Australian Government
Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences

Improving engagement of culturally and linguistically diverse persons in agriculture, fisheries and forestry

Robert Kancans, Nyree Stenekes and Treena Benedictos

July 2010

ISBN: 978-1-921192-56-2

Kancans, R, Stenekes, N and Benedictos, T 2010, *Improving engagement of culturally and linguistically diverse persons in agriculture, fisheries and forestry*, Australian Bureau of Agricultural and Resource Economics –Bureau of Rural Sciences, Canberra, July.

Postal address:
ABARE–BRS
GPO Box 1563
Canberra, ACT 2601

Phone: +61 2 6272 2010
Fax: +61 2 6272 2001
Email: info@abare-brs.gov.au
Web: www.abare-brs.gov.au

Summary

Policy context

There has been increasing recognition of the role that Culturally and Linguistically Diverse (CALD) persons play in Australia's primary industries, particularly:

- the knowledge and innovation they have contributed to improving productivity, profitability and sustainability in the sector
- their contribution to emerging and growing food markets such as Asian vegetables
- their ability to assist in managing key primary production issues such as biosecurity, natural resource management and sectoral adaptation to climate change
- their contribution to government initiatives in areas such as the Australian Government Social Inclusion agenda
- their contribution to domestic food security, for example 80 to 90 per cent of market gardens in the Sydney basin are managed by CALD persons. Market gardens in the Sydney basin are estimated to supply the Sydney metropolitan area with 90 per cent of its perishable vegetables.

Objectives

In this context the Department of Agriculture, Fisheries and Forestry commissioned this research. The key objectives of this research were to provide a better understanding of:

1. the participation and distribution of CALD persons in agriculture, fisheries and forestry industries
2. factors relevant to and influencing CALD persons participation in agriculture, fisheries and forestry industries
3. the level of representation of CALD persons in decision-making positions within agriculture, fisheries and forestry industry organisations
4. barriers influencing CALD persons representation in decision-making positions within agriculture, fisheries and forestry industry organisations
5. strategies for improving engagement with people from CALD backgrounds working in agriculture, fisheries and forestry industries.

Participation and distribution

People from CALD backgrounds make a significant contribution to productivity and innovation in primary production industries in Australia, representing at least 6.7 per cent of all persons employed in agriculture, fisheries and forestry industries in Australia.

CALD persons have a high level of representation in:

- vegetable growing (28.9 per cent of total persons employed)
- fruit and nut tree growing (17.1 per cent)
- poultry farming (14 per cent)
- nursery and floriculture production (11.5 per cent).

CALD persons represent less than 6 per cent of total persons employed in forestry industries; 5.9 per cent in fishing industries and less than 2 per cent of total persons employed in sheep, beef cattle and grain faming.

Factors influencing participation

The degree of participation in primary industries differs according to time of migration (new or late arrivals), generation (first or second) and type of primary industry in which they participate. Other factors that influence participation include:

- patterns of migration and settlement—government programs and housing and job opportunities
- communication and English language skills—highly variable communication skills affects the ability to access information and to farm productively and sustainably
- social and cultural values—such as work ethic, faith, courtesy and devotion to family, influence the way CALD persons engage in the agriculture, fisheries and forestry sectors
- access to services and resources—access to migrant resources (e.g. interpreters), infrastructure and support can influence the ability of CALD persons to participate fully in the sector, especially in rural and regional areas
- property ownership—for example, the insecurity of land tenure for some groups has implications that influence their participation in the sector
- attitudes to government—affected by discrimination and social exclusion among some groups, as well as experiences in other countries
- changing landuse issues—urbanisation is occurring in areas where a large number of CALD growers are operating, especially within major capital cities. These changes can have detrimental effects on disadvantaged groups.

Representation of CALD persons in decision-making positions

There are no available data to quantify the representation of CALD persons in leadership and decision-making positions within agriculture, fisheries and forestry-based organisations either in government or industry. However, there does appear to be a distinction between CALD groups based on their migration patterns to Australia, generation and industry and the degree of representation in relevant industry organisations.

The majority of key informants interviewed in this study highlighted that the greatest lack of representation occurs within the vegetable and horticulture sectors.

Barriers influencing CALD persons representation in decision-making roles

CALD persons face a number of barriers that constrain them from gaining representation in decision-making roles. These are:

- language and literacy skills
- a lack of knowledge concerning the roles of industry, the market place, business management and government systems
- financial and viability issues
- time constraints
- perceived disconnect between institutions and CALD persons
- peak industry body structures.

Strategies for improving engagement with CALD persons

The most effective strategies for improving engagement among people from a CALD background and their communities involve:

- building on past and current engagement strategies that have been successful (e.g. one-on-one engagement through bi-lingual extension officers)
- ensuring the longevity of current programs and funding for engaging CALD groups (industry and government)
- using approaches that emphasise the needs of CALD groups through engaging CALD groups in program planning processes
- using culturally appropriate learning and communication styles
- building trust and personal relationships with CALD groups
- promoting culture change within service delivery institutions to reflect the contribution of CALD groups to agriculture, fisheries and forestry.

Contents

Tables

Figures

Glossary

Agricultural labourers	Persons that perform routine tasks to assist in plant cultivation and animal production on farms, or in shearing sheds, nurseries and gardens. Most occupations in this group have a level of skill commensurate with completion of compulsory secondary education or higher qualification.
Ancestry	Describes the ethnic or cultural heritage of a person, that is, the ethnic or cultural groups to which a person's forebears are or were attached. Operationally, Ancestry is defined by the ABS as the ethnic or cultural groups which a person identifies being his or her ancestry. Ancestry therefore involves measures of self-identification of ethnic or cultural group affiliation or nationality as well as of descent from one or more particular groups (ABS 2007a).
Bi$Link	A project promoting farm business management training for horticulturists from Culturally and Linguistically Diverse backgrounds.
Culturally and Linguistically Diverse (CALD)	People who identify "…as having a specific cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language, language(s) spoken at home, or because of their parents' identification on a similar basis" (Australian Psychological Society Ltd 2008).
Census of Population and Housing (CPH)	Census of Population and Housing conducted by the ABS every five years.
Engagement	The term 'engagement' is used to cover a range of different strategies for working with CALD persons and their communities that can include communication, education, partnerships, extension and participation.
Farmers and farm managers	Persons that plan, direct, coordinate and perform farming activities in agricultural establishments.
Immigration	To move or settle in another country or region, temporarily or permanently, such as the movement of people to Australia from other countries (Ben-Moshe et al. 2005).
Industry of employment	References to industry in this study for 2006 are based on the 2006 Australian and New Zealand Standard Industrial Classification.

Languages Other Than English (LOTE)	Languages other than English spoken by someone on a regular basis.
Key informants	Representatives from government, industry associations (state and peak bodies), grower groups, researchers, rural service providers, multicultural councils and representative agencies (regional, state and national) who participated in semi-structured interviews.
Language spoken at home	The main language other than English that is spoken in the home. It is designed to find out which languages other than English are spoken at home. Usually only one language is coded for each person. A sub-category of this variable, '1201 English', specifically reports persons that only speak English at home.
Migrant	Defined by the ABS as a person who was born overseas and has obtained permanent Australian resident status prior to or after their arrival (ABS 2007a). 'Migration' is the movement of people from one place to another.
Multicultural	Used by Hugo (1995) to refer to the diversity of ethnic groups in Australia. Hogan and Cumming (1997) describe 'multicultural' as a term that encapsulates the concepts of pluralism and diversity and the importance of giving respect and support to diverse values and cultures (i.e. reconciling universal values while maintaining cultural values and traditions).
Non-CALD	Persons that self reported in the Census of Population and Housing (2006) that they *only* speak English at home.
Non-English Speaking Background (NESB)	Term used to describe someone whose first language is not English, or whose cultural background is derived from a non-English speaking region or country (Hugo 1995). Those people born in a country where English is not the primary national language or where their parents were born in a country where English is not the primary language or who use a language other than English at home (Hogan and Cumming 1997).
Occupation	Occupation has been collected for all employed usual residents aged 15 years and over. In this study the occupation classifications have been based, for 2006, on the Australian Standard Classification of Occupations (second edition).
Participation	Participation can be defined as: *the fact of taking part, as in some action or attempt*. The

	term participation is used in this study in its broadest sense and includes persons employed in agriculture, fisheries and forestry industries, volunteers (family members) and 'invisible' persons who are not picked-up in formal statistical data sets.
Proficiency in Spoken English	The ability to speak English in everyday situations. Generally, English speaking ability is classified as: very well, well, not well or not at all (ABS 2007a).
Selected CALD persons	A specific group of CALD persons based on 20 select languages. The 20 languages are: Arabic, Cantonese, Mandarin, Korean, Croatian, Serbian, Czech, Polish, Greek, Italian, Macedonian, Maltese, Punjabi, Vietnamese, Khmer, Indonesian, Balinese, Thai, German and Dutch.
Statistical Local Area (SLA)	A general purpose spatial unit of aggregated Collection Districts.
Statistical Division (SD)	The SD is a general purpose spatial unit. SDs represent relatively homogeneous regions characterised by identifiable social and economic links between the inhabitants and between the economic units within the region. This study uses Capital city SDs. A Capital city SD is a fixed boundary that contains the anticipated development of the city for a period of at least 20 years.
Usual residence	The identified place of residence at the time of the Census.
Visitors	On Census night information about any visitor to a household in the study region would be recorded against the visitor's usual residence. Information about any overseas visitors has been excluded from this study.
Working population	Comprises usual residents aged 15 years and over who stated they had a full-time or part-time job of any kind in the week before Census night.

List of Abbreviations

ABARE-BRS	Australian Bureau of Agricultural and Resource Economics - Bureau of Rural Sciences
ABS	Australian Bureau of Statistics
AFF	Agriculture, Fisheries and Forestry
ANZSCO	Australian and New Zealand Standard Classification for Occupation
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASGC	Australian Standard Geographic Classification
CALD	Culturally and Linguistically Diverse
CPH	Census of Population and Housing
ERP	Estimated Resident Population
LGA	Local Government Area
nec	Not elsewhere classified
nfd	Not further defined
n.p.	Data not provided
SD	Statistical Division
SLA	Statistical Local Area

1. Introduction

This report was commissioned by the Department of Agriculture, Fisheries and Forestry and funded through the Community Networks and Capacity Building (CNCB) component of the Australia's Farming Future (AFF) initiative. This project was developed because it was recognised that the portfolio would benefit from a greater understanding of the challenges and opportunities facing people from a culturally and linguistically diverse (CALD) background working in primary industries. This group has not previously been identified by government as a group requiring specific policy consideration or interventions from an Australian Government perspective.

People from CALD backgrounds, or non-English speaking backgrounds (NESB), are significant participants in agriculture, fisheries and forestry industries in Australia. CALD persons are most likely to be participating in agriculture and more specifically the vegetable, fruit, nut and horticulture sectors. Within this population segment there is a significant diversity of cultural backgrounds which is reflective of immigration and settlement patterns.

CALD populations participating in agriculture, fisheries and forestry are found in many locations throughout Australia with some CALD groups highly concentrated in particular communities across major urban, rural and regional Australia. This report presents the findings from research investigating the participation and engagement of people from a CALD background in agriculture, fisheries and forestry industries in Australia.

1.1 Objectives of the report

The objective of this report is to provide a better understanding of:

1. the participation and distribution of CALD persons in agriculture, fisheries and forestry industries
2. factors relevant to and influencing CALD persons participation in agriculture, fisheries and forestry industries
3. the level of representation of CALD persons in decision-making positions within agriculture, fisheries and forestry industry organisations
4. barriers influencing CALD persons representation in decision-making positions within agriculture, fisheries and forestry industry organisations
5. strategies for improving engagement with people from CALD backgrounds working in agriculture, fisheries and forestry industries.

1.2 Report structure

The report presents the key findings from the investigation based on the five objectives. These chapters present a synthesis of key findings from three different sources, namely: literature review; secondary data analysis (Australian Bureau of Statistics Census of Population and Housing custom data); and key informant interviews with people from various government and non-government organisations working with CALD people or involved in CALD research or policy issues. Appendix 2 provides additional detail of the methods applied and supporting information.

1.3 What is cultural and linguistic diversity?

There is no single, widely applied definition of culturally and linguistically diverse (CALD). The term CALD is often used however to describe people who identify "…as having a specific cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language, language(s) spoken at home, or because of their parents

identification on a similar basis" (Victorian Multicultural Strategy Unit (2002) in Australian Psychological Society Ltd 2008).

CALD was designed to replace Non-English Speaking Background (NESB) as a description of culturally disadvantaged groups. The term NESB focused mainly on English language proficiency as a key indicator of disadvantage, but was unable to distinguish the many diverse cultural and linguistic groups in Australian society. The term also neglected the many positive aspects that diversity brings to the community. It was thought that the inability to distinguish between culturally diverse groups might lead to inappropriate service provision. CALD is a broader concept which attempts to capture broader dimensions of social and cultural diversity in Australia as well as celebrate the positive aspects of multiculturalism.

It is recognised that there is a personal judgment involved in whether people identify themselves as being from a CALD background. This has relevance when considering that the second generation (that is the children born in Australia of migrants) may identify less with the category.

It should also be noted that any concept, such as CALD, 'ethnic' or NESB, involves the construction of identity as different from the 'dominant' culture and this has implications for the way that groups are included or excluded in society.

2. Participation and distribution of CALD persons in Australian agriculture, fisheries and forestry

People from culturally and linguistically diverse (CALD) backgrounds are increasingly recognised for their contribution to the productivity and viability of agriculture, fisheries and forestry in Australia. In 2007, data from the ABS indicated that as many as 21 000 persons employed in agriculture, fisheries and forestry were born overseas in other than the main English speaking countries[1], which represents 7.9 per cent of all persons in the sector (ABS 2007b).[2] Information within the literature on cultural and linguistic diversity across primary industries is mainly limited to CALD persons participating in agriculture, specifically horticulture, vegetable, orchard, cut flower and intensive livestock sectors. The contribution of people from CALD backgrounds tends to be poorly reflected in employment and productivity data collected on these sectors. There is a particularly big gap in information about the participation of CALD persons in the fishing and forestry industries. This is despite anecdotal evidence that people from a CALD background play a significant role in a range of primary industries including the Australian fishing industry.[3]

Following are the key findings of the investigation into the participation and distribution of CALD persons in agriculture, fisheries and forestry industries. It should be noted that Australian Bureau of Statistics (ABS) data used in this section are restricted to those persons employed in production industries and *does not* include 'downstream' industries such as manufacturing, wholesale trade or retail trade. Nor does ABS data include persons who are not picked up in formal statistical data, for example, volunteers, family members and friends.

2.1 Overview of participation

- From the 2006 Australian Bureau of Statistics Census, within the Australian agriculture, fisheries and forestry workforce at least 17 890 persons speak a language other than English at home compared to 248 982 that only speak English at home (see Appendix 1—Table 1). This equates to at least 6.7 per cent of the total Australian agriculture, fisheries and forestry industries workforce.
- Within the Australian agriculture, fisheries and forestry CALD persons are most likely to be participating in agriculture related industries and more specifically the vegetable, fruit, nut and horticulture sectors (see Figure 1).
- CALD persons represent less than 6 per cent of total persons employed in forestry industries; 5.9 per cent in fishing industries and less than 2 per cent of total persons employed in sheep, beef cattle and grain faming.

[1] i.e. countries other than the United Kingdom, Ireland, Canada, United States of America, South Africa, New Zealand and Australia.

[2] The agriculture, forestry and fishing industries category includes: agriculture; aquaculture; forestry and logging; fishing, hunting and trapping; and agriculture, forestry and fishing support services (ANZSIC, 2006).

[3] A people development strategy paper recently published by the Fisheries Research and Development Corporation commented that, "A high proportion of people within the [fishing] industry are from non-English speaking backgrounds, some with low levels of English language and literacy skills, particularly in the wholesale and retail sectors."

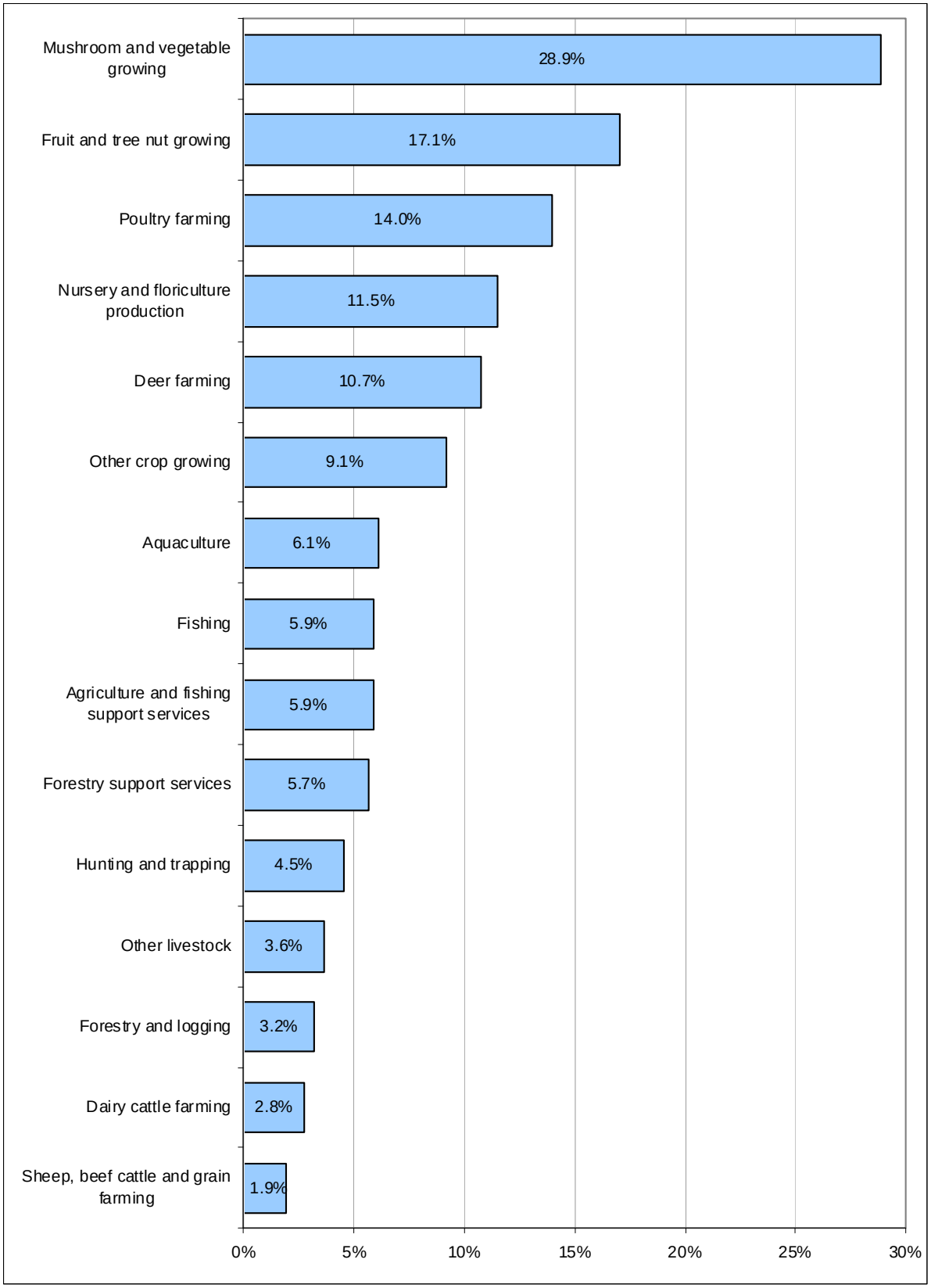
2.2 Geographical distribution of CALD persons

- There are CALD persons participating in agriculture, fisheries and forestry across all States and Territories, in urban, regional and rural locations across Australia.
- Victoria has the highest absolute number of CALD persons (4785) employed in agriculture, fisheries and forestry industries, followed by New South Wales (NSW) (4731), Queensland (3590), South Australia (2231) and Western Australia (2007) (see Appendix 1—Table 2).
- There are high concentrations of intensive agricultural operations located in and around every capital city in Australia. A significant proportion of these operations are sustained by persons with a CALD background.
- The Statistical Divisions (SDs) of Sydney, Adelaide, Perth, Darwin and Canberra play residence to more than 50 per cent of CALD persons employed in agriculture, fisheries and forestry within the corresponding state or territory. Analysis of SD data provides a rudimentary proxy measure of the number of CALD persons participating in peri-urban agriculture.
- The SD of Sydney plays residence to 2381 CALD persons employed in agriculture, fisheries and forestry industries, which is 50.3 per cent of all CALD persons participating in agriculture, fisheries and forestry industries in NSW (see Appendix 1—Table 3).
- The SD of Brisbane has the lowest proportion of CALD persons (22.1 per cent) participating in agriculture, fisheries and forestry industries compared to all other capital city SDs in Australia (see Appendix 1—Table 3).
- Outside of the metropolitan areas there are a number of rural and regional communities across Australia that have high concentrations of CALD people.
- The settlement of CALD persons in rural and regional areas has in part been driven by various government settlement schemes, some with the specific objective of providing labour for agriculture, fisheries and forestry industries and through chain migration into these areas.
- There are significant differences between states and territories and regions in terms of the number of CALD persons employed in specific industries (see Appendix 1—Table 8).

2.3 Industry participation of CALD persons

- CALD persons employed in agriculture, fisheries and forestry represent 1.3 per cent of all CALD persons employed across all industries in Australia (see Appendix 1—Table 1).
- CALD persons represent 28.9 per cent of the total number of persons employed in mushroom and vegetable growing, 17.1 per cent of the total number of persons participating in fruit and nut tree growing and 14 per cent of the total number of persons participating in poultry farming (see Figure 1).
- AUSVEG, the peak national body representing vegetable growers estimates that 40 per cent of vegetable growers speak a language other than English at home (HAL/AUSVEG, 2005).

Figure 1: CALD within total AFF workforce by sub-industry



Source: ABS 2006

2.4 Ethnicity

- 4417 or 24.7 per cent of the CALD population employed in agriculture, fisheries and forestry industries in Australia speak Italian at home, followed by Vietnamese 1504 (8.4 per cent), Greek 899 (5.0 per cent), Maltese 661 (3.7 per cent), Cantonese 655 (3.7 per cent), Punjabi 634 (3.5 per cent) and German 622 (3.5 per cent) (see Appendix 1—Table 10).
- CALD persons that speak:
    - Italian at home represent 35.1 per cent of all CALD persons participating in dairy cattle farming, 34.3 per cent of all CALD persons participating in fruit and nut tree growing, 25.7 per cent of all CALD persons participating in sheep, beef and grain farming, 24.5 per cent of all CALD persons participating in fishing, and 15.2 per cent of all CALD persons participating in mushroom and vegetable growing
    - Vietnamese at home represent 20.7 per cent of all CALD persons participating in mushroom and vegetable growing
    - Maltese at home represent 16.8 per cent of all CALD persons participating in poultry farming
    - Punjabi at home represent 8.5 per cent of all CALD persons participating in fruit and nut tree growing.

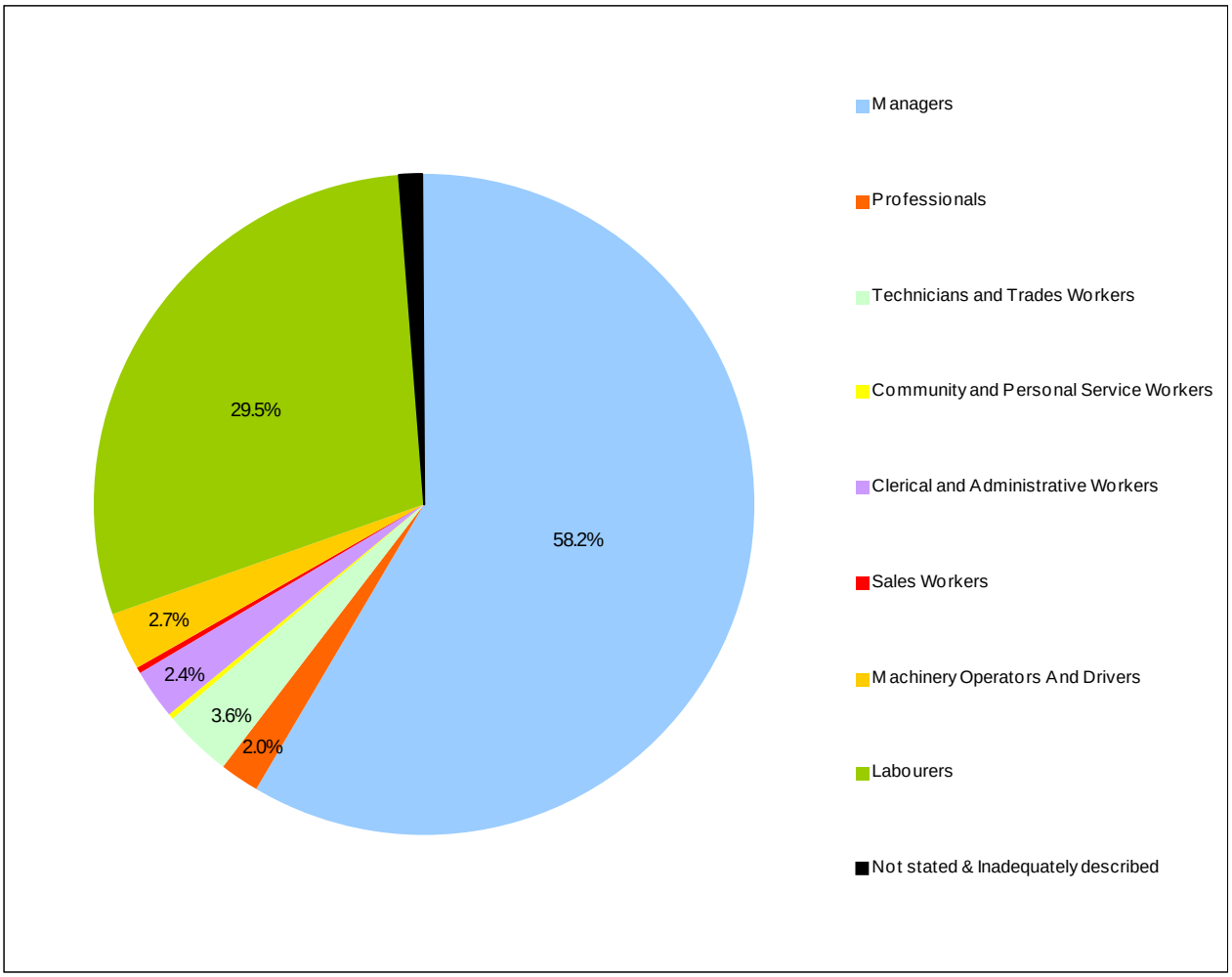
2.5 Gender

- There are more than 70 per cent more CALD males (11 348) participating in agriculture, fisheries and forestry industries than females (6542).
- The proportion of CALD females compared to non-CALD females participating in agriculture, fisheries and forestry is very similar; 36.6 per cent (CALD) and 30.4 per cent (non-CALD) (see Appendix 1—Table 13).
- A higher proportion of female CALD persons are employed as technicians and trades, machinery operators and drivers and labourers than female non-CALD persons in agriculture, fisheries and forestry industries (see Appendix 1—Table 15).
- Key informants highlighted that female CALD persons play significant roles in vegetable and horticulture industries, however this varies based on ethnicity.

2.6 Occupation

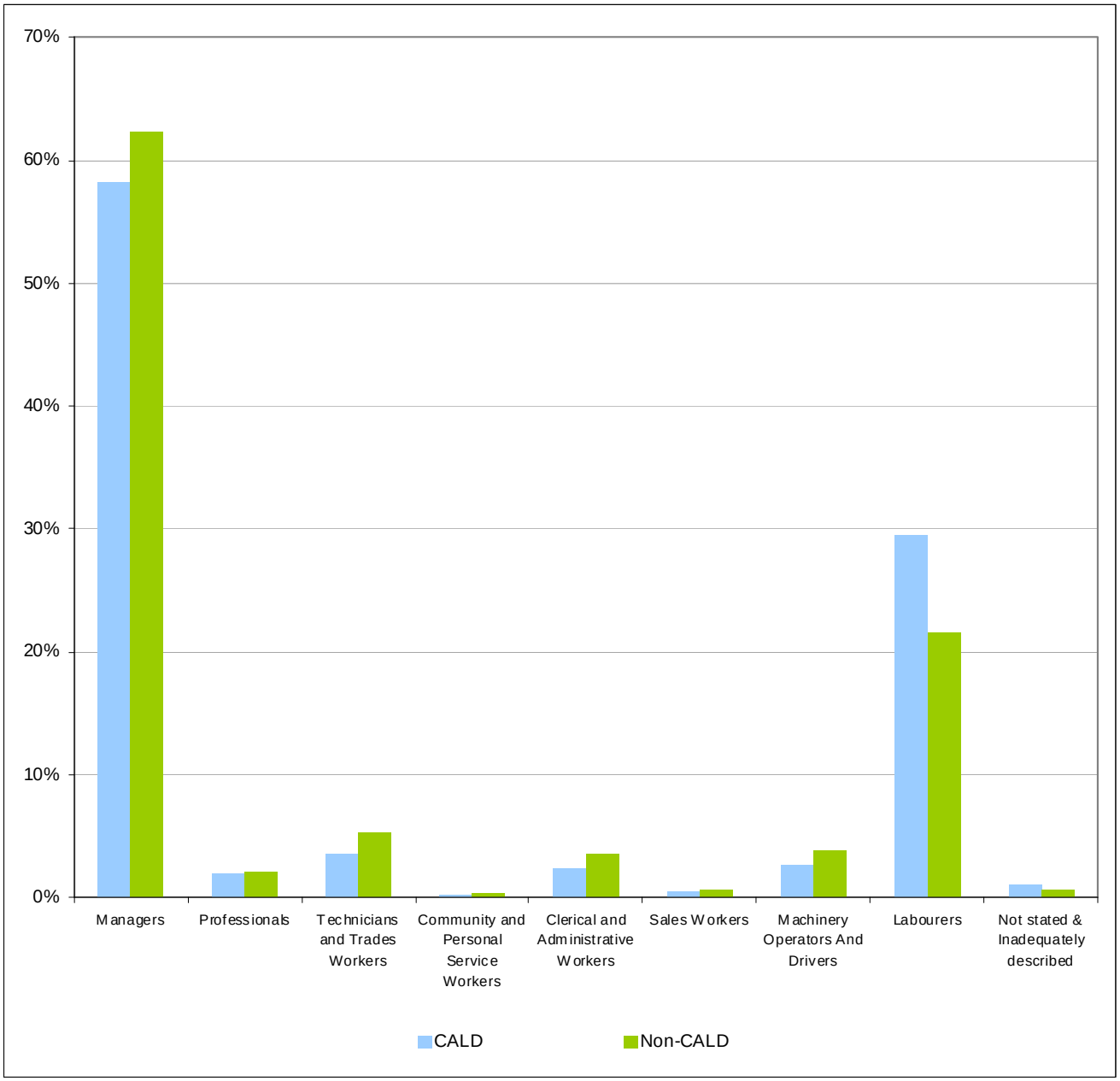
- The majority (58.2 per cent) of CALD persons employed in agriculture, fisheries and forestry industries reported their main occupation as farmers or farm managers in 2006, followed by labourers (29.5 per cent) (see Figure 2).
- Overall there is little difference between the occupational distribution of CALD persons and all other persons participating in agriculture, fisheries and forestry industries (see Figure 3).

Figure 2: CALD persons employed in AFF industries by occupation



Source: ABS 2006

Figure 3: Comparison of percentage CALD and non-CALD by occupation



Source: ABS 2006

3. Factors influencing CALD persons participation in agriculture, fisheries and forestry

The following chapter presents the key findings about the factors that influence the participation of CALD people in agriculture, fisheries and forestry industries. There is a range of factors that appear to influence the overall participation of CALD persons in agriculture, fisheries and forestry in Australia.

3.1 Settlement patterns

The question of why CALD persons participating in agriculture, fisheries and forestry in Australia concentrate in select urban, rural and regional areas has arisen from analysis of the literature, secondary data and key informant interviews. Missingham (2006) offered several reasons as to why CALD persons are concentrated in intensive horticultural areas in Australia. These reasons can be extrapolated to include all CALD persons across urban, rural and regional Australia.

3.1.1 Cultural continuity and chain migration

- Cultural continuity theory observes that many migrants who were familiar with intensive agriculture practices prior to migrating to Australia continued this form of agriculture upon arrival in Australia. However, recent qualitative studies suggest that some migrant farmers had no prior experience of farming before entering the sector (Parker 2000).
- Chain migration is another related factor in which migration and settlement occurs as a result of kinship linkages. This has been encouraged through the practice of family reunion immigration policies in the past. “A typical settlement pattern is for a wave of migrants from similar origins to firstly provide labour for established landowners. They gradually progress to become farm operators through leasing, renting and share farming, and eventually moving to land ownership with the process taking up to a decade” (Cumming & Mathieson 2000 cited in Morgan 2003).
- The attraction to the existing ethnic community arises from the greater support provided and the familiar cultural environment, particularly in times of economic hardship.

3.1.2 Farming as a livelihood strategy

- Farming has been reported as an attractive option for migrants (Parker 2002; Missingham 2006).
- A number of key informants highlighted that CALD persons saw primary production industries as a livelihood strategy.

3.1.3 Immigration policies

- There have been shifts in migrant settlement patterns over time. The introduction of the regional visa scheme in 1996 encouraged settlement in rural and regional areas (Khakbaz 2005).
- Some rural and regional areas that were home to older settler groups like Italian, Greek, Polish, Dutch, German, Maltese, Chinese, Turkish, Sikh, Serbian and Croatian, are now occupied by newer wave groups including Filipino, Laotian, Vietnamese, Persian, Spanish speaking and Hmong (Khakbaz 2005).

3.2 Communication and English language skills

- English language skills are widely reported as the most important factor influencing the participation of CALD persons in agriculture, fisheries and forestry in Australia.
- Low levels of proficiency in English among CALD persons is prevalent within the vegetable industry in Australia (Brunton and Hall 2009). Higher levels of literacy have been reported in more established settler groups, and second and third generation CALD persons in agriculture (Eccles 2007).
- Low levels of proficiency in English affects the ability of CALD persons to meaningfully engage in training programs (Brunton & Hall 2009).
- Low levels of proficiency in English significantly affects the ability of people with CALD backgrounds to understand market and institutional processes. This can reduce their ability to participate effectively within agriculture, fisheries and forestry sectors.
- There is also evidence of low levels of literacy among CALD persons in their first language, however, this should not be assumed for all CALD persons (Brunton in Eccles 2007).
- Low levels of literacy amongst CALD persons in their first language can mean that the use of translated written communication material is less effective, particularly in regards to technical terms (Brunton 2009).
- Avenues of direct communication used by CALD persons in the vegetable industry include: CALD Grower associations, newsletters in their first language, face-to-face communication (i.e. bilingual extension officers), other producers, community leaders, events and workshops, at markets, direct mail, agricultural input suppliers and training courses (Eccles 2007).
- Indirect communication within vegetable industry CALD groups is most effective through SBS and community radio stations. The internet is not considered to be a widely used communication channel (Eccles 2007).

3.3 Access to resources and services

Access to resources and services have been identified as a key barrier to CALD persons' capacity to participate in the agriculture, fisheries and forestry sectors. Key issues raised include:

- barriers to access and lack of resources and infrastructure
- lack of critical mass (of an ethnic or multicultural group) to warrant particular types of service (e.g. interpreters)
- lack of information
- problems integrating with mainstream agriculture, fisheries and forestry industries
- isolation and language
- intergenerational issues (impacting on women, youth and caring responsibilities)
- cultural issues
- racism (Babacan 1998 cited in Khakbaz 2005).

3.4 Security of land tenure

- A large proportion of CALD growers lease the land they farm, or have access to the land under ambiguous or tenuous arrangements. This is especially the case for newer migrant groups entering the industry.

- A lack of secure land tenure has implications for the membership and participation of CALD growers in Grower's Associations. Often it means they are not entitled to membership of associations and formal groups and it limits the type of information they have access to (EMD Multicultural Marketing and Management 2001).

3.5 Access to social services

- Parker (2002) observes that CALD groups in the agricultural sector have been marginalised from both mainstream services as well as special services directed toward people of culturally diverse backgrounds (e.g. interpreters, migrant resource centres, community groups, churches).
- Parker (2002) notes that service delivery toward small-scale market gardeners is fragmented and inadequate and that attitudes toward CALD market gardeners among service delivery organisations are not always positive.
- A particular area of concern raised in several studies is the progressive removal of agricultural extension services (Parker 2002, Parker 2007). This is likely to affect CALD growers more than others, as studies have shown that the development of trust in a one to one personal relationship is the most effective means of communicating and of generating understanding and practice change among growers of culturally diverse backgrounds (Dang and Malcolm 2007, EMD Multicultural Marketing and Management 2001, Parker and Suriyabanadara 2000).

3.6 Relationships and attitudes toward government

- There are numerous reports in qualitative research on ethnic growers of a mistrust of government bureaucracies.
- Relationships between CALD groups and government agencies have been affected by discrimination and social exclusion according to Missingham et al. (2006). Mares (2006b) suggests that this has contributed to a strong ethos of independence among ethnic communities.
- Taxation and social security departmental staff attempts to access the sector have been interpreted as harassment by some CALD growers according to Parker and Suriyabanadara (2000). They note that some growers and their families are fearful because of their experiences of war, trauma and torture at the hands of regimes in their country of origin (Parker and Suriyabanadara 2000).

3.7 Quality assurance and food safety

- The perception of unsafe on-farm occupational health and safety practices and a lack of observance of quality assurance and environmental regulations have been raised in the literature (Dang and Malcolm 2007, Parker 2002, Parker *et al.* 2005, Parker and Suriyabanadara 2000). However, a key informant disputed this claim as being unsubstantiated. Despite the conflicting views, a lack of knowledge and understanding of legislative requirements in the areas of food quality assurance, food safety and environmental regulation could lead to CALD persons having to leave the industry, especially in cases where prosecution occurs and fines are imposed.

3.8 Landuse and urbanisation

- Land use planning and urbanisation changes are occurring in areas where a large number of farmers of a culturally diverse background are operating, especially on the fringes of major capital cities.
- Marginalisation in terms of the quality of available land (especially in metropolitan areas) and how this has being turned into higher quality land suitable for agriculture [by CALD farmers] which is then under threat from urban development was raised by key informants as an issue.

3.9 Sustainable practices

- There is limited information about ethnic minorities knowledge of agricultural sustainability issues according to Missingham et al. (2006). Hogan and Cumming (1997) reported that people from non-English speaking backgrounds are in general participating in Landcare activities, however they are not well represented in formal Landcare activities.

3.10 Gender relations/division of labour

- Women and children from CALD backgrounds play a central role in agricultural, particularly horticultural, production in the context of the family unit, but their contribution and role has not been well documented.
- Women tend to hold responsibility for maintaining family cohesion and kinship networks (Missingham et al. 2006).

4. CALD representation in decision-making-positions

The following section presents the key findings about the representation of CALD persons in agriculture, fisheries and forestry industries. The section is broken into the following sub-sections: overview of representation; barriers to representation; and approaches to increasing representation.

Representation is used here in a broad context to encapsulate:

- CALD representation in formally recognised mainstream positions (for example, industry boards).
- the degree of decision-making at the 'farm' level (for example, farm owner or manager).
- the degree of connectedness, influence, and power they possess and the barriers that diminish these factors.

There are no available data to quantify the representation of CALD persons in leadership and decision-making positions within agriculture, fisheries and forestry-based organisations either in government or industry. However, there does appear to be a distinction between CALD groups based on their migration patterns to Australia, generation and industry and the degree of representation in relevant industry organisations. The majority of key informants highlighted that the greatest lack of representation occurs within the vegetable and horticulture sectors.

4.1 Overview of representation

- Overall, key informants believed that CALD persons were under-represented in leadership and decision-making positions within mainstream agriculture, fisheries and forestry organisations and institutions.
- The premise that CALD persons are under-represented in decision-making positions is supported in literature that examines the participation of CALD vegetable growers in Australia. Many CALD persons in this industry are seen to lack political influence with low levels of recognition as 'farmers' (Parker 2007).
- Parker (2007) observes that many CALD vegetable growers in Western Sydney are not members of growers organisations.
- There appear to be differences in the degree of representation based on ethnicity — linked to migration waves, settlement patterns and industry of participation. Post-World War II (WWII) migrants such as Italians, Greeks and Maltese have been pioneers and subsequently leaders in many agricultural industries such as fruit and nut tree growing, mushroom and vegetable growing, fishing and poultry production. As a result of this they are now well established and represented in positions of leadership within these industries. Conversely, later arrivals, such as Vietnamese, Lebanese, Cambodians, Indians and Somalia's, are reported as not having the same degree of influence or representation by key informants.
- Hassall and Associates (2003) observed two distinct groups in the Australian-Asian vegetable industry and created profiles for each group. The resulting profiles support the proposition that there are distinct differences between post-WWII migrants, their second generation offspring and more recent arrivals.
- Following on from the idea of representation being linked to migration patterns is that second generation persons who identify as having a CALD background may be more integrated into the leadership structures of mainstream agricultural representation, such as on agricultural industry boards, research and development corporations and in agricultural agencies. This higher degree of integration by

second generation CALD persons may also be linked to higher levels of proficiency in English, education and a better understanding of the industry and institutional structures, processes, regulations and opportunities for representation.

- The degree of representativeness in decision-making positions also differs by industry. Key informants from the fishing industry highlighted that some CALD groups were pioneers in the industry and thus well represented in decision-making positions.
- The majority (58.2 per cent) of CALD persons employed in agriculture, fisheries and forestry industries reported their main occupation as farmers or farm managers (see Figure 2). This indicates that CALD persons are in decision-making positions at the 'farm' level. However, this does not translate confidently as a proxy measure of representation in decision-making in the wider agriculture, fisheries and forestry industry organisations and institutions.

4.2 Barriers influencing CALD representation in decision-making positions

There has been little research into the barriers that prevent CALD persons from gaining representation in decision-making positions. Key informants, however, highlighted language and literacy, lack of knowledge, financial pressure, time constraints, disconnect between CALD persons and industry, peak industry body structures, and fragmentation within specific industries as barriers to CALD persons entering decision-making positions in agricultural organisations.

4.2.1 Language and literacy

Language and literacy, as mentioned before as a general barrier to participation has also been highlighted as a barrier to representation in decision-making roles.

4.2.2 Lack of knowledge

The majority of key informants saw a lack of knowledge of the dynamics and functions of the agri-business sectors as a source of risk and vulnerability that reduces the ability of some CALD persons to contribute to higher level decision-making forums within industry. They highlight the following barriers that had the greatest impact on participation in representative roles:

- a lack of understanding of the structures and roles of agriculture, fisheries and forestry industry organisations and government institutions
- a lack of understanding of how to gain membership or representation in agriculture, fisheries and forestry industry organisations and institutions
- a lack of understanding of legislation and regulation
- a lack of rudimentary business management skills and understanding of market access and opportunities.

4.2.3 Financial pressures

- Financial pressures limit the capacity of CALD persons being able to justify investment in training and skill development.
- Financial pressures and viability issues limit CALD persons capacity to gain influence or participate in 'off-farm' activities such as industry boards and organisations.

4.2.4 Time constraints

Many key informants highlighted that many CALD persons are 'time poor' as they try to do everything themselves.

4.2.5 Perceived disconnect between institutions and CALD persons

- Key informants highlighted a lack of engagement by both parties. CALD persons were perceived as not seeing the benefits of joining industry associations and industry organisations and government institutions were seen as not understanding the needs of CALD persons.

- The lack of understanding of the needs of CALD persons can translate into inappropriate communication and engagement approaches. A number of key informants highlighted the processes for utilising industry resources (for example, funding grants) as inappropriate for CALD persons as they often involve complex paperwork which may be difficult for a CALD person to understand.

4.2.6 Peak body structures

Key informants mentioned that the nature and structure of peak industry bodies can sometimes lead to CALD growers being less represented. However, this varies across industry, commodities, region and ethnic group.

4.2.7 Diversity within CALD groups

- Diversity within the agriculture, fisheries and forestry sectors and divisions within many CALD groups makes achieving representation a challenge (Parker 2009).
- Many grower organisations do not have a clear aim or long-term function (Parker and Suriyabanadara 2000) and unified representation due to conflicting factions within grower organisations can be problematic (Morgan 2003).

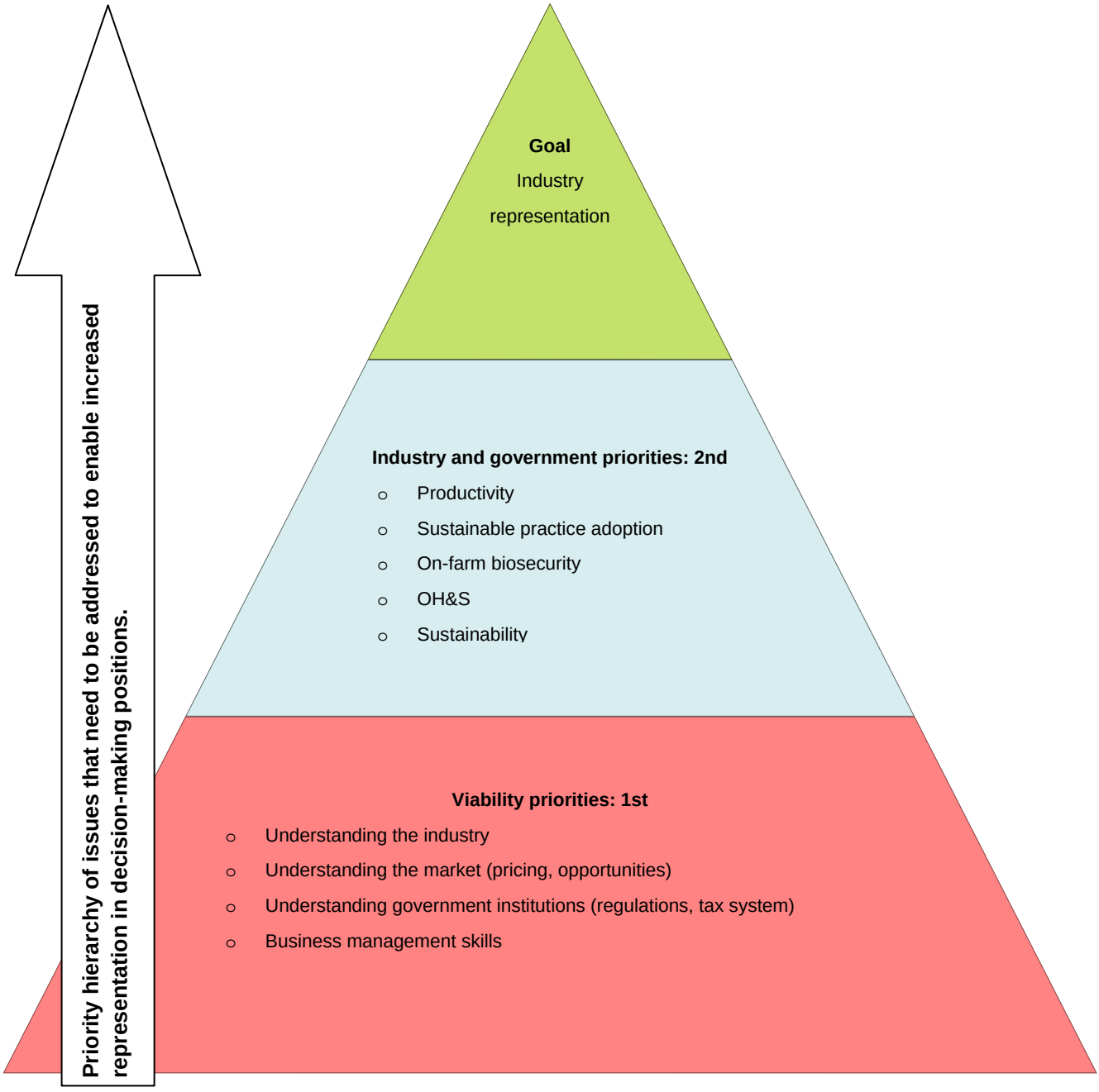
4.3 Opportunities to increase representation

There is clearly an opportunity to increase the representation of CALD persons in decision-making positions. The key elements for increasing opportunities for CALD persons in decision-making roles reside in addressing the barriers presented previously. Aside from addressing the barriers, key informants highlighted that addressing issues of viability and building capacity were integral to enabling CALD persons to gain representation in decision-making roles.

4.3.1 Building capacity

The majority of key informants described the main driver in the decision-making process for CALD growers as financial viability and hence this is a key factor influencing the ability of CALD persons gaining greater representation. One key informant offered a re-interpretation of Maslow's hierarchy of needs in the context of CALD growers and their representation in decision-making positions (see Figure 4). The pyramid can be seen as a number of priority levels each containing issues that need to be addressed before proceeding to the ultimate goal of representation in decision-making positions.

Figure 4: **Priority hierarchy pyramid to build capacity**



Starting at the bottom the foundation or cornerstone is the financial viability priority. Without addressing viability it is difficult to engage CALD growers on other matters and for them to afford time for other pursuits. Until CALD growers are financially viable they do not possess the time or capacity to invest in training, infrastructure, adoption of new practices or the pursuit of gaining representation in decision-making positions.

Four key areas that need to be addressed to improve viability were highlighted by a number of key informants:

- understanding the industry
- understanding the market
- business management skills
- understanding government processes, such as the tax system.

If these areas are addressed then the individual has the capacity to move onto the next set of issues and priorities and ultimately the goal of greater representation.

5: Strategies for improving engagement with CALD persons

In general a number of key informants noted that in recent years there has been increasing recognition of ethnic growers and increasing opportunities for CALD engagement. One of the challenges faced by industry and government is getting CALD growers to take up these opportunities. Several common themes emerged from the literature review and key informant interviews related to improving engagement with CALD persons and their communities in agriculture, fisheries and forestry industries.

5.1 Building on current engagement

- Building on current engagement was highlighted by key informants as an avenue for increasing engagement.

5.2 Approaches emphasising the needs of growers

- The literature emphasises the need to provide opportunities for CALD persons in agriculture, fisheries and forestry industries to identify their own needs. This is best done in consultation with CALD persons and not in a prescribed top-down manner.
- A number of key informants stressed that few engagement programs or training courses incorporated input from CALD persons in their development and design.
- Recognition and understanding of the differences within and between CALD groups pertaining to their cultural needs, the industries they participate in and the varying institutional arrangements they operate under are essential if engagement is going to be successful.

5.3 Development of trust and personal relationships

- The literature emphasises the importance of developing relationships that foster trust and understanding based on mutual respect with CALD growers.
- All key informants emphasised the importance of developing personal relationships built on trust.
- Building effective relationships and trust necessarily involves participative approaches that engage the relevant communities and incorporate long-term strategies that ensure these relationships and levels of trust are preserved.

5.4 Cultural change in service delivery organisations

- Several studies emphasise the importance of cultural changes within key service delivery organisations (e.g. agriculture, health) in order to facilitate the kind of engagement that is likely to be effective for deeper practice change. Parker and Suriyabanadara (2000) discuss the need for cultural change within institutions in terms of better recognition of the role of CALD farmers in the provision of fresh fruit and vegetables. A widespread view is that better recognition by political institutions and service delivery organisations will lead to better provision of services that encourage the participation of CALD growers in agriculture to their full potential.

5.5 Culturally appropriate learning and communication styles

- Brunton (in Eccles 2007) reported that farmers from a non-English background have different learning styles. Many of them have not experienced an Australian education in which active questioning, challenging of opinions and collaborative learning approaches are encouraged.
- Dang and Malcolm (2007) also refer to the use of a culturally appropriate ways of communicating as essential for gaining the trust of CALD grower groups. Cultural sensitivities have implications for the way that agencies engage CALD persons and groups, suggesting that participatory and practical experimentation with a trusted agent (for example, bi-lingual agricultural officers) is the most appropriate means of encouraging practice change.
- Key informants highlighted the value of tailoring programs and communication activities to the audience. Making participants feel comfortable to make the learning seem easy could be achieved through: involving interpreters; considering the location; ensuring timeframes are appropriate to the amount of content being covered; and using existing networks such as local multicultural council offices or ethnic social clubs to help engage with community leaders.

5.6 Longevity of programs and funding

- The longevity of programs is an issue that arises in several studies (Bradley 2008, Morgan 2003). For example in the Northern Territory, Bradley comments that the availability of funding to support a holistic long-term engagement process is essential to building trust with the most marginalised growers.
- A number of key informants observed that the use of short-term projects in engaging CALD persons is fragmented, exposing inefficiencies and lost opportunities for building on current engagement and work. Continuity of projects over time has also being identified as a prerequisite if lasting change is to be brought about or if relationships that have been established as part of programs are to be maintained.

5.7 Change facilitators

Individuals (champions) who were influential in facilitating change within industry or in a particular region or with a particular ethnic group play an important role in improving CALD engagement in industry. Change facilitators could take a number of forms such as government officers, industry representatives or CALD farmers.

- Pilot programs that have supported the use of bilingual extension officers in the Sydney basin have been found to be extremely effective in engaging CALD persons. More than half the participants involved in these programs felt that the bilingual officers gave ‘excellent help when needed’ (Brunton and Hall 2009). Bilingual officers with expertise in agriculture were highly respected by CALD farmers because of their ability to communicate effectively, understanding of cultural norms, ability to provide expert agricultural advice and willingness to work face to face and ‘on-ground’.
- Key informants highlighted that change facilitators were effective engagers with CALD groups.

References

ABS (2007a) *3414.0—Guide to Migrant Statistical Sources (Edition 1),* Available: www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3414.0Glossary12007%20(Edition%201)?OpenDocument) [Accessed Feb 2009]

ABS (2007b) *Migrants, Forms of Employment, Australia, Nov 2007. Supplement to the Labour Force Survey conducted in November 2007.* Canberra: Australian Bureau of Statistics.

Almond, A (2006) Quality assurance training for egg producers. IN (Ed.^(Eds.) *Proceedings of the Australasia Pacific Extension Network (APEN) International Conference 2006, 6-8 March 2006.* Beechworth, Victoria, Australia.

Alston, M (2000) *Breaking Through the Grass Ceiling—Women, Power and Leadership in Agricultural Organisations,* Amsterdam: Harwood Academic Publishers.

Aslin, HJB, V a (2004) *Towards Whole of Community Engagement: A Practical Toolkit*. Murray Darling Basin Commission.

Australian Psychological Society Ltd (2008) What's the difference between NESB and CALD? *APS Interest Group on Psychology and Cultures Newsletter,* (August).

Ben-Moshe, D, S Feldman, S Bertone, C Sonn, S Zuhair, L Martin, H Radermacher & K Davidson (2005) *Cultural Diversity and Economic Development in Four Regional Australian Communities*. Sydney, NSW: NSW Department of Transport and Regional Services.

Bradley, M (2008) *Fostering a culture of sustainability with horticultural growers from non-English speaking backgrounds in the Northern Territory*. Darwin, NT: A report prepared for the Northern Territory Horticultural Association by CSIRO Sustainable Ecosystems.

Brunton, V & P Hall (2009) Evaluating the benefits of bilingual officers in providing training and advice to non-Background Farmers in the Sydney Basin English. IN (Ed.^(Eds.) *The Australasian Evaluation Society International Conference 2–4 September 2009.* Canberra, Australia, The Australiasian Evaluation Society.

Dang, HT & PJ Malcolm (2007) *Impact of a Bilingual Extension Officer—Working with farmers from Non-English Speaking Backgrounds (NESB).* Barton, ACT: Rural Industries Research and Development Corporation.

DIMA (2001) *The Guide: Implementing the standards for statistics and language diversity*. *A publication of the Commonwealth interdepartmental committee on multicultural affairs.* Canberra: Department of Immigration and Multicultural Affairs.

Eccles, J (2007) *Asian Foods Program Researchers' Workshop—Tuesday 29 May 2007. Darling Harbour Convention Centre.* RIRDC.

EDC (2004) (Economic Development Committee) *Economic Contribution of Victoria's Culturally and Diverse Population*, Parliament of Victoria, September.

EMD Multicultural Marketing and Management (2001) *Primary production and the Agriculture – Advancing Australia (AAA) package: review of literature, annotated bibliography, and interviews with ethnic primary producers*. Chippendale, Sydney: Report to Department of Agriculture, Fisheries and Forestry—Australia.

HAL / AUSVEG (2005) *Vegetable Growers With a Language Other Than English A Snap Shot Report*. Facilitated by Horticulture Australia Limited in partnership with AUSVEG.

Hassall & Associates (2003) *Asian Vegetable Industry—A Situation Assessment.* Barton, ACT: Rural Industries Research and Development Corporation.

Hogan, L & B Cumming (1997) *More than a Question of Numbers: Working with women and people from non-English speaking backgrounds towards total catchment participation* Canberra: Australian Government Department of Primary Industries (DPIE).

Houston, P (2005) Re-valuing the fringe: Some findings on the value of agricultural production in Australia's peri-urban regions. *Geographical Research,* 43(2): 209–23.

Huber, R (1977) *From Pasta to Pavlova: A comparative study of Italian settlers in Sydney and Griffith,* St Lucia, Queensland: University of Queensland Press.

Hugo, G (1995) *Understanding where migrants live*. Canberra: Bureau of Immigration, Multicultural and Population Research.

Khakbaz, M (2005) Regional Engagement of Migrant Communities Challenges and Innovations. IN (Ed.^(Eds.) *International Conference on Engaging Communities 14–17 August.* Brisbane, Australia

Mares, P (2006a) *Labour shortages in Murray Valley Horticulture: A survey of growers needs and attitudes*. Hawthorn, Victoria: Swinburne Institute for Social Research.

Mares, P (2006b) Seasonal migrant labour: A boon for Australian country towns? IN Rogers, M & Jones, DR (Eds.) *The Changing Nature of Australia's Country Towns.* Ballarat, Australia: Vistorian Universities Regional Research Network Press.

Merriam-Webster (2009) *Merriam-Webster Online Dictionary,* [Accessed Feb 2009]

Missingham, B, J Dibden & C Cocklin (2006) A multicultural countryside? Ethnic minorities in rural Australia. *Rural Society,* 16(2): 131–50.

Morgan, WC (2003) *Communication with Asian non English speaking background vegetable growers—A pilot project for adoption of best practice.* Barton, ACT: Rural Industries Research and Development Corporation,.

Parker, F (2002) The Case of Sydney's Tainted Food Scandal: Background and Consequences. *The Drawing Board: An Australian Review of Public Affairs,* 2(3): 151–65.

Parker, F (2007) Making Peri-urban Farmers On The Fringe Matter. IN (Ed.^(Eds.) *State of Australian Cities National Conference* Adelaide, 28–30 November.

Parker, F, K Flood & S Jarecki (2005) Engaging farm women from culturally and linguistically diverse background in education and training. IN (Ed.^(Eds.) *International Conference on Engaging Communities 14–17 August.* Brisbane, Australia.

Parker, F & S Jarecki (2003) Transitions at the rural/urban interface: "moving in", "moving out" and "staying put". IN (Ed.^(Eds.) *State of Australian Cities National Conference 3-5 December*. Carlton Hotel, Parramatta.

Parker, F & K Suriyabanadara (2000) *The Safe Use of Farm Chemicals by Market Gardeners of Non-English Speaking Background Developing an effective extension strategy for the Sydney Basin*. Canberra: Rural Industries Research and Development Corporation.

Schembri, N, K Hart, R Petersen & R Whittington (2005) Trading patterns and disease risk factors in pigs in the Sydney basin. IN (Ed.^(Eds.) *Proceedings of the Australian Association of Pig Veterinarians Conference, May 2005.* Gold Coast, Queensland

Sinclair, I, A Docking, S Jarecki, F Parker & L Saville (2004) *From the Outside Looking In The Future of Sydney's Rural Land Background Issues and Workshop Outcomes*. Sydney: Funded by a University of Western Sydney Regional and Community Grant.

Strong, V (2006) *Chinese women working in market gardens across the Sydney basin*. Parramatta, NSW: Sydney West Area Health Service.

Wilkinson, J (1998) Prejudices, Preconceptions or Progress in Agriculture?: Rural Non English Speaking Background Women and Leadership. *Rural Society,* 8(3).

Appendix 1: Tables and Figures

The following tables and figures provide the descriptive results from the analysis of custom data from the ABS Census of Population and Housing 2006 unless otherwise stated.

Table 1: CALD, non-CALD by AFF and all other industries

	Total CALD	Non-CALD	Total persons employed	% by industry CALD	% by industry Non-CALD
Agriculture, fisheries and forestry	17 890	248 982	266 872	1.3	3.2
All other industries	1 380 307	7 457 008	8 837 315	98.7	96.8
Total	1 398 197	7 705 990	9 104 187	100	100

Table 2: Total CALD persons employed in AFF industries by State and Territory

State/territory	CALD persons	%
VIC	4785	26.7
NSW	4731	26.4
QLD	3590	20.1
SA	2231	12.5
WA	2007	11.2
TAS	252	1.4
NT	261	1.5
ACT	33	0.2
Total Australia	17 890	100.0

Table 3: CALD persons employed in AFF by Capital city Statistical Division and State/Territory

Statistical Division	SD	State	% in SD
Sydney	2381	4733	50.3
Melbourne	1920	4789	40.1
Brisbane	792	3591	22.1
Adelaide	1185	2232	53.1
Perth	1012	2009	50.4
Hobart	80	253	31.6
Darwin	165	262	63.0
Canberra	30	33	90.9
Total	565	17 890	42.3

Table 4: CALD persons compared with non-CALD persons employed in AFF by State/Territory

State/territory	CALD persons	Non-CALD	% CALD
NSW	4731	70 003	6.3
VIC	4785	56 122	7.9
QLD	3590	54 670	6.2
SA	2231	28 256	7.3
WA	2007	27 467	6.8
TAS	252	10 531	2.3
NT	261	1695	13.3
ACT	33	361	8.4
Total Australia	17 890	248 982	6.7

Table 5: Regions with significant concentrations of CALD groups engaged in agriculture

Region	Agricultural produce	Cultural diversity
Sunraysia (Northern Irrigation Region) Victoria	Orchards, etc	
Goulburn Valley (Northern Irrigation Region) Victoria	Orchards, etc	
Virginia in South Australia	Vegetables	High proportion of Asian and European growers.
Western Sydney, New South Wales	Vegetables; cut flowers	30 per cent of people in the agricultural sector and 80-90 per cent in the market gardening and cut flowers sector are NESB in W Sydney (see Parker 2000; 2007). 430 Arabic, 600 Maltese, 120 Italian, 67 Vietnamese, 420 Chinese, 67 Cambodian, 20 Yugoslavian/Serbs and 12 Korean in the Greater Western Sydney area (Brunton 2007, Communicating with farmers of diverse backgrounds, in Eccles J. 2007).
Riverlands, South Australia		Agricultural Extension Among Greek Growers in the South Australian Riverland in South Australia, (cited in Parker and Suriyabanadara 2000). Refer also to Menzies, B.J. 1980.
Adelaide Hills, South Australia	Wines; stone fruits; nursery gardens	
Adelaide Plains, South Australia	Vegetables / market gardens	South East Asian and southern European background growers.

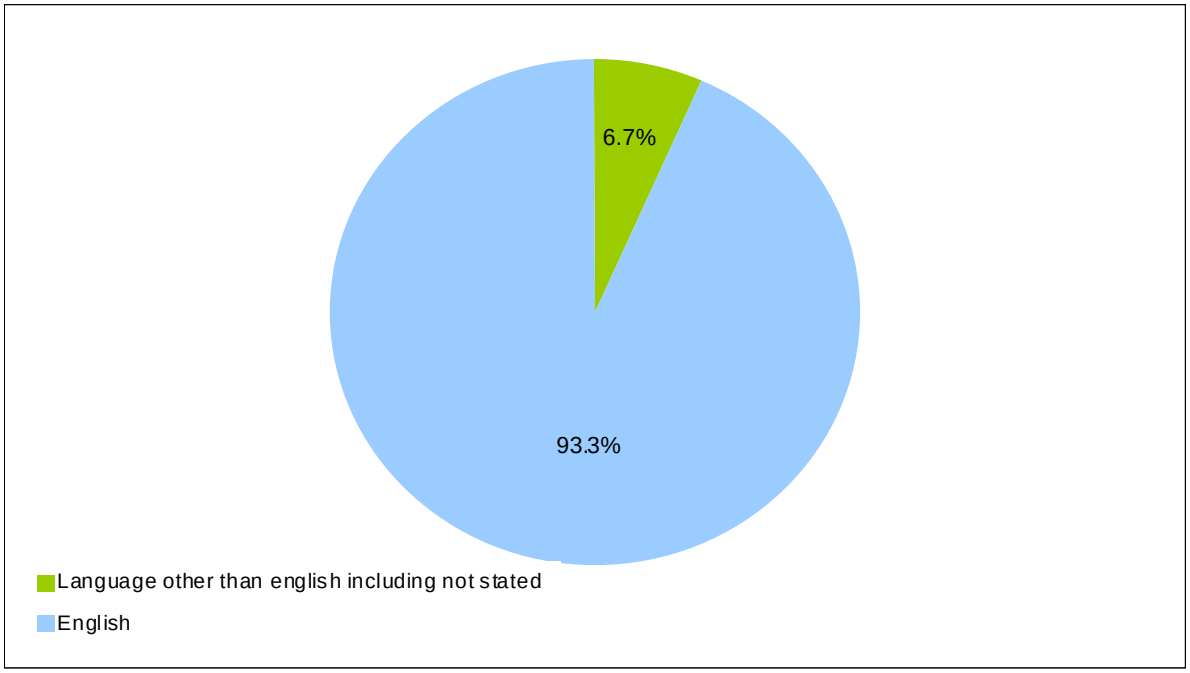
Murrumbidgee Irrigation Area, New South Wales around Griffith in the Riverina - this is one of the most researched immigrant communities in Australia (see Price 1955; Tully 1960; Kelly 1985, 2001; Panucci 1992, cited in Missingham 2006)		Significant number of Italians and their descendents own intensive horticultural farms (Kelly 1988 in Missingham 2006). 11 per cent in Griffith postcode 2680 reported speaking Italian at home & 2 per cent spoke Punjabi; and 7.2 per cent of the total population in postcode 2680 were employed in the Fruit and Tree Nut Growing industry (ABS 2001 Census data).
Atherton Tablelands – Queensland	Every kind of horticultural crop produced. Queensland has about 20-25 horticulture regions.	
Bundaberg, Tully and Manjura – Queensland	Citrus, wine, vegetables.	
Carnarvon - Western Australia	Mainly banana, tomatoes and capsicums. Some tomatoes.	Mix of cultural groups – many Vietnamese with limited English language skills. Lots of land in the area is leased and is changing hands often.
Darwin Greater Rural Area (includes Humpty Doo and Marrakai) - Northern Territory	Biggest area in terms of production/value. Wide range of produce: mangoes, melons, vegetables, tropical fruits, cut flowers.	Vegetable industry has a significant number of NESB growers (e.g. Cambodian, Thai, Malaysian, Greek, Italian) (refer to Bradley M, 2008). Many growers have family in rural areas in SE Asia. NESB growers are an important component of the tropical fruits industry producing up to two-thirds of fresh produce the Darwin region.
Katherine/Mataranka – Northern Territory	Mangoes, melons, vegetables, citrus.	

Note: (Information gathered from various sources including Hugo 1995, Missingham *et al.* 2006, Parker and Suriyabanadara 2000).

Table 6: Proportion of CALD people within the total AFF workforce

Language spoken at home	Total
Language other than English including 'not stated'	17 890
English	248 982
Total	266 872

Figure 5: Proportion of persons employed in AFF by language spoken at home



Source: ABS 2006

Table 7: CALD compared with non-CALD by sub-industry

Industry ANZSIC 2006	CALD	Non-CALD	Total	% CALD of total
Nursery and floriculture production	968	7444	8412	11.5
Mushroom and vegetable growing	4783	11 785	16 568	28.9
Fruit and tree nut growing	5187	25 197	30 384	17.1
Sheep, beef cattle and grain farming	2591	130 687	133 278	1.9
Other crop growing	990	9836	10 826	9.1
Dairy cattle farming	606	21 392	21 998	2.8
Poultry farming	838	5149	5987	14.0
Deer farming	9	75	84	10.7
Other livestock	329	8801	9130	3.6
Aquaculture	221	3411	3632	6.1
Forestry and logging	220	6651	6871	3.2
Fishing	212	3387	3599	5.9
Hunting and trapping	18	378	396	4.5
Forestry support services	117	1938	2055	5.7
Agriculture and fishing support services	801	12 851	13 652	5.9
Total	17 890	248 982	266 872	6.7

Table 8: CALD persons by State/territory and industry

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Nursery and floriculture production	320	314	137	97	84	12	0	0
Mushroom and vegetable growing	1500	1013	873	724	573	29	67	0
Fruit and nut tree growing	1122	1677	913	869	470	41	82	3
Sheep, beef cattle and grain farming	814	626	367	209	465	50	49	7
Other crop growing	83	175	686	21	22	0	3	0
Dairy cattle farming	77	399	32	30	39	27	0	0
Poultry farming	351	195	107	42	119	18	0	12
Deer farming	6	0	0	0	0	0	0	0
Other livestock	128	75	51	36	36	3	9	0
Aquaculture	30	21	94	24	19	31	4	0
Forestry and logging	65	32	37	20	32	19	8	5
Fishing	24	26	38	35	53	13	27	0
Hunting and trapping	3	0	9	0	3	0	0	0
Forestry support services	51	21	24	12	21	0	3	0
Agriculture and fishing support services	157	211	222	112	71	9	9	6
Total	4731	4785	3590	2231	2007	252	261	33

Table 9: CALD persons by SD and industry

Industry	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Nursery and floriculture	260	244	95	55	75	3	0	0
Mushroom and vegetables	1337	724	245	628	337	14	50	0
Fruit and nut tree growing	99	292	224	300	269	18	73	0
Sheep, beef cattle and grain farming	175	235	51	58	67	6	0	7
Other crop growing	21	90	3	21	19	0	3	0
Dairy cattle farming	29	39	0	4	13	0	0	0
Poultry farming	270	132	54	18	110	6	0	12
Deer farming	3	0	0	0	0	0	0	0
Other livestock	43	27	6	3	6	0	9	0
Aquaculture	12	14	31	3	11	17	4	0
Forestry and logging	34	18	0	9	24	6	4	5
Fishing	3	4	15	9	44	7	19	0
Hunting and trapping	0	0	6	0	3	0	0	0
Forestry support services	30	12	6	6	3	0	0	0
Agriculture and fishing support services	65	89	56	71	31	3	3	6
Total	2381	1920	792	1185	1012	80	165	30

Table 10: Selected CALD persons employed in AFF

Selected CALD	Number of persons	%
Arabic	429	2.4
Cantonese	655	3.7
Mandarin	459	2.6
Korean	340	1.9
Croatian	354	2.0
Serbian	118	0.7
Czech	27	0.2
Polish	105	0.6
Greek	899	5.0
Italian	4417	24.7
Macedonian	239	1.3
Maltese	661	3.7
Punjabi	634	3.5
Vietnamese	1504	8.4
Khmer	568	3.2
Indonesian	117	0.7
Balinese	0	0.0
Thai	183	1.0
German	622	3.5
Dutch	450	2.5
Selected CALD total	12 781	71.4
All other CALD including not stated	5109	28.6
Total CALD	17 890	100.0

Table 11: CALD by sub - industry

	Nursery and floriculture production	Mushroom and vegetable growing	Fruit and nut tree growing	Sheep, beef cattle and grain farming	Other crop growing	Dairy cattle farming	Poultry farming	Deer farming	Other livestock	Aquaculture	forestry and logging	Fishing	Hunting and trapping	Forestry support services	Agriculture and fishing support services
Arabic	24	214	53	47	12	15	27	3	3	3	4	0	0	3	21
Cantonese	15	466	58	36	12	0	19	0	6	10	3	6	3	3	18
Mandarin	27	189	57	51	21	0	19	0	0	45	8	9	0	9	24
Korean	3	125	131	15	3	0	0	0	0	3	0	3	0	0	57
Croatian	12	86	131	30	16	0	20	0	9	14	4	20	0	0	12
Serbian	18	34	15	14	0	0	22	0	3	0	0	0	0	3	9
Czech	0	6	6	6	0	3	3	0	0	0	0	3	0	0	0
Polish	13	27	15	17	3	9	9	0	0	0	3	0	0	6	3
Greek	40	126	466	67	27	13	62	0	19	17	9	18	0	9	26
Italian	173	728	1779	665	552	213	89	0	22	10	22	52	3	10	99
Macedonian	11	105	61	17	20	0	7	0	0	0	0	0	0	0	18
Maltese	28	304	28	42	61	8	141	0	31	0	3	0	3	3	9
Punjabi	26	91	443	6	25	10	12	0	3	0	0	0	0	0	18
Vietnamese	52	990	259	53	30	6	28	0	9	3	0	21	0	0	53
Khmer	106	254	137	9	0	0	18	0	0	0	0	3	0	3	38
Indonesian	9	31	17	13	6	3	4	0	3	7	3	3	0	0	18
Balinese	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thai	27	59	47	18	6	3	5	0	3	3	0	6	0	0	6
German	34	60	123	210	17	42	28	0	29	14	23	6	0	9	27
Dutch	81	58	38	94	7	102	19	0	27	0	3	6	0	3	12
All other	269	830	1323	1181	172	179	306	6	162	92	135	56	9	56	333
Total CALD	968	4783	5187	2591	990	606	838	9	329	221	220	212	18	117	801

Table 12: CALD employed in AFF by sex

Gender	Males	Females
Total	11 348	6542

Table 13: CALD and non- CALD employed in AFF by sex

	CALD	Non-CALD
Male	11 348	173 412
Female	6 542	75 570
% Male	63.4	69.6
% Female	36.6	30.4

Table 14: Select CALD employed in AFF by sex

CALD select	Male	Female	Total
Arabic	359	70	429
Cantonese	379	276	655
Mandarin	252	207	459
Korean	219	121	340
Croatian	211	143	354
Serbian	66	52	118
Czech	15	12	27
Polish	49	56	105
Greek	598	301	899
Italian	3117	1300	4417
Macedonian	139	100	239
Maltese	410	251	661
Punjabi	363	271	634
Vietnamese	953	551	1504
Khmer	341	227	568
Indonesian	60	57	117
Balinese	0	0	0
Thai	51	132	183
German	359	263	622
Dutch	271	179	450
Selected CALD total	8212	4569	12 781
All other languages including not stated	3136	1973	5109
Total CALD	11 348	6542	17 890

Figure 6: Selected CALD employed in AFF by sex

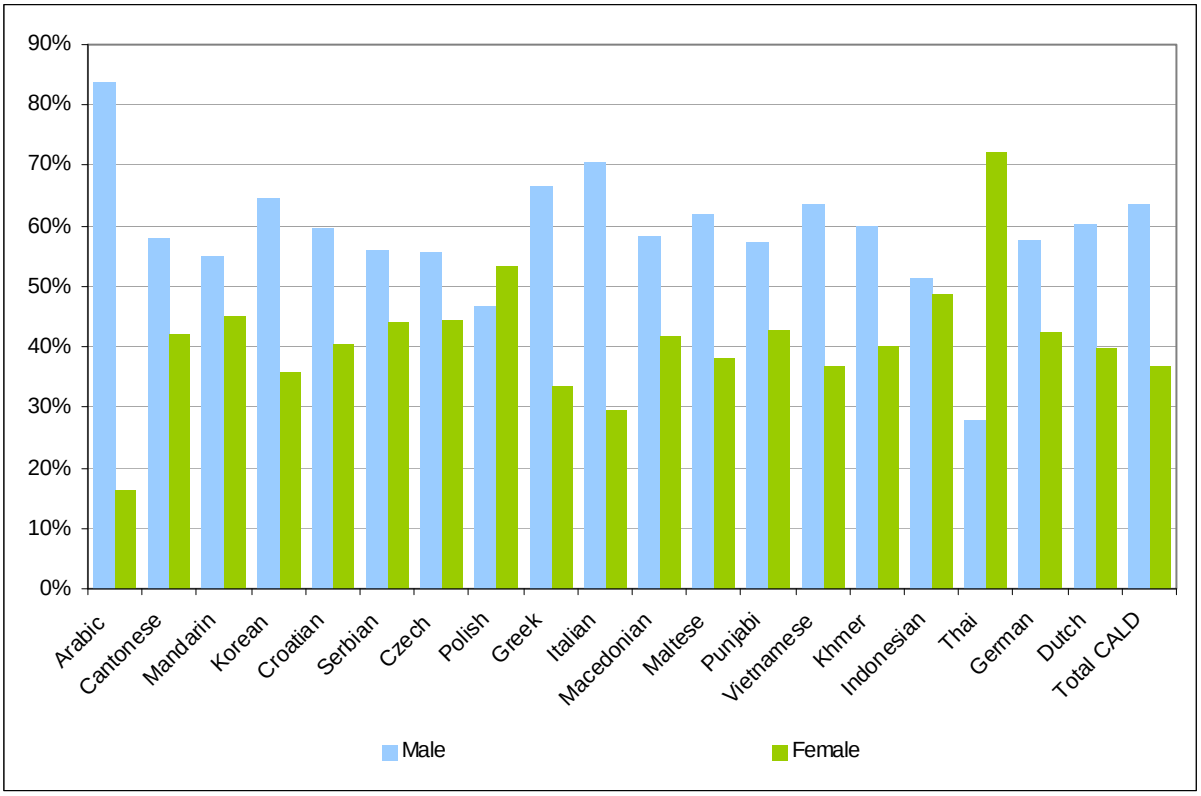


Table 15: CALD employed in AFF by occupation and sex

Occupation	Gender	% of CALD persons within total CALD	% non-CALD persons within total non-CALD
Managers	Male	68.3	70.5
	Female	31.7	29.5
Professionals	Male	67.8	72.3
	Female	32.2	27.7
Technicians and Trades Workers	Male	74.1	81.6
	Female	25.9	18.4
Community and Personal Service Workers	Male	50.0	32.5
	Female	50.0	67.5
Clerical and Administrative Workers	Male	13.3	10.0
	Female	86.7	90.0
Sales Workers	Male	51.8	61.0
	Female	48.2	39.0
Machinery Operators And Drivers	Male	82.8	94.6
	Female	17.2	5.4
Labourers	Male	54.7	70.1
	Female	45.3	29.9

Table 16: CALD employed in AFF by occupation

Occupation (ANZSCO, 2006)	Total CALD
Managers	10 413
Professionals	354
Technicians and Trades Workers	637
Community and Personal Service Workers	30
Clerical and Administrative Workers	427
Sales Workers	85
Machinery Operators And Drivers	477
Labourers	5272
Not stated & Inadequately described	195
Total	17 890

Appendix 2: Methods

This study consisted of three phases focusing on cultural and linguistic diversity in agriculture, fisheries and forestry:

Phase 1: a review of research and literature

Phase 2: analysis of secondary data

Phase 3: primary data collection and analysis through semi-structured interviews.

Literature review (Phase 1)

The literature review drew on existing papers, reports and publicly available information about cultural diversity in agriculture, fisheries and forestry industries in Australia. Information retrieval focused on:

- internet searches (ANU; State Departments)
- academic journals / previous literature reviews
- research reports and publications
- key documents and reports provided by DAFF (e.g. EMD Multicultural Marketing and Management Agriculture – Advancing Australia).

Search terms used included: Culturally and linguistically diverse; Non-English Speaking background; agricultural / agriculture; primary producers; farmers; horticulture; peri-urban; small landholder; fruit and vegetable growers.

Secondary data analysis (Phase 2)

The purpose of Phase 2 of the study was to analyse nationally available representative data sets to identify:

- the distribution (geographically and within industries) of people from a CALD background in primary industries (agriculture, fishing and forestry)
- the number of people from CALD backgrounds in decision-making positions within primary industry organisations (occupational classification).

Data from the 2006 Australian Bureau of Statistics (ABS) Census of Population and Housing (2006) were used to identify CALD persons participating in agriculture, fisheries and forestry industries. For the purpose of this study, the CALD population of interest was identified using the ABS coding classification of Language Spoken at Home (LANP). Under the LANP classification, three fields of data were selected to represent CALD groups, these are:

- 20 select languages (see Table 17)
- all other languages other than English including ‘not stated’
- only speak English at home.

Table 17: Secondary data specifications

Variable	ABS data classifications
Selected CALD	**Language Spoken at Home (LANP)** Arabic, Cantonese, Mandarin, Korean, Croatian, Serbian, Czech, Polish, Greek, Italian, Macedonian, Maltese, Punjabi, Vietnamese, Khmer, Indonesian, Balinese, Thai, German, and Dutch.
All other CALD	**Language Spoken at Home (LANP)** All other languages other than English including Australian Indigenous languages.
Non-CALD	**Language Spoken at Home (LANP)** Only speak English at home.
Agricultural industries	**ANZSIC (2006)** Agriculture (Nursery and floriculture mushroom and vegetable growing, fruit and nut tree growing, sheep, beef cattle farming and grain farming, other crop growing, dairy cattle farming, poultry farming, deer farming, other livestock, services to agriculture). Forestry and logging (Forestry, logging, services to forestry). Commercial fishing (Marine fishing and aquaculture).
Agricultural occupations	**ANZSCO (2006)** Managers, professionals, technicians and trade workers community and personal service workers, clerical and administrative, sales workers, machinery operators and drivers and labourers.
Geography	**ASGC (2006)** All Statistical Local Areas. Capital city Statistical Divisions.

Primary data collection and analysis through semi-structured interviews (Phase 3)

This phase of the project addressed all objectives using an exploratory qualitative approach. Data was collected using semi-structured interviews conducted by phone and face-to-face. Key informants were selected to obtain a range of stakeholder perspectives from government to industry across Australia.

Interviews were conducted with 19 key informants who are directly involved in engaging with CALD groups. These informants came from:

- government (federal and state/territory)
- industry associations (state and peak bodies)
- grower groups
- researchers
- rural service providers (e.g. financial counselling, training providers)
- multicultural councils and representative agencies (regional, state and national).

Table 18: Key informants

Key informant categories	Contribution to research outcomes
National agricultural, fish and forestry bodies and agency representatives. (for example DAFF (AQIS, PIAPH), Horticulture Australia Limited, Meat & Livestock Australia, NFF, FECCA, AFMA)	• Understand the degree and role of representation and membership of CALD groups in decision-making positions within primary industry organisations. • Level of engagement of primary industry organisations with CALD groups. • Barriers and opportunities for engaging with CALDS groups. • Programs currently running to engage CALD groups in decision-making. • Perspectives of relationships with government (government seeking to engage or CALD groups' knowledge of government functions). • Principles of engagement with CALD groups on issues affecting them and Australian society.
State agency representatives. (for example extension officers, program and service delivery officers, communication and liaison officers, people working directly with CALD growers and grower groups)	
Representatives of ethnic growers' organisations. (for example Chinese Growers Association, Arabic/Lebanese Growers Association, Cambodian Growers Association, Virginia Growers Group)	

Table 19: Key informant categories

Stakeholder category	Institution/role	Number of key informants
Government official	State government Quasi state government Federal government	6
Industry representative	Industry association Grower Industry peak body	8
Non-government rural consultant	Consultant	3
Research officer	Researcher	2