

DORPER SHEEP AND THE PRODUCTION OF LEAN LAMB IN ARID AUSTRALIA



Richard Knights

International ISS Institute/DEEWR Trades Fellowship

Fellowship supported by the Department
of Education, Employment and Workplace
Relations, Australian Government

**ISS Institute**

Suite 101
685 Burke Road
Camberwell Vic
AUSTRALIA 3124

Telephone

03 9882 0055

Facsimile

03 9882 9866

Email

issi.ceo@pacific.net.au

Web

www.issinstitute.org.au

Published by International Specialised Skills Institute, Melbourne.

ISS Institute
101/685 Burke Road
Camberwell 3124
AUSTRALIA

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Executive Summary

The Dorper sheep was developed from a Blackhead Persian ewe and a Dorset Horn ram after the 1930s in the harsh dry regions of South Africa. This sheep was required to fill the need for an animal that could produce a desirable carcass for the South African market. The resultant sheep has become a hardy adaptable animal eminently suitable for the arid regions of South Africa and Namibia and has proved that it can adapt to all environments around the world.

The Dorper has proved that it can replace traditional uneconomical livestock industries anywhere and this is especially evident in Namibia where the Dorper has almost completely taken over from the Karakul Sheep Industry where the lambs were killed for their skins. From these changes in the industry, international Dorper breeding businesses are now conducted virtually from the Kalahari Desert. In South Africa the Dorper replaced the existing Meat Sheep Industry after its development in the 1930s and now very few other sheep breeds are grazed on the vast open plains of western South Africa.

The Australian Pastoral and Grazing Industries 'rode on the Merino sheep's back' for the best part of a century. However, it can be argued that this is no longer the case. Many farmers in Australia have been looking for an alternative enterprise to wool since the demise of the Reserve Price Scheme. Since 1996, farmers have been importing Dorper genetics and since then these sheep have been spreading across the country. In more recent years large-scale lamb producing enterprises using Dorpers have been developed in the more arid areas of Australia. This movement combined with rising lamb prices and the scarcity of sheep has injected a new sense of a future into the bush.

Breeders of Dorpers and the White Dorpers focus on fertility, conformation, masculinity and femininity to ensure that Dorpers can be the basis for a productive and economical Lamb Producing Industry. These factors—combined with the Dorper's low maintenance requirements such as shearing, crutching, lice treatment and mulesing with minimal feed requirements—have the capacity to rejuvenate pastoral industries across the arid regions of Australia.

The Dorper has proved that it can produce a carcass equal to the best in the world and is now sought out by abattoirs, the conventional lamb market and the certified organic market. Due to the low maintenance requirements of Dorpers, the breed lends itself well to fill the organic market without any special management requirements. In Namibia the industry has virtually a state imposed system of certified organic product. This is at least in part to protect its EU accreditation and export market and is heavily regulated with farmers being subjected to severe penalties for infringements.

The Dorper industry of Namibia and South Africa has a well-developed structure of education and training available for interested people. Young people routinely access the training courses to prepare themselves for careers in the Dorper Lamb producing Industry. The Fellow was able to partake in a senior course conducted at Beaufort Wes by the South African Dorper Society. The courses are quite intense and only the very best Dorper people pass. Structured courses of this type do not exist in Australia. Those interested wanting to undertake such courses either have to wait for trainers to visit from overseas or travel to South Africa.

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Abbreviations and Acronyms

DEEWR	Department of Education, Employment and Workplace Relations
EU	European Economic Union
ISS Institute	International Specialised Skills Institute Inc.
RPS	Reserve Price Scheme

Boer goat

A mainly brown and white South African breed of goat bred for meat production.

Breaking down

The term used to describe an animal that develops very poor quality conformation faults of any kind usually early in the animal's life.

Camp

The Namibian and South African term for a 'paddock'.

Conformation

The overall shape of the sheep; the head, neck, shoulders, barrel and hindquarters form the components of the sheep, which together conform to an accepted shape for a sheep.

Dam

The mother of the lamb.

Design

Design is problem setting and problem solving. Design is a fundamental economic and business tool. It is embedded in every aspect of commerce and industry and adds high value to any service or product - in business, government, education and training and the community in general. *Reference: 'Sustainable Policies for a Dynamic Future', Carolynne Bourne AM, ISS Institute 2007.*

Docking

The practice of removing the tail from a lamb within eight weeks of birth to keep the tail area free of urine and faeces stain and keep the area clean. A number of methods are used including elastrator rings, knife and cauterizing.

Dorper

A white sheep with a black head and points bred in South Africa for lamb and sheep meat production in harsh dry areas of country.

Dorper breed standard

A list of requirements developed by the South African Dorper Sheep Industry, which must be adhered to when breeding and selecting sheep to be used in any full blood breeding program.

Draft

A group of animals selected from the whole mob for certain characteristics.

Dressed

The net carcass of the sheep after slaughtering, when all cavity contents, hooves and head have been removed.

Dressing out percentage

The dressed carcass of the sheep expressed as a percentage of the live sheep weight.

Empty

Not pregnant.

Entire

A male lamb that has not been castrated.

Fat score

A generally recognized system of assessing and scoring an animals' body condition by using your fingers along the backbone of the animal to actually feel the fat development, and transferring this information in to a score from one to five. Score one is the lowest, meaning no fat at all, and five being the highest, meaning a very fat animal. The African fat score system goes up to six meaning an over-fat animal.

Finished

The term used to describe the process of having the animal reach the right stage for the market.

Full Blood

Any entire animal/s whose sire and dam are registered with the Dorper Society as full blood animals.

Green pick

Any small amount of green fodder that an animal may find in the area of country it is grazing.

Growth promotants

Synthetic substances placed in an animal's body to promote muscle growth.

Innovation

Creating and meeting new needs with new technical and design styles (new realities of lifestyle). *Reference: 'Sustainable Policies for a Dynamic Future', Carolynne Bourne AM, ISS Institute 2007.*

Joining weight

The minimum body weight of a female required to ensure that, when mated to a sire, cycling is happening in the female and pregnancy will be the result.

Lambs at foot

A term used to describe a young lamb still suckling its mother for milk.

Lot fed

The process of having a group of animals placed in a restricted area and provided with a rich ration of food to ensure these animals grow well and achieve a desired market weight in the shortest possible time.

Mulesing

The practice of surgically removing a small amount of loose skin from both sides and above the anus of a sheep to tighten the skin of the area and so as to almost remove any blowfly strike from the sheep and hence keep the sheep healthy and in many instances keep it alive.

Pastern

The area of an animal's leg, just above the hoof, that joins the hoof to the rest of the leg.

Scanned

Ultrasound scanning of ewes to determine if a ewe is pregnant or 'empty' for management purposes.

Sire

The father of the lamb.

Skills Deficiency

A skill deficiency is where a demand for labour has not been recognised and where accredited courses are not available through Australian higher education institutions. This demand is met where skills and knowledge are acquired on-the-job, gleaned from published material, or from working and/or study overseas.

There may be individuals or individual firms that have these capabilities. However, individuals in the main do not share their capabilities, but rather keep the IP to themselves; and over time they retire and pass away. Firms likewise come and go. *Reference: 'Directory of Opportunities. Specialised Courses with Italy. Part 1: Veneto Region', ISS Institute, 1991.*

Sustainability

The ISS Institute follows the United Nations NGO on Sustainability, "*Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". *Reference: http://www.unngosustainability.org/CSD_Definitions%20SD.htm*

Tail end

The draft of animals, from a mob, that has not grown or performed as well as the mob as a whole.

Trade lamb weight

A slaughtered and dressed carcass weight of lamb suitable for sale to the general public.

Veldt

Pronounced 'felt': all the countryside from open plains to mountains, excluding agricultural land and urban areas, in Namibia and South Africa

White Dorper

An all-white Dorper breed of sheep with some dark pigmentation around the eyes and under the tail, the skin colour is the only difference between the Dorper and the White Dorper.

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Awarding Body – International Specialised Skills Institute (ISS Institute)

The International Specialised Skills Institute Inc is an independent, national organisation that for over two decades has worked with Australian governments, industry and education institutions to enable individuals to gain enhanced skills and experience in traditional trades, professions and leading-edge technologies.

At the heart of the Institute are our Fellows. Under the **Overseas Applied Research Fellowship Programme** the Fellows travel overseas. Upon their return, they pass on what they have learnt by:

1. Preparing detailed reports to government departments, industry and education institutions.
2. Recommending improvements to accredited educational courses.
3. Offering training activities including workshops, conferences and forums.

Over 180 Australians have received Fellowships, across many industry sectors.

Recognised experts from overseas also conduct training activities and events. To date, 22 leaders in their field have shared their expertise in Australia.

According to Skills Australia's 'Australian Workforce Futures: A National Workforce Development Strategy 2010':

Australia requires a highly skilled population to maintain and improve our economic position in the face of increasing global competition, and to have the skills to adapt to the introduction of new technology and rapid change.

International and Australian research indicates we need a deeper level of skills than currently exists in the Australian labour market to lift productivity. We need a workforce in which more people have skills, but also multiple and higher level skills and qualifications. Deepening skills across all occupations is crucial to achieving long-term productivity growth. It also reflects the recent trend for jobs to become more complex and the consequent increased demand for higher level skills. This trend is projected to continue regardless of whether we experience strong or weak economic growth in the future. Future environmental challenges will also create demand for more sustainability related skills across a range of industries and occupations.¹

In this context, the Institute works with Fellows, industry and government to identify specific skills in Australia that require enhancing, where accredited courses are not available through Australian higher education institutions or other Registered Training Organisations. The Fellows' overseas experience sees them broadening and deepening their own professional practice, which they then share with their peers, industry and government upon their return. This is the focus of the Institute's work.

For further information on our Fellows and our work see www.issinstitute.org.au.

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¹ Skills Australia's 'Australian Workforce Futures: A National Workforce Development Strategy 2010', pp. 1-2 http://www.skillsaustralia.gov.au/PDFs_RTFS/WWF_strategy.pdf

Acknowledgments

Fellowship Supporter

This Fellowship has been supported by the Department of Education, Employment and Workplace Relations (DEEWR), Australian Government.

The Australian Government's Department of Education, Employment and Workplace Relations (DEEWR) implements Government policies and programs to provide education and training opportunities for all Australians, to increase employment participation and to ensure fair and productive workplaces. Education, training and workforce participation are central to our goal of building a productive and socially inclusive nation, one which values diversity and provides opportunities for all Australians to build rewarding social and economic lives.

Supporters

The Fellow acknowledges the invaluable support and encouragement of the following organisations:

- AgriFoods Skills Australia
Arthur Blewitt: Chief Executive Officer
- Dorper Sheep Society of Australia Inc.
Rob Martin: Secretary
- Rural Skills Australia
Bob Ward: Education and Training Advisor

Australian Organisations Impacted by this Fellowship

- AgriFood Skills Australia, Canberra
- Australian Agricultural College Corporation, Longreach Campus, Queensland
- Department of Agriculture, Fisheries and Forestry, Canberra
- Department of Agriculture and Food, Western Australia
- Department of Primary Industries, New South Wales
- Department of Primary Industries, Victoria
- Department of Agriculture, South Australia
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- National Farmers Federation
David Crombie: President
- Rural Skills Australia, Education and Training Advisor, Brisbane
- Sheepmeat Council of Australia
Kate Joseph: President
- Tocal Agricultural College, Tocal, New South Wales
- University of Adelaide, Roseworthy Campus, South Australia

About The Fellow

Richard Knights is a professional sheep farmer in a semiarid area of western Queensland. He is part owner of the Kalou White Dorper stud No. WD308.

The Fellow has many years of experience with Merino wool sheep and cattle in the semiarid regions of western Queensland. This career followed receiving a rural education up to the level of Diploma experience in animal husbandry at the Queensland Agricultural College.

Knights is a member of the Dorper Sheep Society of Australia Inc. and the Lower Nebine Bestprac Group (an innovative farming/producer group). He has a certificate in Dorper Sheep Assessment (junior course) issued by the South African Dorper Society.

The Fellow also served nineteen years as a Balonne Shire Councillor, four of those years as Deputy Mayor and eight years on the Queensland Council of the Isolated Children's Parents Association, two of those years as the Queensland President.

Knights is currently the President of the Fernlee Water Authority Board, a Category two water board, charged with the responsibility of replacing open bore water drains with a fully enclosed system of poly pipe over approximately one hundred and twenty thousand hectares.

Aims of the Fellowship Programme

The purpose of the Fellowship programme was to:

- Investigate the process of gaining formal qualifications in the senior South African breed standard for Dorper sheep. Some of the skills were achieved by accessing and taking part in a five-day senior practical and theory Dorper Sheep Assessment course. This was an advanced training course on the assessing and placing of sheep, including a 'practical' and 'theory' examination with a certificate being generated by the South African Dorper Society for successful participants. The course covered breed development, outstanding characteristics and breed standard of excellence.
- Become skilled in practical Dorper sheep selection techniques and standards. Within the standards are sub-sections on conformation, size & growth, distribution of fat, colour pattern, covering, type and selection.
- Gain knowledge of successful paddock-to-plate practices for naturally or organically produced Dorper sheep.
- Achieve an increased level of knowledge on environmental and natural resource management requirements for the Dorper lamb.
- Play a leading role in the dissemination of information and skills through the Dorper sheep Industry and the general meat sheep industries.

The Australian Context

The Dorper sheep was developed in South Africa when it became apparent after the 1930s that the current breeds of meat sheep could not be absorbed locally or exported because of poor carcass quality. The sheep was bred using a Dorset Horn ram crossed with a Blackhead Persian ewe and the South African Dorper Sheep Breeders Society was established in July 1950. The sheep is a single purpose wool-shedding meat sheep (hair sheep) eminently suited to the harsh environments of South Africa and Namibia. The breed has since split into two breeds: the Dorper (black head and black points) and the White Dorper (pure white). The first Dorpers arrived in Australia in 1996 and have since spread slowly throughout the country from the intensive agricultural areas to the arid, dry regions. It is only in the last four or five years that large-scale commercial operators have introduced Dorpers into the arid and semiarid areas of Australia to produce marketable lambs off naturally grown pasture. This experiment will need to be supported by skills and knowledge into the future to allow the industry to progress.

The Dorper sheep is known as a hardy adaptable animal that can produce marketable lambs from less than ideal pasture conditions. In its pure and near-pure state it requires very little maintenance and husbandry practices. It does not require shearing and produces high-quality skins sought after by luxury carmakers for upholstery. It does not require chemical treatments for external parasites and only in high rainfall areas are chemical treatments necessary for internal parasites.

Dorpers do not require mulesing and lend themselves easily to the production of certified organic food. Strong political activity by animal welfare activists to have mulesing banned has seen the Merino Industry set a deadline for phasing out mulesing; however, the alternatives leave much to be desired. These attributes mean that the Dorper can be farmed with a high level of animal welfare in a harmonious relationship between the environment, the sheep and the farmers.

The often hard experiences in the traditional industries due to drought and low wool prices has led to the thinking that there must be a better way of utilising the natural environment in a sustainable way for personal and community benefit. People from all over the country started importing Dorper genetics from South Africa and Namibia into Australia. These sheep quickly developed a reputation as hardy highly productive animals in the arid and semiarid regions of Australia. Market research from Meat and Livestock Australia over the past three years forecasts strong and increasing demand for lamb and sheep meat for at least ten years.

The development of the arid and semiarid areas of Australia since the 1900s saw the Merino sheep and wool become the dominant sector of the Australian pastoral industry. For decades the industry battled droughts, floods and isolation. During the good times it brought great wealth to inland cities and towns. The sector employed many people, as Merino sheep management required a heavy input of labour. From about 1960 the profitability of the industry started declining. The advent of mining and its ability to pay higher wages saw a drift of families leaving the farms and inland towns. Periodically, wool prices would improve for a short while but this was soon followed by another slump. The Australian Government introduced a Reserve Price Scheme (RPS) to support the wool industry. While this underpinned the industry for a number of years, real prices for wool continued to decline over time, making Merino sheep and wool production uneconomical. Eventually the RPS was withdrawn.

The Australian Context

This situation has left much of inland Australia devastated. Small towns have shrunk even further, services have been withdrawn and the general quality of life has left many of those who have stayed in the bush with little confidence in the future. Too many farms and farmers have to rely on social security support to simply put food on the table. The average age of the Australian farmer is approximately 60 years with very few young people entering farming in the traditional wool growing areas.

The conservative wool growing community has been reluctant to embrace change, going to the extent of actively opposing change. It has seen the introduction of different animal industries into the traditional wool growing areas as a threat to its very existence. The introduction of single purpose hair sheep (some with black wool) with their medullated fibres, were seen simply as contaminants for pure Merino wool. The wool industry was able to block the importation of these genetics for some time but eventually it became understood that the arid areas of Australia needed to experiment with alternative industries to see if they could halt the decline in the fortunes of the bush.

When the Dorper was first introduced into Australia in 1996 (and for quite some time afterwards) many mistakes, breeding accidents and misinformation were prevalent. As with any new venture many participants were entrepreneurs, opportunists, and ill-informed people looking for a quick profit.

The industry is moving on from this position and looking to consolidate through training and knowledge. Farmers experienced in running Dorpers are helping entrants to the industry better know the breed. The Australian Dorper Society promotes skill development and conducts training programs.

The production of quality lamb and sheep meat in Australia has traditionally been in the high rainfall areas using British sheep breeds. Lamb was referred to as 'fat lamb' and sheep meat as 'mutton', being used for low grade manufacturing purposes. In these areas the emphasis has changed to producing prime lean lamb and sheep meat. With the increase in lamb prices in recent years and the introduction of new breeds of sheep that are more suitable for lamb production in arid areas some farmers see that there could be a future in a new industry.

Sheep numbers have been declining in Australia for many years. Official numbers at the 30th June 2009 put Australia's sheep flock at approximately 72 million, a 4 million head decrease since figures were last posted making a 30 million head drop in the past five years.² The flock run-down is largely due to farmers moving from Merino wool to various other farming enterprises including Dorper and Dorper-cross sheep. Lamb slaughtering in the past three years has been 20 million per year with a peak of 21.2 million in 2007.³ Total disposals from Australia's sheep flock are running at 36 million per year.⁴

Approximately 72 per cent of the flock are ewes and in an average year on joining 35 million ewes at an 80 per cent lamb-marking rate the lamb tally will struggle to make 30 million or a net deficit of 6 million sheep per year.⁵ International trends in China and Russia also show declining flock numbers.

² Clancy, Brian. 'Weekly Times Now', June, 2009

³ ibid

⁴ ibid

⁵ ibid

The Australian Context

Recent saleyard prices for export live sheep in Western Australia reached unprecedented levels of around \$150.00 per head. These prices are not sustainable, but show that the demand is strong. Forecasts predict that the \$5.00 per kilogram for dressed lamb, normally only reached in the peak of winter, could be a more general price.⁶ Australia needs more sheep meat produced and one major production area that could meet this demand is the arid and semiarid regions of Australia using Dorper sheep and Dorper crossbreeds.

SWOT Analysis of the Dorper Sheep Industry

Strengths

- National and international demand for sheep meat.
- Market forecasts showing strong demand for at least ten years.
- Ability of Dorper sheep and crossbreeds, based on Dorper bloodlines, to thrive in arid Australia.
- Clean green sustainable use of the natural environment.
- Organic certification.
- Chemical free production.
- Minimal veterinary practices eg no mulesing, shearing, lice or blowfly control.

Weaknesses

- Lack of expertise and appropriate qualifications in Dorper sheep breeding and maintenance.
- Global economic crises.
- Input costs eg fuel, freight.
- Ability to meet market demands eg delivery schedules.
- Distance to processing facilities and markets.
- Changing skill requirements for industry workforce.

Opportunities

- Increasing opportunities in export markets for conventionally grown and certified organic lean meat.
- Technology for individual sheep identification to identify elite animals.
- Technology for environmental management eg remote monitoring of water facilities, pasture assessment.
- Direct, fully identified lamb deliveries to customers.
- Anoestrus breeding for year-round production and deliveries to market.
- Food security.

⁶ 'The Land', June, 2009.

The Australian Context

Threats

- Strength of the Australian dollar.
- Carbon Pollution Reduction Scheme.
- Government policies on land and water use.
- Ill-informed and unsympathetic urban environmental activism eg animal welfare.
- Cost of production, placing lamb out of reach of the customer.

Identifying the Skills Deficiencies

We know that Australia's economic future is reliant upon high-level skills and knowledge, underpinned by design and innovation.

The ISS Institute has developed a clear framework for what is an immensely complex area. 'Skill deficiencies' is used as the overarching phrase to encompass skills, knowledge and insights underpinned by design and innovation. Based on the ISS Institute's initial market research in 1990, an important category emerged, that of skill deficiency.

ISS Institute's objectives are directed towards bringing skills (traditional and leading-edge technologies), knowledge and insights to Australian industry, education and government agencies and, in turn, the community in general. The goal is to generate new ways of thinking and new ways of working so as to create innovative products and services for local and global markets.

The Fellowship addressed the following skill deficiencies:

1. Achieve specific skills that help facilitate the Dorpers ability to adapt to a range of environmental conditions and produce lambs even on very harsh arid land.

Meet with Dorper sheep breeders in South Africa and Namibia to learn specific factors that determine the ability of the sheep to thrive and produce marketable lambs under a range of natural environments including arid and semiarid regions. Specific Dorper-related skills to be addressed include management and husbandry requirements of the sheep such as shearing, mulesing, drenching for internal parasites and dipping for external parasites.

2. Gain more scientific understanding of the grazing and foraging capacities of the Dorpers to use pasture and forage, while maintaining production without damaging any plant species.

A specific objective is to better understand the ability of the sheep to be non-selective grazers across different types of country. This includes the grazing of grass, shrubs, bushes and trees and the percentages of each type of forage the sheep includes in its diet. This non-selective grazing trait has positive implications for species that are normally overgrazed by livestock.

3. Conduct an analysis of the information available on a Dorper ewes fertility and strong mothering qualities under rangeland management conditions.

Learn from South African and Namibian Dorper breeders detailed information about Dorper fertility, their ability to be anoestrus, have multiple births and the strong mothering qualities of ewes.

Obtain relevant data from Dorper breeders showing how productive the ewe is during her life. It is important to know how many live lambs are produced, understand the impact of predators on newborn lambs and the impact of the Dorper ewes mothering instincts on lamb survival.

4. Develop high-level skills in identifying Dorpers with the capacity to produce lambs with a higher dressing out percentage than other breeds of meat sheep.

Gain new insights about the Dorpers' ability to have a higher dressing-out percentage than other breeds of sheep. Learn from abattoir managers about the dressing out percentage of Dorper lambs and learn from breeders about the particular physical traits required in the lamb to achieve this advantage.

Identifying the Skills Deficiencies

5. Achieve new knowledge and skills in marketing methods for commercial lamb and sheep meat.

Analyse and assess the compatibility of the Australian industry with the marketing and sale options available to South African and Namibian Dorper farmers for commercial lamb. Identify potential new and innovative methods for lamb sales and based on that information, formulate a strategy that will lead to the best commercial and environmental advantage.

6. Attend full blood Dorper sales where alternative methods of selling can be observed to undertake a comparative analysis of new versus traditional selling and marketing methods currently in use in Australia.

Alternative methods of selling livestock will be analysed to assess success or otherwise with a view to making specific recommendations on how to improve selling methodologies and practices in Australia.

7. Gain new competencies in the assessment of Dorper sheep by using the Dorper Breed Standards and Aims and attaining formal qualifications in the South African standard.

Undertake a formal training course that will lead to a high level of assessment and superior information on the best sheep for the lamb production industry.

8. Obtain new skills in current best practice environmental management techniques to ensure no land degradation occurs during the predicted challenge of climate variability. This will be achieved through hands-on field conditions experiences in studying the impact of Dorpers on the natural environment with a particular focus on the capacity of Dorpers to continue producing lambs in the face of climate variability.

Study Namibian and South African rangelands to better understand sustainability issues relating to specific pastures and environment.

9. Determine the future outlook for lamb marketing using the best international market research available.

Obtain up-to-date international market research information from South African and Namibian sources to develop a clear picture of the future directions of the lamb market in the major lamb producing countries. This knowledge will assist in better production planning at the Australian farm level.

10. Gain a better understanding of the certified organic export lamb market by working with any organic groups processing lamb.

Determine the potential for exports of certified organic lamb considering the natural advantages the Dorper has in being a major part of the production of clean green food. The world is looking for clean green food and the production and export of certified organic Dorper lamb could become an important market.

The International Experience

Namibia and South Africa have had the biggest influence on the development of the Dorper sheep. Both countries were forced by a range of circumstances to develop a sheep that could both thrive in semiarid and desert areas and produce high quality lamb for domestic and international consumption.

Many questions were asked and answered during the Fellow's travel through Namibia and South Africa:

- What is good about Dorpers?
- Why do you run them here?
- Do you have to feed them during dry times?
- Do you prefer Dorpers to White Dorpers?
- When do you sell the lambs?
- Where do you sell the lambs?
- How fertile are they?
- What are the growth rates?

The answers to these questions unfolded as the tour progressed.

Namibia

Namibia is a relatively small country with a population of just over two million. Windhoek is the capital. Namibia gained independence from South Africa in 1990.

The Namibian climate is wetter in the north, becoming progressively dryer as one moves south. The Kalahari region in southeast Namibia is Dorper sheep and Boer goat country. The prevailing weather pattern delivers summer thunderstorms between January and March, followed by dry winters. Average annual rainfall is between 100 and 150 millimetres. By May each year the grass has become very dry and remains that way until summer storms arrive. Plentiful water for stock can be found at depths of 30 to 100 metres. Water is drawn by windmills, stored in large tanks and distributed through polythene pipe to troughs.

The Dorper breed was introduced into Namibia from South Africa during the 1960s. Prior to this time the principal breed was the Afghan Karakul. This sheep has been farmed in many arid regions and is still farmed in parts of Namibia. The Afghan Karakul is farmed for the skin of newborn lambs. These are sold into the European market to produce luxury leather and fashion-related items. Known locally as 'Swakara', newborn Afghan Karakul lambskin has erratic and significant price fluctuations. It has also been the target of an international campaign by the World Wide Fund for Nature, which branded the Swakara industry barbaric and cruel. Despite this, the industry provides a livelihood for 20,000 Namibians and is worth between \$4.5 million and \$5.5 million a year.⁷

A major reason for introducing the Dorper breed into Namibia was to provide insurance against the wild price fluctuations for Swakara. The Dorper was also an ideal breed to meet the growing demand for lamb in South Africa. There are 64 Dorper studs in Namibia that are breeding seed stock for Namibian commercial farmers and international breeders.

⁷ www.copenhagenfur.com

The International Experience

Uhlenhorst

Francois and Amanda Stumke met the Fellow on his arrival in Windhoek. The Stumkes' are South African Dorper farmers.

In Uhlenhorst the Fellow visited the farm of Connie and Hoehus van Niekerk. Their farm is considered to be the premier Namibian Dorper stud.

Aranos

Apart from some stone outcrops, the country around Aranos is principally comprised of low-grade sandy soil covered in dry sour grass. The Fellow visited three Dorper farms in the Aranos area operated by Danie Visser, Jerrie Kotze and Freddie Dreyer respectively. These farms are run as both stud and commercial breeding operations. Freddie Dreyer is the President of the Dorper Breeders Society of Namibia and Danie Visser is a qualified judge and breed selector.



Freddie Dreyer briefing the Fellow and others on conformation issues relating to the White Dorper

Although Aranos is a small town, it boasts its own lamb abattoir. This provides an outlet for the local farmers to sell their lambs. Dorper lambs are usually weaned at four months and from that time the drafts of lambs that will yield a carcass of 16 to 18 kilograms are slaughtered. In Australia a trade lamb weight is up to 22 kilograms dressed. The lighter weight lambs from the tail end of the mob are often lot fed to achieve market weight.

The Namibian farmers expressed concern that growing a Dorper lamb to a heavier carcass weight and to an older age may lead to problems of the carcass being too fat. It would take some years under Australian arid conditions to document this process and consider market requirements. Currently Australian lot feeders and processors suggest there is no problem.

The International Experience

Because of the harsh environment, breeders need to pay attention to maintaining the desirable breed characteristics that enable the sheep to thrive under such conditions. The sheep must maintain the correct proportions of Blackhead Persian and Dorsett Horn to ensure they remain hardy, adaptable, fertile, maternal, have fast growth rates and produce a good carcass. The sheep must also have a well-balanced conformation. The rams must be masculine and, to enhance fertility, the ewes need to be feminine. The fertility traits are crucial to successful commercial farming of the breed. While it is possible to breed larger Dorpers that produce bigger and heavier carcasses, the downside is a loss of fertility and the introduction of conformation faults.

The Dorper in Australia has been plagued with conformation faults such as poor feet and pastern structure as well as poor shoulder structure. This had led to many sheep 'breaking down' and becoming undesirable breeding stock. The Namibian and South African Dorper farmers believe that they do not have these faults in their flocks to any significant degree and are of the view that Australian breeders can select these faults out of Australian Dorper flocks with results achieved in five to ten years. Unfortunately, most buyers of stock only see very young animals at sales, where these faults are not very noticeable, only to be confronted by the faults as the animal gets older and heavier.

The next farm visited was approximately two hours drive south east of Aranos close to the Botswana border. This farm was owned and managed by Hannes and Jomarie Visagie. Visagie was the first woman ever to qualify as a judge and Dorper Breed Selector. The Dorpers inspected were mostly commercial ewes with lambs at foot. The sheep were in approximately 'fat score three' condition with the lambs growing well.



Commercial ewes and lambs in an open paddock. Note the sparse vegetation and sandy soil typical for running the flocks in Namibia

The International Experience

Predators such as jackals, cats, lynx and occasionally cheetahs have a serious impact on lamb survival throughout Namibia and South Africa. Worse case scenarios can see a flock of ewes with up to 140 per cent of live lambs born having 60 per cent to 80 per cent of those lambs being taken by predators.⁸ These are native animals to these areas and have a serious impact on the ability of the farmer to farm successfully.

The Visagie farm is located in one of the harsher and dryer parts of the Kalahari with sand dunes ten to 15 metres high across most of the farm. The flats between the dunes grow softer grass but on the dunes the grass was very coarse. This is not the kind of livestock feed that would normally be associated with the production of good lamb. Dorper lambs however go straight from these pastures to market.

The dune peaks also had thorn bush growing to a height of two meters. The dunes appeared very stable, showing no sign of sand movement or erosion. The farming of Dorpers in this fragile desert environment for the past 50 years has not degraded the ecosystem and can continue in this manner indefinitely.

Koes

In the Koes region, the Fellow visited two farms owned and operated by Floors Nell and Kosie Esterhuizen. The drive was over sand dunes that appeared to go on forever. The only relief was when the road ran parallel to the dunes. Nell runs Dorpers and Esterhuizen White Dorpers. Although the 2008-09 summer season had been wetter than normal, the grass was completely dry.

Although the relative merits of these two Dorper breeds are the subject of much debate among farmers, the skins off the carcasses are exactly the same. Some stud breeders have both Dorper and White Dorper studs on their farms. Approximately 75 per cent of the Dorpers in Namibia and South Africa are black-headed Dorpers, with breed supporters claiming production successes in both directions. A farm of around 10,000 acres in the Koes region will run approximately 2000 breeding ewes.

Farms of this size employ up to ten workers. There was a noticeable absence of labour saving devices such as horses, motorcycles and sheep dogs as the workers do mustering on foot. The fencing is of a high standard compared with fencing in the pastoral zones of Australia. A standard internal sheep-only fence would include nine plain wires, with boundary fencing usually including netting, plain and barbed wire. In some places the fences are constructed over rough rock.

Other farms have very elaborate conventional and electric fence combinations up to three metres high to control game animals. Water facilities for stock are not sophisticated. This does not matter under these conditions as workers see these facilities at least daily and can easily restore water supplies if they are interrupted. In the remote regions of Australia water facilities need to be of a very high standard, as they are not monitored regularly due to little or no workforce.

⁸ Terminology expressed as percentages as used by farmers means that in this worse case scenario, 100 ewes can produce 140 lambs. Of those 140 lambs, between 60 and 80 per cent are taken by predators.

The International Experience



The White Dorper ewes here show there is no need for mulesing

An issue that arose on a regular basis was the practice of accelerated mating. Nell practices this particular breeding plan. With accelerated mating, maiden ewes are mated at ten months of age. If they fail to get pregnant they are given a second chance and ultrasound scanned for pregnancy. Empty young ewes are culled to market. All other ewes are mated every eight months, scanned for pregnancy and empty ewes sent to market.

This management plan is applied through all seasons no matter how dry. Annual yields are around 160 per cent. Lambs are weaned at four months and drafts of market lambs are ready soon after. The accelerated mating management plan only includes sheep run on the natural veldt. Lambs that are too light for the market are then lofted until heavy enough for sale. This aspect of the management plan requires detailed management and success depends on the ability of the ewe to regain the required joining weight to start again. The farm work plan must be adhered to in order to achieve the desired outcomes.

Ben Grobbelaar, a Dorper farmer from South Africa puts a different point of view on accelerated mating. According to Grobbelaar, mating the ewe only once a year will result generally in the ewe rearing twins, thereby lowering management requirements and enabling the ewe to regain sufficient weight for the next mating. Grobbelaar stated that this approach still achieves 150–160 per cent lambs per year.

The issue revolves around the ewes' ability to regain weight after rearing a lamb and the economics of the management procedures. Different regions of Namibia and South Africa can have varying levels of natural nutritional value in the pastures and this will dictate how ewes will perform.

The International Experience

Samehaling

In the region of Samehaling, Pieter and Helena van Schalkwyk operate a commercial lamb production farm as well as a White Dorper breeding business selling Dorper genetics worldwide. The van Schalkwyk's breeding business emphasises breeding fertility. Femininity and masculinity are essential traits in having fertile sheep. Apart from having the skill to recognise such traits, van Schalkwyk is of the view that tail docking has a negative impact on ewe fertility. According to van Schalkwyk the emphasis on having sheep with very straight backs can place the angle of a ewe's pelvis more vertically and cause some birthing difficulties compared with a ewe whose pelvis angles slightly backwards providing a smoother birthing canal.

The Fellow found that professional opinion on the impact of tail docking on fertility differed among the farmers he met. One farmer was of the view that tail docking causes more blowfly strike than it prevents. This practice, first introduced by the British, is seen by many Namibian and South African farmers to more of a fashion statement than practical sheep husbandry.

Keetmanshoop

Keetmanshoop is a large town in central southern Namibia. In 2008 the President of Namibia, Hifikepunye Pohamba, opened the Brukkaros Meat Processor's lamb abattoir approximately 20 kilometres south of the town. The abattoir has the capacity to kill 1500 lambs per day on one processing chain and tan 2500 and 3000 hides per day. The abattoir has European Union (EU) accreditation. Lambs killed at the abattoir are exported principally to Norway and Belgium. Dorper hides have six levels of grading. Substandard hides are discarded, with the remainder exported to Italy for use in the luxury goods industries. Offal products are sold to local Africans who prefer the offal to red meat.

At the time of the Fellow's visit to the abattoir, lambs being slaughtered were around eight months old and had come off very rough country with little pasture. They were entire male lambs with their tails. Removal of the testicles and tails from the carcass's on the chain was done efficiently. Presenting lambs in this manner removes the need for live tail docking and castration and the consequent animal welfare issues associated with these practices.

In Namibia lambs on average spend three hours on a truck to reach an abattoir. Travel times of eight hours are considered a very long time. One specific procedure observed involved encasing the oesophagus and rectum in banded plastic bags to avoid any contamination. At grading and weighing hot lambs ranged from 17 kilograms to 23 kilograms dressed. The price for the lambs is set by the abattoir. At the time of the Fellow's visit the going price was about N\$33–34 per kilogram (approx A\$5.20 per kilogram). In Namibia and South Africa farmers expect a yield for Dorpers of approximately 46 per cent in dressed weight. In Australia they are promoted to yield over 50 per cent in dressed weight. The Australian Auctions Plus internet selling system regulates the dressing out percentage for all lambs at 45 per cent. Australian abattoirs do seek out Dorper lambs because of their dressing out percentage.

Dorper-cross lambs finished on lucerne pasture near Millmerran in August 2009 and killed at the Millmerran abattoir consistently yielded 52.2 per cent. This was from a live weight animal of 45.3 kilograms producing a 23.65 kilogram carcass. Accurate information on live and dressed weights is difficult to ascertain, as such information is kept confidential by the abattoir.

The International Experience

In Namibia it is illegal to use growth promotants and a variety of other chemicals in lambs. Severe penalties apply for the use of growth promotants. In South Africa however, no such restrictions apply. Namibian farmers could export live lambs to South Africa freely before independence but now have to earn credits in Namibia before exporting them live. These government regulations impose a level of certified organic status on the lamb to ensure that the EU accreditation is not compromised. It is also a make-work-scheme for local people in the abattoirs.

Karasburg

Vegetation in the Karasburg region of south east Namibia is a mixture of grass, thorn bush and karoo bush. The karoo bush is a woody plant that grows to about 30 centimetres and grows more in the winter rainfall regions. Although not particularly nutritional, it provides green pick for most of the year.

Phillip Strauss runs a large Dorper stud and commercial Dorper farm. He has a reputation as one of the most successful stud Dorper exhibitors in the world and has exported genetics. He does not concentrate as strongly on fertility traits as other stud breeders.

Strauss presented a number of selected stud Dorpers for inspection by the Fellow. He described the conformation traits required by elite Dorpers, which has allowed him to be a leading breeder in Namibia. The finely honed visual assessment skills of stud managers are what produce elite animals.

South Africa

Loxton

Kasteel White Dorper Stud is located approximately 30 kilometres from the town of Loxton in northwest South Africa. Vegetation is overwhelmingly karoo bush and thorn bush growing on stony rough ground. It is owned and managed by Dries Wiese and family. One of the main reasons hooves of sheep don't cause many problems for managers of farms is because the constant wear against the stone and rock keeps them small with short toes. In Australia many Dorpers run on soft country and develop problems with their feet. At Kasteel there is a strong emphasis on fertility when selecting ewes. Both the mother and grandmother of the ewe have to have an excellent fertility and mothering history before the maiden ewe can be included with the stud breeding ewes.

Beaufort Wes

The Vale farming property is a Dorper stud owned by Gideon Vivier, President of the South African Dorper Society. As the farm is located in a higher rainfall area, some irrigation water is available to grow stock feed.

The Vale is the location where courses for the South African Dorper Breed Standard (The Standard) accreditation are conducted. The South African Dorper Breed Standard is the only officially recognised Dorper Breed Standard in the world. It has evolved over the past 50 years. The Standard has been codified in a textbook by Dolf Lategan and is used for all the training programs offered by the South African Dorper Society in South Africa or anywhere else in the world.⁹

⁹ Lategan, Dolf, 'Dorpers Into the New Century', Brochure and Training Manual, Fourth Edition 2008.

The International Experience

The Standard covers all the course requirements for junior course, senior course (five days per course) and the judge's exam. It also contains information dealing with the management of Dorpers. The Dorper Society can then invite Dorper judges to become breed selectors. The Dorper Society then conducts periodic seminars for these people to ensure a very high level of competency is maintained.

The South African Dorper Society protects the integrity of the standard vigorously. Many people have to attend courses over a number of years before gaining accreditation. Many never make the upper levels. To sit for the judge's exam, a participant normally has to have passed two senior courses in the previous twelve months. This is not possible in Australia as courses are only held occasionally. However, introductory Dorper courses are held periodically in Australia.

South African and Namibian experts also conduct Junior and senior courses locally. To achieve success at this senior level requires a very high degree of assessment speed and skill. This can only be achieved by those who work with Dorpers constantly and develop an 'eye' for the sheep. Australia's first qualified Dorper judge is Adrian Vietch from Kaya stud in Western Australia. Vietch achieved this honour in August 2009.

The Standard is based on conformation (balance), growth, fat distribution, colour pattern, cover (fleece), type and selection. Some Australian Dorper farmers are of the opinion that the standard does not place sufficient emphasis on certain breed traits required in Australia, such as shedding, better feet and shoulders, and slightly longer legs. The South Africans believe that their standard produces the best Dorper. The Society in South Africa also has some difficulty in ensuring that all its own members respect the standard.

Following a two-day visit to Steyterville the Fellow returned to Beaufort Wes to observe the ram sale. This was a two-day event with a Hi/Lo judging show the first day and the sale held on the second day.



Hi/Lo judging held in Beaufort Wes

The International Experience

Stud Dorpers being sold at auction are assessed and typed the day before the sale. The Hi/Lo judging system is used. This system uses three independently qualified judges to type animals. The South African Dorper Society has a list of qualified judges from which the group of three is chosen. Each judge has a number of cards numbered X, 2, 3, 4 and 5, with X defining a cull animal and 5 an excellent animal, and as the judge makes an assessment they show a steward the card publicly. The steward averages the scorecards and the result is recorded. After judging the animals are run past the judges for reassessment and final changes can be made. This assessment is final and any animals culled cannot be offered for sale. On occasions there can be significant discrepancies in scoring between judges. This process would have great benefits for Australian stud and commercial producers, as it is completely transparent.

Steytlerville

Uitkyk is a commercial Dorper farm owned and operated by Francois and Amanda Stunke, at Steytlerville. Pure-bred White Dorper ewes are mated and lamb on the open veldt take their chances with any predators. These sheep appeared to have very little to eat other than karoo and thorn bush and were in at least 'fat score three' condition with lambs at foot. After birth lambs are fitted with a collar designed to repel predators. Over a two-day stay the Fellow was able to get some hands-on experience working in very harsh conditions mustering, drafting and inspecting flock rams. A final draft of lambs from the veldt was delivered to the abattoir in George on the last day with one of these lambs returning a fat score of five.



Uitkyk farm at Steytlerville, South Africa, note the rocky terrain and semiarid environment in which the Dorper thrives

One of the most striking aspects of the Fellow's observations and discussions throughout Namibia and South Africa was the extent to which young people are involved in farming. These were usually passionate, well educated people who believed in the future of farming in these countries. Some had already had careers in the urban world of South Africa, Europe and America and had chosen to return to Dorper farming.

Knowledge Transfer: Applying the Outcomes

Exposure to Dorper breeding and selection methodologies practiced in Namibia and South Africa equipped the Fellow with new skills and greater understanding of the requirements for successful Dorper lamb production in the arid and semiarid areas of Australia.

Adaptability

The Fellow gained knowledge about the essential physical characteristics required in the Dorper, which has led to the Dorpers ability to adapt to any environmental conditions. The sheep must be selected with a strong and robust conformation, strong mouth and jaw, well-protected eyes, strong legs and maintaining the equal balance between the Blackhead Persian and Dorset Horn sheep. These traits when maintained in the Dorper provide a sheep that will graze rough pasture and produce lambs suitable for the market.

Management and Husbandry

The Dorper is bred to have low maintenance requirements. The full blood and purebred sheep do not require shearing, crutching, external parasite control or mulesing. It was an unintended consequence in the cross-breeding program between the Blackhead Persian ewe and the Dorset Horn ram that the progeny shed their wool.

The Fellow gained insights into the consequences for Dorper management when the husbandry requirements are considered. There is no need for expensive shearing sheds, huge labour costs or the need to constantly take sheep long distances to facilities for husbandry practices.

In some instances lambs are not castrated or tail docked and are presented for slaughter as entire animals. This process has potential in enhancing animal welfare and also removes a serious setback from the lamb's growth pattern allowing for younger slaughter or heavier weights for sale lambs.

Fertility and Strong Mothering Qualities

The Fellow gained a greater understanding about selection criteria and management practices that produce the most fertile sheep. In order to be considered for inclusion in the stud breeding performance data from her mother and grandmother a maiden ewe must show strong fertility records and mothering instincts. All of this must be achieved on the open veldt under natural conditions.

An emphasis on masculinity and femininity traits in parent sheep is essential for the offspring to continue being fertile. The ewe needs to show strong feminine traits of pretty head, longer finer neck, lighter bones, lighter shoulders tapering to a heavier hindquarter with large well developed reproductive organs and udder.

The ram must have a bold head with ennobled 'roman' nose, side pleats, scurs or horn base with the light presence of a mane and beard. The bones should be heavier with a thicker shorter neck well fitted to heavy shoulders; large well-sprung barrel and heavy well-developed hind quarter. The whole body should be well muscled.

Knowledge Transfer: Applying the Outcomes



A feminine Dorper Ewe



A masculine Dorper Ram

Australian attitudes to these traits often follow different selection criteria to those mentioned above. The performance of the Dorper in southern Africa depends on the fertility traits being adhered to, and applying emphasis to other traits will have a negative impact on the sheep's performance and economic outcome.

Knowledge Transfer: Applying the Outcomes

Grazing in the Natural Environment

The Dorper has a natural ability to graze aggressively on whatever pasture is in front of the animal. The Fellow observed the available pasture of grass and shrubs on the veldt, what was actually available for the Dorper to eat and how the sheep consumed this unpalatable looking material. The plant material in Namibia was mainly dry grass and thorn bush and in South Africa there was little grass with karoo bush and thorn bush. From this the Dorper is able to maintain good body weight and the ewes can rear lambs to market weights.

The Fellow noticed on a number of farms that the normal habit of livestock to seek out more palatable species was not so evident in Dorpers removing grazing pressure from the vulnerable species. There is a natural tendency to graze or browse at head height similar to goats, but different to British breeds of sheep that prefer to graze more palatable species at ground level.

Most of the natural environment of the western Kalahari is sand dune country. This desert type country can be subject to denuding by overgrazing if prudent management is not normal practice. The Fellow observed that the sand dunes were covered with plant species and appeared very stable with thorn bush at least two metres high on the very crest of the dunes. These sand dunes must have been formed at a different time under very different environmental conditions. Current management of this veldt that allows plant species to thrive on the sand dunes is sustainable.

Much of the environmental thinking in Australia revolves around removing livestock and farmers from the natural environment, locking the areas up and therefore preserving that part of the environment forever and returning it to a pristine condition. The Fellow believes that using the environment in a sustainable manner, including livestock, people and the natural environment operating in a harmonious and continuous way, will sustain the environment, provide wealth for the greater community and help provide food security indefinitely.

Marketing of Commercial Lamb and Sheep Meat

Prior to Independence Namibian farmers exported live sheep to South Africa for slaughter. Since independence these farmers now largely have their sheep killed at local abattoirs in Namibia. The Fellow was able to see that these abattoirs were located in fairly convenient areas, even in the most isolated areas of the Kalahari, with three hours travelling time for livestock being considered reasonable and eight hours being considered a long time. These abattoirs also conveniently provided jobs for the local people in their hometowns providing a boost to the local economy.

The Fellow was shown through a lamb abattoir where entire male lambs were being slaughtered under EU accreditation for export to Norway and Belgium. These lambs were approximately eight months old, from very poor pastures, weighed in from 17kgs to 23kgs dressed with a fat score average three. The abattoir also tanned 2500 to 3000 hides per day for export mainly to Italy for use in luxury industries. Offal products processed in the abattoir were usually sold locally.

The Fellow was advised that Namibia has state-imposed regulations regarding growth promotants and chemical use. This is akin to having organic certification of meat regulated by the state. Severe penalties apply to farmers who contravene these regulations. The protection of Namibia's EU accredited export markets appears to be an essential policy for the Namibian Government. South Africa has no such regulations; no export market and growth promotants are routinely used. South Africa also has abattoirs conveniently located for lamb slaughtering.

Knowledge Transfer: Applying the Outcomes

Stud Dorpers and Genetics

Since 1995 a number of Namibian and South African Dorper and White Dorper studs have exported genetics to Australia. Although these studs have the best genetics in the world, a number of breeding anomalies have occurred with serious conformation faults being the result. The Fellow had a number of discussions about these problems with stud managers in both Namibia and South Africa. These managers assured the Fellow that the faults referred to, such as poor shoulders and feet, had been addressed and that Australia needed to improve selection processes to remove these faults from Australian Dorpers.

The Fellow was told that the South African Dorper Society also had to be constantly vigilant with its own stud breeders to ensure that correct selection procedures were used by stud managers. The South African Dorper Society has criteria in place that will penalise stud breeders if they don't observe correct breeding objectives.

The South African Dorper Society has a pool of qualified judges and selectors to call upon to conduct Dorper sheep assessments. Australia has no such resource to call on to support the breed but relies on visiting qualified people from Africa. Stud Dorper sales in South Africa use a system of judging pre-sale to type animals called the Hi/Lo system. In this system three qualified judges type the animals publicly and a steward collects the scores, averages the figures and presents a type from one to five. Any animals culled under this system are ineligible for that sale.

Recommendations

Government

Recommendations:

- In the interests of enhancing Australia's food security, Federal, State and Territory Governments provide joint financial support for further scientific and market research into Dorper sheep breeding and farming in Australian arid and semi-arid regions.
- That a component of federal, state and territory funding be earmarked for farmers to attend training courses (in Australia or overseas) in the Dorper Breed Standard.

Education and Training

Recommendation:

- That courses currently offered by agricultural colleges and agricultural training programs relating to the Australian pastoral industry, incorporate up-to-date research on the capacity of the Dorper breed to produce high quality meat from arid and semi-arid regions of Australia.

Professional Associations

Recommendations:

- That the Dorper Society of Australia undertake a comprehensive education program to inform and encourage young people considering a career in Dorper lamb production to attend junior and senior breed standard courses.
- That relevant sheep and pastoral industry councils under the umbrella of the National Farmers' Federation be apprised of the observations and outcomes of this particular Fellowship.

ISS Institute

Recommendations:

- That the ISS Institute assist in identifying new opportunities to acquire and/or develop the unique skills required for Dorper breeding and farming. Obtaining these skills in a timely manner will ensure the Australian Dorper sheep industry can expand.
- That the ISS Institute work with national and state Dorper societies in seeking funding support from the Australian, State and Territory Governments to provide further opportunities for Australian Dorper farmers to obtain professional accreditation so as to enhance the Australian skill base in Dorper sheep breeding.