



**Australian Government**  
**Australian Communications  
and Media Authority**

---

Australia's regulator for broadcasting, the internet, radiocommunications and telecommunications

[www.acma.gov.au](http://www.acma.gov.au)

---

# Telecommunications Today

## Report 3: Farming sector attitudes to take-up and use

© Commonwealth of Australia 2008

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Manager, Communications and Publishing, Australian Communications and Media Authority, PO Box 13112 Law Courts, Melbourne Vic 8010.

Published by the Australian Communications and Media Authority

Canberra Central Office  
Purple Building, Benjamin Offices  
Chan Street, Belconnen  
PO Box 78  
Belconnen ACT 2616  
Tel: 02 6219 5555  
Fax: 02 6219 5200

Melbourne Central Office  
Level 44, Melbourne Central Tower  
360 Elizabeth Street, Melbourne  
PO Box 13112 Law Courts  
Melbourne Vic 8010  
Tel: 03 9963 6800  
Fax: 03 9963 6899  
TTY: 03 9963 6948

Sydney Central Office  
Level 15, Tower 1 Darling Park  
201 Sussex Street, Sydney  
PO Box Q500  
Queen Victoria Building NSW 1230  
Tel: 02 9334 7700, 1800 226 667  
Fax: 02 9334 7799



# Contents

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. METHODOLOGY .....</b>	<b>2</b>
<b>3. RESULTS .....</b>	<b>5</b>
3.1 Overview of farming sector take-up and use of telecommunications services.....	5
3.2 Voice services.....	5
3.2.1 Take-up of voice services .....	5
3.2.2 Use of mobile phone services .....	6
3.2.3 Attitudes to mobile phone use.....	8
3.3 Data services.....	9
3.3.1 Take-up of internet services.....	9
3.3.2 Use of data services .....	12
3.3.3 Attitudes towards data service use .....	16
<b>4. CONCLUSIONS .....</b>	<b>17</b>





# 1. Introduction

This study presents the findings of quantitative (consumer survey) and desk research into consumer attitudes in the Australian farming sector to the take-up and use of telecommunications services. This consumer sector is the subject of a separate report due to its unique nature—a farm is both a business and a household, and telecommunications services are used interchangeably for both purposes.

This is the third report in the *Telecommunications Today* series and results from earlier reports in the series are cited throughout.

This study has three main objectives:

1. To identify the levels of take-up and use of various telecommunications services by the farming sector.
2. To explore consumer attitudes in the farming sector to voice and data services.
3. To ascertain how location, farming sector and farm size influence consumer take-up and use of telecommunications services.

In investigating these issues, the Australian Communications and Media Authority (ACMA) is also seeking to gain an understanding of the adequacy and significance of specific telecommunications services to the farming sector. ACMA has found there is limited information on the farming sector in Australia, specifically on the take-up and use of voice services. This is reflected in this report.

This research was also undertaken to meet ACMA's statutory reporting requirements under the *Australian Communications and Media Authority Act 2005*, which requires ACMA to report and advise on matters affecting consumers of carriage services, including consumer satisfaction and benefits, and to disseminate consumer demand research into the broader Australian community.

For the purpose of this research the term 'telecommunications' includes all voice (landline telephone, mobile and VoIP) and data services (dial-up and broadband in all its forms such as ADSL, cable, satellite and wireless).

## 2. Methodology

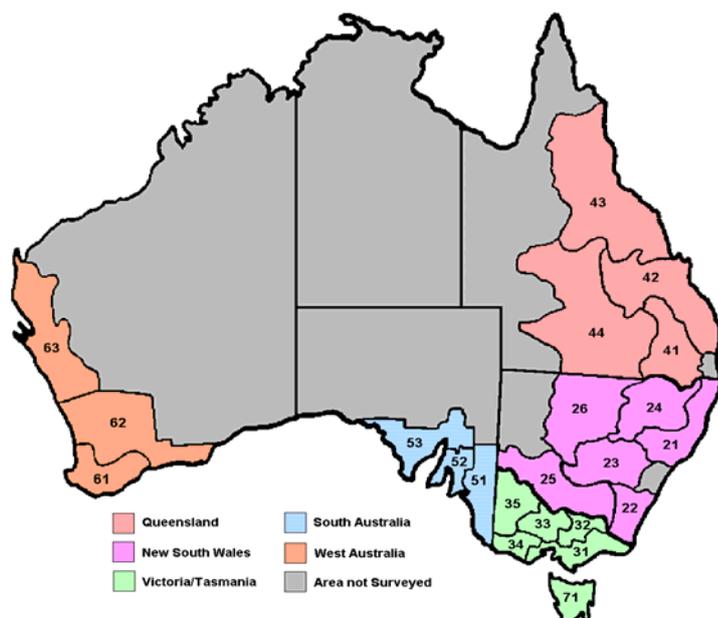
Data within this report is drawn from two data sources: Marketing Solutions' AgScan Survey and Roy Morgan Single Source Survey. This report also cites data from previous reports in the *Telecommunications Today* series.

### Marketing Solutions AgScan survey

ACMA commissioned the consultancy Marketing Solutions to undertake quantitative surveys to explore consumer attitudes in the Australian farming sector to the take-up and use of telecommunications services. The data presented in this report was collected via AgScan, a quarterly telephone survey of approximately 2,000 farmers across the major agronomic regions in Australia.

The sample was stratified by farm type and farm size to be statistically representative of farms at a national and state level, with additional geographical analysis at AgScan survey zones (see Figure 1). The size of the farm sample for each region is shown.

**Figure 1: AgScan survey zones**



The data in this report was collected from two quarterly telephone surveys:

- October 2006: 3 October to 5 November; and

- April 2007: 5 April to 2 May.

The sample was limited to farms greater than 100 hectares in all categories except dairy and sugar cane. The following farm types were included (based on the Australia New Zealand Standard Industrial Classification or ANZSIC system):

- cereal;
- sheep and cereal;
- beef and cereal;
- sheep and beef;
- sheep;
- beef;
- dairy;
- sugar cane; and
- cotton.

All results are weighted to reflect national population data sourced from the Australian Bureau of Statistics (ABS).

### **Roy Morgan Single Source**

The Roy Morgan Single Source is a survey of individual consumers aged over 14 years. Data for the period July 2006 to June 2007 is presented and includes respondents who indicated they work within the agricultural industry, including those who own a farm.

### **Woolcott Research**

ACMA commissioned the consultancy Woolcott Research to undertake research for the first report in this series, *Telecommunications Today: Consumer Attitudes to take-up and use*.<sup>1</sup> This included a series of qualitative focus groups and in-depth interviews, as well as a national quantitative survey.

The qualitative phase was made up of 12 focus group discussions in five locations, as well as eight in-depth interviews in remote areas. The focus group discussions were conducted among residential household consumers selected on the basis of age (18+) and a self-measure of technological literacy or confidence. Focus group respondents were recruited from a random sample, with each group containing between eight and ten participants.

The quantitative phase consisted of a representative quantitative telephone survey of 1,600 respondents. The electronic WhitePages® was used as the sampling frame for Australian households and the interviews were undertaken using Computer Assisted Telephone Interviewing (CATI). All respondents were aged over 18 and screened to ensure they were the main or joint decision maker in relation to at least one household telecommunications service.

---

1 For further methodological detail, refer to Australian Communications and Media Authority (September 2007), *Telecommunications Today – Report 1: Consumer attitudes to take-up and use*, [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_9058](http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058).

## Other sources of information

This report is supplemented and supported by information from the following sources:

- Australian Communications and Media Authority, *Telecommunications Today – Report 1: Consumer attitudes to take-up and use*, September 2007.
- Australian Communications and Media Authority, *Telecommunications Today – Report 2: Take-up and use by small and medium enterprises*, December 2008
- Australian Bureau of Statistics, *Use of Information Technology on Farms*, cat. no. 8150.0 (series runs from 1998–99 to 2004–05).
- Department of Agriculture, Fisheries and Forestry, *Young Farmers’ Information Needs*, December 2005.
- Department of Communications, Information Technology and the Arts, *Broadband in Regional Australia: Making a difference*, April 2007.

## Research considerations

### Definitions

A number of different data sources have been analysed and reported throughout this report. To assist with ease of reading and interpretation of the results, farm survey respondents from all data sources have been referred to as ‘farming respondents’, ‘the farming sector’ or ‘farms’. Refer to Table 1 for full definitions.

**Table 1: Survey reference definitions**

Source	Reference	Definition
AgScan	‘Farming respondents’ or farming sector’ or ‘farms’	All farms greater than 100 hectares.
Roy Morgan	‘Farming respondents’ or farming sector’ or ‘farms’ Non-farming respondents	Respondents who indicated they work within the agricultural industry, including those who own a farm. All respondents excluding those who work within the agricultural industry.
Woolcott Research	Overall household respondents	All residential households with a landline telephone.

### Sample size

While all results within this research are statistically significant, the sample size limits any further analysis by smaller sub-groups, for example data at state level.

### Rounding

Discrepancies may occur between the sums of the component items and totals due to the effects of rounding.

## 3. Results

### 3.1 Overview of farming sector take-up and use of telecommunications services

The farming sector is generally well connected, with take-up figures similar to overall household figures. However, the farming sector is unique in that farms are both the workplace and the home for many farmers. This drives the take-up and use of communications services and research has shown farmers have a greater reliance on communications tools for business purposes, with nearly half of farmers using their mobile for personal and business purposes and nearly all farmers using their internet connection for personal and business purposes.

The results in this report show that perceptions of limited availability of communications services were reported more frequently in farming areas than for overall households. Research indicated a continuing reliance on dial-up internet services reflecting the perception of limited availability of terrestrial broadband services and the relatively higher cost of the alternative satellite broadband services. This is further supported by the wide use of satellite broadband technology on farms, with nearly half of farms using a satellite broadband connection.

### 3.2 Voice services

#### 3.2.1 Take-up of voice services

The research results indicate that overall the landline and mobile phone are regarded as an essential part of farmers' lives. Almost all respondents had a landline connection and four out of five farm respondents (85 per cent) indicated that they use a mobile phone. These results are similar to overall household take-up figures,<sup>2</sup> which indicate that 87 per cent of respondents use a mobile phone (see Figure 2).

Mobile phone use was highest among farmers in Western Australia (91 per cent) and South Australia (89 per cent) and lowest among those in Tasmania (79 per cent) and Queensland (81 per cent). Mobile phone take-up also differed by farm size and sector, with cotton farms (98 per cent), cereal farms (95 per cent) and farms over 800 hectares (91 per cent) more likely to use a mobile phone. It should be noted that 88 per cent of cotton farms and 71 per cent of cereal farms are over 800 hectares. Conversely, respondents with beef and sheep

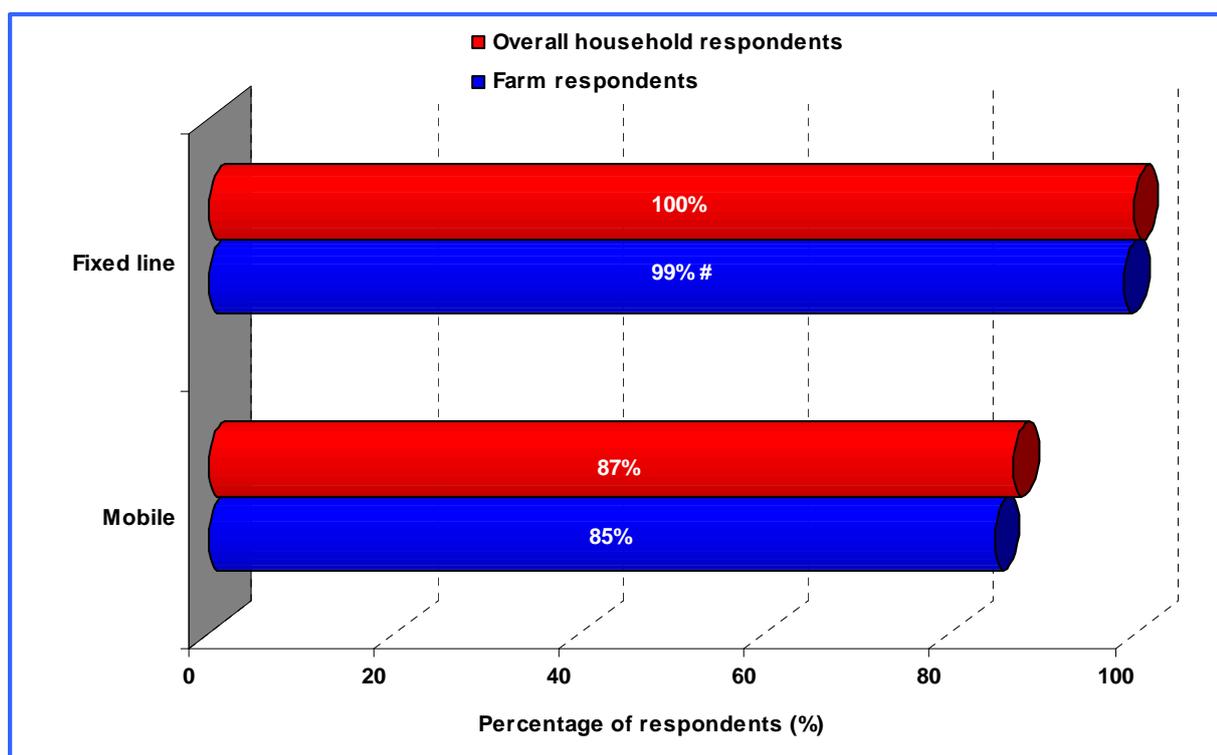
---

<sup>2</sup> Australian Communications and Media Authority (September 2007), *Telecommunications Today – Report 1: Consumer attitudes to take-up and use*, [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_9058](http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058).

farms (80 per cent) or farms less than 400 hectares (80 per cent) were less likely to have a mobile phone.

This is consistent with other Marketing Solutions research, which indicates that cotton farms have led the way in the adoption of technology in the farming sector. Technology has helped manage the high-resource input needed for this high-gross-margin crop. For example, the internet has been used for water management, pest control and harvest and crop yield monitoring. Other intensive farms such as specialist cereal farms have also followed this technology-adoption trend. Western Australian farms, 73 per cent of which are over 800 hectares, have also adopted technology to assist in the management of large areas.

**Figure 2: Take-up of telecommunications services.**



Source: AgScan, April 2007, all respondents (n=1,738) & Woolcott, April 2007 (n=1,600). Results of the Woolcott survey are published in Australian Communications and Media Authority (September 2007), *Telecommunications Today: Consumer attitudes to take-up and use*. # Note: The other 1% of landline phones could be attributed to satellite telephone or VoIP

### 3.2.2 Use of mobile phone services

Farm respondents were asked about mobile phone usage. The results indicated there was little difference between farm and non-farm respondents in terms of the types of calls made (see Table 2).

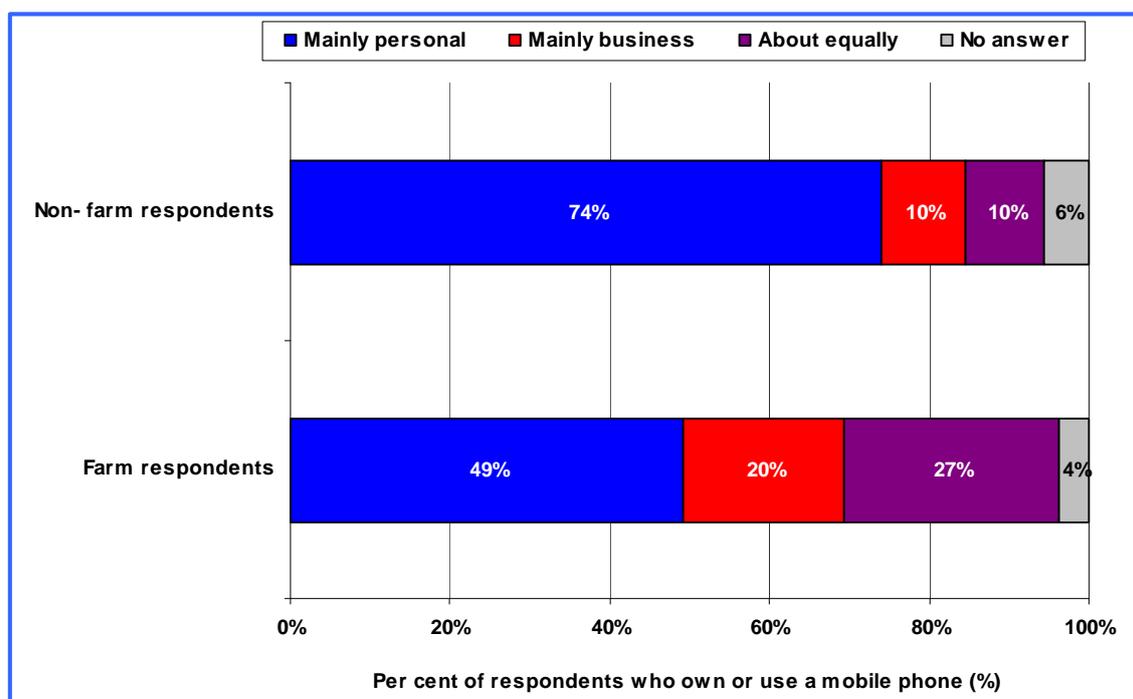
**Table 2: Use of mobile phone services**

	Farm respondents	Non-farm respondents
Made calls to mobiles	82%	80%
Made local calls	73%	69%
Received SMS	68%	74%
Sent SMS	64%	70%
Received voice mail	37%	32%
Made interstate calls	20%	17%
Entered a competition or voted using SMS	8%	11%
Did not use mobile phone in the last four weeks	5%	5%
Made overseas calls	5%	6%

Source: Roy Morgan Single Source, July 2006–July 2007, total aged 14+ main user of a mobile phone that indicated they worked in the agricultural industry (n=385) & total aged 14+ main user of a mobile phone excluding those that indicated they worked in the agricultural industry (n=17,632)

Farm respondents were less likely to use mobile phone functions such as watching television and accessing the internet. Fifty-three per cent of farm respondents had used these services in the past year compared with 60 per cent of overall respondents. The most popular services and functions used by both the farm and non-farm respondents were taking photos or videos, instant messaging and gaming.

Although there was little difference in type of call, there was a big difference in the stated purpose of mobile phone use, with nearly half of farm respondents using their mobile phone mainly for business or for personal and business use equally. This compares with only 20 per cent of non-farm respondents using their mobile phone mainly for business or for personal and business use equally, as shown in Figure 3.

**Figure 3: Use of mobile phones for business and personal use**

Source: Roy Morgan Single Source, July 200–June 2007, total aged 14+ main user of a mobile phone excluding those that indicated they worked in the agricultural industry (n=17,632) & total aged 14+ main user of a mobile phone that indicated they worked in the agricultural industry (n=385)

### 3.2.3 Attitudes to mobile phone use

Respondent attitudes to mobile phone usage differed significantly between farm and non-farm respondents. In general, farm respondents emphasised the importance of their mobile phone for work purposes, as well as highlighting issues with mobile phone network coverage, whereas non-farm respondents indicated a higher degree of dependence on mobile phones for social life and security. The statements in Table 3 were highlighted in the survey:

**Table 3: Consumer attitudes to mobile phones**

% Agree with statement	Farm respondents	Non-farm respondents
<b>Work and business purposes</b>		
I need a mobile phone to juggle my work and personal life	51%	38%
I need to be contactable at all times for work	52%	37%
If I didn't have to carry my mobile phone for work I would not have one	19%	11%
<b>Availability</b>		
My job often takes me outside of mobile phone network range	47%	12%
<b>Security</b>		
I want members of my family to carry a mobile phone for security reasons	62%	69%
I need a mobile phone for my personal security	47%	61%
<b>Social life</b>		
I enjoy people contacting me on my mobile phone	47%	56%
I need a mobile phone to help me co-ordinate my social life	28%	34%

Source: Roy Morgan Single Source, July 2006–July 2007, total aged 14+ main user of a mobile phone that indicated they worked in the agricultural industry (n=385) & total aged 14+ main user of a mobile phone excluding those that indicated they worked in the agricultural industry (n=17,632)

Age had an impact on farmer attitudes to mobile phones. Younger farm respondents' views are more closely aligned with those of non-farm respondents and they are significantly more dependent on their mobile phone for security and for social life than older farm respondents, as shown in Table 4. However, they are still more likely to rely on their mobile phone for business purposes than non-farm respondents.

**Table 4: Consumer attitudes to mobile phone by age**

Farm respondents	14–24	25–49	Over 50
I love being able to contact my friends wherever I am	100%	70%	39%
I need a mobile phone for personal security	73%	44%	47%
I enjoy people contacting me on my mobile phone	71%	53%	30%
I need a mobile phone to help me co-ordinate my social life	63%	34%	7%

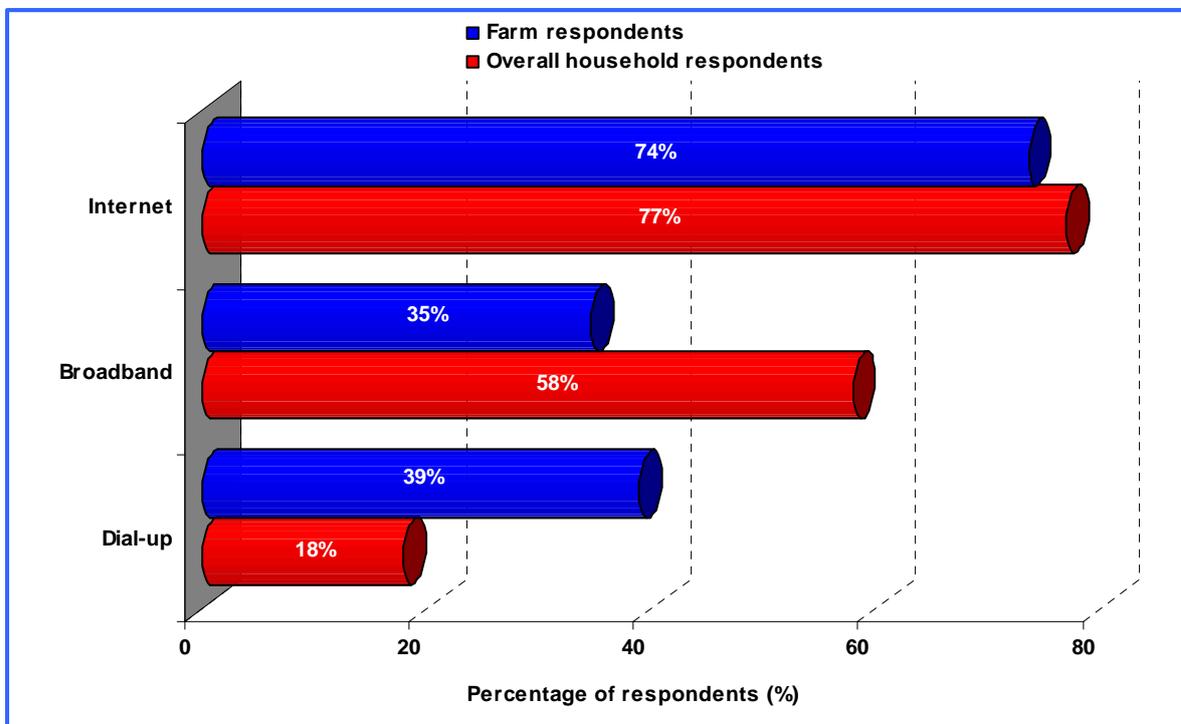
Source: Roy Morgan Single Source, July 2006–June 2007, total aged 14+ main user of a mobile phone that indicated they worked in the agricultural industry (n=385)

## 3.3 Data services

### 3.3.1 Take-up of internet services

The ABS *Patterns of Internet Access in Australia*<sup>3</sup> report found that 63 per cent of households had an internet connection at August 2006 and 40 per cent had a broadband connection. This ABS report did not undertake any detailed sector analysis hence ACMA commissioned Agscan to undertake research to understand internet take-up and use in the farm sector. This research provided a snapshot of internet take-up at April 2007 and indicated that three-quarters of farm respondents were connected to the internet. However, as shown in Figure 4, farm respondents were more likely to have a dial-up connection than overall household respondents, as reported in the first report in the *Telecommunications Today*<sup>4</sup> series, and subsequently less likely to have a broadband connection.

**Figure 4: Take-up of internet services**



Source: AgScan, April 2007, all respondents (n=1,738) & Woolcott, April 2007 (n=1,600). Results from the Woolcott survey published in Australian Communications and Media Authority (September 2007), *Telecommunications Today: Consumer attitudes to take-up and use*.

Overall, farm respondents with the highest internet take-up were based in Western Australia (78 per cent) or South Australia (77 per cent), were intensive crop farms, particularly cotton farms (93 per cent), or were farms over 2,000 hectares (86 per cent). Farm respondents least likely to be connected to the internet were based in Tasmania (63 per cent), were livestock farms, particularly beef (67 per cent) and sheep (66 per cent), or were farms under 400 hectares (66 per cent).

These demographics differed depending on internet connection type; farms with broadband were more likely to be located in New South Wales (53 per cent), cotton farms (58 per cent)

<sup>3</sup> Australian Bureau of Statistics (November 2007), *Patterns of internet access in Australia*, cat. no. 8146.0, ABS, Canberra.

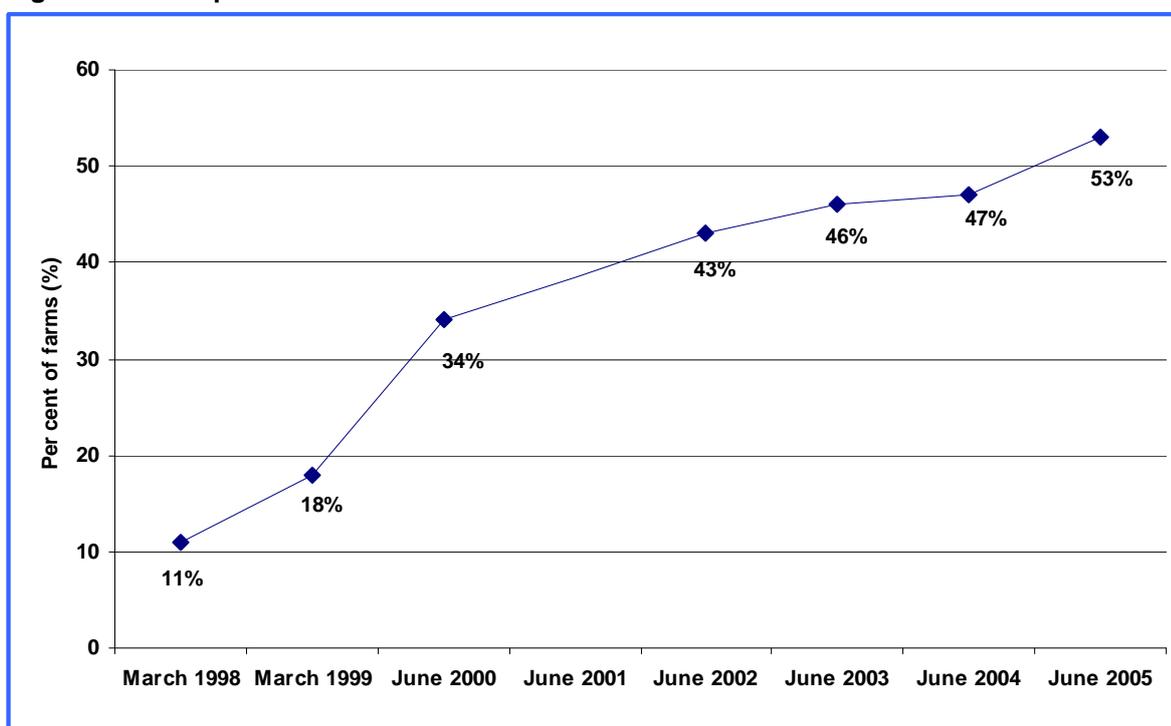
<sup>4</sup> Australian Communications and Media Authority (September 2007), *Telecommunications Today: Consumer attitudes to take-up and use* [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_9058](http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058).

or 2,000 hectares or more (63 per cent). In contrast, farms with dial-up or ISDN connections were more likely to be in Tasmania (70 per cent), beef and cereal farms (55 per cent) or between 400 and 799 hectares (55 per cent).

Data from the ABS report *Use of Information Technology on Farms*<sup>5</sup> supports these results, indicating that at June 2005 farms with the highest internet take-up were in Western Australia, cotton farms or larger farms. The farms least likely to have an internet connection were again those located in Tasmania, beef farms or smaller farms. It should be noted that 78 per cent of farms in Western Australia are over 800 hectares and 73 per cent of farms in Tasmania are under 400 hectares.

Figure 5 tracks the farm take-up of internet services since March 1998, based on the ABS survey series.

**Figure 5: Take-up of internet services for business use**



Source: Australian Bureau of Statistics; data for March 1998–June 2002 refers to all farms with access to the internet; data from June 2003–June 2005 refers to all farms with access to the internet for business operations.

The ABS started collecting broadband figures for the farming sector in June 2005 and results indicated that 9 per cent of all farms had a broadband connection for business operations. AgScan data shows that broadband connections have increased significantly since June 2005. This is supported by survey findings indicating that over half of farm respondents with broadband (56 per cent) have had a connection for a year or less, 24 per cent for one to two years and only 19 per cent for more than two years.

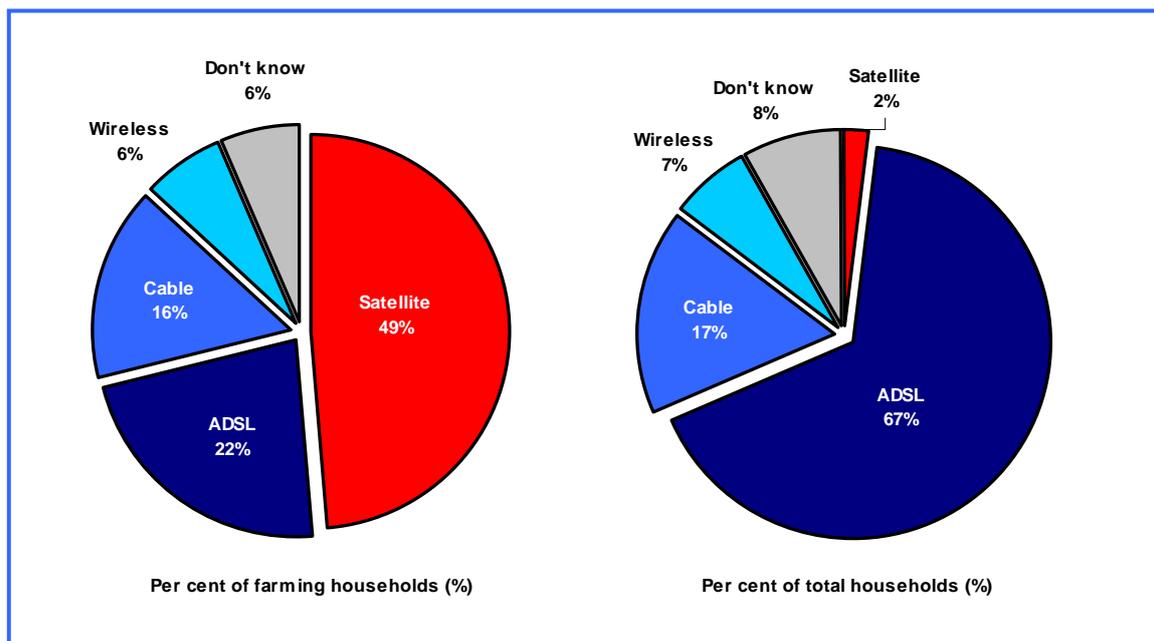
<sup>5</sup> Australian Bureau of Statistics (June 2005), *Use of Information Technology on Farms*, cat. no. 8150.0, ABS, Canberra.

## Type of broadband connection

Of farm respondents with an internet connection, just under half (47 per cent) had a broadband connection. This compares with nearly three-quarters of overall household respondents indicating they had a broadband connection.

As indicated in Figure 6, the type of broadband connection differed significantly between the farm sector and overall households, with farm respondents significantly more likely to have satellite connection and overall household respondents more likely to have an ADSL connection.

**Figure 6: Broadband take-up**



Source: AgScan, April 2007, all those with an broadband connection (n=647) & Woolcott April 2007, all those with a broadband connection (n=796)

For farm respondents, in all states, apart from Victoria, satellite was the most common connection type, accounting for around three-quarters of broadband connections in Western Australia and Tasmania. In other states, satellite connections still accounted for around 50 per cent of broadband connections; however, ADSL and cable were also common in these states as outlined in Table 5. It should be noted that the findings presented are based on respondent perceptions of type of broadband service used and therefore there is a possibility of confusion between cable and ADSL services, that is, the presence of copper pairs used to deliver ADSL may be regarded by the respondent as 'cable' when this category is intended to reflect HFC (hybrid fibre coaxial) cable.

**Table 5: Broadband type by state**

	Total	NSW	Qld	SA	Tas	Vic	WA
Satellite	49%	52%	55%	49%	78%	28%	70%
ADSL	22%	23%	17%	19%	11%	31%	13%
Cable broadband	16%	16%	16%	17%	0%	20%	4%
Wireless	6%	3%	4%	11%	11%	10%	9%

Source: AgScan, April 2007, all those with broadband connection (n=647)

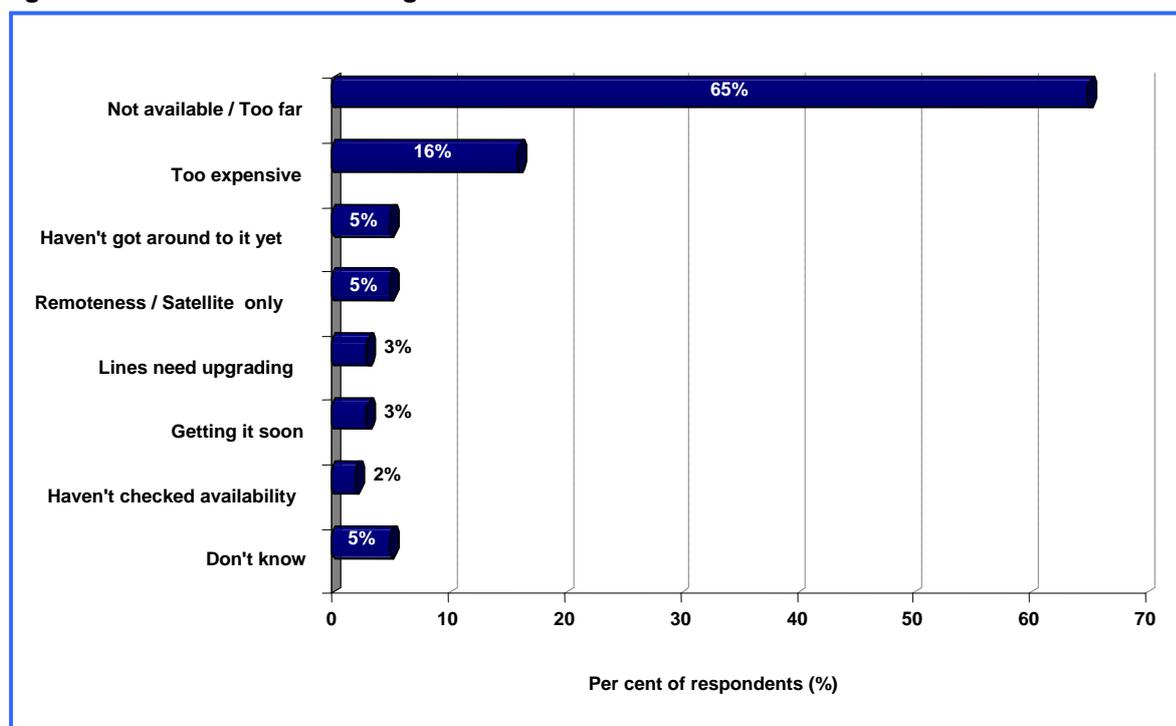
Farming sector also had an impact on the type of broadband connection. Cotton farms were significantly more likely to have a satellite connection (87 per cent of broadband

connections), while sugar cane and dairy farms were more likely to have either an ADSL or cable connection. Size of farm was also relevant to the type of broadband connection. The larger the farm the more likely it was to have a satellite connection; 77 per cent of farms over 2,000 hectares had a satellite connection compared with only 28 per cent of farms less than 400 hectares. Smaller farms were more likely to have ADSL, cable or even a wireless connection. As noted previously, there is a correlation between farm sector and size; the majority of cotton farms are over 800 hectares while the majority of dairy and sugar cane farms are less than 400 hectares (89 per cent and 84 per cent respectively).

### Non-broadband connections

Of farm respondents with a non-broadband connection, over 80 per cent indicated they would prefer broadband. Of these respondents, the main reason reported for not having the service was that there was a perception it was not available in the area or the consumer lived too far away (see Figure 7).

**Figure 7: Reasons for not having broadband**

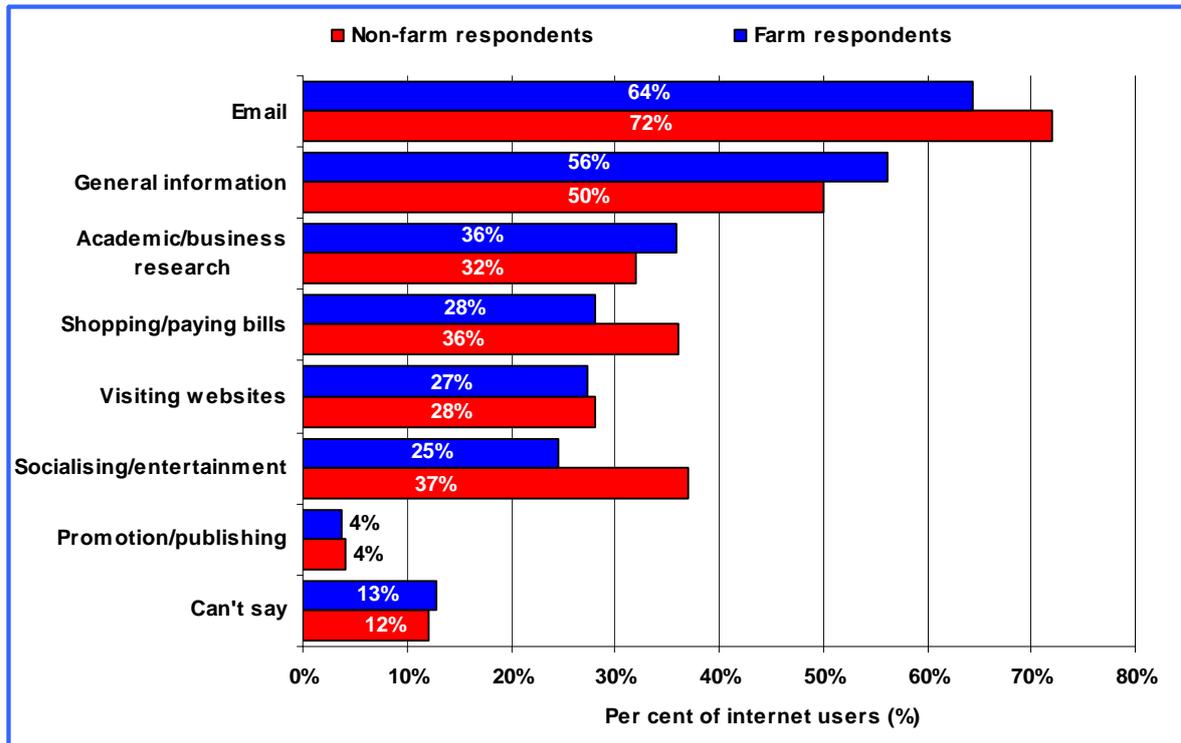


Source: AgScan, October 2006, respondents with non-broadband connection who preferred broadband (n=723)

Note: Percentages do not total 100% due to rounding.

### 3.3.2 Use of data services

Farm respondents were also asked about their internet use. The most common uses indicated were for email and general information searches, as shown in Figure 8. Use differed from non-farm respondents who indicated higher usage of email, shopping/paying bills and socialising/entertainment.

**Figure 8: Main uses of the internet**

Source: Roy Morgan Single Source, July 2006–June 2007, total aged 14+ ever accessed the internet, excluding those that indicated they worked in the agricultural industry ( $n=17,767$ ) & total aged 14+ ever accessed the internet and indicated they worked in the agricultural industry ( $n=373$ )

Although not as common as for non-farmers, nearly a third of farm respondents indicated one of their main uses of the internet was for shopping and paying bills. The survey indicated forty-four per cent of farm respondents had bought products online within the past three months. The most common purchases were travel (30 per cent), books/magazines/newspapers (13 per cent) and CDs/tapes (12 per cent).

Farmers are increasingly using the internet for business purposes. Survey results indicated that 84 per cent used the internet for both business and personal use, 11 per cent used the internet solely for business, and only five per cent used the internet for personal use only. The most common uses were for weather information and banking followed by agricultural and market information, as shown in Table 6. This trend is supported by an ABS survey conducted in 2004,<sup>6</sup> which showed farms rely on the internet for email and obtaining weather information.

<sup>6</sup> Australian Bureau of Statistics (June 2004), *Use of Information Technology on Farms*, cat. no. 8150.0, ABS, Canberra.

**Table 6: Farm business use of the internet**

Use of internet in farming business	Total %
Weather information	47%
Banking	47%
Agricultural information	28%
Market financial information	26%
Livestock and machinery market information	24%
Email	23%
Agronomy information	15%
Selling / Trading	11%
Paying Bills	11%
Purchasing Goods and Services	10%
Education/General Research	8%
Information on world agricultural trends	6%

Source: AgScan, October 2006, respondents with broadband connection, (n=488)

In 2005, the Department of Agriculture, Fisheries and Forestry undertook research on the information needs of young farmers.<sup>7</sup> This highlighted that the most important sources of information for young farmers were web-dedicated agricultural search engines followed by magazines. In terms of information accessed, young farmers placed a high level of importance on market information and weather information. This research also recognised the importance of information with local content, specific to farming regions and relevant to farming sectors.

The former Department of Communications, Information Technology and the Arts (DCITA) also undertook a number of case studies into the use of broadband in regional areas, which highlighted some of the ways broadband has improved business and personal life on farms.<sup>8</sup> Broadband has helped farmers deal with banks more efficiently, provided farms with a competitive advantage, streamlined selling directly to world markets and allowed farmers to access weather updates and news. It also provides a resource for schooling, entertainment and leisure pursuits.

These online business activities are similar to overall SME internet use<sup>9</sup>. The main use of the internet by small and medium enterprises (SMEs) was to communicate via email (87 per cent of SMEs) followed by banking (71 per cent), getting reference information or research data (63 per cent) and looking for information about products and services (61 per cent).

### Frequency of internet use

Survey results indicate that in general farm respondents used the internet less often than non-farm respondents. Of internet users, 32 per cent of farm respondents use the internet more than once a day and 14 per cent use the internet once a day. This compares with 43 per cent

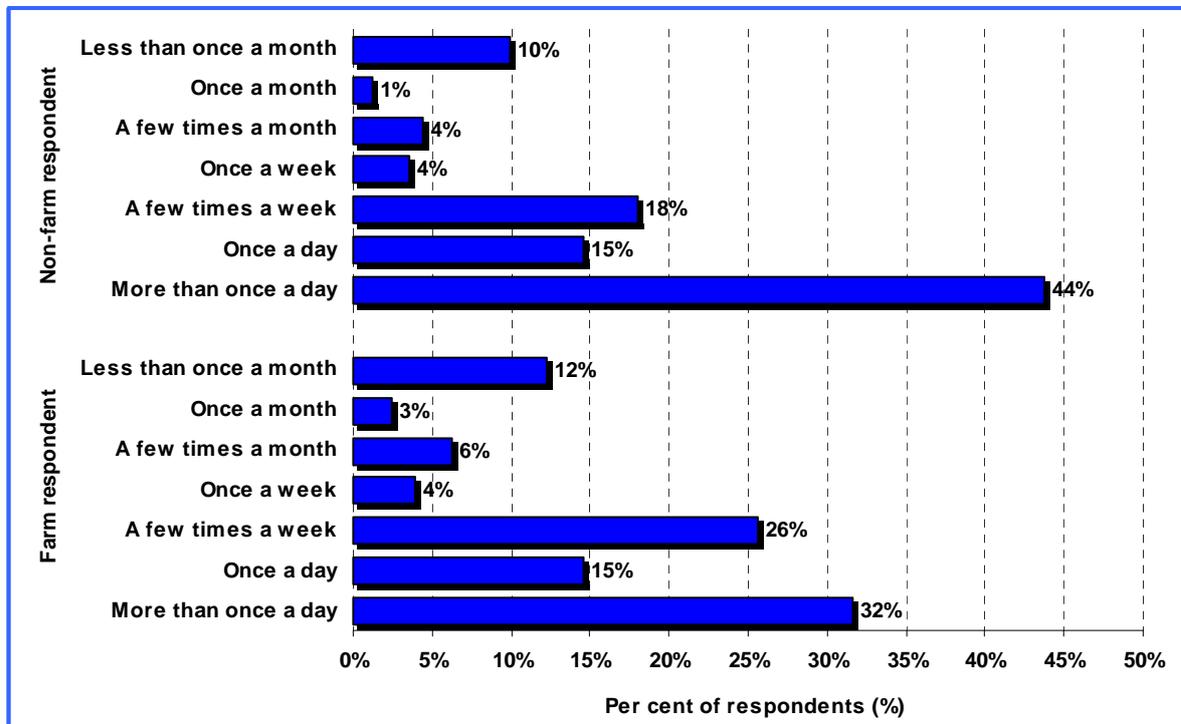
<sup>7</sup> Department of Agriculture, Fisheries and Forestry (December 2005), *Young Farmers' Information Needs*, research conducted by Kondinin Group.

<sup>8</sup> Department of Communications, Information Technology and the Arts (April 2007), *Broadband in Regional Australia: Making a difference*, DCITA, Canberra, [http://www.dbcde.gov.au/\\_\\_data/assets/pdf\\_file/66870/06020040\\_CC\\_CaseStudies\\_web.pdf](http://www.dbcde.gov.au/__data/assets/pdf_file/66870/06020040_CC_CaseStudies_web.pdf).

<sup>9</sup> Australian Communications and Media Authority (December 2007), *Telecommunications Today – Report 2: Take-up and use by small and medium enterprises*, [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_9058](http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058).

of non-farm respondents using the internet more than once a day and 15 per cent using it once a day (see Figure 9).

**Figure 9: Frequency of internet use**

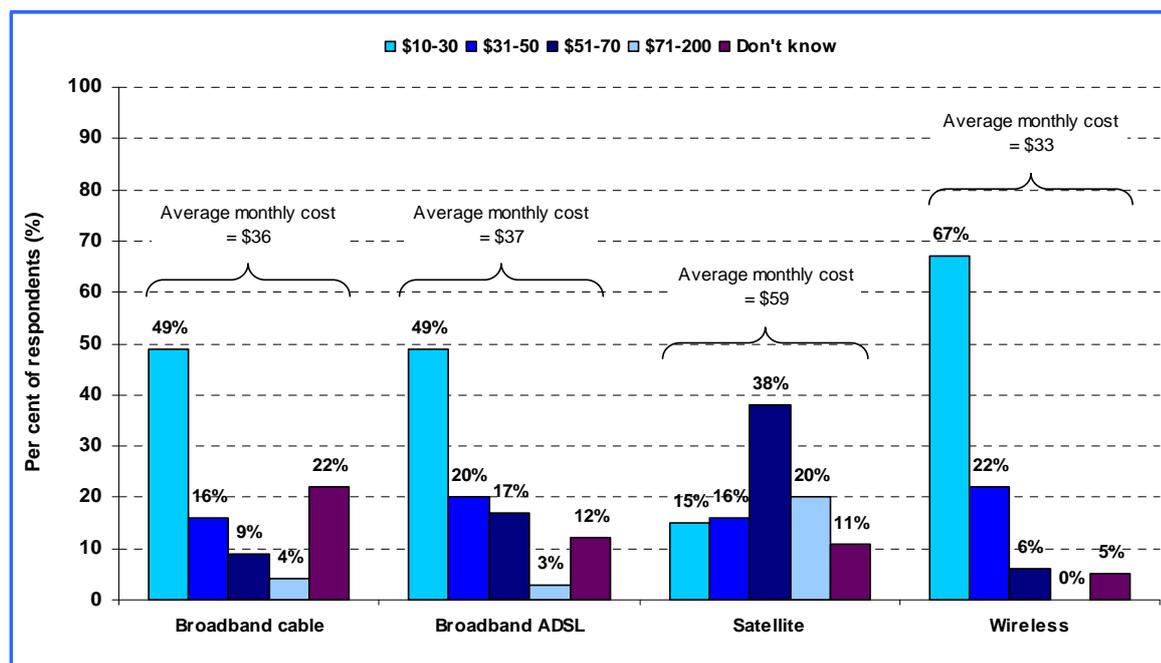


Source: Roy Morgan Single Source, July 2006–June 2007, total aged 14+ ever accessed the internet, excluding those that indicated they worked in the agricultural industry (n=17,767) & total aged 14+ ever accessed the internet and indicated they worked in the agricultural industry (n=373)

### Cost of internet services

Farm respondents were asked about the average monthly cost of their broadband connection (see Figure 10). Respondents reported spending less on wireless, broadband cable and ADSL services than on satellite services. Satellite users reported spending an average of \$59 a month on their satellite service compared with an average of \$36 for cable users, \$37 for ADSL users and \$33 per month for wireless users.

Figure 10: Cost of broadband services



Source: AgScan, October 2006, respondents with broadband connection (n=488)

### 3.3.3 Attitudes towards data service use

Unlike attitudes to mobile phone use, farm respondents' attitudes to the internet are similar to those of non-farm respondents. The most commonly held concerns and attitudes towards the internet were around security and the pace of technological change. These are outlined in Table 7.

Table 7: Consumer attitudes towards the internet

% Agree with statement	Farm respondents	Non-farm respondents
I find technology is changing so fast, it's difficult to keep up with	70%	64%
It's important for me to control appropriate internet content for my family	64%	56%
To me the internet is far more an information tool than an entertainment tool	79%	70%

Source: Roy Morgan Single Source, June 2006–July 2007, total aged 14+ ever accessed the internet and indicated they worked in the agricultural industry (n=373) & total aged 14+ ever accessed the internet, excluding those that indicated they worked in the agricultural industry (n=17,676)

Although there is little difference, farm respondents did have slightly more concerns with appropriate content and the pace of technological change of the internet than non-farm respondents. Farm respondents also recognised that the internet was more than an entertainment tool, probably reflecting their relatively greater dependence on the internet for business use.

## 4. Conclusions

The farming sector is generally well connected, with 85 per cent of farms having access to both a landline and mobile service, and 74 per cent having access to the internet. This is similar to overall household take-up figures.

The farming sector has been reported independently as it not possible to separate the personal and business communication needs of this sector. Farms are both the workplace and the home for many farmers and this drives the take-up and use of communications services. Farmers depend on their communications services—particularly mobile and broadband—for business operations, with nearly half using their mobile for both business and personal calls and 84 per cent using the internet for both business and personal purposes.

The type, size and locality of farms also affect the take-up and use of services. Cotton farms have led the way in the adoption of technology due to the intensive nature of cotton farming—the internet has helped with activities such as water management and crop monitoring. Other intensive farming sectors such as specialist cereal farms have followed this technology-adoption trend. Western Australian farms have also adopted technology faster than other states due to the large areas under management. In general, larger farms are better connected than smaller farms.

There is a perception among the farming sector that there is limited availability of mobile coverage and broadband services, with those without broadband indicating services are not available or that they live too far from an exchange. Therefore there is a greater reliance on dial-up in rural areas and satellite connections are the most popular broadband service, with half of farmers indicating they have a satellite connection. The research also showed that the perceived average monthly spend on satellite is significantly higher than other forms of broadband.

Over the coming months, ACMA intends to publish additional research reports containing further analysis of some of the issues covered in this report. These issues include the level of substitution and complementarity between mobile and landline services, consumer attitudes to and potential take-up of emerging services and new technologies, as well a study on consumer satisfaction with telecommunications services.