



Skills Supply and the ANZSCO Codes: Urgent Concerns and Implications for AgriFood Industry Sustainability

by

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ONE PAGE SYNOPSIS

The Agrifood Industry is an essential national industry that provides food for Australia and contributes significantly to national exports.

The Agrifood Industry is at the threshold of a major labour and skills crisis. The ageing of the workforce alone is serious but combined with low attraction rates and strong competition from the resources sector, the sustainability of the industry is now under threat.

The industry has strong informal recruitment and skilling systems that do not feature in current national skill demand surveys conducted by such agencies as DEEWR. These surveys are used to determine skills shortages by occupation with many Agrifood occupations failing to be recorded on national skilled occupational listings (SOL).

Agrifood Industry demand is further thwarted by current classifications and definitions contained in the ABS ANZSCO series. The Agrifood Industry has experienced considerable skills deepening and broadening as new technician and trade level roles become more pronounced across the industry. These roles and the qualifications that match them are commonly not evident within ANZSCO.

The flow on effect of the limitations within ANZSCO impact on a wide range of labour market and migration initiatives. At the heart of these impacts is a lack of recognition of the occupations and roles within the Agrifood Industry. Typical results have been a smaller percentage of migrants being deployed to regional areas to work in food and fibre production sectors and numerous industry requests for skilled migrant labour being refused on the basis of incorrect ANZSCO classifications.

This paper seeks to identify the main occupational changes within the Agrifood industry and the more obvious gaps within ANZSCO.

The paper makes a number of recommendations to address the more immediate labour shortage issues as well as recommendations for a longer term continuous improvement program to more effectively respond to occupational change.

Without a concerted effort to record current Agrifood Skilled Labour Demand, the industry is at risk of experiencing a contraction in production over the next five years.

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The Agrifood industry is facing a crisis of labour supply and rapid industry restructuring which directly impacts the currency of existing occupational classifications. The accuracy of the ANZSCO Codes have and will have, an increasingly critical impact on the industry's ability to access labour through a variety of labour market initiatives. These include improved training and access to training; the status and attractiveness of occupations within the industry; and the formulation of the Skilled Occupation List and its impact on industry access to migrant labour.

The purpose of this paper is to identify the urgent need to revise the ANZSCO Codes for the agrifood industry. As part of this process this paper provides an occupational review that will feed directly into and support such a revision as part of the ABS Minor Revision occurring in 2012. It may also provide a more current occupational review that can be adopted for labour market planning in advance of a later ANZSCO revision.

The Agrifood Industry Overview

The Agrifood industry provides Australia with an enviable level of food security. Australia grows and produces over 89% of its domestic food supply and exports 80% of total gross production value. Meeting the skill and labour needs of the industry is critical to future national food security, sustainable industry development and ensuring robust and secure communities in regional Australia.

The agrifood industry is made up of 180,000 mostly small to medium sized enterprises and a workforce of more than 880,000 people, with 57% based in regional Australia. It is the single largest employer within regional areas. The agrifood industry covers the entire food supply chain, and makes a significant contribution to the national economy, generating more than \$200 billion each year and accounting for around 20% of Australia's export earnings.

Key Challenges

While labour and skill shortages face many industries in Australia, the plight of the agrifood industries will worsen relative to other industries. The skills and labour shortages which face the Australian agricultural sector have acute and chronic elements.

The agrifood industry is facing significant challenges to secure labour supply due to a rapid ageing of the workforce, low unemployment rates in regional Australia, the national perception of the relative unattractiveness of careers in the industry; significant movement of labour to other industries such as mining; and seasonality in labour demand and supply in some industry sectors. Serious labour shortages in the agrifood industry pose fundamental food security challenges to Australia. The following summarises the challenges facing the agrifood industry:

- The age profile of the workforce is a critical labour supply constraint for the rural sector. By 2018, 116,558 workers (out of a 2008 workforce of 305,763 in agriculture) will be over the age of 65 years. Workers exiting the sector to work in the resources sector compounds this demographic attrition.
- Low rates of unemployment and underemployment in rural and regional Australia indicate that shortfalls in labour supply due to demographic factors will not be able to be met by pools of surplus labour in many parts of Australia. The AgriFood Skills Council 2011 Environmental Scan highlights the serious scale of labour shortages amongst both high skilled para-professionals and professionals and lower skilled labour. The Scan further emphasizes the acceleration in the severity of these shortages in the near future and in the longer term.
- The current number of students training in agrifood in the VET system is relatively low and will not meet future industry skill and labour needs. Low training rates, combined with high rates of labour departure from the sector due to portable skills, indicates that the industry can anticipate a lower output of Agrifood Industry personnel from the current national training system. This will simply compound the demographic profile noted above, and will be insufficient to meet the challenge of future industry skill and labour demand.
- The lack of currency of occupational descriptors under the ANZSCO has serious negative impacts on the agrifood industry. The lack of relevance of narrow occupational descriptors and the need to capture new and emerging skills and job roles rather than limit the responses to outdated descriptors threatens the supply of skilled labour to the industry. While many descriptors are still valid, occupation descriptors are becoming increasingly more complex than skilling by occupational title requiring vastly improved job role, skill and qualification descriptions.
- For example, we are witnessing the development of a technician class of workers who have some management responsibilities. This trend is occurring in nearly all sectors and indicative of a shift in industry thinking towards risk management models and lean management concepts. This is both a response to regulation and trading requirements but also a key survival requirement for businesses having to compete in a global market.
- The emergence of a chronic shortage of skills and labour is a significant concern for the industry and strategies to address these shortages need long-term support especially through the national migration program.
- The current limitations of the ANZSCO system impact on the access of labour under the Skilled Occupation List (SOL).
 - The SOL for General Migration Purposes does not meet the needs of the agrifood industry as it is focused on occupations, which are classified at Certificate IV level and above. As the majority of occupations in our industry are below this level as currently classified under ANZSCO, the structuring of the national migration program largely ignores the labour and skills needs of the Agrifood industry.
 - Under the current structure and framing of the SOL, the almost total lack of any identified Agrifood occupations poses serious problems for the Agrifood Industry with attendant economic and social consequences.

Recommendations

There is an urgent need for a comprehensive national data collection to occur from which to develop robust occupational profiles for the Agrifood Sector.

Such data will have serious implications for VET and Higher Education funding, the SOL and broader migration eligibility for the industry. Robust, evidence based forecasting is essential to frame policy, funding and timelines for Commonwealth education and training in the Agrifood industry.

Following research conducted by the Australian Farm Institute (2010) study *“Towards a Better Understanding of the Future Human Resource Needs of Australian Agriculture,”* the Council calls for the following:-

- ✓ A comprehensive revision and expansion of the current ANZSIC and ANZSCO systems. This revision would necessarily include additional industry and occupational classifications across the Agrifood industries, and would have embedded in it sufficient flexibility to enable regular updating as structural and technology shifts occur in the industry;
- ✓ The development of an annual national standardised labour and skills survey based on these revised occupational profiles. The combination of these would deliver contemporary data which could be projected and provide more reliable forward projections on labour and skills requirements for the agriculture sector. Such projections would take into account demographic factors and various scenarios such as climate and the peaks and troughs throughout the seasonal production cycle.
- ✓ The development of a consistent national standard and concordance for agricultural production, employment and occupational statistics collection to ensure consistency and standardisation of reporting and analyses.

Problem Areas and ANZSCO

In many of the occupations listed for the agrifood industry, outdated skill levels have been arbitrarily listed and thus require substantial revision. Part of the problem stems from old notions of skills more common in the 1980's. In those days truck drivers drove rigid trucks (large vans), articulated trucks (single trailer) or road train. Since then we have witnessed a B Double revolution in carrying the bulk of our freight and a huge increase in specialised freight operations (large loads, refrigerated loads, reefers, livestock etc).

In the case of the trucking industry (which is integrated in most primary sectors) the roles have changed with the technology and forced State and Territories to re-classify all Truck licenses by new skill levels. ANZSCO does not adequately pick this up and assumes that truck drivers are all at Skill level 4. Clearly some are at Skill level 3 and the 7331 group needs to be expanded to cover the higher skill occupations.

An early issue with ASCO, which was perpetuated with the development of ANZSCO, relates to specifying qualifications and experience for Farmers. Almost without exception it is a Degree or 5 years experience. This bears no relation to the actual experience and skills held by farmers. In practice very few pig farmers, poultry farmers, beef cattle farmers etc hold a degree in anything. The main determinant of skill is experience. 5 years may be suitable for some mixed farm operations and broad acre generally but some other areas such as Apiary require much lesser periods of experience (generally 3 years).

- **Suggestion:** amend all farming, horticulture, livestock farmer/grower occupational profiles to reflect relevant experience. Check with specialist recruitment agencies, the NFF and Horticulture Australia that the revisions accurately reflect industry experience requirements.

In the Primary Industry sector the process of skill deepening has fundamentally changed the majority of occupations. The new National Training Packages covering Agriculture, Horticulture, Conservation and Land Management as well as Animal Care and Management, Seafood and Racing all have clear links between the occupations and a new suite of qualifications. These qualifications are an important reference tool for revising existing ANZSCO occupations and skill levels.

The complexity associated with new growing practices (hydroponics, continuous seed trialling, no till, perennial cropping etc) combined with high-tech machinery in cropping, growing, harvesting and packing all point to significant job role changes. It is difficult to identify many of these in the current ANZSCO listing and this is causing all sorts of problems with training, immigration and industry recognition. It may even account for an understatement of actual occupational roles within the primary industry group in census analysis.

Of particular concern is the ongoing problem rural industries face in securing any level of workforce program support from national and State Governments due in part to poorly collected regional data which anecdotal evidence suggests is directly related to ANZSCO.

The Primary Industry has clear occupational titles that are related to skill level and supported by appropriate qualifications. The majority are in the Cert II/III range with the bulk of middle to higher skilled personnel now operating at the Cert III level. In practice many industry personnel have what can be termed a skills pyramid model with competencies that straddle several AQTF levels ranging from Level 2 through to Level 5.

The industry now has difficulties with a number of ANZSCO definitions that have elevated former lower skilled occupations to technician levels. The sectors with the largest changes are horticulture and seafood although it has also affected animal care and broad acre. There remains clear skill segmentation in some sectors eg Wool Industry Sheep Farm Hands, Shed Hands/Wool Handlers, Shearers, Wool Classers and Wool Buyers. However in most sectors AQTF level 3 workers are typically covering Level 4 and 5 competencies and indeed the revised Training Packages support this skill profile.

In broad acre operations the traditional Farmer/family model with some unskilled labour has largely been supplanted by Farmer, Manager or Unit Managers, with contract seeding/harvesting/fencing/agronomy support which includes a variety of specialist science and technical staff. It is interesting to see that amongst the science occupations listed there is no mention of an Agronomist which is a key national occupation in demand across the whole industry.

- **Suggestion:** ensure that farm managers and overseers/unit managers are listed separately and that such roles as Agronomist are separately identified as occupations in their own right.

It is also interesting to see that a forklift driver is specified but not a tractor/header driver, an infinitely more complex job. Modern high tech farming equipment is mostly laser and GPS guided, some are self drive and most are huge by comparison with the dinky toy sized Massey Fergusons that were mass produced some 60 years ago and can still be seen in some small horticulture areas. Many of these roles are now being undertaken by contractors as farmers increasingly do not buy the half million dollar machines that are now increasingly being used in the industry.

- **Suggestion:** in Agricultural Plant Operator broaden the levels to accommodate small plant and larger more complex plant eg include Contract GPS guided machinery operators

Similarly the titles used in ANZSCO can be confusing. Growers and Managers are often not the same job eg vegetable farmer/grower may be an office based occupation scheduling, selling, managing logistics etc whereas the farm manager manages the actual crop production. The absence of a defined group of technicians and managers more commonly seen in the industry seems to be a serious omission in the whole ANZSCO series.

- **Suggestion:** include manager and technician roles in the major primary industry sectors that have been identified in this paper.

From a traditional standpoint their omission is understandable but as the industry and its jobs change, we see the emergence of a new range of occupations, which tend to fall between the professional/managerial level descriptions and semi-skilled descriptions.

A good example is Marine Engine Driver, which is a licenced occupation at AQF Level 3, but is not a Marine Engineer as defined. Similarly, an Animal Technician is a person who works in a variety of animal care roles, some embedded and some quite specific, eg feedlots, high tech piggeries etc. They may have a range of skills that have some equation to a Vet Nurse but they

have a higher level of competency somewhere between a Vet Nurse and a Veterinarian and often with Animal Technician qualifications.

The current Technicians and Trades Workers nec 399999 is simply a far too general catch all classification when there are specific jobs that are clearly differentiated in the major sectors. The lack of specificity for Agrifood occupations in ANZSCO contrasts with a number of other industries such as education, health and manufacturing where there is much greater specificity of major role.

As a general comment, a large number of the occupational definitions under ANZSCO no longer reflect the skill level, the complexity of the skills (skills pyramid structure) or the actual industry nomenclature for the Primary Industry sector in particular. Fixing this is becoming increasingly important for migration purposes as National Food and Fibre Production is seen as an essential national industry.

A classic example is afforded by the shift from the old Master Fisher terminology towards defining fishers by their licence category eg Coxswain, Skipper 3, Skipper 2, Skipper 1 and the industry uses these terms and the levels to determine their skill level.

In the case of irrigationists, there are several levels, a person who simply connects pipes together on a small horticulture plot, a relatively lower skilled task which is in nearly all cases part of a mainstream horticultural role (horticulturalist), a person who sets up irrigation lines, positions complex equipment and estimates delivery load in conjunction with computer controlled water management, and an irrigation designer who programmes computer systems, designs complex water delivery systems and monitors delivery and plant growth.

The skills are markedly different at each level and are not reflected in the classifications listed under ANZSCO. In practical terms we have a balanced supply of the first level, a shortage of the second level and a severe shortage in the higher technician level.

- **Suggestion:** Look at better defining irrigation workers who perform high level tasks in the Agrifood industry.

Clerical and administrative positions have been excluded as much of the data (partner data in micro businesses) is not reliably recorded in the Census for primary industry sectors. This is nonetheless important to consider as the industry has a small number of corporate type entities and a large percentage of small to micro family businesses (in excess of 90% but declining rapidly.)

Ideally it would be good to have a rural business administration title to cover these people possibly under the 5619 group.

- **Suggestion:** consider either including a new occupation under 5121 or 5619 or alternatively define rural business admin work under 5121.

Industry Sectors and Major Occupational Changes

The following provides an overview of key industry sectors within the remit of AgriFood Skills Australia and the changing nature of skilled occupations in each.

Seafood

Comprises wild catch, commercial fishing, aquaculture and post-harvest processing sectors. The seafood industry directly employs over 17,200 people across the wild catch, harvesting and aquaculture sectors and a further 7,200 in processing and wholesale.

Major challenges & trends

- Attracting, training and retraining workers at all skill levels
- Growing contemporary industry leaders and securing their engagement in skills and workforce development
- Linking skill development with industry licensing and compliance requirements
- Ensuring occupational health and safety, and food safety form an integrated approach to risk management
- Evolving job roles which require higher, often technician orientated skills
- Diffusing new practice and knowledge from research and development work into the workforce via formal training

New and emerging skills

- Genetics, selective breeding and biotechnology
- Seafood processing, value adding, supply chain skills underpinned by new technologies
- Natural resource management
- Compliance and regulatory requirements
- Biosecurity, emergency pest and disease response
- Animal behavior, health and welfare
- Market research and marketing

Food, beverage and pharmaceuticals

Comprises food processing, pharmaceuticals and beverages and is Australia's largest manufacturing industry with total sales of over \$100 billion. It consistently accounts for more than 20 per cent of manufacturing industry employment and involves over 224,000 employees, 40 per cent of which are located in non-metropolitan areas. About 1,000 wineries and around 6,000 vineyards add to this picture, with the pharmaceutical sector employing approximately 14,000 workers.

Major challenges & trends

- Evolving job roles which require higher skills and/or greater breadth of skills
- Greater adoption and understanding of technology across the workforce

New and emerging skills

- Risk management skills and knowledge across all occupations
- Processing and supply chain skills underpinned by new technologies and world class research and development
- Lean and agile manufacturing processes

Meat

Comprises meat processing, meat wholesaling, meat retailing, small goods manufacturing and food services. Approximately 5,800 enterprises employ around 55,000 workers and generate GDP in excess of \$16 billion per annum. Around 10,000 workers undertake Australian Apprenticeships each year; a further 1,000 undertake higher-level training supported by industry.

Major challenges & trends

- Lifting employee retention rates
- Up skilling existing workers to fill vacancies as 457 visa holders depart
- Developing skills and knowledge to meet changing regulator and customer requirements
- Actively embedding career paths and rewarding job design
- Growing contemporary industry leaders to drive high quality workforce development practices
- Lifting innovation capability and capacity of enterprises

New and emerging skills

- Skills and knowledge to address national and international standards in meat safety, meat quality, animal welfare and specific customer requirements
- Processing and supply chain skills underpinned by new technologies and world class research and development

Racing

Comprises three codes: thoroughbred; harness and greyhound – the ‘code’ being the breed and type of animal which competes. While some workers are centrally employed in permanent conditions, the majority of the 117,000 people involved in the industry are self-employed, part time or transient (trainers, jockeys, track riders, driver and stable staff). Over 600 racecourses and more than 22,000 small/ medium sized enterprises make up the industry, 95 per cent of which are in non-metropolitan Australia.

Major challenges & trends

- Attracting, training and retraining workers at all skill levels
- Higher demand for and skilling of casual staff
- Growing contemporary industry leaders to drive culture change on workforce development
- Establishing innovative and productive job roles, supported by meaningful career paths
- Embedding occupational health and safety
- Linking skill development with industry licensing and compliance requirements
- Embedding integrity operations and management training as part of an integrated approach to improving the image and credibility of the industry

New and emerging skills

- On-going need for occupational health and safety, risk management and biosecurity
- Small business management
- Animal behavior, health, and welfare
- Track maintenance

Agriculture, Horticulture, Conservation and Animal Care

Comprises rural production (commonly referred to as 'agriculture'); amenity horticulture; conservation and land management; animal care and management. Over 460,000 people are directly employed across the sectors.

Major challenges & trends

- Attracting, skilling and retaining workers at all levels
- Creating sustainable, robust labour pools
- Building individual enterprise capability to become 'employers of choice'
- Evolving job roles which require higher, often technician orientated skills
- Building adaptive capacity of enterprises underpinned by new technologies and world class research and development
- Building environmentally sustainable production systems capable of delivering strong economic returns

New and emerging skills

- Supply chain management
- Natural resource management – biodiversity, sustainable management of land, water and vegetation
- Biosecurity, emergency pest and disease response
- High technology farm equipment operation
- Increased technician roles especially in intensive farming sectors
- Community farming management and corporate farm management

APPENDIX 1

Primary Industry Occupations Covered by the Primary Industries Skills Council

The following occupational list identifies occupations in the Primary Industry sector (non Forestry). These are titles used regularly in the industry sectors and in recruitment. The translation from ASCO to ANZSCO resulted in a number of these being absorbed into other occupational titles or not being covered in any identifiable way. Where there is not an appropriate match there is an X listed.

General Comments

Interchangeable occupational titles:

Some titles can mean quite different things in an occupational sense. The term Wool Handler and Shearing Shed Hand are interchangeable in terms of some shed duties and it may be better to define the occupation as Wool Handler/Shed Hand. Similarly, the Sports Administrator occupation is often quite different from occupations such as Race Steward, which are a key part of the racing industry with quite different roles to mainstream administrators.

We need to identify Rural Technical representatives who fall into two main categories, machinery and crop support (Landmark, Elders, Rural merchandisers etc) and veterinary product support representatives (companies such as Bayer). There are quite a few people engaged in these roles and they don't fit easily into any existing classification.

1. Farm Managers and Overseers

Some Primary Industry management occupations appear to be omitted.

Farm Managers and Overseers are commonplace in the industry. They are not Farmers who generally own the land or share farm the land, they are managers who work for farmers. As the industry moves towards larger farming units, we are seeing this occupational division more clearly defined in separate job roles.

- The ANZSCO series lists Production Managers in Forestry, Manufacturing and Mining, not Agriculture and Horticulture.
- **Suggestion:** either the Forestry is reclassified as Primary Production or there are two new classifications added to the 1335 group.

2. Agriculture Technicians

The industry has shifted over the past decade towards employing a range of Agriculture, Horticulture and Seafood Industry technicians. Good examples are the intensive industry sectors, which employ Piggery technicians, Poultry technicians, Animal technicians, Aquaculture and Mariculture technicians, Botanical and Horticultural technicians.

- Since the demise of ASCO many of these clear occupational definitions were lost with the more generic term agricultural technician being used. It is clear that this really applies to one major sector rather than across the various industry sectors that make up the Primary Industry group.

- **Suggestion:** it may be better to describe these people as primary industry technicians and define the various roles under that title for the discrete industries in which they work. The alternative is to list them separately as in other industries.

3. Maritime Fishing, Aquaculture and Trading Occupations

The 2312 group does not fit the marine industry as defined occupationally, by licence or under Fishing and Trading. The occupations other than deck crew are all licensed. They are:

Master/Skipper
Coxswain
Marine Engineer
Marine Engine Driver

However, the main fishing and marine aquaculture licensed occupations are not effectively covered by ANZSCO. Some occupational titles differ between Australia and New Zealand (e.g. NZ Harbour Masters) but the generic occupational titles can cover both jurisdictions.

There are other trading sector occupations which are pertinent to some sectors such as Ratings, or Ships Purser which is covered by the Ship's Officer category.

It must be stressed that a Marine Engineer is a professional level 1 person whereas a marine Engine Driver is the (small E) that maintains most small to medium size commercial vessels. Their skills are limited compared to a Marine Engineer and lie at level 3.

- The Master/Skipper term relates to the new national maritime qualifications that are dual ticket, that is able to operate fishing and trading vessels. The old terms are used to differentiate actual experience and, to a degree, skill range. The Coxswain is also a skipper but of small inshore vessels (oyster barges, small commercial craft such as tourist boats) Masters and Skippers range from AQTF Level 3 through to AQTF Level 5 (Levels 3-1 in ANZSCO) depending on the size of the vessel. It may be better to differentiate these titles to reflect actual skill levels. Currently there is a major national shortage of skilled maritime crew necessitating immigration solutions hence getting the definitions right is very important.
- **Suggestion:** Discuss with AMSA and settle on appropriate terms such as Master/Skipper ANZSCO Level 3 covering Master 5, Ship's Master ANZSCO Level 1 (covering Master 1, 2 and 3 and 4.)

Occupational Title	ANZSCO	S/L
Animal Technician/Attendant	361199	3
Animal Trainer	361199	3
Apiarist	121311	1
Agronomist 234111 too general, new code required X	234111	1
Agricultural Plant Operator	721111	4
Agricultural Technician	311111	2
Agricultural Consultant	234111	1
Ag Economist New code required X	224511	1
Ag Scientist	234112	1
Alpaca Farmer	121399	1
Aquaculture Farmer	121111	1
Aquaculture Technician New code required X	311111	2
Aquaculture Farm Hand	841111	5
Arborist	362212	3
Artificial Inseminator	311111	2
Beef Cattle Farmer	121312	1
Beef Cattle Farm Worker	841511	5
Blacksmith	322111	3
Botanist	234515	1
Botanical Technical Officer New code required X		3
Cotton Grower	121211	1
Coxswain (Could be listed under master/skipper) X		3-1
Crop Farmer (nec)	121299	1
Dairy Cattle Farm Worker	841512	5
Dairy Farmer	121313	1
Dairy Technician	311111	2
Deckhand	899211	4
Deer Farmer	121314	1
Dog Handler or Trainer	361111	3
Dog or horse racing official	452318	3
Ecologist not 139912		1
Emu farmer	121399	1
Environment, Parks and Land Care Manager	234311	1
Environment and Ag Science Professionals	234399	1
Farm Hand Grain, Pasture	841213	5
Farm Hand Vegetable	841214	5
Farm Hand Other	841299	5
Farm Overseer 1335 group new X		1
Farrier	322113	3
Fencer Add a new category "Rural Fencer"	821311	4
Field Crop Technical Officer X		3
Fish Farmer (This is an obsolete term - see aquaculture)	121111	1
Fish Hatchery Technician X		3
Fisheries Compliance Officer	311311	2
Fisheries Technical Officer X		3
Fishing Hand/Deck Hand	899212	4

Floriculturalist		121212	1
Fruit and Nut Grower		121213	1
Fruit, Nut and Vegetable Hand		841211	5
Gardener		362211	3
Garden Labourer		841411	5
General Farm Hand		841411	5
Goat Farmer		121315	1
Grain Buyer	X		3
Grain Handler	X		3
Grain, Oilseed and Pasture Farmer		121214	1
Grapegrower (see viticulturalist)		121215	1
Greenkeeper		362311	3
Hatchery Hand - Poultry/seafood aquaculture			3/8
Hatchery Manager – Poultry/seafood aquaculture			3/8
Herd Tester			3
Hide and Skin Classer	X		3/5
Horse Breaker		361112	3
Horse Breeder		121316	1
Horse and Dog Racing official		452318	3
Horse Stud Manager	no relevant code		3/5
Horse Trainer		361112	3
Horticultural Nursery Assistant/Nursery Hand		841412	5
Horticultural Technical Officer			3
Hunter/Trapper		841911	5
Import/Export Clerk		591212	4
Irrigation Supervisor			2
Irrigationist/Installer			2/3
Jackaroo/Jilleroo	Station workers		?8
Jockey		452413	3
Land Care Officer		362213	3
Landscape Gardener		362213	3
Livestock Farmer (nec)		121399	1
Livestock Farm Worker		841513	5
Livestock Farm hand nec		841599	5
Livestock Trader			1/5
Marine Biologist		234516	1
Marine Engineer		231212	1
Marine Engine Driver	X		3/7
Market Gardener			3/8
Master Fisher		231211	1
Mixed Crop Farmer		121216	1
Mixed Crop and Livestock Farmer		121411	1
Mixed Livestock Farmer		121317	1
Mixed Livestock Farm Worker		841513	5
Mixed Crop and Livestock Worker		841611	5
Nurseryperson		362411	3
Occupational Diver		399911	3
Orchardist			3/5

Oyster Shucker (discrete job- not gen. processing)			8
Park Ranger		234314	1
Parks and Gardens Conservation Worker	X		8
Pest and Weed Controller		841912	4
Pig Farm Manager	1335 group - new		1/5
Pig Farmer		121318	1
Piggery Technician	311111 too general X		
Plant Physiologist			1
Plant Propagator			3
Poultry Farmer		121321	1
Poultry Farm Worker		841514	5
Poultry Technical Officer	311111 too general		3
Primary Products Inspector		311399	2
Race Steward	X	139915	1
Rural Technical Representative	X		6
Sales and Marketing Manager - Rural Products			6
Seafood Packer		832115	5
Seafood Process Worker		831313	5
Shearer		361211	3
Shearing Shed Hand		841517	8
Sheep Farm Manager	1335 group - new		1
Sheep Farmer		212322	1
Sheep Farm Worker		841515	5
Ship's Master/Skipper			1
Soil Conservationist			1
Soil Scientist		234112	1
Soil Science Technical Officer	311111 too general		
Stablehand		841516	5
Stock and Station Agent		611112	3
Stud Master			3
Track Rider	X		3
Turf Farmer		121218	1
Vegetable Farm Manager	1335 group - new	121221	1
Vermiculture Farmer	add to 121399 X	121399	1
Veterinarian		234711	1
Vet Nurse		361311	3
Vineyard Worker		841216	5
Viticulturalist		121215	1
Wool Buyer		639212	3
Wool Classer		399917	3
Wool Handler ? Shearing shed hand		841517	5
Zoologist		234518	1
Zoo Keeper		361114	3
Zoology Technical Officer			3

SUMMARY OF AREAS REQUIRING DISCUSSION/CHANGE

Agronomist	234111 too general new code required	X	234111	1
Ag Economist	New code required	X	224511	1
Aquaculture Technician	New code required	X	311111	2
Botanical Technical Officer	New code required			
Coxswain	(Could be listed under master/skipper)	X		
Ecologist	not 139912			
Farm Overseer	1335 group new	X		
Fencer	Add a new category "Rural Fencer"		821311	4
Field Crop Technical Officer		X		
Fish Hatchery Technician		X		
Fisheries Technical Officer		X		
Grain Buyer		X		
Grain Handler		X		
Hatchery Hand	- Poultry/seafood aquaculture			
Hatchery Manager	- Poultry/seafood aquaculture			
Herd Tester				
Hide and Skin Classer		X		
Horse Stud Manager	no relevant code			
Horticultural Technical Officer				
Irrigation Supervisor				
Irrigationist/Installer				
Jackeroo/Jilleroo	Station workers			
Livestock Trader				
Marine Engine Driver		X		
Market Gardener				
Oyster Shucker	(discrete job- not gen. processing)			
Parks and Gardens Conservation Worker		X		
Pig Farm Manager	1335 group - new			
Piggery Technician	311111 too general	X		
Plant Physiologist				
Plant Propagator				
Poultry Technical Officer	311111 too general			
Race Steward		X	139915	1
Rural Technical Representative		X		
Sales and Marketing Manager	- Rural Products			
Sheep Farm Manager	1335 group - new			
Ship's Master/Skipper				
Soil Conservationist				
Soil Science Technical Officer	311111 too general			
Stud Master				
Track Rider		X		
Vegetable Farm Manager	1335 group - new		121221	1
Vermiculture Farmer	add to 121399	X	121399	1
Wool Handler	? Shearing shed hand		841517	5
Zoology Technical Officer				