



Information Sources for the Egg Industry

**A report for the Rural Industries Research
and Development Corporation**

by John O'Connor
and Erin Giles
Industry Management Services Pty Ltd

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Researcher Contact Details
John O'Connor
Industry Management Services Pty Ltd
Level 2, 470 Collins Street
Melbourne Vic 3000
Phone: 03 9629 6287
Fax: 03 9629 2289
Email: johnoconnor@access.net.au

RIRDC Contact Details
Rural Industries Research and Development Corporation
Level 1, AMA House
42 Macquarie Street
BARTON ACT 2600
PO Box 4776
KINGSTON ACT 2604

Phone: 02 6272 4539
Fax: 02 6272 5877
Email: rirdc@rirdc.gov.au
Website: <http://www.rirdc.gov.au>

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Foreword

Over the past decade or so, government agencies such as the Australian Bureau of Statistics and the Australian Bureau of Agricultural and Resource Economics have provided fewer and fewer statistics and other economic information to the agricultural industries. At the same time, state departments of agriculture have also provided less management information through extension services.

Many industries have responded to these trends by using levies or other industry funding sources to provide selected statistical series and economic information. This report is the first stage of the review of information sources by the egg industry to determine whether it would be a good investment to increase the level of activity in this area. The report confirms that the statistical collections and farm survey data collected for the industry is less than for other Australian agricultural industries and the egg industries of most other countries.

The project was funded from industry revenue which is matched by funds provided by the Federal Government.

This report, a new addition to RIRDC's diverse range of over 450 research publications, forms part of our Egg R&D program, which aims to support improved efficiency, sustainability, product quality, education and technology transfer in the Australian egg industry.

Most of our publications are available for viewing, downloading or purchasing online through our website:

- downloads at www.rirdc.gov.au/reports/Index.htm
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Peter Core

Managing Director

Rural Industries Research and Development Corporation

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Executive Summary

As with other agricultural industries, the egg industry needs certain statistical collections for the purposes of business planning and policy analysis. There is a particular need for statistics that assist with production forecasting because egg price fluctuations are mainly caused by fluctuations in supply, not fluctuations in demand. The purpose of this project is to provide some of the information that will assist the industry to make decisions about the statistical collections to be made in the future, and the methods to be used to collect and publish those collections.

The main part of the report is a comprehensive listing of statistics collected for the Australian pig, dairy and wool industries, and for the egg industries of New Zealand, the UK, the USA and the Netherlands. These examples confirm that the Australian egg industry compares unfavourably with other industries in the extent of its statistical collections and the availability of economic information such as farm physical and financial data.

In the UK, the US, and the Netherlands, the egg industries are supplied with comprehensive statistical services by government agencies. In the UK and US, these are supplied almost entirely at the national governments' expense. In the Netherlands the cost is split between the government and the industry. In addition to the statistical collections, there is a substantial amount of information about farm costs, returns and performance benchmarks in these three countries. In New Zealand, the situation is much like that in Australia, with minimal contribution from the government and a very limited range of collections.

The other Australian industries reported also have more extensive collections than the egg industry. To some extent this is because they are treated more generously by government agencies, but the main reason is that these industries organise and fund collections from their own resources. In the wool industry, most non-ABS collections are provided by the industry's major service organisations, the Australian Wool Exchange and the Australian Wool Testing Authority, with most of the cost ultimately being borne by growers.

The dairy and pig industries fund their collections, including some farm benchmarking collections, through industry levies. The levies are sometimes promotion levies and sometimes R&D levies. To the extent that R&D levy proceeds are used, half of the cost is borne by the federal government as a result of dollar for dollar funding arrangements.

In some circumstances, valuable statistical series can be collected at moderate cost by using a properly constructed sample survey rather than a full survey of firms in the relevant sector. A good example of this is a quarterly telephone survey of 300 woolgrowers that provides an indispensable input into wool production forecasting.

This report provides a comprehensive illustration of the options available as demonstrated by other industries. The next, and more difficult stage, is for the industry to make judgements about the purposes for various collections and whether the cost can be justified in terms of the benefits they might confer.

1.Introduction

Statistical series currently collected on the Australian egg industry are summarised in the Australian Egg Industry Association's *Annual Statistical Publication 1999*, prepared by the Australian Egg Industry Association and published by RIRDC. This report makes apparent the shortcomings of current collections:

- the limited range of statistics
- the changing bases over time
- the impact of deregulation
- the minimal contribution of the ABS and other government agencies
- the uneven level of cooperation by companies in the industry
- the large number of producers spread all over the country, some of them having only semi-commercial operations.

As with other agricultural industries, the egg industry needs certain statistical collections for the purposes of business planning and policy analysis. There is a particular need for statistics that assist with production forecasting because egg price fluctuations (excluding those caused by predictable annual events such as spring and Easter) are mainly caused by fluctuations in supply, not fluctuations in demand. It is also notable that trade statistics are becoming important as imports and exports increase as a proportion of Australian production.

The purpose of this project is to provide some of the information that will assist the industry to make decisions about the statistical collections to be made in the future, the methods to be used to collect and publish those collections, and the way in which these activities will be funded.

The main part of the report, section 2, is a set of tables providing a comprehensive listing of statistics collected for the Australian pig, dairy and wool industries, and for the egg industries of New Zealand, the UK, the USA and the Netherlands. The beef, dairy and wool industries were chosen because they share three important characteristics with the egg industry. Firstly, they do not have regulated marketing arrangements, so do not have the easy options that industries with monopoly marketing authorities have in collecting statistics. Secondly, they all produce livestock products, so forecasting methods have some common elements. Thirdly, they all have a large number of producers with wide geographic dispersion.

The four countries chosen for examination of egg industry collections all have unregulated egg industries. They were also chosen because information is relatively accessible, for language and other reasons. New Zealand was included because it has relatively little government support for collecting and publishing statistics, as does Australia.

Information reported includes:

- the statistical series collected
- numbers of sources (hatcheries, producers etc)
- whether collections are based on compulsory or voluntary participation
- who undertakes the collection and distribution
- sources of funds for collection and distribution
- methods of collection and distribution.

The tables containing this information are accompanied by some text that further explains the collections and the circumstances in which those collections are made.

The third and final section of this report contains some conclusions about how the Australian egg industry is placed relative to the other industries examined. This is followed by some recommendations about the issues as a prelude to an industry workshop that will be held to consider the way forward.

The appendices contain sample monthly statistical reports produced for the UK and US egg industries. These provide illustrations of the comprehensive statistical collections that are available in some countries.

2. Statistical Collections

Tables 1 to 8 contain the details of the various statistical collections. They report only nation-wide collections and omit some duplicated series such as the many price reports that are available in some countries, particularly the US.

2.1 Australian Egg Industry

The Industry's statistical collections compare unfavourably both to other Australian industries and other egg industries (Table 1). Those provided by government agencies (ABS, ABARE, AFFA) are few and of relatively low quality. The main exception is the import and export data which is comprehensive in terms of the sample (all traded product) and the disaggregation by product type. Nevertheless, import and export data is readily available only on an annual basis, while for many other industries it is published on a monthly basis.

Series provided from industry sources are also few and have quality problems. In particular, the chick placements figures (one of the most important series in all countries) suffer from delays in the provision of data by some hatcheries. Chick placements have also proven to be an unreliable basis for making forecasts in recent times.

TABLE 1: Australian Egg Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
flock size	layers and pullets by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
number of producers	by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
gross value of production	at farmgate, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
imports	volume and value, shell egg equivalents, countries of origin, 3 categories of dried product	annual	all product	compulsory	ABS/AEIA	ABS, R&D levy	customs documents, conversions calculated by AEIA
exports	volume and value, shell and five product categories	annual	all product	compulsory	ABS/AEIA	ABS, R&D levy	customs documents, conversions calculated by AEIA
retail prices	by state	quarterly	CPI collection	compulsory	ABS	ABS	retail survey
egg consumption	million dozen equivalent	annual	all product	N/A	AEIA	R&D levy	estimated using production estimates and trade statistics
chick placements	layer chicks, by state	monthly	all hatcheries	information compulsory, timing voluntary	AFFA/AEIA	AFFA/R&D levy	with levy collection
feed prices	various feedgrains	monthly	small sample of suppliers	voluntary	ABARE	ABARE	various

2.2 Australian Wool Industry

Series provided by the ABS are again infrequent (generally annual) and of limited range and quality (Table 2). The industry is treated no more generously by government agencies than is the egg industry. Nevertheless, the wool industry has quite good coverage of important statistics. Most are provided by either the Australian Wool Exchange (AWEX) or the Australian Wool Testing Authority (AWTA). These series are available because well over 90% of wool is sold by members of AWEX and 100% of wool is tested by AWTA. These two organisations therefore have the opportunity, the power, and the funds necessary to generate the various statistical series. The cost is mostly passed back to growers, although AWEX earns considerable revenue by charging for publications.

One significant aspect of the wool industry's information services is that it has a formalised "official" forecasting process through the Wool Production Forecasting Committee (WPFC). The WPFC is comprised of representatives of all sections of the industry, plus AWEX and AWTA, and the relevant government agencies ABS and ABARE. The committee meets three or four times per year and the most important single piece of information used in making the forecast is the quarterly survey of sheep numbers and wool production, which is funded by AWEX and undertaken by ABARE. This survey collects information about growers' intentions, as well as current data.

Another important collection is Australian Agricultural and Grazing Industry Survey (AAGIS) which is funded half by the government and half by the industry (effectively growers) via the R&D levy. This survey collects detailed physical and financial data from about 600 farms with sheep. The results are used both for policy purposes and to provide physical and financial benchmarks to assist with farm management. There are also a large number of benchmarking services offered by private consultants and departments of agriculture, but these are localised and the level of participation is low.

2.3 The Australian Dairy Industry

Assistance from the government is again limited, although the government funds half of the cost of the Australian Dairy Industry Survey, which is the equivalent of AAGIS in the wool industry. Both the government and the Dairy Research and Development Corporation (DRDC) contribute over \$200 000 each year to fund this survey. DRDC supplements the questionnaire every second year to generate the Technology and Farm Practices report on the adoption of various on-farm practices. This costs the DRDC about \$40 000 each time.

The dairy industry is quite rich in industry-funded statistical collections (Table 3). These are funded by the levy on farmers that is used to fund promotion programs, and are collected and published by the Australian Dairy Corporation (ADC). Until June 2000, when the industry was deregulated, the ADC was able to obtain many collections compulsorily from processors and manufacturers. Others were available from the state marketing authorities that administered the fluid milk market. These authorities were abolished at the time of deregulation. In anticipation of the changes that would occur as a result of deregulation, the industry undertook a review of its collections during 1999 and agreed which ones would be continued into the future. Most collections were continued, although the method used changed in a number of cases. Many that were previously collected on a compulsory basis are now collected on a voluntary basis.

The strength of the dairy industry from the point of view of collecting statistics is that, because of its perishable nature, nearly all milk goes direct from the farm to a small number of processors and manufacturers. Most of the necessary data is provided to the ADC by these companies.

TABLE 2: Australian Wool Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
sheep numbers	sheep and lambs, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
farms with sheep	by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
lambling	ewes mated, lambs marked, mating intentions	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
wool production	volume and value, greasy, by state	annual	all brokers and dealers	compulsory	ABS	ABS	wool levy statistics
gross value of production	at farmgate, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
exports	volume and value, by degree of processing, by destination	monthly	all wool except that in fabric and garments	compulsory	ABS, Australian Wool Exchange	ABS, Australian Wool Exchange	customs documents
wool receivals	kilograms greasy, by state	quarterly	all wool	compulsory for auction wool	ABS	ABS	wool levy statistics
wool receivals	bales, by storage centre	weekly	all wool selling brokers	compulsory for auction wool	Australian Wool Exchange	Australian Wool Exchange	electronic transfer
stocks	bales, by storage centre	weekly	all wool selling brokers	compulsory for auction wool	Australian Wool Exchange	Australian Wool Exchange	electronic transfer
wool sold at auction	bales, by wool type	monthly	auction wool	compulsory for auction wool	Australian Wool Exchange	Australian Wool Exchange	electronic transfer
wool sold by private treaty	bales, by state	quarterly	association members	voluntary	Private Treaty Wool Merchants of Australia	Private Treaty Wool Merchants of Australia	mailed questionnaire
prices	by sale centre and wool type	monthly	auction wool	compulsory for auction wool	Australian Wool Exchange	Australian Wool Exchange	electronic transfer
wool tested	bales, by state and wool type	monthly	all wool	compulsory for tested wool (all)	Australian Wool Testing Authority	Australian Wool Testing Authority	electronic transfer
sheep numbers and wool production	kilogram, greasy, by state	quarterly	300 growers	voluntary	Wool Production Forecasting Committee	Australian Wool Exchange	telephone survey by ABARE
Australian Agricultural and Grazing Industry Survey	physical and financial details, by state	annual	600	voluntary	ABARE	AFFA, R&D levy	farm visits
farm benchmarking studies	physical and financial details, with comparisons between farms	usually annual	(unknown)	voluntary	commercial providers, Departments of Agriculture	growers, Departments of Agriculture	farm visits

TABLE 3: Australian Dairy Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
cow numbers	by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
registered dairy farms	by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
milk production	by protein and fat content, end use, and state	monthly	all milk	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	monthly return by processors and manufacturers
gross value of production	at farmgate, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
exports	volume and value, by product and destination	monthly	all dairy products	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	monthly return by processors and manufacturers
imports	by major product and origin	monthly	all imports	compulsory	ABS	ABS	customs documents
production of dairy products	volume and value, major product, by state	monthly	commercial processors and manufacturers	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	monthly return by processors and manufacturers
stocks of dairy products	volume, major product, by state	monthly	commercial processors and manufacturers	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	monthly return by processors and manufacturers
prices	farm gate	annual	commercial processors and manufacturers	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	monthly return by processors and manufacturers
supermarket sales	volume and prices, by product	annual	sample of supermarkets	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	purchased from commercial provider
consumption	liquid milk by type and state	annual	commercial processors	voluntary	Australian Dairy Corporation (levy)	Australian Dairy Corporation (levy)	sales from processors divided by ABS population figures
Australian Dairy Industry survey	physical and financial details by state	annual	300	voluntary	ABARE	AFFA, R&D levy	farm visits
Technology and Farm Management Practices	adoption rates for various on-farm technologies and practices	every second year	300	voluntary	ABARE	R&D levy	farm visits
farm benchmarking studies	physical and financial details, with comparisons between farms	usually annual	10-20 percent of farms	voluntary	commercial providers, Departments of Agriculture	farmers, Departments of Agriculture	farm visits, mailed questionnaire
Australian herd recording statistics	milk production per cow and milk consumption	annual	half of farms	voluntary	Australian Dairy Herd Improvement Scheme	farmers via various farmer-owned organisations, R&D levy	mailed questionnaire

There is no industry-wide farm benchmarking study in the dairy industry but there is substantial participation in regional studies, with between 10 and 20 percent of farms participating. Most are provided by private consultants, but substantial studies in Tasmania and South Australia are supported by industry organisations, with some levy funds being provided, while in Queensland a service is provided by the government extension service.

2.4 The Australian Pig Industry

Like milk, all pigs are processed in a relatively small number of plants and these are the source of important statistical series, slaughterings and meat production. The difference between the dairy and pig industries is that while dairy statistics are collected by the industry, these livestock series are published by the ABS. In other respects, the pig industry gets the same minimal services from government agencies as do most other industries (Table 4).

Where the pig industry differs from the egg industry is that it undertakes some major collections itself, using both the R&D and promotion levies. These include herd numbers by size, farmgate pig prices, feed costs and farm performance data. All are published, along with some ABS-funded collections, in the annual booklet PigStats – Australian Pig Industry Handbook.

The farm performance data is collected via a detailed questionnaire from 28 producers who volunteer for the purpose. The identity of the participants is confidential to the consultants who undertake the survey, and is not known to other producers or industry organisations. Australian Pork Limited (the organisation being formed by the merger of the Australian Pork Corporation and the Pig Research and Development Corporation) has difficulty getting producers to participate in the farm survey, even though there is no charge to them. This means that the sample is not necessarily representative of pig producers.

2.5 The New Zealand Egg Industry

The New Zealand Egg Industry was included in this review because it was considered that it was the egg industry most likely to have little government support for its statistical collections. This was indeed the case, with Statistics New Zealand (the equivalent of the ABS) providing only a few series from the annual census which are quite unreliable, and trade figures which are of good quality but limited interest because exports are minimal and imports are claimed to be zero (Table 5).

The industry, through the Egg Producers Federation of New Zealand, provides a monthly series on chick placements. This series is timely, accurate and cheap to produce because there are only two hatcheries in the country, and they cooperate fully with the collection.

TABLE 4: Australian Pig Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
pig numbers	boars and sows, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
farms with pigs	by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
gross value of production	at farm gate, by state	annual	sample of commercial producers	compulsory	ABS	ABS	mailed questionnaire
pigs slaughtered	volume, by state for quarterly figures	monthly	commercial abattoirs	compulsory	ABS	ABS	mailed questionnaire
pig meat produced	volume, by state for quarterly figures	monthly, quarterly	commercial abattoirs	compulsory	ABS	ABS	mailed questionnaire
average slaughter weight	by state	annual	commercial abattoirs	compulsory	Australian Pork Limited	ABS, levies	extracted by APL from ABS collection
exports	volume and value, by major destination, pork and bacon/ham	monthly	all exports	compulsory	ABS	ABS	customs documents
imports	volume and value, by major source	monthly	all imports	compulsory	ABS	ABS	customs documents
herds by size	sows and total pigs, by state	annual	commercial producers	voluntary	Australian Pork Limited	Australian Pork Limited (levies)	mailed questionnaire (APL database)
farm performance	benchmarks for breeding, finishing, financial performance	annual	28 commercial producers	voluntary	Australian Pork Limited	Australian Pork Limited (levies)	farm visits
farmgate prices	bacon and pork carcass weights, various locations, auction and contract prices	weekly	all sales for auction collections	voluntary	Australian Pork Limited	APL (levies), Queensland Pork Producers Inc	market reports and questionnaire to abattoirs
farrowing forecast	by state	monthly	300	voluntary	Australian Pork Limited	Australian Pork Limited (levies)	telephone
pig price to grain ratio	saleyard prices, feed wheat prices	annual	all sales for auction collections, sample of suppliers for wheat	voluntary	Australian Pork Limited	Australian Pork Limited (levies), others	calculated by consultants to Australian Pork Limited
retailers' purchases of fresh pork	by state	monthly	large sample of supermarkets	voluntary	Australian Pork Limited	Australian Pork Limited (levies)	purchased from AC Nielson
average retail prices	loin chops and leg, by state	quarterly	CPI collection	compulsory	ABS/APL	ABS, APL (levies)	retail survey
consumption of pigmeat	national	monthly	estimated	voluntary	Australian Pork Limited	Australian Pork Limited (levies)	estimated from production figures

TABLE 5: New Zealand Egg Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
flock size	layers	annual	about half of farms	compulsory	Statistics New Zealand	Statistics New Zealand	mailed questionnaire
number of producers	commercial producers	annual	about half of farms	compulsory	Statistics New Zealand	Statistics New Zealand	mailed questionnaire
egg production	collected but not published due to problems with accuracy	annual	about half of farms	compulsory	Statistics New Zealand	Statistics New Zealand	mailed questionnaire
exports	by category, collected but not published	annual	all product	compulsory	Statistics New Zealand	Statistics New Zealand	customs documents
imports	(none)						
chick placements	layer chicks	monthly	both hatcheries	voluntary	Egg Producers Federation of New Zealand	Egg Producers Federation of New Zealand	telephone

2.6 The UK Egg Industry

The UK industry is almost three times the size of the Australian industry. It is extremely well served by statistical services, most of them provided by The Ministry of Agriculture Fisheries and Food (Table 6). The important collections are reported, among other places, in the monthly publication “Egg Statistics Notice”, a sample of which is attached as Appendix 4.1. This publication includes data from hatcheries, packing stations, processors, slaughterhouses and feed suppliers. As in Australia, hatcheries are required to provide data to the government, however all the other sectors provide data voluntarily and most major participants cooperate by providing figures. The publication is quite timely, with the edition published in March containing full January data and even some February and March data for prices.

The other major publication series is the Egg Production Quarterly, published by the National Farmers’ Union. This reproduces many of the series published by MAFF, but adds value by providing analysis of market conditions and the outlook for the next quarter. The quarterly also contains a detailed analysis of current production costs based on input and output prices in a recent week, and typical production ratios. These ratios are updated periodically from farm surveys.

There are various other minor statistical collections in the UK, mostly concerned with prices. For example, the National Egg Marketing Association Limited publishes wholesale prices each week, along with some comparisons with prices in other European countries.

There is no large-scale farm benchmarking study in the UK.

TABLE 6: UK Egg Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
flock size	census	annual	commercial producers	compulsory	MAFF	MAFF	mailed questionnaire
number of producers	census	annual	commercial producers	compulsory	MAFF	MAFF	mailed questionnaire
egg production	census	annual	commercial producers	compulsory	MAFF	MAFF	mailed questionnaire
value of production	census	annual	commercial producers	compulsory	MAFF	MAFF	mailed questionnaire
exports	volume and value, by shell eggs and product category	monthly	all product	compulsory	MAFF	MAFF	customs documents
imports	volume and value, by shell eggs and product category	monthly	all product	compulsory	MAFF	MAFF	customs documents
household consumption	total and per person	quarterly	all eggs	(calculation)	MAFF	MAFF	calculated from various sources
eggs set	layer eggs	monthly	all hatcheries	compulsory	MAFF	MAFF	mailed questionnaire
chicks placed	UK hatcheries only	monthly	all hatcheries	compulsory	MAFF	MAFF	mailed questionnaire
slaughterings	spent layers	monthly	large sample (49)	voluntary	MAFF	MAFF	mailed questionnaire
packing station throughput	by egg size, production system and major region	monthly	large sample (100)	voluntary	MAFF	MAFF	mailed questionnaire
egg prices	prices paid by packers to producers, by size and production system	monthly	large sample (100)	voluntary	MAFF	MAFF	mailed questionnaire
egg prices	medium size	weekly	members	voluntary	National Egg Marketing Association	Central Egg Agency	(unknown)
feed prices	ready mix	monthly	(unknown)	voluntary	MAFF	MAFF	(unknown)
eggs bought by processors	cases for breaking (excludes eggs for hard boiling)	monthly	all big processors (15)	voluntary	MAFF	MAFF	mailed questionnaire
egg products produced	whole egg and other (excludes hard boiled)	monthly	all big processors (15)	voluntary	MAFF	MAFF	mailed questionnaire
egg production costs	estimates based on current prices and known production ratios	weekly for cage eggs, monthly for barn and free range	(not a survey)	voluntary	National Farmers' Union	National Farmers' Union	data collected each week for feed, pullet, spent hen prices
feed component prices	wheat and soya meal	weekly	(unknown)	voluntary	National Farmers' Union	Home Grown Cereal Authority	published prices

2.7 The US Egg Industry

The US industry is also very well served by government statistics agencies, notably the National Agricultural Statistics Service (NASS), a subsidiary of the US Department of Agriculture (Table 7). Many of the important series are published monthly in the newsletter “Chickens and Eggs”, an example of which is attached as Appendix 4.2. This publication contains data from farms (30 major producing states only) and hatcheries. The farm data is collected by state governments, universities and other agencies that have cooperative agreements with NASS.

Other important statistics are published by the Agricultural Marketing Service (AMS), another subsidiary of the USDA. These include slaughterings, stocks, eggs processed, and a number of price series. Some of these series are collected on a compulsory basis as a result of the presence of USDA inspectors in slaughterhouses and egg processing plants. There are a number of publications, in addition to “Chicken and Eggs” carrying statistical series. One of these, the USDA’s “Livestock, Dairy and Poultry Situation and Outlook” provides analysis and forecasts as well as statistics.

Many state and regional organisations, including the Land Grant Universities, provide farm advisory services, often including a benchmarking component. However, there is a highly significant national benchmarking service operated by Chilson’s Management Controls, a private company based in California. This service is funded entirely by participants and these include over 200 big producers, more than half of the total population of big producers. Chilson’s provide very detailed reports to participants on a quarterly basis.

TABLE 7: US Egg Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
number of farms	census	every five years	all farms	compulsory	National Agricultural Statistics Service	USDA	mailed questionnaire
flock size	all layers, average during period, by state	monthly	900	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire, with telephone follow-up and some visits
egg production	table eggs & hatching eggs, by state	monthly	900	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire, with telephone follow-up and some visits
layers being moulted	current and completed moult, by state	monthly	900	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire, with telephone follow-up and some visits
exports	volume and value, by product and destination	monthly	all exports	compulsory	US Census Bureau	US Census Bureau	customs documents
imports	volume and value by product type and origin	monthly	all imports	compulsory	US Census Bureau	US Census Bureau	customs documents
eggs in incubators	by six regions	monthly	330 (all known hatcheries)	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire
chicks hatched	by state	monthly	330 (all known hatcheries)	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire

intended placements	pullets for hatchery flocks	monthly	330 (all known hatcheries)	voluntary	National Agricultural Statistics Service	USDA	mailed questionnaire
slaughterings	light and heavy hens	weekly	commercial abattoirs	compulsory	Agricultural Marketing Service	USDA	USDA inspectors in abattoirs
prices for spent hens	heavy hens, two regions	weekly	(unknown)	voluntary	Agricultural Marketing Service	USDA	(unknown)
egg stocks	by six sizes and ungraded, end use (shell or breaking), five regions	weekly	208 packers and processors	voluntary	Agricultural Marketing Service	USDA	electronic collection
egg product stocks	eight products by dried and frozen cases	monthly	commercial processors	compulsory	Agricultural Marketing Service	USDA	USDA inspectors in plants
eggs processed	cases used, five categories of product	weekly	commercial processors	compulsory	Agricultural Marketing Service	USDA	USDA inspectors in plants
movements of eggs	between six regions and into retail channels	weekly	90 packers	voluntary	Agricultural Marketing Service	USDA	electronic collection
prices paid to producers	ungraded, two sizes, mid-west region	weekly	(unknown)	voluntary	Agricultural Marketing Service	USDA	electronic collection
prices paid to volume buyers	graded, three sizes, five regions	weekly	(unknown)	voluntary	Agricultural Marketing Service	USDA	electronic collection
prices to retailers	graded, three sizes, selected cities	weekly	(unknown)	voluntary	Agricultural Marketing Service	USDA	electronic collection
retail prices	grade A, large	monthly	supermarkets	compulsory	USDA	USDA	retail survey
retail orders	cases	weekly	17 packers	voluntary	USDA	USDA	electronic collection
cost of production	feed costs and total costs	quarterly	estimated	voluntary	USDA	USDA	estimated from data from various sources
consumption	total and per capita	quarterly	estimated	various	USDA	USDA	estimated using production and trade figures
feed components	numerous sources and formats	daily, weekly, monthly, quarterly	various	usually voluntary	USDA, futures markets, various others	various	various
farm performance	physical and financial benchmarks for pullet raising and egg production	quarterly	200	voluntary	Chilson's Management Controls	Chilson's Management Controls	electronic records

2.8 The Netherlands Egg Industry

The Netherlands industry has a comprehensive statistical service, some of it funded by the national government and some by the industry through levies.

The government agencies involved are the Central Bureau of Statistics, which undertakes the annual census, and the Landbouw Economisch Instituut which provides estimates of the value of production, along with feed price series. The industry agency is the Product Boards for Livestock, Meat and Eggs which is funded (for egg industry purposes) by levies on producers, hatcheries and slaughterhouses.

The statistical collections are similar to those in the UK, except that more attention is given to exports. A significant proportion of the country's egg production is exported, mostly to Germany. Weekly prices for exports to Germany are provided, and export volumes receive more prominence than in other countries.

TABLE 3: Netherlands Egg Industry

Collection	Details	Frequency	Sample	Compulsion	Publisher	Funder	Method
flock size	full census	annual	commercial producers	compulsory	Central Bureau of Statistics	Central bureau of Statistics	mailed questionnaire
number of producers	full census	annual	commercial producers	compulsory	Central Bureau of Statistics	Central Bureau of Statistics	mailed questionnaire
value of production	by main product categories	annual	commercial producers	compulsory	Landbouw Economisch Instituut	Landbouw Economisch Instituut	calculation by LEI
exports	volume and value, by shell eggs, egg products, fertile chicks and eggs	monthly/quarterly	all product	compulsory	Product Boards for Livestock, Meat and Eggs	Product Boards and Government	customs documents
imports	volume and value, by shell eggs, egg products, fertile chicks and eggs	monthly/quarterly	all product	compulsory	Product Boards for Livestock, Meat and Eggs	Product Boards and Government	customs documents
household consumption	total and per person	quarterly	statistical sample	voluntary	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	household survey
eggs set	layers	monthly	all hatcheries	compulsory	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	collected with levy
chicks placed	domestic and export	monthly	all hatcheries	compulsory	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	collected with levy
slaughterings	layers	monthly	all slaughter-houses	compulsory	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	collected with levy
egg prices	prices paid to producers, medium and large eggs	weekly	major packers	voluntary	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	mailed questionnaire
egg prices	delivered to Germany	weekly	major packers	voluntary	Product Boards for Livestock, Meat and Eggs	Product Boards (levy)	mailed questionnaire
feed prices	ready mix	weekly	major suppliers	voluntary	Landbouw Economisch Instituut	Landbouw Economisch Instituut	mailed questionnaire

3. Conclusions and Recommendations

The most obvious conclusion to be drawn from the summary of statistical collections is that agricultural industries in Australia and New Zealand receive a very limited service from government funded organisations, compared with those in other countries. This was not always the case. The service provided by the Australian Bureau of Statistics has declined greatly over the past decade or so, and not even the agricultural census is now carried out on an annual basis.

While all the Australian Industries are poorly serviced by government agencies, some are more generously treated than the egg industry. The major broadacre industries are the subject of the annual ABARE surveys that provide detailed physical and financial information, which is used for both policy and farm management purposes. These services are part-funded by Agriculture, Fisheries and Forestry Australia (AFFA). The smaller industries, including the egg industry, might reasonably seek to be similarly treated.

The egg industry might also argue that it is less generously treated than some other industry in the production/processing area. The meat industry receives from the ABS a set of comparatively high-quality series concerning slaughterings and meat production. No comparable series is provided to the egg industry. The ABS also goes to some trouble, at its own expense, to provide a wool production series, for which there is no comparable collection in the egg industry.

Australian industries do receive significant assistance from the federal government in the form of a readily available levy mechanism which can be used to collect and disseminate statistics. When the levy funds are from the R&D levy, the proceeds are matched dollar for dollar by the government. Of the other egg industries surveyed, only the Netherlands uses a levy mechanism to part fund the collection of statistics.

The Australian egg industry is notably less active than the other Australian industries surveyed in using levy funds to collect and disseminate statistics and economic data. The AEIA, funded by the R&D levy, adds value in a number of areas by publishing such series as are available in a useable form. However, it does not undertake original collections as do industry organisations in the wool, dairy and pig industries. In considering whether it should make a greater commitment, it is recommended that the industry consider the prospects for improving the chick placement series, and for introducing a slaughterings series. In both cases the number of companies that need to cooperate is small, and virtually full coverage should be achievable.

A range of other potentially valuable series could be collected at moderate cost through sample surveys. Samples provide a sufficient basis when the important information is concerned not with the aggregate number, but with the direction of movement between time periods. For example, for forecasting egg production, a very useful series would be hen numbers from a representative sample, which would provide an indication of trends (presumably on a monthly basis) without giving a figure for the total population. This method is used effectively in the wool industry through a quarterly telephone survey of growers which generates information on current sheep numbers and intentions for the year ahead.

In the Australian egg industry, sample surveys could be effectively used in a number of areas other than hen numbers and production intentions. These include hens moulted, egg

production (by size and production system), stocks, farm and wholesale egg prices, and feed prices). These series are collected on a sample basis in other countries, notably the USA.

The other notable absence from the Australian egg industry is a farm benchmarking service. Services of this type were widely provided by departments of agriculture until the 1970s. Producers seem reluctant to participate in such surveys because of the cost (both monetary and in terms of management time), skepticism about the value obtained, and a reluctance to share information with competitors. The industry should consider, at least in the first instance, a minimal service that is concerned with the most important management information such as hen housed production by bloodline and average egg size, and feed costs. This information could be collected at minimum cost and without detailed records.

In considering the way forward, the industry faces some difficult decisions. It is always very difficult to place a value on information, and this is what is required when decisions are made on statistical collections. In the end, those making the decisions need to make judgements, but those judgements need to be informed by a clear idea of the purpose of each collection and the way in which it will be used. It should not be assumed that because others make a particular collection, that it is justified on a cost-benefit basis. Some of the many collections made in the UK and the US may be made only because the government bears the cost, and would not be made if the industry bore the cost.

APPENDIX 4.1

EGGS STATISTICS NOTICE

20 March 2001

**SOURCE: Ministry of Agriculture, Fisheries and Food
United Kingdom**

Downloadable from:

www.maff.gov.uk/esg/Work_html/Notices/eggnotce.pdf

APPENDIX 4.2

CHICKENS AND EGGS

23 March 2001

**SOURCE: National Agricultural Statistics Service
United States Department of Agriculture**

Downloadable from:

Usda.mannlib.cornell.edu/reports/nassr/poultry/pec-bb/