# 14 Forestry and fisheries

This NCP assessment is the first to consider progress by governments in fulfilling their Competition Principles Agreement (CPA) obligations relating to forestry and fisheries. The CPA clauses that are relevant to forestry are clause 3 (competitive neutrality) and clause 5 (the review and reform of legislation that restricts competition). For fisheries the most significant obligation is CPA clause 5 (the review and reform of restrictive legislation).

## **Forestry**

Native forest covers 155.8 million hectares or about 20 per cent of Australia's landmass (ABS 2001). Of this, 27 per cent is privately owned. Of the publicly owned remainder, 16 per cent is reserved, 12 per cent is managed by forest agencies for various uses including wood production, 14 per cent is on other Crown land and 59 per cent is leased. Industries based on harvesting of timber from native forests are located in New South Wales, Victoria, Queensland, Western Australia and Tasmania.

Plantations covered 1.3 million hectares as at September 1999, of which 71 per cent was softwood and 29 per cent was hardwood. The plantation estate is evenly split between public and private ownership.

The wood and paper products industries contribute about 1 per cent to GDP and employed just over 60 000 people as at June 1999 in the growing and harvesting of wood and the manufacture and processing of wood and paper products. Exports of forest products were valued at \$1293 million in 1998-99 and imports at \$3262 million.

The CPA obliges governments to ensure that regulatory and commercial responsibilities relating to forestry are not vested in the same public entity. This is relevant to public forest agencies, which have usually had both commercial and regulatory functions. The Council considered functional separation for forestry as part of the regulatory neutrality obligation in CPA clause 3. Clause 4 of the CPA (structural reform of public monopolies) also discusses functional separation. It obliges governments to relocate regulatory responsibilities when they are introducing competition to a public monopoly market or are privatising a public monopoly so as to prevent the former monopolist enjoying a regulatory advantage over its rivals. While public forest agencies generally dominate the supply of unprocessed timber in local markets, they have never been public monopolies in the conventional sense as there have always been competing privately-owned suppliers of timber. With the growth of the private plantation sector, this competition is increasing.

#### Competitive neutrality

Governments have agreed that, so as to eliminate resource allocation distortions arising out of public ownership of businesses, significant government businesses should not enjoy any net competitive advantage over their competitors simply as a result of their public sector ownership (CPA clause 3). State and Territory forest agencies are generally recognised as undertaking significant business activities, for example the sale of logs or logging rights in competition with private owners of native and plantation forests. State governments are therefore obliged under clause 3 to either:

- corporatise the business activities of these agencies, and impose taxes or tax equivalents, debt guarantee fees and regulations equivalent to those imposed on private sector competitors; or
- ensure that the goods and services they supply are priced to cover their full costs of production, including, where appropriate, taxes or tax equivalents, debt guarantee fees and costs arising from regulations to which private businesses are normally subject;

provided that the benefits of applying these measures outweigh the costs.

Whichever approach governments adopt, forest agencies must charge prices for timber that, over the longer term, generate revenues that at least cover the costs of managing its forests for timber supply and provide a commercial return on its assets, including land and trees.

There have been longstanding concerns that forest agencies are underpricing timber. Underpricing can:

- lead to an unsustainable rate of exploitation of native forests;
- result in slow productivity growth in the timber processing industry; and
- hamper the development of private plantations (and hence related benefits such as the contribution private plantations can make to controlling salinity in certain dryland farming areas and to sequestering carbon).

However, determining an appropriate target rate of return for native forests can be difficult. There are few sales of native forests upon which to base asset values, and using the net present value method can be unsatisfactory because of the circularity it introduces between timber prices and asset values.

The Commonwealth Competitive Neutrality Complaints Office recently released a research paper that considered timber pricing. A key message of the paper is that 'to help assess compliance with competitive neutrality, the market value of logs can be estimated by calculating their 'residual value' (CCNCO 2001, p. vii). This is the value of timber remaining after deducting the costs of harvesting, processing and transport from the price of processed timber products. The paper also advocated the use of log residual values to estimate forest asset values.

However, this conclusion does not mean that the 'residual value' method is most appropriate for setting actual timber prices. A report recently prepared for the Australian Conservation Foundation (Marsden Jacob Associates 2001) argued that forest agencies that set timber prices in this way effectively subsidise the processing industry by making 'ability to pay' the main pricing criterion. This resulted, according to the report, in the exploitation of native forest that is uneconomic to log and in inefficiency in the processing industry. The Marsden Jacob Associates report recommended that forest agencies sell timber via auctions or tenders subject to a cost-based reserve price.

The sale of timber via auction or tender was also discussed in a paper recently released by the Victorian Government's Timber Pricing Review (Jaakko Poyry Consulting 2001). However, the discussion paper also noted that, in areas where insufficient competition exists between processors, other approaches such as the residual value method may give a better indication of overall market values. Victoria is to complete its Timber Pricing Review by November 2001. Western Australia has also commenced an independent review of native forest timber pricing.

This is a complex area of competitive neutrality application, with potentially important implications for forest agencies and other interests in forestry alike. The conclusions of available reports and papers are (so far) largely consistent. However, governments have had limited opportunity to consider these conclusions in the context of their own institutional settings, and relevant work is still underway in two jurisdictions. The Council also needs to consider further the implications of the studies that have been undertaken to date, and to work with governments and other parties on appropriate pricing obligations for public forestry activities.

There is also an obligation on governments under competitive neutrality principles (CPA clause 3(4)(b)(iii)) to ensure that regulatory and commercial responsibilities relating to forestry are not vested in the same public entity. This obligation is relevant to public forest agencies, which have usually had both commercial and regulatory functions. All but one jurisdiction separately regulate public and private forestry to some extent. While most jurisdictions have taken some steps to separate regulatory from commercial forestry responsibilities, the adequacy of such separation is not always clear. Further development of regulatory arrangements is therefore necessary, particularly on the location of policy and regulatory responsibilities.

The Council will consider compliance by States and Territories with their competitive neutrality obligations in forestry in the 2002 NCP assessment. Table 14.1 summarises the current status of State and Territory application of competitive neutrality to forestry.

 Table 14.1: Application of competitive neutrality to forestry

| Jurisdiction       | Agency and status                                                                                 | Timber pricing                                                                                                                                                                                                                   | Financial performance                                                                                                                                 | Tax and debt equivalence                                                                                         | Regulatory neutrality                                                                                                                                                                                                                                                                                                         | Assessment                          |
|--------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| New South<br>Wales | State Forests of NSW is a Government Trading Enterprise.                                          | Most hardwood and<br>softwood timber is<br>sold under long term<br>agreements and<br>priced using a<br>residual value<br>method.                                                                                                 | Shareholder value<br>added target<br>negotiated annually.<br>Hardwood forest and<br>mature softwood<br>asset values are<br>based on market<br>prices. | Pays all State taxes, goods and services tax and equivalents for Commonwealth taxes.  Pays a debt guarantee fee. | State native forest operations regulated by Forestry and National Park Estate Act 1998.  Private plantation operations regulated by Plantations and Reafforestation Act 1999.                                                                                                                                                 | Council to assess progress in 2002. |
| Victoria           | Forestry Victoria is a service agency within the Department of Natural Resources and Environment. | Most sawlogs are sold under 'evergreen' licences and priced using a residual value method. Pulping timber is sold under long term agreement and by competitive tender.  Timber pricing is currently under an independent review. | Forest asset values recently determined using net present value method, assuming an 8 per cent nominal discount rate, and an 80 year rotation.        | Not applied.                                                                                                     | State forest operations regulated by the <i>Forests Act 1958</i> . This was reviewed in 1998 and the Government is reconsidering its response.  Both State and private forest operations are regulated by the Code of Forest Practices for Timber Production made under the <i>Conservation, Forests and Lands Act 1987</i> . | Council to assess progress in 2002. |

Table 14.1: continued

| Jurisdiction         | Agency and status                                                                                                   | Timber pricing                                                                                                                       | Financial performance                                                                                                                                                              | Tax and debt equivalence                                                                                     | Regulatory neutrality                                                                                                                                 | Assessment                          |
|----------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Queensland           | The Department of Primary Industries undertakes commercial forestry activity within a commercialised business unit. | Most forest products are sold via competitive processes.                                                                             | Long run and annual rate of return targets. Native forests are not valued. Plantations valued using net realisable value method.                                                   | Pays all State taxes.  Pays a loan guarantee fee.                                                            | State forest operations regulated by the <i>Forest Act 1959</i> .  Private forests regulated under the <i>Integrated Planning Act 1997</i> .          | Council to assess progress in 2002. |
| Western<br>Australia | The Forest Products<br>Commission is a<br>commercial statutory<br>authority (established<br>November 2000).         | Timber is priced to cover the cost of establishing and maintaining forest.  Timber pricing is currently under an independent review. | Financial targets are set in the annual business plan approved by the Treasurer.  Native forests and most plantations are valued using the net present value method.               | Pays all State taxes.  Pays local rate equivalents for premises but not forests.  Pays a loan guarantee fee. | State forest operations regulated by Conservation and Land Management Act 1984.  Private forests regulated under Soil and Land Conservation Act 1945. | Council to assess progress in 2002. |
| South Australia      | Forestry SA is a<br>Government Business<br>Enterprise<br>(established January<br>2001).                             | Log prices are market based.                                                                                                         | Financial targets set in annual performance statement.  Mature plantations valued using net realisable value method. Immature forests are valued using the cost of growing method. | Pays all State taxes.  Pays local rates.  Pays Commonwealth tax equivalents.  Pays a debt guarantee fee.     | Both State and private forest operations are regulated under the Development Act 1993.                                                                | Council to assess progress in 2002. |

Table 14.1: continued

| Jurisdiction | Agency and status                                            | Timber pricing                                                                       | Financial performance                                                                                                                                                                                                                             | Tax and debt equivalence                                            | Regulatory neutrality                                                                                                                              | Assessment                          |
|--------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Tasmania     | Forestry Tasmania is<br>a Government<br>Business Enterprise. | Prices for major products determined by negotiation with reference to market prices. | Broad objective of maximising sustainable return, set in Ministerial Charter.  Standing timber valued using net present value method, assuming 6.3 per cent real discount rate and a 80 rotation for native forests and 28 years for plantations. | Pays all State taxes.  Pays a debt guarantee fees.                  | State forest operations regulated by Forestry Act 1920 and the Forest Practices Act 1985. The latter Act also regulates private forest operations. | Council to assess progress in 2002. |
| ACT          | ACT Forests                                                  | Logs sold at market prices.                                                          | Applies full cost<br>attribution. Mature<br>plantations valued<br>using net realisable<br>value method.                                                                                                                                           | Pays all Territory<br>taxes and<br>Commonwealth tax<br>equivalents. | Territory and private forest operations regulated by Land (Planning and Environment) Act 1991.                                                     | Council to assess progress in 2002. |

#### Legislation review

#### Legislative restrictions on competition

The main classes of restrictions on competition in relation to native forests are:

- restrictions on market entry, for example requirements that operators obtain a licence, permit, lease or other authority, that prohibit foreign ownership or ownership by certain legal persons, and that impede the trading of such authorities;
- quantitative restrictions on supply, for example maximum (and sometimes minimum) quantities of timber able to be removed, authorisation of export quantities; and
- restrictions on market conduct via licence conditions and codes of practice, such as required logging practices.

Plantation forestry is usually regulated by general environmental planning laws. These laws impose restrictions on how plantation forestry operations are conducted and, in the extreme, may prohibit conversion of land to plantation forestry from another land use.

#### Regulating in the public interest

Forests comprise two distinct resources that have largely different policy concerns for governments — native forests and plantation forests.

Society derives a range of benefits from native forests and managing these forests sustainably generally maximises these benefits. However, markets alone are unlikely to manage native forests sustainably because, while some benefits of native forests are tradeable (principally timber production, mining and grazing) others (such as water production, biological diversity, recreational experience and aesthetic amenity) often are not. Moreover, the availability of non-market benefits may be reduced by exploitation of native forests for market benefits.

Native forests are diverse and hence the relative value of their market and non-market benefits varies between forests. Those forests that are highly valued for their non-market benefits are generally reserved as parks to prevent any exploitation that might compromise these benefits. Other native forests less highly valued for their non-market benefits are made available for exploitation for market benefits subject to regulations that seek to make such exploitation sustainable. That is to restrict, say, logging to a rate not exceeding that at which the forest regenerates (with or without assistance),

and to restrict the manner in which logging is conducted to minimise the other benefits forgone.

Regulation imposes costs however and can fail. For instance, it can be costly to estimate a sustainable rate of exploitation, and the estimate may subsequently prove inaccurate. Costs also arise in creating and enforcing rights to access native forest and in maintaining and enforcing conduct restrictions.

To achieve sustainable management of native forests, while minimising regulatory costs, regulation should:

- provide stable secure rights of commercial access to native forests;
- allow competition in the allocation and trading of these rights; and
- impose the minimum necessary restrictions on the conduct of owners of these rights.

With plantation forestry the main concern is that establishment and harvesting of plantations may impose costs outside the boundary of the plantation, for example, harm to water quality and local roads. The aim of regulation here should be to require the plantation owner to take steps to minimise the harm (for example, to protect water quality through establishing settling ponds) or to compensate for harm done (for example, to contribute towards the maintenance of local roads). A sound regulatory regime will:

- impose minimum restrictions to effectively mitigate or remedy clearly identified harms; and
- be stable and predictable so that potential plantation investors can be certain what costs they face before investing.

#### Review and reform activity

Table 14.2 summarises governments' review and reform activity relating to the regulation of forestry.

Table 14.2: Review and reform activity of legislation regulating forestry

| Jurisdiction       | Legislation                                                           | Key restrictions                                                                                            | Review activity                                                                   | Reform activity | Assessment                          |
|--------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Commonwealth       | Export Control<br>(Unprocessed<br>Wood) Regulations<br>1986           | Licensing of unprocessed wood exporters                                                                     | Currently under review by the Department of Agriculture Fisheries and Forestry.   |                 | Council to assess progress in 2002. |
|                    | Export Control<br>(Hardwood Chips)<br>Regulations 1997                | Licensing of hardwood chip exporters                                                                        | Currently under review by the Department of Agriculture Fisheries and Forestry.   |                 | Council to assess progress in 2002. |
|                    | Export Control<br>(Regional Forest<br>Agreements)<br>Regulations 1997 | Maximum aggregate mass limits for woodchip exports                                                          | Currently under review by the Department of Agriculture Fisheries and Forestry.   |                 | Council to assess progress in 2002. |
| New South<br>Wales | Forestry Act 1916                                                     | Licensing of timber harvesting Licensing of sawmills Permits for grazing, hunting or occupying State forest | Not scheduled for NCP review but included in program of forest regulatory reform. |                 | Council to assess progress in 2002. |
|                    | Threatened Species<br>Conservation Act<br>1995                        | Licensing of conduct that harms threatened species, populations or ecological communities                   | Not scheduled for NCP review but included in program of forest regulatory reform. |                 | Council to assess progress in 2002. |

Table 14.2 continued

| Jurisdiction | Legislation       | Key restrictions                                                                                                                                                                                                                                                                                                                                                                                                                     | Review activity                                                                                                                                                                                                                                                                                                                                                                                | Reform activity                                                                                                                                                                                                                                                                                             | Assessment                          |
|--------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Victoria     | Forests Act 1958  | Exclusive control and management of State forests by the Department of Natural Resources and Environment Licensing of timber harvesting Permits and leases for grazing and other uses of State forest Administrative discretion over how licences and produce are allocated and priced Logs harvested to equal sustainable yield                                                                                                     | Reviewed by independent economic advisers in 1998. The review recommended:  • allowing purchaser/provider structure for management of State forests;  • removing requirement for minimum level of logging;  • developing market-based processes for log allocation and pricing; and  • separating policy, regulatory and commercial forestry functions of the department.                      | In August 2000 the commercial forestry function was established as a commercially-focused business unit within the Department, with separate financial reporting. The Government has commissioned an independent review of timber pricing. In June 2001 a discussion paper was released for public comment. | Council to assess progress in 2002. |
| Queensland   | Forestry Act 1959 | Management and control of forest products on State land vested in the Department of Primary Industries under agreement with the Queensland Parks and Wildlife Service and regulated by that service  Licensing of timber collection and of taking of other resources  Administrative discretion over how licences and produce are allocated and priced  Logs harvested not to exceed sustainable yield  Levy to fund timber research | Reviewed by officials in 1999. The review recommended:  • retaining the native forest sawlog allocation system as, while procompetitive reform would bring economic gains, it avoided imposing significant social costs on several rural communities; and.  • retaining the timber research levy.  A subsequent review of agricultural levies recommended removal of the timber research levy. | Act amended in November 1998 to extend exemption from the Trade Practices Act for the native forest sawlog allocation system until 2009. Timber research levy removed in 2000.                                                                                                                              | Council to assess progress in 2002. |

Table 14.2 continued

| Jurisdiction   | Legislation                                     | Key restrictions                                                                                                                                                                                                                                                            | Review activity                                                                                                                                                                                                                                                                                                                                                                     | Reform activity | Assessment                          |
|----------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Queensland     | Sawmills Licencing<br>Act 1936                  | Licensing of sawmills at absolute discretion of corporation                                                                                                                                                                                                                 | Reviewed in 2000 and report under preparation for Cabinet.                                                                                                                                                                                                                                                                                                                          |                 | Council to assess progress in 2002. |
|                |                                                 | Licenses specify maximum productive capacity of mill                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                     |                 |                                     |
| Australia L.A. | Conservation and<br>Land Management<br>Act 1984 | Exclusive control and management of State forests by the Conservation Commission  Licensing of timber collection and of taking of other resources  Administrative discretion over how licences and produce are allocated and priced  Permits to occupy and use State forest | <ul> <li>The Act was substantially amended by:</li> <li>Conservation and Land Management Amendment Act 2000; and</li> <li>Forest Products Act 2000.</li> <li>These Acts vested State forests and other lands in the Conservation Commission and established the Forest Products Commission to undertake commercial forestry functions on State forests and private land.</li> </ul> |                 | Council to assess progress in 2002. |
|                |                                                 | Registration of timber workers                                                                                                                                                                                                                                              | An independent economic adviser reviewed the Act prior to its amendment. The amending legislation was also reviewed. However, the previous Government did not consider these reviews before the amending legislation was passed. The reviews are now awaiting consideration.                                                                                                        |                 |                                     |
|                | Sandalwood Act<br>1929                          | Caps the quantity of naturally- occurring sandalwood harvested from Crown and private land Licensing the harvesting of sandalwood Individual licences capped at 10 per cent of the total limit                                                                              | Review completed. It recommended retaining the overall cap on the quantity sandalwood harvested while removing the restriction on the proportion of the annual sandalwood harvest that may be taken from private land.                                                                                                                                                              |                 | Council to assess progress in 2002. |

Table 14.2 continued

| Jurisdiction    | Legislation            | Key restrictions                                                                                 | Review activity                                                                                                                 | Reform activity                                             | Assessment                          |
|-----------------|------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------|
| South Australia | Forestry Act 1950      | Exclusive control and management of State forests by Forestry SA                                 | The South Australian Government considers the Act does not contain restrictions on competition.                                 |                                                             | Council to assess progress in 2002. |
|                 |                        | Licensing of timber collection and taking of other resources                                     |                                                                                                                                 |                                                             |                                     |
|                 |                        | Administrative discretion over how licences and produce are allocated and priced                 |                                                                                                                                 |                                                             |                                     |
|                 | Sandalwood Act<br>1930 | Caps the quantity of naturally-<br>occurring sandalwood harvested<br>from Crown and private land | Reviewed in 1999. The review recommended repeal of the Act.                                                                     | A Bill repealing the Act has been introduced into the South | Council to assess progress in 2002. |
|                 |                        | Licensing the harvesting of sandalwood                                                           |                                                                                                                                 | Australian Parliament.                                      |                                     |
| Tasmania        | Forestry Act 1920      | Exclusive control and management of State forests by the Forestry Corporation                    | Reviewed by an external consultant in 1998. It noted that minimum supply restrictions are anti-competitive and recommended:     |                                                             | Council to assess progress in 2002. |
|                 |                        | Licensing of timber collection and of taking of other resources                                  | • simplifying the Act; and                                                                                                      |                                                             |                                     |
|                 |                        | how licences and produce are                                                                     | <ul> <li>removing certain conditions of wood supply agreements.</li> </ul>                                                      |                                                             |                                     |
|                 |                        | Minimum supply of logs for veneer and sawmilling industries                                      | The minimum supply restrictions were found to be of public benefit during the process to establish a Regional Forest Agreement. |                                                             |                                     |
|                 |                        | Wood supply agreements to contain certain conditions                                             | , <u>, , , , , , , , , , , , , , , , , , </u>                                                                                   |                                                             |                                     |
|                 |                        | Permits to occupy and use State forest                                                           |                                                                                                                                 |                                                             |                                     |
|                 |                        | Registration of timber workers                                                                   |                                                                                                                                 |                                                             |                                     |

Table 14.2 continued

| Jurisdiction            | Legislation                  | Key restrictions                                                                                                                  | Review activity                                                                                            | Reform activity | Assessment                          |
|-------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Tasmania<br>(continued) | Forest Practices Act<br>1985 | Requires preparation and certification of forest practices plan before timber harvesting can start                                | Reviewed in 1998 by Forest Practices<br>Advisory Council. The review<br>recommended no changes to the Act. |                 | Council to assess progress in 2002. |
|                         |                              | Declaration of private timber forests                                                                                             |                                                                                                            |                 |                                     |
|                         |                              | Prescribes forest practices under Forest Practices Code                                                                           |                                                                                                            |                 |                                     |
|                         |                              | Operators harvesting more than<br>100 000 tonnes per annum must<br>submit a 3 year plan for approval<br>by Forest Practices Board |                                                                                                            |                 |                                     |

#### **Fisheries**

Australian production of fish and fish products was worth \$2038 million in 1998-99, up from \$1 092 million in 1989-90 (ABS 2001). Australia's major commercially accessed species are prawns, rock lobster, abalone, tuna, other fin fish, scallops, and edible and pearl oysters. Most production is sourced from fish stocks occurring naturally offshore, in coastal waters, in estuaries and in inland waterways. However, aquaculture production is growing rapidly, up from \$188 million in 1989-90 to \$602 million in 1998-99. Aquaculture is established in all States, with species farmed ranging from pearl oysters to trout.

The majority of Australian production — some \$1500 million in 1998-99 — is exported. The value of fish and fish products consumed in Australia in 1998-99 was approximately \$1400 million including imports valued at \$878million.

Fishing is also an important recreational activity in Australia. Two main industries are involved. The Australian fishing tackle and bait industry has an annual turnover in excess of \$170 million. The recreational boating industry, with around 60 per cent being related to fishing, accounts for a further \$500 million in turnover. In addition to Australian fishers, international tourists spend over \$200 million on fishing in Australia each year.

#### Legislative restrictions on competition

Commonwealth, State and Territory governments all regulate natural fisheries. The Commonwealth is responsible for fisheries from three to 200 nautical miles off the Australian coast. State and Territory governments regulate coastal fisheries out to three nautical miles as well as estuaries and fresh water fisheries.

Natural fisheries vary considerably. The main dimensions of variation are seasonality, mobility, recruitment, fish life span, unit value, bycatch and knowledge of stock. Governments have responded to these variations by imposing different types of restrictions, usually in combinations. The main types are:

- access controls (restrictions on entry/exit), including;
  - licensing of fishers and boats (licences can be tradeable or non-tradeable);
  - fishing seasons, closure of fisheries;

- output controls (restrictions on production levels), including;
  - total allowable catches;
  - output quotas (quotas can be tradeable or non-tradeable) and bag limits; and
- input controls (restrictions on market conduct), including;
  - boat and crew sizes; and
  - gear and fishing methods.

Another potential restriction arises not from regulation itself but from the costs of maintaining and administering regulation. These costs are in large part attributable to the activities of fishers (commercial and recreational) and, therefore, should be recovered from fishers. Otherwise there may be, for example, too much investment in fishing and insufficient investment in aquaculture, with consequences for consumer prices and for regional employment and development.

State and Territory governments also regulate aquaculture, usually through general planning laws. Restrictions on competition in planning are discussed in chapter 24. While the commercial fishing and aquaculture sectors are regulated separately, approaches to regulation in one sector may impact on producers in the other (to the extent they compete).

### Regulating in the public interest

Governments have regulated natural fisheries because of concerns that, without legislation, fisheries resources may be utilised at an unsustainable rate. Due to the 'common property' nature of natural fishery resources there is a fear that unfettered competition can lead to overfishing, overcapitalisation and ultimately lower economic, environmental and social returns from the fishery than might otherwise be obtainable. Typically, the objectives of natural fisheries regulation are to:

- sustain fish stocks so as to maximise their economic benefits in perpetuity;
- · protect marine environments and marine biodiversity; and
- reconcile the sometimes competing interests of commercial, recreation and indigenous fishers.

As noted above, as natural fisheries vary considerably, the suitability of different types of restrictions in particular settings also varies. Output controls such as quota are preferable in theory as they constrain fishing effort most directly and do not hamper incentives for innovation by fishers. However, the information and enforcement costs can be high, and quotas do not easily address problems of bycatch and small fish sizes. Quotas therefore

tend to be most suitable for single species fisheries where fish are of high value. Quotas should be readily tradeable and divisible to minimise the cost of fisher entry and so that ownership passes to the most efficient fishers. In other settings, input controls may be more suitable, that is for multi-species and low-value fisheries, and where it is important to avoid the taking of certain sizes of fish.

Turning to controls on access, fisheries seasons and closures are most suitable where a fishery will not tolerate any significant fishing effort, for example, when fish are particularly easy to catch such as during breeding seasons, or when stocks are close to collapse. Licences are suitable for facilitating the application of output and input controls and for passing on fishery management costs. Licences for fisheries subject to quota regimes can be issued on demand. Licences associated with input controls should be readily transferable.

Making the right choice of restriction or combination of restrictions is important. A poor choice may:

- imperil a fishery, degrade its environment, take the livelihood of dependent fishers and take a preferred choice fish product away from consumers;
- inhibit technological changes that may offer improved returns to fishers and better value fish products to consumers; or
- impede entry of new fishers into an industry and forgo new investment in regional areas.

#### Review and reform activity

Table 14.3 summarises governments' review and reform activity relating to the regulation of fisheries.

 Table 14.3: Review and reform activity of legislation regulating fisheries

| Jurisdiction | Legislation                         | Key restrictions                                                                                                                                                                                                                                                                                                                       | Review activity                                                                                                                                                                                                                                                                                                      | Reform activity | Assessment                          |
|--------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Commonwealth | Fisheries<br>Management Act<br>1991 | Licensing of commercial fishers  Permits for fish receivers  Input controls on boats, gear and fishing methods  Output controls such as total allowable catches, individual transferable quota (transfer of which is subject to various restrictions), size limits, prohibitions on taking certain species and restrictions on bycatch | Review by officials started in October 1998.                                                                                                                                                                                                                                                                         |                 | Council to assess progress in 2002. |
|              | Torres Strait<br>Fisheries Act 1984 | Licensing of community and commercial fishers Wide Ministerial powers to: • prohibit taking of certain species; • prohibit taking fish under certain sizes; • impose a variety of input controls.                                                                                                                                      | Reviewed completed in 1999 by Commonwealth and Queensland officials. The review recommended:  • a new statement of objectives for the Act;  • maintaining the distinction between community and commercial fishing;  • retaining licensing of fishing; and  • retaining wide Ministerial powers to regulate fishing. |                 | Council to assess progress in 2002. |

Table 14.3 continued

| Jurisdiction    | Legislation                         | Key restrictions                                                                                                                                                                                                                                              | Review activity                                                                                                                                                                                                                                                                                                                                                                               | Reform activity | Assessment                          |
|-----------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|
| New South Wales | Fisheries<br>Management Act<br>1994 | Licensing of fishers  Access to share managed fisheries by owning shares  Input controls on boats, gear, crew levels and fishing methods  Output controls such as total allowable catches, bag limits, size limits and prohibitions on taking certain species | Reviewed by independent economic advisers supervised by interagency committee. Final report under preparation for consideration by Cabinet.                                                                                                                                                                                                                                                   |                 | Council to assess progress in 2002. |
| Victoria        | Fisheries Act 1995                  | Licensing of commercial and recreational fishers Input controls on boat size, gear and fishing methods Output controls such as total allowable catches, individual transferable quota, bag and size limits                                                    | Reviewed by independent economic advisers in 1999. The review recommended:  • retaining access licences but for longer periods and with automatic renewal;  • introducing full cost recovery;  • considering royalty or rent taxes to limit fishing;  • removing restrictions on quota transfers and holdings for abalone;  • replacing input controls with output controls for rock lobster. |                 | Council to assess progress in 2002. |

Table 14.3 continued

| Jurisdiction | Legislation                              | Key restrictions                                                                                                                                                                                                                    | Review activity                                                                                                                                                                                                                                                                                                                          | Reform activity | Assessment                          |
|--------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Queensland   | Fisheries Act 1994                       | Licensing of fishers and crew Input controls on boat and gear Output controls such as total allowable catches, individual transferable quotas, bag and size limits                                                                  | Review complete and report under preparation for Cabinet.                                                                                                                                                                                                                                                                                |                 | Council to assess progress in 2002. |
|              | Fish Resources<br>Management Act<br>1994 | Licensing of fishers  Prohibitions on market outlets Input controls on boat, gear and fishing methods  Output controls such total allowable catches, quota, bag and size limits                                                     | Review completed in 1999. It recommended retaining existing restrictions except for the Western Rock Lobster Managed Fishery, where it recommended an assessment of the net benefit of moving to an output controls-based regime. It also recommended steps to embed NCP principles in the ongoing cycle of fisheries management review. |                 | Council to assess progress in 2002. |
|              | Pearling Act 1990                        | Licensing of pearling and hatcheries  Minimum quota holding for pearling licences  Hatchery licensees must also hold pearling licence  Wildstock quota  Hatchery quota  Hatchery sales to other than Australian industry prohibited | Review completed in 1998. It recommended:  • removing minimum quota holdings;  • decoupling pearl farming licences from pearl fishing licences;  • auctioning wildstock quotas;  • removing hatchery quotas;  • codifying in regulation criteria for fishery management decisions; and  • establishing an independent review tribunal.   |                 | Council to assess progress in 2002. |

Table 14.3 continued

| Jurisdiction    | Legislation                                                                         | Key restrictions                                                                                                                           | Review activity                                                                | Reform activity                                                         | Assessment                          |
|-----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------|
| South Australia | Fisheries Act 1982                                                                  | Licensing of fishers and fish farmers                                                                                                      | Review by officials underway.                                                  |                                                                         | Council to assess progress in 2002. |
|                 |                                                                                     | Registration of boats and fisher processors                                                                                                |                                                                                |                                                                         |                                     |
|                 |                                                                                     | Input controls on gear and fishing methods                                                                                                 |                                                                                |                                                                         |                                     |
|                 |                                                                                     | Output controls such as catch limits, size limits and prohibitions on taking certain species                                               |                                                                                |                                                                         |                                     |
|                 | Fisheries (Gulf St<br>Vincent Prawn<br>Fishery<br>Rationalization) Act<br>1987      | Imposes on remaining licence holders the cost of compensating those who surrendered their licenses                                         | Reviewed by officials. Act has achieved objective of reducing licence numbers. | To be repealed once settlement with remaining licenceholders finalised. | Council to assess progress in 2002. |
|                 | Fisheries (Southern<br>Zone Rock Lobster<br>Fishery<br>Rationalization) Act<br>1987 | Licensees may not transfer their licenses Imposes on remaining licence holders the cost of compensating those who surrender their licenses | Reviewed by officials. Act has achieved objective of reducing licence numbers. | Act repealed.                                                           | Council to assess progress in 2002. |
| Tasmania        | Living Marine<br>Resources<br>Management Act<br>1995                                | Licensing of fishers, handlers, processors and marine farmers Input controls on gear, vessel operations, handling and storage standards    | Review completed. It recommended retaining all restrictions.                   |                                                                         | Council to assess progress in 2002. |
|                 |                                                                                     | Output controls such as quotas, size limits and species                                                                                    |                                                                                |                                                                         |                                     |

Table 14.3 continued

| Jurisdiction            | Legislation                         | Key restrictions                                                                                                 | Review activity                                              | Reform activity                    | Assessment                          |
|-------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------|-------------------------------------|
| Tasmania<br>(continued) | Marine Farming<br>Planning Act 1995 | Marine farming not to occur outside marine farming zones                                                         | Review completed. It recommended retaining all restrictions. |                                    | Council to assess progress in 2002. |
|                         |                                     | Lease required to operate a marine farm                                                                          |                                                              |                                    |                                     |
|                         | Inland Fisheries Act<br>1995        | Licensing of commercial fishers and fish farms                                                                   | Review completed.                                            | Recommendations to be implemented. | Council to assess progress in 2002. |
|                         |                                     | Registration of private fisheries, fish processors and sellers                                                   |                                                              |                                    |                                     |
| ACT                     | Fisheries Act 2000                  | Licensing of commercial fishers Registration of fish dealers                                                     | Replaced Fishing Act 1967, which was not reviewed.           |                                    | Council to assess progress in 2002. |
|                         |                                     | Output controls such as size and bag limits                                                                      |                                                              |                                    |                                     |
|                         |                                     | Input controls on gear                                                                                           |                                                              |                                    |                                     |
| Northern<br>Territory   | Fisheries Act 1996                  | Licensing of fishers                                                                                             | Review completed.                                            |                                    | Council to assess                   |
|                         |                                     | Input controls on vessels, gear, fishing methods and landings                                                    |                                                              |                                    | progress in 2002.                   |
|                         |                                     | Output controls such as total allowable catches, size and bag limits, and prohibitions on taking certain species |                                                              |                                    |                                     |