

A PROFILE OF GOAT MILK



Compiled by
Directorate: Agro-processing Support July 2016



agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

A PROFILE OF GOAT MILK

2016
Design and layout by
Directorate Communication Services
Private Bag X144,
Pretoria 0001

All correspondence can be addressed to:
Director: Agro-processing Support
Private Bag X416,
Pretoria,
0001,
South Africa
Tel: +27 12 319 8457/8311
Fax: +27 12 319 8093
E-mail: VictorTH@daff.gov.za

Disclaimer

This document has been compiled by the Department of Agriculture, Forestry and Fisheries and every effort has been made to ensure the accuracy and thoroughness of the information contained herein and the department cannot be held responsible for any errors, omissions or inaccuracies in such information and data, whether inadvertent or otherwise. The Department of Agriculture, Forestry and Fisheries therefore accepts no liability that can be incurred resulting from the use of this information

TABLE OF CONTENTS

1. INTRODUCTION 1

2. DESCRIPTION OF GOAT MILK 1

3. PRODUCTION OF GOAT MILK 2

4. GOAT MILK PROCESSING 4

5. GOAT MILK VALUE CHAIN 4

6. TRADE PATTERNS OF GOAT MILK CHEESE 5

 6.1 World exporters and importers of goat milk cheese 5

 6.2 South Africa's trade pattern of goat milk cheese 6

7. CONCLUSION 7

8. REFERENCES 8

LIST OF TABLES

Table 1 : Major goat milk producers by continent, 2013.....	2
Table 2: Values for top ten exporters of goat milk cheese (HST040610) in the world, 2011-2015	5
Table 3: Values for top ten importers of goat milk cheese (HST040610) in the world, 2011-2015	5

LIST OF FIGURES

Figure 1: Production of goat milk in the world, 2000-2013.....	2
Figure 2: Top 10 producers of goat milk in 2013.....	3
Figure 3: Goat numbers in South Africa, 2005-2015	3
Figure 4: SA's exports and imports of goat milk cheese (HST040610), 2006-2015.....	6

1. INTRODUCTION

Goat milk is considered as a niche product. A niche product is defined as a product targeting a specific section of a larger industry and market. Niche products are often, but not always, more expensive than more generic products. Goat milk, in the world, is mainly produced in four continents, namely, Asia, Europe, Africa and America. Asia is the most producing continent of goat milk, with the share of approximately 57,8%. Africa produces 25,2%, Europe produces around 13,7% and the remaining 3,2% is produced in the Americas. A key advantage to goat farming, amongst others, is its adaptability and resistance to various conditions and can be easily milked manually or mechanically.

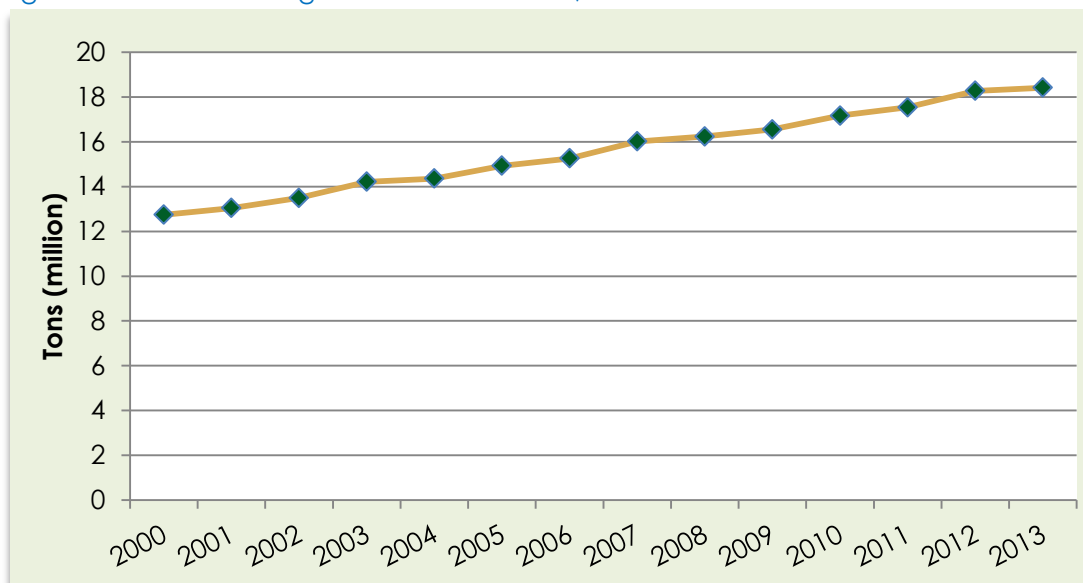
In South Africa, goats are mainly found throughout the country, with the Eastern Cape, Limpopo and KwaZulu-Natal as the largest producing provinces and account for approximately 72% of the total live goats (DAFF, 2014). According to the National Agricultural Marketing Council (2005), goats in South Africa are mostly kept for religious or traditional purposes and on an informal basis (backyard slaughter). This brief study presents an analysis of goat milk's production trends, trade patterns, goat milk processing and the conclusion.

2. DESCRIPTION OF GOAT MILK

Goat milk is well tolerated by individuals sensitive and allergic to cow milk and has beneficiary effects on health and can be easily digested. Agatha (2013) argued that, besides cow and buffalo milk, goat milk has an exceptional quality given by its chemical composition owing to its richness in various nutrients. Goat milk can also be consumed fresh or processed in different types of products such as cheese, butter, ice cream, yogurt, condensed milk and evaporated powdered milk.

3. PRODUCTION OF GOAT MILK

Figure 1: Production of goat milk in the world, 2000-2013



Source: FAO, 2016

Figure 1 above shows the world production of goat milk from 2000 to 2013. Goat milk production has been increasing throughout the period under review. The lowest and highest number of goat milk production was recorded in 2000 and 2013 at 12,7 million tons and 18,4 million tons, respectively.

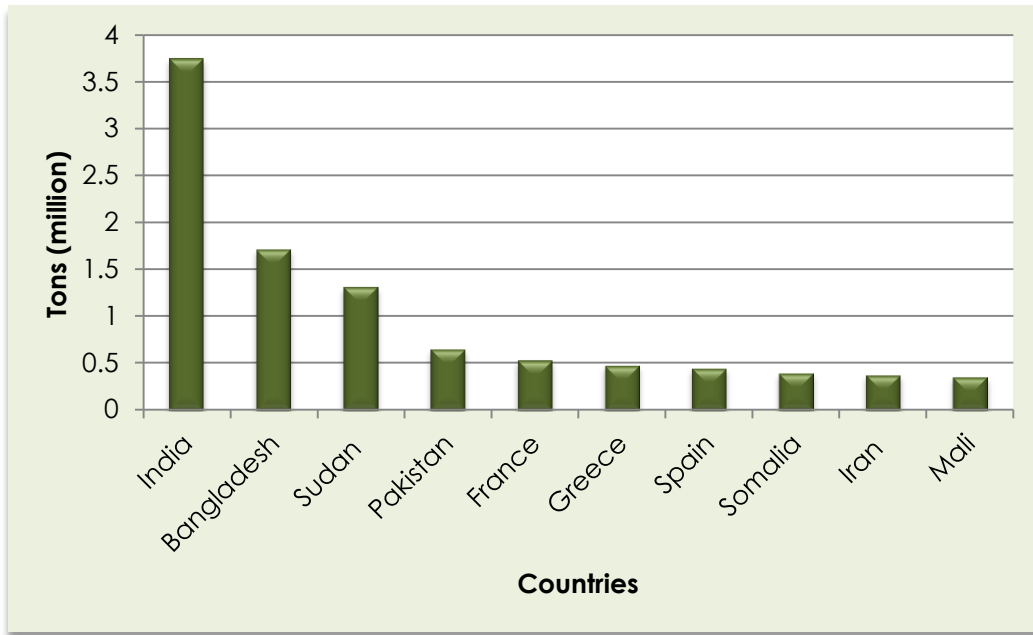
Table 1 : Major goat milk producers by continent, 2013

Continent	tons 'million'
Asia	10,65
Africa	4,65
Europe	2,53
Americas	0,59

Source: FAO STAT, 2016

Table 1 shows the production of goat milk by continent in 2013. The most producing continent of goat milk in the world is Asia (10,65 million tons), which is followed by Africa (4,65 million tons), Europe (2,53 million tons) and lastly the Americas (0,59 million tons).

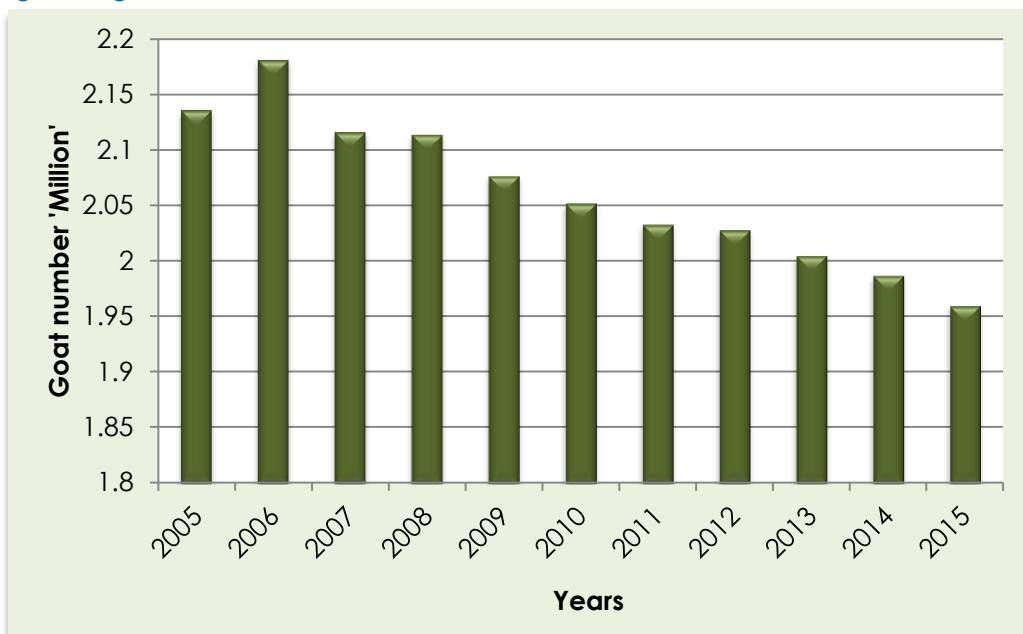
Figure 2: Top 10 producers of goat milk in 2013



Source: FOASTAT, 2016

Figure 2 above depicts the top ten countries producing goat milk in 2013. The most producing countries of goat milk are India (3,7 million tons), Bangladesh (1,7 million tons) and Sudan (1,3 million tons), respectively. Ranked tenth is Mali, which produces approximately 0,35 million tons of goat milk.

Figure 3: goat numbers in South Africa, 2005-2015



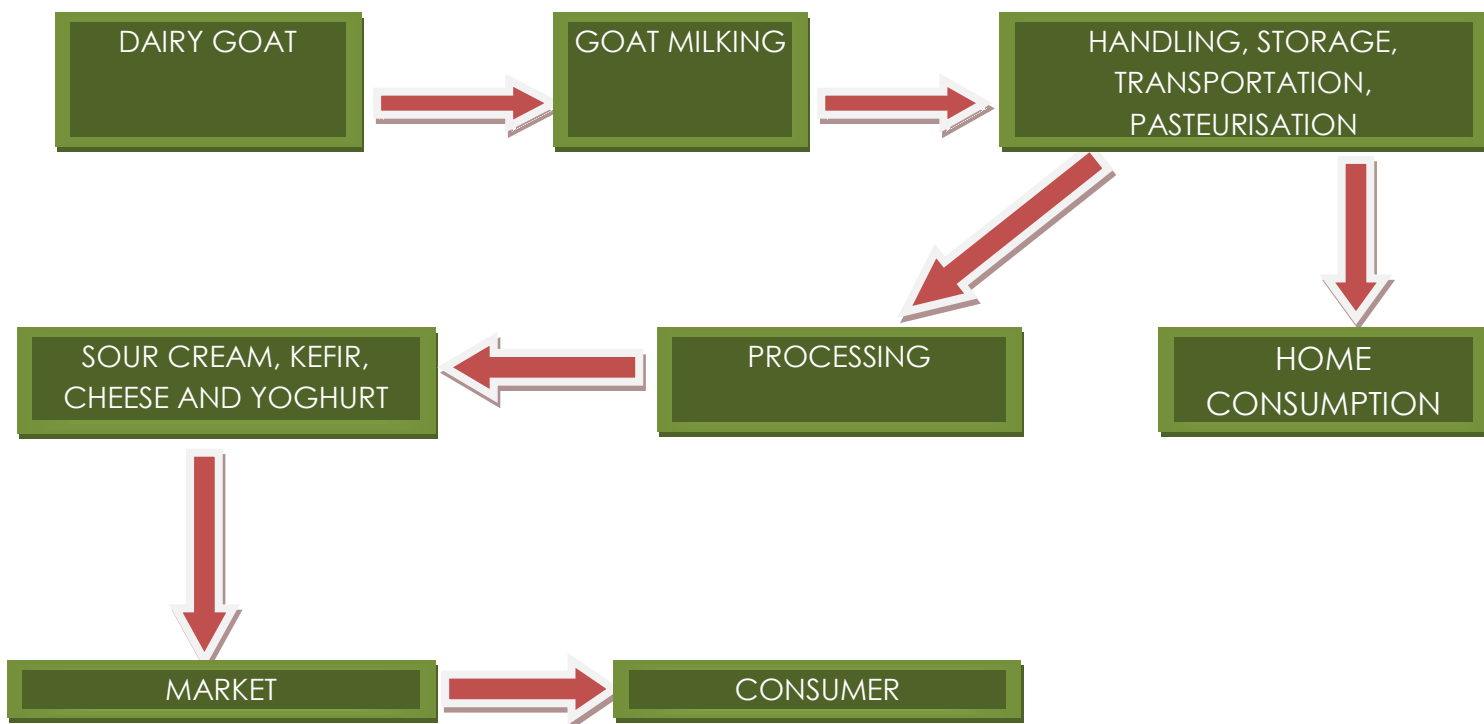
Source: DAFF, 2016

Figure 3 shows the number of goats in South Africa over the period 2005 to 2015. Goat numbers in South Africa increased marginally in 2005 from 2,14 million to 2,18 million and again decreased marginally over the period 2007 to 2015.

4. GOAT MILK PROCESSING

Raw milk is highly perishable and extremely delicate. Therefore, the handling, processing or cooking of goat milk requires strict compliance to hygiene standards and the use of stainless steel is recommended. According to Statistics Canada (2016), there are three different lines of goat products which are milk, meat and fibre and each has to make it to the market in a different way. The stats further explain that goat milk is collected by milk brokers and sent to processors to be made into cheese, yogurt, ice cream and fluid milk, butter, fat and powdered milk. The goat milk industry is one of the fastest growing livestock industries.

5. GOAT MILK VALUE CHAIN



Source: Park, 2011

6. TRADE PATTERNS OF GOAT MILK CHEESE

Given the perishability nature of milk, trade of raw goat milk often tends to be minimal. Therefore, this section provides an analysis of trade patterns of goat cheese over the period 2011 to 2015.

6.1 World exporters and importers of goat milk cheese

Table 2: Values for top ten exporters of goat milk cheese (HST040610) in the world, 2011-2015

Exporters	2011	2012	2013	2014	2015	AVERAGE
	R (bn)	R (bn)	R (bn)	R (bn)	R (bn)	R (bn)
World	37,72	45,86	60,70	73,62	72,40	58,06
Germany	9,37	10,63	14,39	17,78	16,01	13,64
Italy	4,53	5,13	7,12	8,74	8,77	6,86
France	4,71	5,49	7,24	7,94	7,72	6,62
Denmark	3,66	4,03	4,89	5,78	5,78	4,83
USA	1,19	2,24	3,97	5,92	5,51	3,77
Australia	1,98	2,55	2,64	2,97	3,51	2,73
United Kingdom	1,62	1,75	2,25	2,79	2,47	2,18
New Zealand	1,14	1,52	2,01	2,44	2,60	1,94
Poland	1,12	1,14	1,88	2,21	2,46	1,76
Lithuania	0,97	1,32	1,58	1,75	1,48	1,42

Source: ITC Trade Map, 2016

Table 3 above shows the top ten countries exporting goat cheese in the world over the period 2012 to 2015. The leading exporting country in the world is Germany, with an average value of exports at R13,64 billion and Italy, ranging at an average value of R6,86 billion. Ranking tenth is Lithuania, with an average value of exports at approximately R1,42 billion.

Table 3: Values for top ten importers of goat milk cheese (HST040610) in the world, 2011-2015

Importers	2011	2012	2013	2014	2015	Average
	R (bn)	R (bn)	R (bn)	R (bn)	R (bn)	R (bn)
World	34,73	41,30	56,15	66,62	67,33	53,23

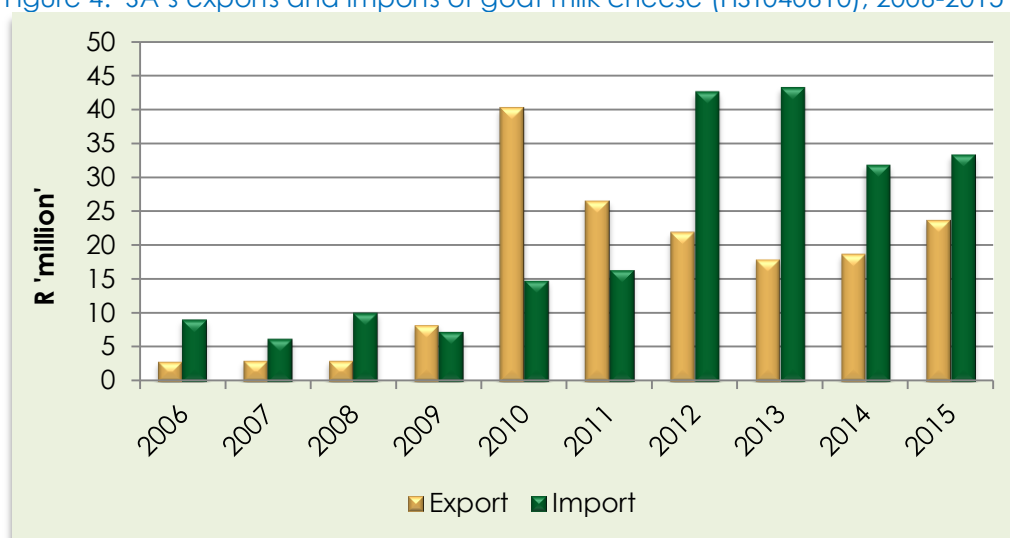
Italy	5,64	5,77	8,34	9,77	8,25	7,55
United Kingdom	3,67	4,18	5,60	6,97	6,57	5,40
Germany	3,11	3,68	4,37	5,17	5,41	4,35
Japan	2,56	3,30	3,64	4,15	4,88	3,71
France	2,02	2,23	3,31	4,27	4,37	3,24
Korea, Republic of	1,47	1,61	2,21	3,12	3,99	2,48
Russian	1,11	2,24	3,33	2,96	1,8	2,24
Spain	1,62	1,84	2,43	2,71	2,56	2,23
Belgium	1,41	1,62	2,31	2,55	2,41	2,06
Netherlands	1,09	1,50	2,08	2,35	3,23	2,05

Source: ITC Trade Map, 2016

Table 2 shows the top ten countries importing goat cheese in the world over the period 2011 to 2015. The leading importing country is Italy, with an average value of imports at around R 7,55 billion, followed by the United Kingdom with an average of R5,41 billion, while the Netherlands' imports rank tenth at an average of R2,05 billion.

6.2 South Africa's trade pattern of goat milk cheese

Figure 4: SA's exports and imports of goat milk cheese (HST040610), 2006-2015



Source: Quantec/ Easy Data, 2016

Figure 4 shows the imports and exports of goat cheese were fluctuating throughout the periods of 2006 to 2015. The imports for goat cheese were higher than the exports with an exception of 2009 to 2011, indicating that South Africa has an unfavourable trade balance.

7. CONCLUSION

The production of goat milk in South Africa, specifically in rural areas, is mainly produced for home consumption and religious or traditional purposes. However, goat milk for commercial purposes in South Africa could yield positive results if supported. There's a huge demand for goat milk cheese, as shown by an unfavourable trade balance experienced by South Africa. Similarly in most countries, goats are kept on small-scale farms and most of the milk produced is supplied immediately to households for personal consumption. However, there are companies that are also producing various products from goat milk such as cheese, butter, etc., specifically for local consumption and commercial purposes in most cases.

Given a significantly increase of goat cheese imports in South Africa, there is therefore a need to consider the importance of farming goats and also the products that are produced by goats such as cheese, milk, etc.

8. REFERENCES

- 9.1 Agatha P, (2013). Study regarding the trends in the world and European goat milk production. Available online:
http://www.uaiasi.ro/revista_zoo/ro/documente/Pdf_Vol_59/Agatha_Popescu1.pdf
[Accessed on June 2016]
- 9.2 Arya HPS and Chander M, (2016). Goat production by landless and small scale farmers in North Indian Plains. Available online:
https://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0ahUKewj0rYy4msrNAhXkLsAKHUMIBfMQFgg8MAU&url=http%3A%2F%2Fconference.ifas.ufl.edu%2Ffisa%2Fpapers%2Fa%2Fa10.doc&usq=AFQjCNHGwa5nlRiA7G8KEB3lLqic6_N8tw&sig2=uDNJ0AZ52JxLscJK7_waYg [Accessed on June 2016]
- 9.3 Department of Agriculture Forestry and Fisheries, (2014). A profile of the South African goat market value chain. Available online:
<http://www.nda.agric.za/doaDev/sideMenu/Marketing/Annual%20Publications/Commodity%20Profiles/Livestock/Goat%20Market%20Value%20Chain%20Profile%202014.pdf>
[Accessed on July 2016]
- 9.4 National Agricultural Marketing Council, (2005). Report on the investigation into the potential for the South African goat industry. Available online:
<http://www.nda.agric.za/docs/AAPS/NAMC1.pdf> [Accessed on July 2016]
- 9.5 Statistics Canada, (2016). Industry profile. Available online:
http://www5.agr.gc.ca/resources/prod/doc/dairy/pdf/goatprofile_e.pdf [Accessed on August on 2016]
- 9.6 Donkin EF, (2016). Milk production from goats for households and small-scale farmers in South Africa. Available online: <http://www.library.up.ac.za/vet/goat/documents/sec21.pdf>
[Accessed on June 2016]
- 9.7 Knickerbocker J, (2002). French Goat Cheese Recipe Available online:
<http://www.motherearthnews.com/real-food/french-goat-cheese-recipe-zmaz02jjzgoe.aspx> [Accessed on June 2016]
- 9.8 Life Slice. 2016. Handling and processing raw goat milk. Available online: <http://www.life-slice.com/processing-goats-milk-for-human-consumption.html> [Accessed on June 2016]
- 9.9 ITC Trade Map, (2016). Values for top ten exporters of goat cheese (HST040610) in the world. Available online: http://www.trademap.org/Country_SelProduct_TS.aspx [Accessed on August 2016]
- 9.10 ITC Trade Map, (2016). Values for top ten importers of goat cheese (HST040610) in the world. Available online: http://www.trademap.org/Country_SelProduct_TS.aspx [Accessed on August 2016]
- 9.11 Food and Agricultural Organisation, (2016). Production of goat milk in the world. Available online: <http://faostat3.fao.org/browse/Q/QL/E> [Accessed on August 2016]
- 9.12 Food and Agricultural Organisation, (2016). Production of goat milk by continent. Available online: <http://faostat3.fao.org/browse/Q/QL/E> [Accessed on August 2016]

- 9.13 Food and Agricultural Organisation, (2016). Major goat milk producers by country. Available online: <http://faostat3.fao.org/browse/Q/QL/E> [Accessed on August 2016]
- 9.14 Quantec/ Easy Data, (2016). SA's exports and imports of goat cheese (HST040610). Available online: <http://quanis1.easydata.co.za/TableViewer/dimView.aspx> [Accessed on August 2016]
- 9.15 Park YW, (2011). Goat milk value chain. Available online: <http://articles.extension.org/pages/32775/goat-milk-products:-quality-composition-processing-marketing> [Accessed on August 2016]
- 1.16 Department of Agriculture Forestry and Fisheries Abstract, (2016). Goat numbers. Available online: <http://www.daff.gov.za/daffweb3/Home/Crop-Estimates/Statistical-Information> [Accessed on August 2016]