

## Chapter 7

### The fin-fish industry's contribution to the Tasmanian economy and employment

7.1 This chapter examines the importance of the fin-fish aquaculture industry to the Tasmanian economy and the improvement of workforce participation rates for the state. It also examines the industry's significant investment in training and education, and the role it plays in revitalising rural and regional communities, particularly those suffering from the downturn in traditional industries such as forestry and mining.

#### Economic value of the fin-fish aquaculture industry

7.2 The committee received numerous submissions highlighting the importance of the aquaculture industry to the Tasmanian economy. The following paragraphs outline this evidence

##### *Direct economic contribution*

7.3 In 2012–13, the gross value of overall fisheries production in Tasmania was \$696 million, with salmonid aquaculture contributing \$489 million.<sup>1</sup> A 2015 report by KPMG found that the Tasmanian salmonid industry has a turnover of \$1.12 billion and represents 2.3 per cent of Tasmania's gross state product.<sup>2</sup> It is Tasmania's most valuable primary industry in terms of the value of production.<sup>3</sup> The real gross value of Tasmania's aquaculture production has increased significantly over the past decade, as shown by Figure 7.1. Although the majority of the economic benefits from the industry are experienced within Tasmania, the salmonid aquaculture industry also contributes over \$115 million to mainland economies.<sup>4</sup>

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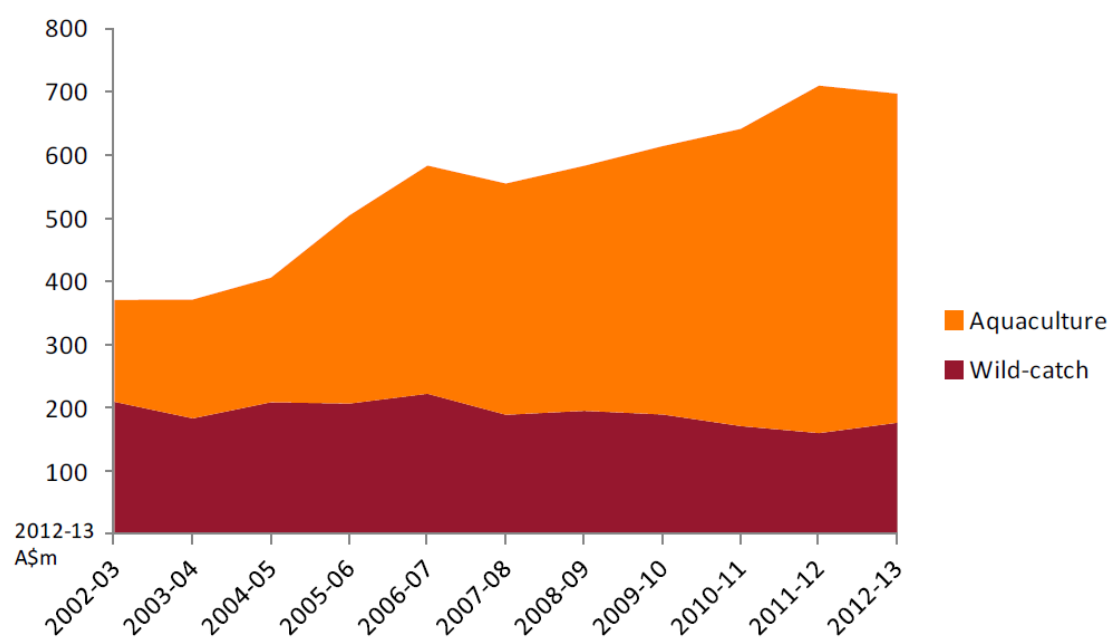
1 Department of Agriculture, *Submission 10*, p. 2.

2 KPMG, *Economic Impact Assessment; Tasmanian Aquaculture Industry May 2015*; cited in Tasmanian Salmonid Growers Association, *Submission 33*, p. 33.

3 Tasmanian Government, *Submission 35*, p. 20.

4 Tasmanian Salmonid Growers Association, *Submission 33*, p. 34.

**Figure 7.1: Real gross value of Tasmanian fisheries production, 2002–03 to 2012–13**



Source: M Stephan and P Hobsbawn, *Australian fisheries and aquaculture statistics 2013*, ABARES Fisheries Research and Development Corporation project 2010/208; reproduced in Department of Agriculture, *Submission 10*, p. 3.

7.4 Australia's farmed salmonids are almost entirely from Tasmania. At a national level, production increased from 16,686 tonnes in 2003–04 to 41,615 tonnes in 2013–14. The Commonwealth Department of Agriculture indicated that the volume of Australian salmonids production is forecast to continue to grow with a forecasted expansion of 3500 tonnes in 2014–15. In 2015–16, the volume is forecast to expand by a further 2300 tonnes, due in part to the planned industry expansion of production in Macquarie Harbour. Over the medium term, salmon production is projected to reach 61,400 tonnes by 2019–20.<sup>5</sup>

7.5 Currently, Tasmanian aquaculture salmonids are primarily produced for domestic markets and only contributed \$14 million of the total Tasmanian fisheries export value of \$144 million in 2013–14. However, 81 per cent of salmonid exports from Australia over the past decade originated in Tasmania.<sup>6</sup>

### *Indirect economic effects*

7.6 It is clear that Tasmania's fin-fish aquaculture industry has strong links with other sectors of the economy, such as the service and transport industries. These links generate a multiplied output or turnover effect and expand the capacity and depth of

5 Department of Agriculture, *Submission 10*, pp 2–3.

6 Department of Agriculture, *Submission 10*, p. 4.

the economy.<sup>7</sup> A report from the Australian Innovation Research Centre published in 2012 highlighted these links and commented that it is:

...vital that Tasmania strengthen and grow its private sector...[as] expanding Tasmania's private sector is the key to long-term diversification and economic security for Tasmanians.<sup>8</sup>

7.7 The aquaculture industry provides direct employment and supports ancillary businesses which have proved valuable for local economies. The committee received submissions from a number of companies detailing the work they undertake in support of the aquaculture industry. This includes in electrical and mechanical services, refrigeration, metal fabrication, logistics, transport, and concreting and construction.<sup>9</sup> Without the aquaculture industry, these companies would suffer negative consequences. For example, Scielex Pty Ltd stated that:

We have little doubt that our organisation exists in its present form because of the presence of the aquaculture industry in Tasmania...if there was any reason that the Tasmanian aquaculture industry was undermined or restricted, then it would have a direct negative impact on our company.<sup>10</sup>

7.8 Duggans Pty Ltd, a family owned business which has been based in the Huon Valley for the past 88 years, stated in its submission to the committee that:

Since commencing in the mid 1980s the salmon industry has grown to provide both direct and indirect employment in the Huon Valley and economic activity...Without the rise of industries such as the aquaculture industry, many of our regional centres would be ghost towns with high unemployment and little economic activity.<sup>11</sup>

7.9 Duggans Pty Ltd also indicated that although it is not directly involved in the aquaculture industry:

...its future and the jobs of its employees depend upon the economic activity of the salmon industry to create demand for housing, commercial buildings, roads, and concrete and quarry products it produces.<sup>12</sup>

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7 Tasmanian Salmonid Growers Association, *Submission 33*, p. 34.

8 West, J et al. (2012), *Diversifying Tasmania's Economy: Analysis and Options—final report*, Australian Innovation Research Centre, Department of Infrastructure and Regional Development, cited in Tasmanian Salmonid Growers Association, *Submission 33*, p. 38.

9 See for example G & D Transport Pty Ltd, *Submission 21*, Motors Group Tasmanian Pty Ltd, *Submission 23*, Scielex Pty Ltd, *Submission 24*, Duggans Pty Ltd, *Submission 25*; Veolia, *Submission 32*.

10 Scielex Pty Ltd, *Submission 24*, p. 2.

11 Duggans Pty Ltd, *Submission 25*, p. 1.

12 Duggans Pty Ltd, *Submission*, p. 2.

7.10 In addition to businesses carrying out work in support of the fin-fish aquaculture industry, there is also considerable flow-on economic activity to the rest of the community. The Australian Workers' Union stated that:

...the indirect impact has been flow-on activity which has meant that existing businesses within those regions have been able to have enough turnover as a consequence of the growth of aquaculture so that the communities have remained robust.<sup>13</sup>

### **Jobs, skills and workforce development**

7.11 The importance of the fin-fish aquaculture industry for employment, skills and workforce development in Tasmania is significant. With Tasmanian educational attainment and employment rates generally lower than those in the rest of Australia, the industry provides not only employment opportunities, but also opportunities for skills improvement of the Tasmanian workforce.

7.12 In Tasmania, less than one in five (18 per cent) of 15 to 19 year olds in Tasmania have Year 12 or equivalent qualifications compared with one in four (26 per cent) nationally based on Australian Bureau of Statistics (ABS) 2011 census data. Similarly, for 20 to 24 year olds, 57.4 per cent of Tasmanians have Year 12 or equivalent qualifications, compared with 69.9 per cent nationally.<sup>14</sup>

7.13 The 2011 census also indicated that the percentage of 25 to 34 year olds in Tasmania who have attained advanced diploma, diploma and certificate level qualifications (34 per cent) is now higher than the percentage nationally (30 per cent).<sup>15</sup> However, participation in higher education in Tasmania is still lower than the Australian average. In Tasmania, only 22 per cent of people aged 25 to 34 have bachelor degree or higher qualifications compared to 32 per cent nationally.<sup>16</sup>

7.14 Adult literacy levels in Tasmania are also lower than the rest of Australia. The ABS found, in 2006, that literacy skills of Tasmanians aged 15 to 74 years were the lowest in the nation, and there had been no improvement since they were measured in

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13 Mr Robert Flanagan, Assistant Branch Secretary, Australian Workers' Union, *Committee Hansard*, 15 July 2015, p. 19.

14 The Office of Regional Education, Skills and Jobs, *Regional Education, Skills and Jobs Plan – Tasmania 2012–2014, (July 2013)*  
[http://docs.employment.gov.au/system/files/doc/other/resj\\_tasmania.pdf](http://docs.employment.gov.au/system/files/doc/other/resj_tasmania.pdf) (accessed 22 July 2015).

15 The Office of Regional Education, Skills and Jobs, *Regional Education, Skills and Jobs Plan – Tasmania 2012–2014, (July 2013)*  
[http://docs.employment.gov.au/system/files/doc/other/resj\\_tasmania.pdf](http://docs.employment.gov.au/system/files/doc/other/resj_tasmania.pdf) (accessed 22 July 2015).

16 The Office of Regional Education, Skills and Jobs, *Regional Education, Skills and Jobs Plan – Tasmania 2012–2014, (July 2013)*  
[http://docs.employment.gov.au/system/files/doc/other/resj\\_tasmania.pdf](http://docs.employment.gov.au/system/files/doc/other/resj_tasmania.pdf) (accessed 22 July 2015).

1996.<sup>17</sup> The ABS also found that around half of the Tasmanian population aged 15 to 74 years lack the literacy skills needed to cope with the demands of everyday life and work. For example, 49 per cent of adult Tasmanians, or approximately 174,000 people, do not have the basic skills needed to understand and use information from newspapers, magazines, books and brochures.<sup>18</sup>

7.15 Tasmania's rate of adult literacy is influenced by a range of factors including the higher prevalence of older persons in the population, and lower school retention rates and post-school qualifications. Recent information from the ABS also suggests that Tasmanians in regional municipalities tend to have lower literacy levels compared to those living in major metropolitan areas.<sup>19</sup>

7.16 The estimated unemployment rate in Tasmania was 6.9 per cent in June 2015, compared to the national average of 6 per cent. Tasmanian employment was estimated at 238 900 persons in June 2015, a participation rate of 60.9 per cent.<sup>20</sup> Workforce participation is likely affected by a range of factors including the levels of adult literacy, and availability of alternative employment in rural areas where industries such as forestry and mining have declined.

7.17 The fin-fish aquaculture industry provides employment in 26 of the 29 local government areas. Crucially, the industry is responsible for 31 per cent of private sector employment in the Huon Council Area, 14 per cent in the West Coast Council Area and almost 10 per cent in the Tasman Council Area. The Huon and Tasman areas have all been significantly affected by downturns and closures in the forestry and mining sectors.<sup>21</sup> The Australian Workers' Union noted that:

...as the forest industry has shrunk and reduced and as this industry [aquaculture] has grown, this industry has been able to provide a well-trained, stable, full-time employment opportunity in those regions which quite simply would not otherwise be there.<sup>22</sup>

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17 Department of Education Tasmania, *Tasmanian Adult Literacy Action Plan 2010–2015*, <https://www.education.tas.gov.au/documentcentre/Documents/Tasmanian-Adult-Literacy-Action-Plan.pdf> (accessed 22 July 2015).

18 Department of Education Tasmania, *Tasmanian Adult Literacy Action Plan 2010–2015*, <https://www.education.tas.gov.au/documentcentre/Documents/Tasmanian-Adult-Literacy-Action-Plan.pdf> (accessed 22 July 2015).

19 Department of Education Tasmania, *Tasmanian Adult Literacy Action Plan 2010–2015*, <https://www.education.tas.gov.au/documentcentre/Documents/Tasmanian-Adult-Literacy-Action-Plan.pdf> (accessed 22 July 2015).

20 Department of Treasury and Finance Tasmania, *Labour Force (ABS Cat No 6202.0)*, [http://www.treasury.tas.gov.au/domino/df/df.nsf/LookupFiles/Labour-Force.pdf/\\$file/Labour-Force.pdf](http://www.treasury.tas.gov.au/domino/df/df.nsf/LookupFiles/Labour-Force.pdf/$file/Labour-Force.pdf) (accessed 22 July 2015).

21 Tasmanian Salmonid Growers Association, *Submission 33*, p. 36.

22 Mr Robert Flanagan, Assistant Branch Secretary, Australian Workers Union, *Committee Hansard*, 15 July 2015, p. 19.

7.18 The Tasmanian fin-fish aquaculture industry currently employs 1571 people and supports a further 3769 full-time equivalent (FTE) jobs in both Tasmania and the rest of Australia. In April 2015, the industry employed one out of every 100 persons in the state and accounted for 10 per cent of FTEs in the Tasmanian agriculture, forestry and fishing sector.<sup>23</sup>

7.19 As has been previously noted, the industry is expanding. The 2012 Australian Innovation Research Centre report stated that it is estimated that new farms could create a further 800 FTE jobs in the near future. Beyond this, as many as a further 1000 farming and 100 processing FTE jobs could be created, with support for a further 1233 FTE jobs.<sup>24</sup> For example, in July 2015 Huon Aquaculture opened its new \$12 million Smokehouse and Product Innovation Centre at Parramatta Creek. This created an additional 70 jobs in north Tasmania.<sup>25</sup>

7.20 Employees in the salmonid industry earn more than other employees in other sectors in Tasmanian: the average weekly wage for salmonid industry employees is almost double the Tasmanian average which is significant in the context of the largely rural and regional nature of the industry.<sup>26</sup> According to the Australian Workers' Union:

All of the aquaculture companies, with the exception of Van Diemen Aquaculture in the Tamar Valley, have in place enterprise agreements with the union. We are currently in the process of concluding an enterprise agreement with Van Diemen Aquaculture. The effect of those enterprise agreements is that the average earnings of people in aquaculture are approximately \$1,200 a week, compared to the Tasmanian community average earnings of about \$700 a week. So when we talk about a living wage we are talking about a wage which can support the livelihoods of families and keep them within the communities that they have grown up in.<sup>27</sup>

7.21 The importance of the salmonid industry to local communities was emphasised in evidence. The Australian Workers' Union stated:

The aquaculture industry supports communities with two fundamental foundations on which those communities can build and prosper: firstly, a living wage and livelihood rather than a minimum safety-net wage; secondly, a highly skilled workforce with a stable, reliable, full-time

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23 Tasmanian Salmonid Growers Association, *Submission 33*, pp 34–35.

24 West, J et al. (2012), *Diversifying Tasmania's Economy: Analysis and Options—final report*, Australian Innovation Research Centre, Department of Infrastructure and Regional Development, cited in Tasmanian Salmonid Growers Association, *Submission 33*, p. 38.

25 C Slessor, 'Huon Aquaculture's \$12m Parramatta Creek processing facility creates 70 jobs', *The Advocate*, 4 July 2015.

26 Tasmanian Salmonid Growers Association, *Submission 33*, p. 35.

27 Mr Robert Flanagan, Assistant Branch Secretary, Australian Workers' Union, *Committee Hansard*, 15 July 2015, p. 19.

employment rather than unskilled, itinerant or casual work. The significance of those two foundations cannot be overstated in the role that they play in contributing to healthy and robust regional communities within which they operate.<sup>28</sup>

7.22 The Australian Workers' Union went on to give the example of the Huon Valley where approximately 600 people are directly employed in aquaculture. This area at one time had large orchards, however:

...the type of work that is available in that region if you did not have aquaculture is itinerant, unskilled casual work. It is not the sort of work or the sorts of earnings which can sustain the community in itself. So it is fundamentally a part of sustaining that part of Tasmania. We know from our experience with mine closures on the west coast that if you have a single industry which plays a significant role in underpinning the community and that industry disappears, the community suffers very seriously and shrinks very quickly and the services that are available retreat.<sup>29</sup>

### ***Training and skills development***

7.23 The TSGA highlighted the diversity of skills required in the industry, with Dr Adam Main, Chief Executive Officer, commenting that skilled people are employed by the industry in such areas as human resources, IT, processing, aquaculture innovation, science, quality control, marketing and distribution. Dr Main added that:

Their expertise and expanding skills are fundamental to the industry as it moves forward. It is this self-belief and passion that reinforce our sense of providence. Tasmanian salmon is produced by truly local teams, and this is invaluable in the way we market our product.<sup>30</sup>

7.24 The committee received a number of submissions which also highlighted the importance of training and skills certification, both for current aquaculture employees, and for the future development of the industry. The Huon Valley Trade Training Centre (HVTTC) described the salmonid industry as an 'advanced technological industry' that requires highly skilled employees. This is in contrast to industries such as resource extraction, and has required a 'fundamental change' in the employment profile in areas such as the Huon Valley.<sup>31</sup>

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28 Mr Robert Flanagan, Assistant Branch Secretary, Australian Workers' Union, *Committee Hansard*, 15 July 2015, p. 18; see also Mr Julian Harrington, Project Manager, Tasmanian Seafood Industry Council, *Committee Hansard*, 15 July 2015, p. 50.

29 Mr Robert Flanagan, Assistant Branch Secretary, Australian Workers' Union, *Committee Hansard*, 15 July 2015, p. 19; see also p. 23.

30 Dr Adam Main, Tasmanian Salmonid Growers Association, *Committee Hansard* 15 July 2015, pp 25–26.

31 Huon Valley Trade Training Centre, *Submission 4*, p. 3.

7.25 The Australian Workers' Union similarly commented that the Tasmanian salmonid industry supports a well-qualified workforce with staff trained in a wide variety of farm and factory skills.<sup>32</sup>

7.26 The industry has a long-term commitment to the improvement of skills of employees and providing opportunities for young Tasmanians. Dr Main stated:

...a major initiative of TSGA and its members is to improve VET training in Tasmania, to improve access to apprenticeships and work experience for young Tasmanians. This is all about uplifting skills and providing employment pathways for young regional Tasmanians into our industry.<sup>33</sup>

7.27 Other submitters supported the industry's commitment to improving the skill base of its workforce. Seafood Training Tasmania, for example, stated that:

...the Tasmanian Aquaculture industry has a long history of taking formal training seriously with over 75% of the current marine operations trained at Certificate 3 and above!...[as this] does not include the many employees holding [other] trade and tertiary qualifications the real number holding Cert 3 and above qualifications is closer to 90%!<sup>34</sup>

### *Training programs*

7.28 With the expansion of the industry, and the recognition of the need to ensure a stable and skilled workforce, Skills Tasmania and the Tasmanian Seafood Industry Council developed the Tasmanian Seafood Industry Workforce Development Plan.<sup>35</sup> Training opportunities such as school-based apprenticeships, traineeships, work experience and support for tertiary education are available.

7.29 Seafood Training Tasmania (STT), a not-for-profit registered training organisation, stated in its submission that it now provides 18 nationally-recognised qualifications and has more than 1200 participants annually. Over 60 per cent of enrolments come from the Tasmanian salmonid industry. While its training has mainly been mainly directed at upskilling existing employees, demand has now emerged at four regional Trade Training Centres for Certificates in Aquaculture. Currently, there are 95 school-based students undertaking these qualifications.<sup>36</sup>

7.30 The industry has strong links with the STT with industry representatives sitting on the STT board. In addition, the industry provides access to 'the latest plant

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32 Australian Workers' Union, *Submission 5*, p. 9.

33 Dr Adam Main, Tasmanian Salmonid Growers Association, *Committee Hansard* 15 July 2015, p. 26.

34 Seafood Training Tasmania, *Submission 30*, p. 2.

35 Huon Valley Trade Training Centre, *Submission 4*, p. 2.

36 Seafood Training Tasmania, *Submission 30*, pp 2, 3.



and equipment, including vessels and training rooms to enable STT to deliver the right training in the most appropriate region'. The STT concluded that:

From our observations over the last 3 decades the Tasmanian fin-fish industry has proven itself to be an outstanding example of innovation that has provided significant employment in those areas of Tasmania that need it the most.<sup>37</sup>

7.31 The HVTTC is funded by the Australian Government's Trade Training Centres in Schools Program. Training is delivered under a Partnering Agreement with STT and is supported by industry including Tassal, Huon Aquaculture, Petuna, and Skretting. Representatives of Tassal and Huon Aquaculture sit on the board of HVTTC and assist with the selection and induction of the students into the program, and provide ongoing technical support, training opportunities, site visits, and work-placement opportunities for the students.

7.32 The HVTTC commented that a workforce development model around Australian School-based Apprenticeships has been developed in partnership with the salmonid companies. In its first year of operation, this has been taken up by six students, providing them with work and training while at school, assisting with retention. There is also guaranteed employment at the end of Year 12 and support for tertiary studies as required. This program has now become a model for other industries in Tasmania.<sup>38</sup>

7.33 The HVTTC concluded:

...the Tasmanian salmon industry is vital to the employment future of Tasmania's young people, particularly in regional areas, and is an internationally recognised model of industry and school partnerships.<sup>39</sup>

7.34 The committee also heard evidence from companies which provide support to the aquaculture industry about the ways in which they are 'investing in youth as future leaders'<sup>40</sup> through the provision of apprenticeships and training. Degree C Pty Ltd indicated that they have 'been able to provide training to our tradespeople and a large number of our 40-plus apprentices'.<sup>41</sup>

7.35 Degree C Pty Ltd also highlighted the importance of the opportunities provided by the aquaculture industry and stated that:

If the aquaculture industry were to suddenly disappear, the loss would be huge...The opportunity for training and upskilling of tradespeople and

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37 Seafood Training Tasmania, *Submission 30*, p. 7.

38 Huon Valley Trade Training Centre, *Submission 4*, p. 3.

39 Huon Valley Trade Training Centre, *Submission 4*, p. 3.

40 Huon Valley Trade Training Centre, *Submission 4*, p. 3.

41 Mr Chris Fontana, Degree C Pty Ltd, *Committee Hansard*, 16 July 2015, p. 27.

apprentices will be lost, as this industry provides training and learning opportunities that cannot be gained elsewhere.<sup>42</sup>

## **Conclusion**

7.36 The committee recognises the important contribution of the fin-fish aquaculture industry to the economic prosperity of Tasmania. It is providing direct employment opportunities for over 1500 people and more than twice that many people indirectly.

7.37 Significantly, many of those who are employed directly by the industry are working in regional areas. These are areas which have, in the past, suffered as a result of contracting employment opportunities through downturns in traditional industries, notably forestry and mining. With expansion of the industry, greater employment opportunities will become available which the committee considers will further enhance community wellbeing in regional Tasmania.

7.38 The committee saw at first hand, during its inspection of fish pens on the Huon River, the commitment of the industry to supporting local businesses. For example, the large black plastic pipes used in construction of the pens are made by Zest, a company based at Wynyard on the north west coast of Tasmania. This commitment to local businesses creates many additional employment and training opportunities.

7.39 The aquaculture industry requires an appropriately skilled and stable workforce across all areas of activity. The fin-fish companies, and indeed the entire seafood industry in Tasmania, have actively supported training and education programs. These range from upskilling of those already employed in the industry to school-based apprenticeships and tertiary education opportunities. Given the poor levels of educational attainment and literacy in Tasmania compared to the rest of Australia, the contribution and support of the aquaculture industry for education and training is significant. For many young Tasmanians, this provides opportunities which that are not available elsewhere. With the industry continuing to expand, it is expected that further benefits from the skilling of the workforce will emerge.

7.40 It is the committee's view that the success of the fin-fish aquaculture industry is inextricably linked to the future economic prosperity of Tasmania.

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42 Mr Chris Fontana, Degree C Pty Ltd, *Committee Hansard*, 16 July 2015, p. 27.