of the Territory's commercial fishing industry by the Commonwealth has resulted in several participants being awarded the highest level of accreditation, meaning that Territory fisheries are healthy, well managed and ecologically sustainable. Participants in the accreditation process include shark and mackerel, aquarium, demersal fish, finfish trawl, mud crab, Timor Reef and trepang fisheries.

Commercial Fishing and Aquaculture

In 2007, the most recent year available, the value of production from the wild harvest fishery was \$30.1 million, including \$6.4 million for mud crab, \$5.2 million for barramundi, and \$4.5 million from the Timor Reef fishery (primarily golden snapper). Other high value fisheries include shark, finfish trawl and Spanish mackerel.

The value of production for aquaculture in 2007 was \$22.8 million. The largest contributors were pearling (\$17.6 million) and barramundi farming (\$3.3 million).

The value of pearling production decreased by 2 per cent from 2006, while the value of barramundi production decreased by 32 per cent in the same period. This is mainly due to the closure of the Marine Harvest Pty Ltd commercial barramundi farm at Bathurst Island at the beginning of 2007.

Recreational Fishing

Based on a survey conducted in the Territory in 2001, recreational fishing is one of the most popular leisure activities in the Territory. The survey data estimated that about \$35 million was spent on recreational fishing in the Territory each year. Recreational fishing also makes a significant contribution to tourism expenditure.

The closure of Darwin Harbour and Shoal Bay to inshore commercial coastal net fishing in February 2008 should assist recreational fishing in these areas, with sustainable fishing stocks expected to boost recreational fishing and act as a draw card for future tourism activity in Territory.

Fishing Outlook

In an effort to assist consumers in making informed decisions when purchasing seafood, seafood retailers in the Territory are being encouraged to label imported products. These changes introduced by the Seafood Council of the Northern Territory, with funding assistance from a Territory Government grant, are expected to promote the marketing of local products with a flow-on benefit to producers across the industry.

The Territory Government has also provided funding for a large scale survey to provide more recent data on the value of recreational fishing in the Territory. The results of the survey are due to be published in 2010.

In 2009-10, uncertain global economic conditions could adversely affect the pearling industry due to reduced demand for luxury goods such as pearls.