



No. 235

Farm Victimisation in Australia

Carlos Carcach

This paper summarises the main results from a national farm crime survey commissioned by the Australian Institute of Criminology (AIC). The survey sought data on experiences of farm crime victimisation in Australia during the period from 1 July 2000 to 30 June 2001.

Twenty-seven per cent of farms were victims of property crime during the survey period. This is almost three times the rate of property crime among Australian households (which is 9.2% according to the latest National Crime Victims Survey published by the Australian Bureau of Statistics in 1998).

The types of crime that affected Australian farms varied in their degree of seriousness, prevalence and incidence. Livestock theft, theft of farm property and damage to farm property had prevalence rates of eight per cent, six per cent and four per cent respectively. The offences of dumping rubbish, trespassing and unauthorised hunting or fishing had prevalence rates of three per cent, 10 per cent and 12 per cent respectively.

About one in three victims reported their last incident of crime to the police. The highest reporting rates were observed for theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce (60%), and livestock theft (47%).

The total loss to farmers from crime was estimated to be \$63 million, or an average \$2,690 per victimised farm. The total net cost of repair, replacement and out-of-pocket expenses after insurance claims was \$8.7 million, or an average \$354 per victimised farm. Livestock theft attracted both the highest losses and the highest net costs to farms, with \$49 million in total losses and \$3.2 million in total net costs.

This is the first national survey of its type in Australia and is part of a three-year project aimed at enhancing our knowledge about crime against farms.

Adam Graycar
Director

This report discusses the main results from the first national survey of farm crime in Australia. It examines the type and extent of property crime being committed on Australian farms that belong to the broadacre and dairy industries. It also examines the impact of property crime on farm businesses, and explores the reasons underlying farmers' decisions to report these crimes to the police.

Empirical evidence about the prevalence and incidence of crime in rural Australia is almost non-existent. The study of property crime against farms is a first step in the process of gaining knowledge about the extent and magnitude of this form of crime, and its effect on the economic and social wellbeing of rural Australia. As in urban areas, property crime against farms may have a very negative effect not only on the economic situation of farmers and their families, but also on the performance of the local economies served by the farms. The development of strategies for the prevention and control of property crime against farms is dependent upon the availability of properly collected empirical data.

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About the 2001 Australian Farm Crime Survey

The Australian Bureau of Agricultural and Resource Economics (ABARE) conducted the 2001 Australian Farm Crime Survey (AFCS) on behalf of the AIC. The survey was a supplement to the Australian Agricultural and Grazing Industries Survey (AAGIS) and the Australian Dairy Industry Survey (ADIS), both conducted by ABARE as part of its annual farm surveys program. The reference period was from 1 July 2000 to 30 June 2001.

The main focus of the survey was crimes occurring on property that belonged to the farm or was directly related to its operation. This included incidents involving property used for work in the main activity of the farm as well as off-farm crimes that impacted on the farm's operation.

Target Population

The target population comprised 86,752 agricultural establishments from the broadacre and dairy industries with an estimated value from agricultural operations of \$22,500 or more per year. The sample was selected from a framework drawn from the Business Register maintained by the Australian Bureau of Statistics (ABS) that includes agricultural establishments classified by size and major industry. Industry definitions were based on the Australian and New Zealand Standard Industrial Classification (ANZSIC).¹

Response Rate

The response rate for the parent surveys was 80 per cent, giving a sample of 1,539 properties, or 1.8 per cent of the total number of farms in the scope of the main surveys (that is, AAGIS and ADIS). Ninety-eight per cent of these farms responded to the crime supplement, resulting in a final sample size of 1,508 farms. The distribution of the population and sample for the 2001 Farm Crime Survey was as follows:

	Population	Sample	Sampling fraction (%)
New South Wales	26,485	367	1.4
Victoria	24,791	300	1.2
Queensland	14,178	318	2.2
South Australia	9,468	203	2.1
Western Australia	9,511	175	1.8
Tasmania	2,119	95	4.5
Northern Territory	200	50	25.0
Australia	86,752	1,508	1.7

Methodology

All interviews were carried out face-to-face, with the survey questionnaire answered by the person deemed to be the operator or manager of the farm.

Offence Types

The survey sought information on the farms' experiences of the following types of crimes between 1 July 2000 and 30 June 2001:²

- livestock theft;
- theft of farm vehicles, farm machinery, tools, spare parts (excluding vehicle or machinery parts), materials or farm produce;
- theft of vehicle or machinery parts;
- damage/vandalism (including arson) to farm dwellings, farm vehicles, farm machinery, farm tools, farm spare parts, farm materials, farm produce or farm goods;
- dumping of rubbish on farm land;
- trespassing on farm land; and
- unauthorised hunting or fishing on farm land.

Estimation

Survey estimates were based on weighted data. Survey weights accounted for the effects of sample selection and non-response to the survey. Two main types of estimate are discussed in this report:

- **Prevalence rates:** The number of farms recording at least one incident of crime as a percentage of total farms. The prevalence rate for the offence of livestock theft or rustling represents the number of farms recording at least one incident of the offence as a percentage of the farms having at least one head of livestock.
- **Police reporting rates:** The number of farms reporting the last incident of an offence to the police as a percentage of all the farms that recorded at least one incident for the same offence.

The Prevalence of Farm Crime in Australia

Twenty-seven per cent, or 23,423 of Australia's 86,752 dairy or broadacre farms, experienced some form of property crime during the period from 1 July 2000 to 30 June 2001. An earlier study (Barclay et al. 2001) found that 68 per cent of farmers in New South Wales were the victims of property crime over a two-year period. A study in Scotland found 32 per cent of farmers reported instances of crime on their farms over a five-year period (The Scottish Office 1999).

The present study found that unauthorised hunting or fishing, trespassing and livestock theft were the offence types with the highest prevalence (Figure 1). The national one-year victimisation rate for livestock theft (eight per 100 farms) was similar to that reported by Barclay et al. (2001, p. 53) in their study of rural crime in New South Wales.

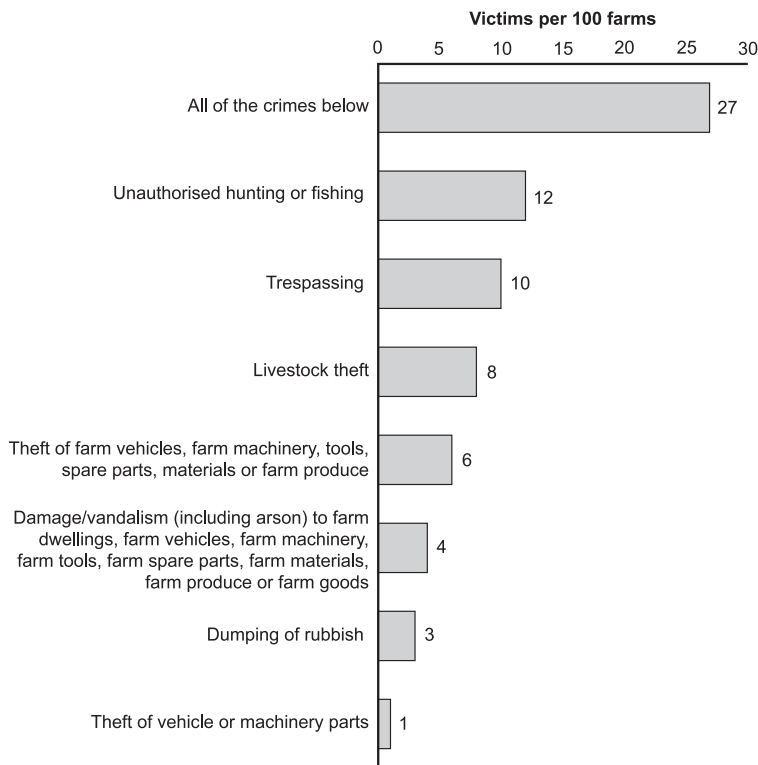
Seriousness of Farm Property Crime

The survey asked a question about farmers' perceptions of how serious each type of farm crime was in their own area. In the farmers' opinion, farm property crime is not a serious issue (Figure 2). These findings are consistent with previous research (The Scottish Office 1999) and suggest that a majority of broadacre and dairy farmers in Australia enjoy a crime-free working environment. However, a significant minority are affected by farm property crime.

Crimes Reported to Police

Overall, 36 per cent of victimised farms reported the last incident of crime to the police. Reporting rates varied across offence types, ranging from a low five per cent

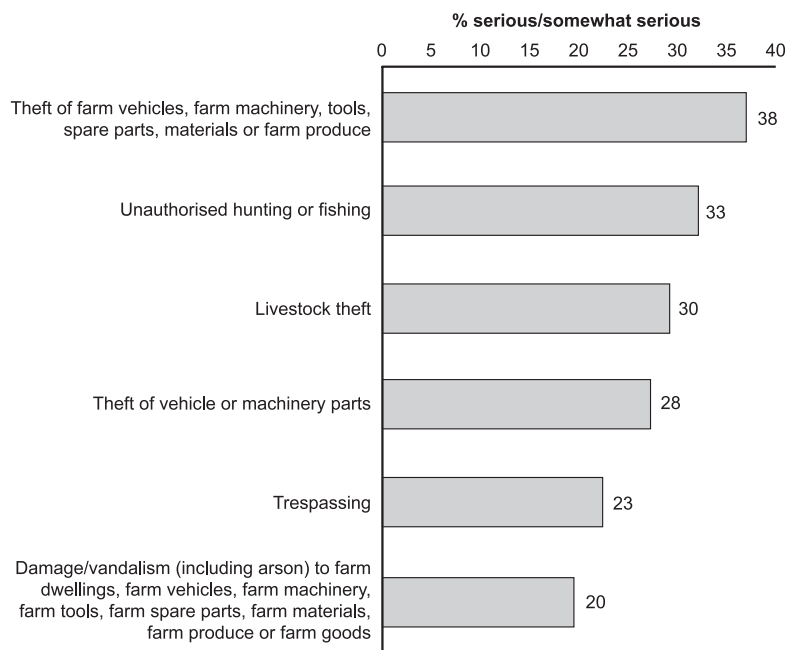
Figure 1: Crime against Australian farms



Note: All the rates have relative standard errors below 25 per cent.

Source: ABARE, Farm Crime Victimization Supplementary Survey 2000–2001.

Figure 2: Percentage rating farm crime in local area as serious or somewhat serious



Note: All the percentages have relative standard errors below 25 per cent.

Source: ABARE, Farm Crime Victimization Supplementary Survey 2000–2001.

for “dumping of rubbish” to a high 60 per cent for “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”. Forty-seven per cent of incidents of livestock theft were reported to the police (Figure 3). These rates are lower than the two-year rates found by Barclay et al. (2001).

An important issue to consider is the propensity of farm crime victims to report offences to police compared with the average urban victim. Of course there are contextual differences underlying urban and farm property crimes. The geographic size of many Australian farms, and their relative isolation from populated areas, may mean that farm operators are not even able to determine whether crimes have taken place. These factors can influence the farmer’s decision to report a crime to the police.

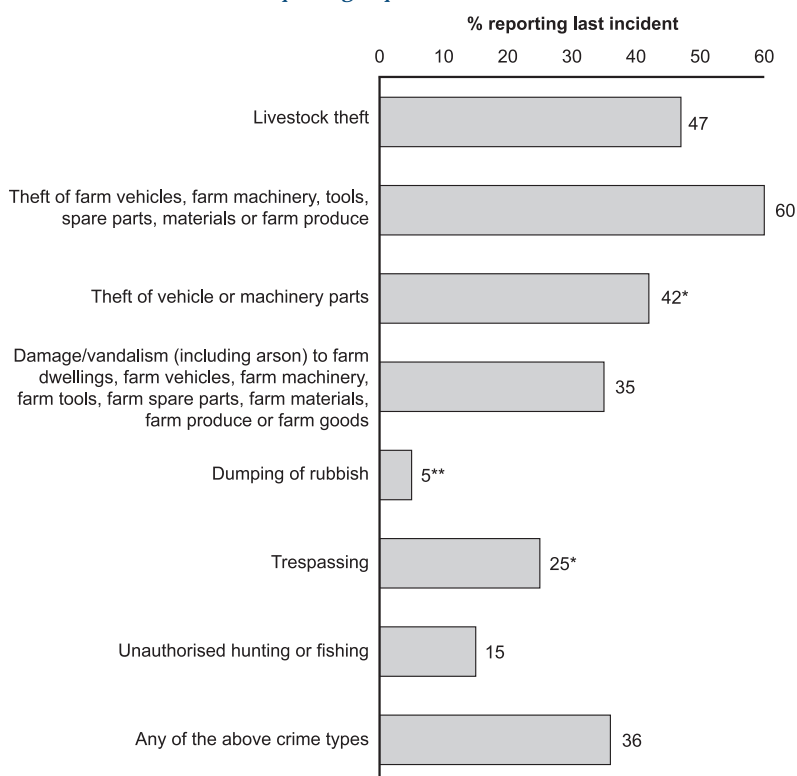
The Australian component of the 2000 International Crime Victims Survey found that 38 per cent of personal thefts were reported to the police (Australian Institute of Criminology 2001, p. 8). Personal theft is similar to many types of farm property crime (for example, theft of tools, machinery parts, livestock theft, property damage) in that the theft may go unnoticed by the victim for relatively long periods of time. In cases like these, most victims tend not to report the theft to police because there is little that can be done to catch the offender or to recover the property.

Reasons for Reporting Crime to the Police

The distribution of the victims’ reasons for reporting crimes to police varied slightly across offences. In general, the four major reasons victims reported crime to the police were (Figure 4):

- the seriousness of the crime to the victim;

Figure 3: Victims of farm crime reporting to police

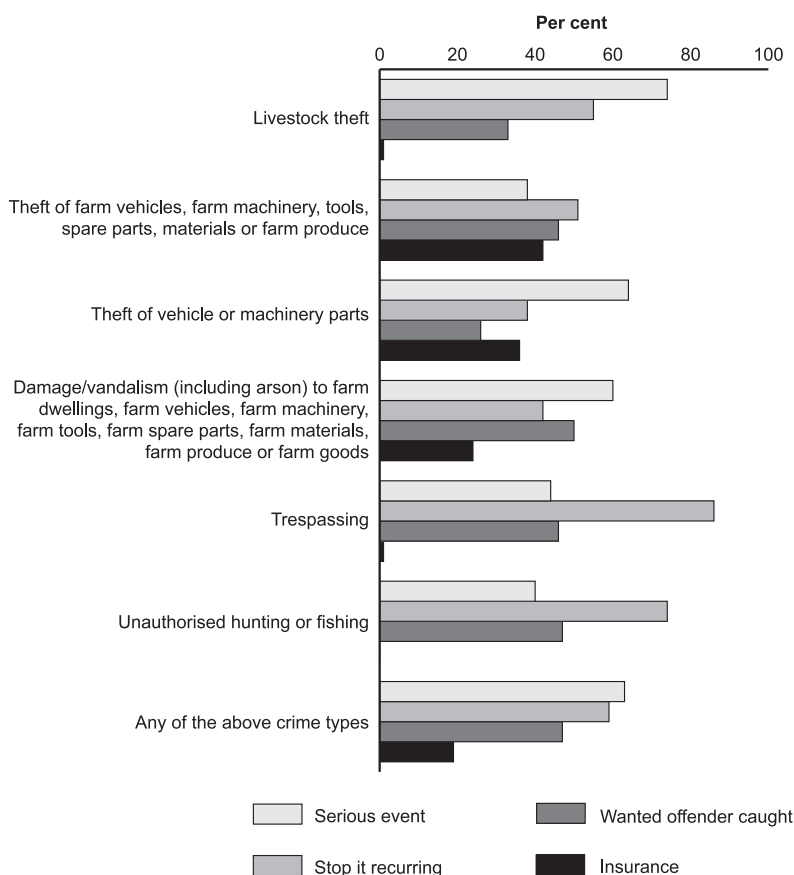


* Relative standard error greater than 25 per cent but less than 50 per cent.

** Relative standard error greater than 50 per cent.

Source: ABARE, Farm Crime Victimization Supplementary Survey 2000–2001.

Figure 4: Four most frequent reasons for reporting to the police



Note: The percentages in the figure do not necessarily add up to 100. Victims were asked to state up to three reasons for reporting the last incident of an offence to the police. The graph shows the distribution of the four most frequently cited reasons.

Source: ABARE, Farm Crime Victimization Supplementary Survey 2000–2001.

- the victim's desire to stop the crime recurring;
- the victim's desire for the offender to be caught; and
- insurance.

In the case of livestock theft, “seriousness of the event” and “to stop it recurring” had the highest frequencies, followed by “wanted the offender caught”. Livestock theft was the offence with the highest percentage of victims reporting to the police because it was serious (74%), followed by theft of vehicle or machinery parts (64%).

“Wanted the offender caught” and “stop it recurring” were the main reasons for reporting incidents of “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”, “trespassing” and “unauthorised fishing”.

As expected, “insurance” ranked high among the reasons to report incidents of theft or damage/vandalism of farm vehicles, farm machinery, vehicle or machinery parts, and other farm property. However, only a negligible proportion of victims of livestock theft mentioned insurance as a reason driving their decision to report to the police.

Reasons for not Reporting Crimes to the Police

“Not serious enough” and “lack of proof” were the most frequently cited reasons for not reporting an incident to the police (Figure 5). In particular, “lack of proof” was the most common reason for not reporting incidents of livestock theft, theft of vehicle or machinery parts, and “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”. This finding is consistent with previous research (Barclay et al. 2001).

It is noteworthy that “lack of proof” is the main reason for not reporting to the police incidents of livestock theft and theft of farm

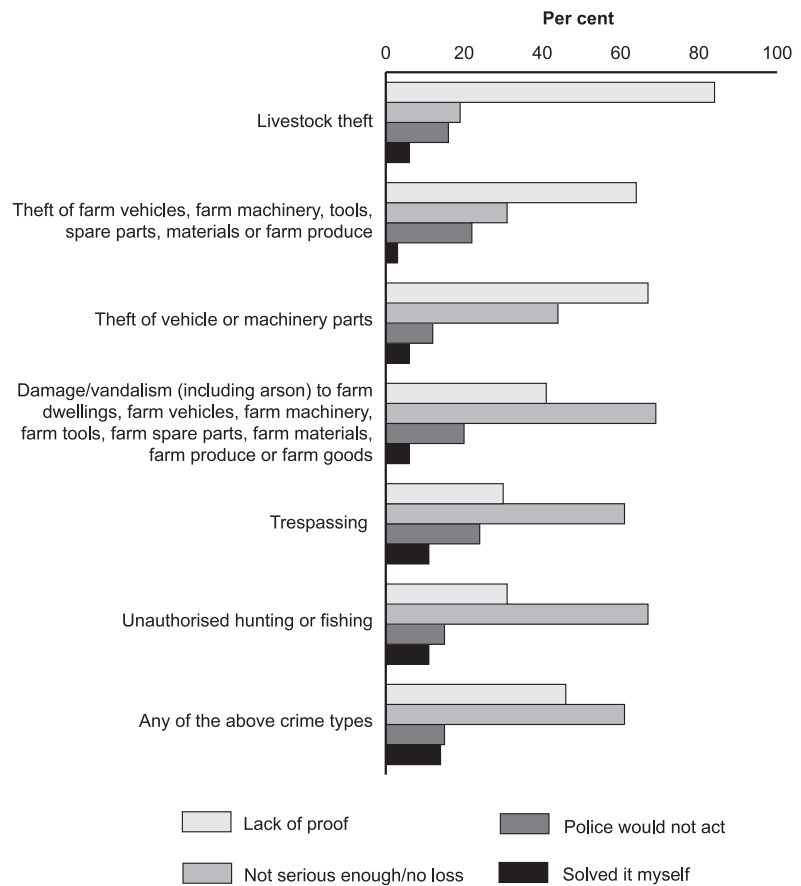
property. This may be reflecting the actual situational factors involved in the last incident. Barclay et al. (2001) argue that “it can be difficult to prove what and how much livestock or farm property have been stolen”, and that “failure to keep adequate records also prevents farmers from reporting thefts” (p. 68).

The Cost of Crime to Australian Farms

The total loss to victims due to crime was \$63,300,000 during the 2000–2001 financial year. Fifty-one per cent of this amount constitutes the estimated value of loss or damage to the farm, and 49 per cent is loss of income to the farm. However, after adjusting for repairs, replacement and out-of-pocket expenses after insurance claims, the net cost to farms in the broadacre and dairy industries was \$8,700,000.

The financial impact of crime on farms is not uniform across offence type. Livestock theft had the highest average loss or damage (\$3,081) and loss of income to the farm (\$3,980). “Theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce” had the highest average net cost per incident (\$732) (Figure 6). Although livestock theft affected only eight per cent of farms in Australia, it represented 67 per cent of the total loss or damage, 88 per cent of the total loss of income, and 38 per cent of the total net cost to the broadacre and dairy industries (Table 1). “Theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce” affected six per cent of surveyed farms but contributed 21 per cent of total loss or damage, 45 per cent of total net cost and 0.7 per cent of total loss of income to farms.

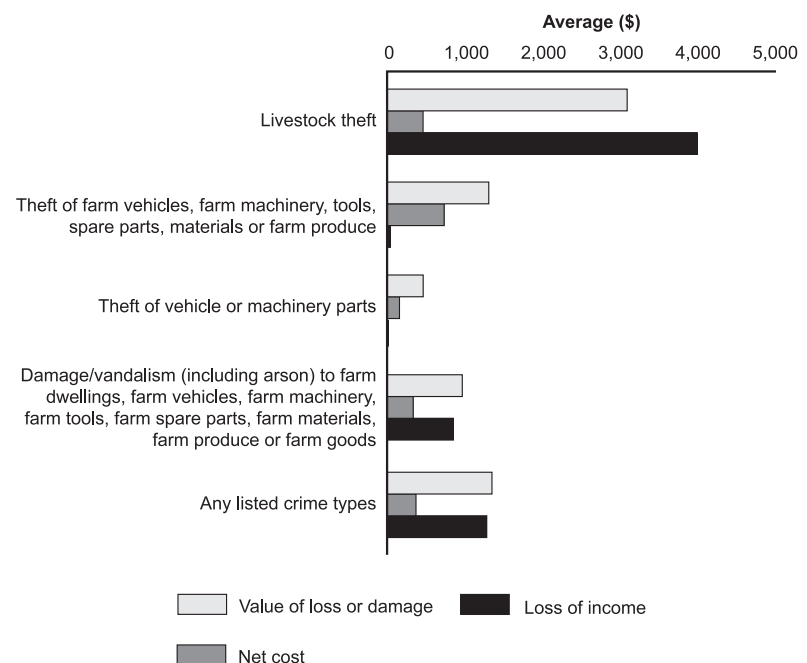
Figure 5: Four most frequent reasons for not reporting to the police



Note: The percentages in the figure do not necessarily add up to 100. Victims were asked to state up to three reasons for not reporting the last incident of an offence to the police. The graph shows the distribution of the four most frequently cited reasons.

Source: ABARE, Farm Crime Victimisation Supplementary Survey 2000–2001.

Figure 6: Average losses and net costs to farm victims of crime



Source: ABARE, Farm Crime Victimisation Supplementary Survey 2000–2001.

Table 1: Percentage contribution of crime to total cost, net cost and loss of income

Offence type	Percentage contribution to:		
	Value of loss or damage	Net cost	Loss of income
Livestock theft	67	38	88
Theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce	21	45	1
Theft of vehicle or machinery parts	1	2	0
Vandalism	10	14	9
Dumping rubbish, trespassing or unauthorised hunting or fishing	0	1	2

Source: ABARE, Farm Crime Victimization Supplementary Survey 2000–2001.

Offences such as dumping rubbish, trespassing and unauthorised hunting or fishing comprised a fraction of the total costs (Table 1).

Conclusion

Farms are exposed to a relatively high risk of crime. Over 25 per cent of all farms were affected by crime during the financial year 1 July 2000 to 30 June 2001. The findings indicate that livestock theft and “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce” were the most costly offences affecting Australian farms. Livestock theft affected one in every 12 farms in the broadacre and dairy industries. Together with “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”, it contributed 87 per cent of the total losses and net costs to farms.

Less costly crimes, such as trespassing and unauthorised hunting or fishing, were more prevalent than the financially serious offences of livestock theft or “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”. The environmental offence of dumping rubbish on farmland had a low prevalence rate (3%) and represented a negligible cost to farmers.

About 30 per cent of farmers rated the types of crimes included in the survey as a serious problem in their own area. This is consistent with about 28 per cent of victims reporting crimes to police because they perceived them as serious events, in particular for the most costly offences of livestock theft and “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”.

Insurance did not emerge as a significant reason for farmers to report crimes to the police. This may be partially explained by the fact that most victims did not report crimes to due to “lack of proof”. It may be difficult to tell whether a crime has occurred and, if so, to prove who did it. This may apply where the crime is detected far away from a farm’s main buildings.

These findings indicate the need for more research on the offences of livestock theft and “theft of farm vehicles, farm machinery, tools, spare parts, materials or farm produce”. The next stage of the survey will focus on the risks of crime victimisation and its effect on farm operations.

Notes

- 1 The broadacre industries in the Australian Agricultural and Grazing Industries Survey (AAGIS) are: wheat and other crops industry

(ANZSIC class 0121), mixed livestock-crops industry (ANZSIC class 0122), sheep industry (ANZSIC class 0124), beef industry (ANZSIC class 0125), and sheep-beef industry (ANZSIC class 0123). The Australian Dairy Industry Survey (ADIS) includes the dairy industry (ANZSIC class 0130).

- 2 The survey asked: “Were any of these crimes committed on the surveyed farm during the survey year?”

Acknowledgments

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