

# The global sheep industry

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*It is useful sometimes to stand back and take a global and long-term view of an industry in order to better understand what its future prospects are. In the following paragraphs world production and consumption of wool and sheep meat, as well as world trade in sheep meat, live animals and wool is analysed for the period 1961 to 2007. In all cases the data come from the Food and Agriculture Organization of the United Nations and can be found on their website ([www.http://faostat.fao.org/default.aspx](http://faostat.fao.org/default.aspx)).*

## Wool production

Table 1 shows the ranking of the 20 biggest wool-producing countries in the world in 1961 and again in 2007. Australia and New Zealand remain the largest and third largest producers respectively, while the break-up of the Soviet Union leaves the constituent parts (Russian Federation, Kazakhstan and Uzbekistan) the fourth largest producer. China is the big gainer – its fourfold increase in production (from 93 000 tons in 1961 to 395 000 tons in 2007) has propelled it to second place, not far behind Australia, which has seen a large decline in production over this period. New Zealand's output has remained relatively stable, while South Africa's has declined from 142 600 tons in 1961 to a mere 45 000 tons in 2007, falling from 6th place overall to 12th place. Of interest, too, is the increase in production of wool recorded by Iran, Pakistan and India, and the near-total collapse of production in the USA, which has dropped off the list after being the fifth largest producer in 1961.

Table 1: Wool production in 1961 and 2007: country rankings

1961			2007		
Rank	Area	Production (MT)	Rank	Area	Production (MT)
1	Australia	737100	1	Australia	464736
2	USSR	366300	2	China	395000
3	New Zealand	266300	3	New Zealand	217900
4	Argentina	182000	4	Iran	75000
5	USA	144156	5	United Kingdom	62000
6	South Africa	142600	6	Argentina	60000
7	China	93000	7	Russian Federation	50620
8	Uruguay	85000	8	Sudan	46000
9	United Kingdom	59602	8	Turkey	46000
10	Turkey	46280	10	India	45900
11	India	32600	11	Uruguay	45570
12	Iran	29091	12	South Africa	45000
13	Spain	29002	13	Pakistan	40600
14	Brazil	24570	14	Morocco	40000
15	France	23600	15	Kazakhstan	34200
16	Afghanistan	23400	16	Syria	34000
17	Bulgaria	23200	17	Spain	30000
18	Romania	23000	18	Indonesia	24400
19	Chile	22000	19	Algeria	23360
20	Pakistan	15200	20	Uzbekistan	22386

Figure 1 shows production of wool for the world as a whole, and for the major regions of the world, where the latter is measured on the right-hand axis. The data show that world production increased steadily for three decades after 1961, from 2½ million tons to its peak in the early 1990s, when it reaching almost 3½ million tons.

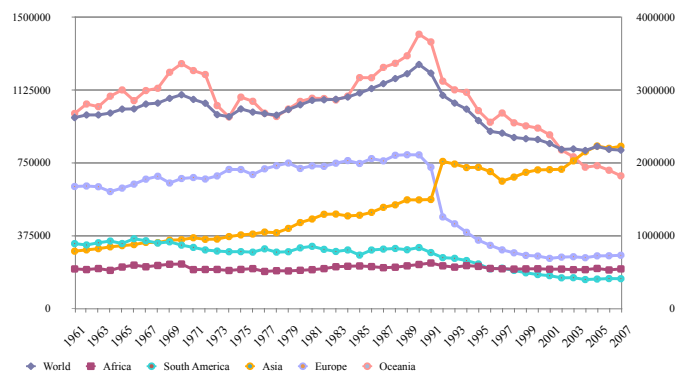


Figure 1: Global production of wool, 1961-2007

As can be expected, trends in the global wool industry are to a large extent a reflection of what happens in Australia and New Zealand, where the production of wool also peaked in the early 1990s, having increased from a combined 1 million tons (on the left hand scale) to 1.4 million tons in 1991, then declining to below 700 000 tons in 2007. Production in Africa has remained fairly constant at around 200 000 tons over the whole period, while in South America it declined steadily from just over 300 000 tons to under 200 000 tons. Production in Europe increased slowly from around 600 000 tons to 800 000 tons in the early 1990s, and then fell sharply to just above 200 000 tons within the decade – since then it has remained constant at that level.

The exception (as with so many other commodities globally) is Asia, where production has increased from just over 200 000 tons in 1961 to almost 800 000 tons in 2007, with a great spurt in growth in the early 1990s.

## Production of mutton and lamb

Table 2 shows the country rankings for the production of mutton and lamb in 1961 and 2007. The USSR was the biggest producer in 1961, but as in the case of wool, the constituent parts of the former Soviet Empire have lost five places: the combined production of the Russian Federation, Kazakhstan and Turkmenistan puts them in fifth place, behind Iran in fourth place. China has shown the largest increase, from some 56 000 tons in 1961 (in 17th place) to more than 2 million tons and first place in 2007, while Iran has tripled output over this period and India has doubled output, with the result that they are now the fourth and sixth largest producers respectively. Production has increased in Australia and New Zealand, which maintain their rankings as the second and third largest producers respectively. South Africa's production has increased by far less, and the country has slipped from 12th to 16th on the list. Nigeria has replaced Ethiopia as the only other African country on the list, while the USA has dropped from fourth to 19th place, and France from 10th to 17th place.

Table 2: Mutton and lamb production in 1961 and 2007: country rankings

1961			2007		
Rank	Area	Production (MT)	Rank	Area	Production (MT)
1	USSR	927748	1	China	2003608
2	Australia	586255	2	Australia	702698
3	New Zealand	458105	3	New Zealand	543327
4	USA	377840	4	Iran	394203
5	United Kingdom	268176	5	United Kingdom	336000
6	Turkey	247573	6	India	234490
7	Argentina	167154	7	Spain	234000
8	India	122672	8	Syria	233718
9	Iran	116267	9	Sudan	180263
10	France	114000	10	Algeria	178075
11	Spain	104491	11	Pakistan	151500
12	South Africa	101500	12	Russian Federation	146869
13	Ethiopia	80800	13	Nigeria	141915
14	Mongolia	79124	14	Morocco	120416
15	Afghanistan	61137	15	Kazakhstan	115772
16	Uruguay	56220	16	South Africa	108685
17	China	55978	17	France	106800
18	Pakistan	52423	18	Turkmenistan	90194
19	Yugoslav SFR	52300	19	USA	87200
20	Romania	50996	20	Greece	86000

Figure 2 shows that world production of mutton and lamb has increased steadily, from some 5 million tons (right hand scale) in 1961 to over 8 million tons in 2007. This is mainly the result of increased production in Asia (from less than 1 million tons in 1961 – right hand scale – to more than 4 million tons or from 20% to 50% of global production) and Africa, where production increased from under 500 000 tons in 1961 to 1.3 million tons in 2007. As will be seen later, this increase in production occurred despite a sharp decline in production in South Africa. Production in Australia and New Zealand remained relatively constant, while production in Europe declined sharply after 1990, mirroring the decline in wool production.

To put this performance in perspective, it is instructive to look at global production of beef, which was 28 million tons in 1961, doubled to 54 million tons in 1991, but then kept on increasing, to reach 60 million tons in 2007, i.e. double its level in 1961. Global poultry meat production increased even more spectacularly, from a base of 7.5 million tons in 1961 to 37 million tons in 1991 and 76 million tons in 2007 – a tenfold increase over these 46 years.

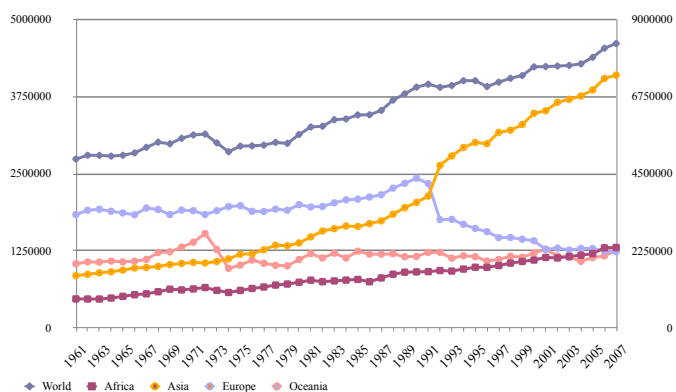


Figure 2: Global production of mutton and lamb, 1961-2007

### International trade in wool

Figure 3 shows the net exports (exports minus imports) of wool for the major regions of the world since 1961. The major importers of wool are Asia and Europe, with Australia and New Zealand the major exporters. However, consumption of wool in Europe is declining – imports have declined from some 800 000 tons in 1961 to almost zero in 2007 (Europe exported 125 000 tons of wool in 2007, and imported less than 200 000 tons) at the same time that total production has declined. The situation in Asia is different – countries on the continent exported only 45 000 tons in 2007, and imported some 340 000 tons in the same year, giving net exports of around 300 000 tons. These net imports have remained in a band between 200 000 and 300 000 tons per year since 1961. However, as production has been increasing over this period, the region is clearly becoming more self-sufficient. This is reflected in the declining net exports of the Oceanic countries, from more than 800 000 tons per annum in the late 1960s to around 400 000 tons per year in the past decade. Africa and South America have changed from being net exporters to relative self-sufficiency, while North America has gone from being a small net importer to being self-sufficient.

### International trade in mutton and lamb

Figure 4 shows the net exports of mutton and lamb. The Asian region was importing more than 300 000 tons per annum until the early 1980s, but currently imports around 200 000 tons per year as a result of the sharp increase in production from China. Europe's imports have also declined, from some 400 000 tons per year in the early 1970s to around 200 000 tons per year over the last decade. Australia and New Zealand are the only substantial exporters, with the Oceania region responsible for 400 000 tons per year in the 1960s, increasing to around 700 000 tons per annum over the past five years. The remaining regions are relatively self-sufficient, although North America has become increasingly import-dependent over the past decade.

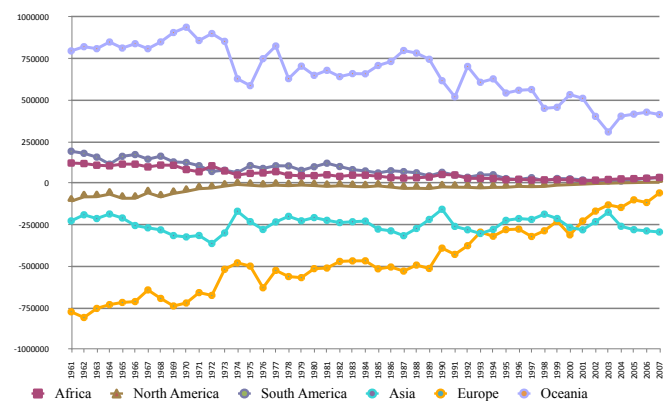


Figure 3: Net exports of wool, 1961-2007

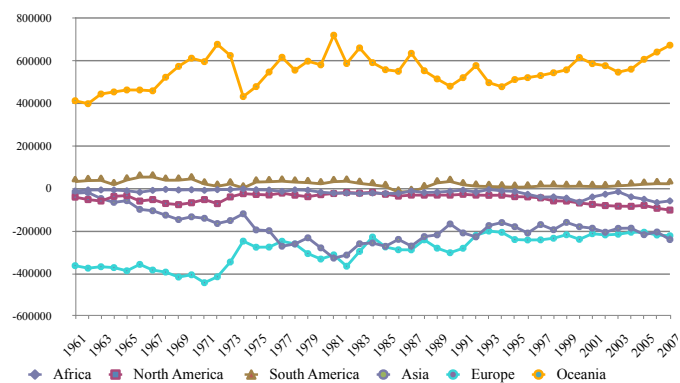


Figure 4: Net exports of mutton and lamb, 1961-2007

## Productivity

Figure 5 shows a proxy measure for the productivity of sheep farmers in the major regions of the world. The data show that the global average proportion of the flock that is slaughtered every year has increased from just above 30% annually in the 1960s to just less than 50% today – of the approximately 1.1 billion sheep in the world, some 531 million were slaughtered in 2007! Most of this increase is however due to the increased productivity in Asia and to a lesser extent in Europe – in the rest of the world productivity seems to have remained relatively constant or even declined, as has been the case in South Africa.

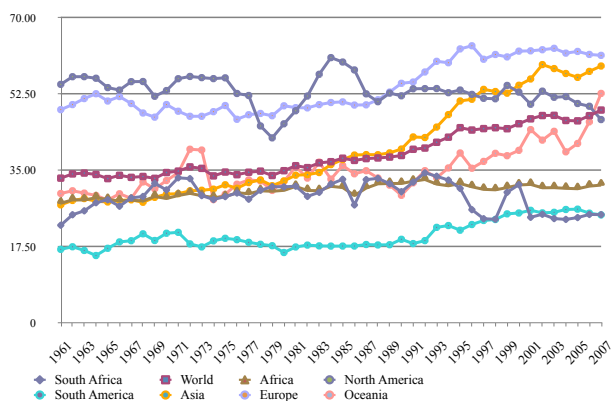


Figure 5: The proportion of the regional sheep flock slaughtered annually

## Consumption

Per capita consumption of sheep and goat meat is around one to three kilograms per person per year in most regions of the world, with Australia and New Zealand the two exceptions (Figure 6). Their annual per capita consumption has, however, declined considerably, from more than 35 kg in 1961 to less than 15 kg in 2003, the last year in which comparable data are available. In South Africa, annual per capita consumption has declined from a high of almost 10 kg in the 1960s to less than 5 kg in 2003. The South African Abstract of Agricultural Statistics gives current (2007/08) annual per capita consumption of poultry meat as 30 kg, beef 18 kg, pork 4.4 kg and mutton and lamb 3.4 kg.

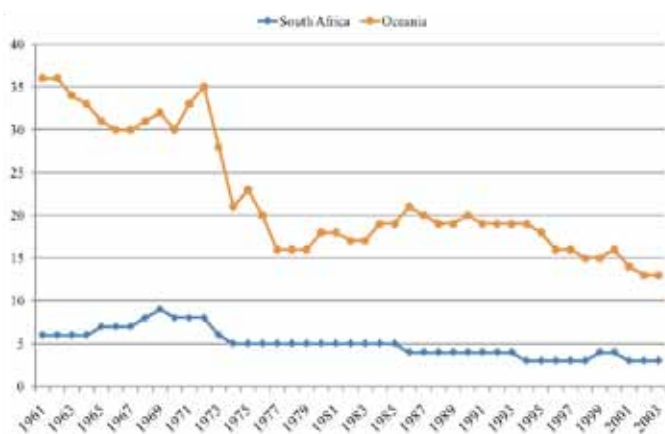


Figure 6: Per capita consumption of sheep and goat meat (kg/person/year)

## Prices

Table 3 shows at least part of the reason for the low per capita consumption of sheep meat in most parts of the world, and the declining consumption in those parts of the world where it was traditionally favoured. The Table shows what types of meat were the most expensive and which the cheapest, when comparing between sheep meat, beef and chicken meat. Average prices for the three years between 2005 and 2007 were used as the benchmark.

The only country where mutton and lamb was the cheapest source of animal protein was Nigeria, hardly known as a large consumer of sheep meat. Beef was the cheapest meat in Argentina (for obvious reasons); in Kenya (where chicken meat was, unusually, the most expensive meat); and in Turkey – in all other countries chicken meat was the cheapest. In most countries, mutton and lamb was the most expensive source of meat. In Australia and New Zealand, where mutton and lamb is relatively abundant, it is cheaper than beef but still more expensive than chicken. Even in China, which has posted the largest increases in the production of sheep meat, it is still more expensive than beef, as is the case in countries traditionally associated with sheep meat consumption, such as France, Greece, Spain and Turkey.

Table 3: The relative prices of meat (average of 2005/07)

	Most expensive	Cheapest
Argentina	Sheep	Beef
Australia	Beef	Chicken
Belgium	Sheep	Chicken
Brazil	Sheep	Chicken
Canada	Beef	Chicken
Chile	Beef	Chicken
China	Sheep	Chicken
Côte d’Ivoire	Sheep	Chicken
France	Sheep	Chicken
Germany	Sheep	Chicken
Greece	Sheep	Chicken
Hungary	Sheep	Chicken
Japan	Beef	Chicken
Kenya	Chicken	Beef
Mexico	Sheep	Chicken
New Zealand	Beef	Chicken
Nigeria	Beef	Sheep
Poland	Sheep	Chicken
Russia	Beef	Chicken
South Africa	Sheep	Chicken
Spain	Sheep	Chicken
Sweden	Sheep	Chicken
Turkey	Sheep	Beef
UK	Beef	Chicken
USA	Beef	Chicken

## Conclusion

Since the early 1990s there has been a marked decline in global production of wool in all regions of the world excepting Asia (especially China), but the production of mutton and lamb has increased, again largely because of rapid increases in production in China. While international trade in sheep meat and in wool is still dominated by Australia and New Zealand, China is playing

an increasingly important role in this arena as well. Price seems to be the driving force behind the relative stagnation in sheep meat consumption in most parts of the world. As is the case with so many other commodities, increases in production and consumption are dominated by the emergence of hundreds of millions of new consumers in China.

South Africa seems to have been left behind. We have slipped down the global rankings in the production of both meat and wool, we have never been a large player in international markets for either commodity, our per capita consumption is declining, and our productivity seems to be well below global averages and is declining, unlike global productivity, which is increasing. Where does this leave the industry?

This analysis is clearly at too aggregate a level to serve as a base for more detailed strategies. However, the industry cannot escape the fact that it has a poor image in the minds of consumers, largely because of health-related issues, and that the demand for wool has experienced

a long-term decline. The industry needs to decide whether it sees its future as a niche, high value product (both in food and fibre) or whether it wants to compete head-on with more favoured meat types.

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