

## Scenario analysis

## Soccer World Cup: 2010

April 2009

### OBJECTIVE:

*To develop various scenarios for the 2010 FIFA Soccer World Cup and highlight the possible impacts of these scenarios on the red meat industry in South Africa<sup>1</sup>.*



### HIGHLIGHTS

- Even if the current economic crisis dampens some of the demand, there is a high probability that all the available tickets will be sold.
- 300 000 – 500 000 international visitors are expected for the showpiece.
- Average length of stay is expected to range from 10 to 20 days with attendance estimated at around 3.5 games per soccer spectator.
- The expected main visiting countries are USA, Australia, Germany, Italy, France, Netherlands and the United Kingdom.
- During the previous world cup in 2006 in Germany foreign visitors spent approximately € 280 per day. It is likely that foreign visitors for the world cup in South Africa have at least the same budget to dispose.
- Consumption patterns will mainly be bound to away from home meals and thus a lower impact is expected at retail level.
- The two most prominent key uncertainties for the 2010 SWC are:
  1. The composition/mix of foreign visitors, based on their country of origin. This will determine the consumption habits, specifically meat preferences.
  2. The length of stay of the visitors and the amount of visitors will determine the total number of overnight stays.
- With the highest number of overnight stays total meat consumption will increase by 2636 tons and with the lowest number of overnight stays total meat consumption will increase by 760 tons.
- The net effect on the red meat industry is relatively small in terms of absolute shifts of consumption patterns. Under the best case scenario (scenario 1) 875 tons of additional beef and 67 tons of additional lam will be consumed and under the worst case scenario (scenario 4) 164 tons of additional beef and 23 tons of additional lam will be consumed.
- The estimated overall meat consumption for visitors will be approximately 250 grams per person, per day.
- The Largest impact will be on the high valued fresh cuts for the hospitality industry (restaurants and overnight stays).
- To maximize the positive impact of the 2010 world cup, the red meat industry must have the:
  - right product
  - required quality
  - correct volume
  - for a very specific period
  - at the correct location

<sup>1</sup> *This report was prepared by the Bureau for Food and Agricultural Policy (BFAP) for the Red Meat Producers Organization (RPO).*



## RULES AND ASSUMPTIONS

- At the previous world cup 15 million applications were received for just over 3.5 million available tickets. Even if the current economic crisis dampens some of the demand, there is a high probability that all the available tickets will be sold.
- FIFA rules dictate that at least 1/3 of ticket sales have to be made to locals.
- It is assumed that an average of 3.5 tickets per foreign spectator will be sold.
- Stadiums are distributed throughout South Africa, with the main concentration in Gauteng (21 games) and the Western Cape (7 games) out of a total of 64 games.
- Stadiums will be 93% filled which implies that a total of approximately 3.5 million spectator seats will be available for the complete tournament. The other 7% are allocated to seat curls.
- Fifa's rules apply under all circumstances during the course of the world cup.
- Consumption patterns of foreign spectators remain the same for visitors to the world cup with only slight variations. Therefore, the composition/mix of foreign visitors will determine the relatively impact of the white meat versus the red meat industries.
- The amount of tickets sold to various countries can serve as an indicator to anticipate the composition of foreigners who will eventually attend the world cup. Table 1 lists the expected attendance by taking the ticket applications for the first round of allocations into account.

**Table 1: Expected attendance per country**

Country	Share of foreign visitors
United States of America	±25%
Germany	±10%
United Kingdom	±10%
Italy	±5%
Australia	±7%
France	±5%
Brazil	±8%
Netherlands	±10%

- If ticket applications are a fair assumption to go by, then consumption patterns in those countries could be used to determine the food expenditure patterns for a particular combination/mix of soccer fans.
  - Americans: Strong overall consumption with beef 41.8 kg per capita consumption (pcc), 29.5 kg pcc of pork, 45.2 kg pcc of poultry.
  - Germans: High levels of pork consumption 39 kg pcc, lower beef at 8.6 kg and poultry at 10 kg pcc.
  - UK: Average beef and pork consumption, at 20 kg and 25 kg pcc respective. Relative high poultry consumption with 29 kg pcc.
  - Italy: High levels of pork consumption at 43 kg pcc, average beef at 24 kg and poultry at 15 kg pcc.
  - Australia: Above average beef consumption 37.2 kg pcc, higher poultry at 35.4 kg and pork at 22.4 kg pcc.
  - France: High levels of Pork consumption, 38 kg pcc, average beef at 26.9 kg and poultry at 24 kg pcc.
  - Brazil: Above average beef and poultry consumption with beef at 38.3 kg an poultry at 39.2 kg pcc and low pork consumption at 12.3 kg pcc.
  - Netherlands: High levels of pork consumption 36 kg pcc, average beef at 20 kg pcc and lower poultry at 9 kg pcc.



## CRITICAL UNCERTAINTIES

- The local population can change its travelling, vacation and consumption patterns? At the previous world cup in Germany the hospitality industry actually reported a downturn of business because the local travellers did not travel during the course of the event. Local consumption habits might also change because locals decide not to eat out but rather stay at home.
- It is uncertain to what extend the purchase of tickets by local lower-income households will influence their consumption patterns of meat. If most of their budget is spent on the ticket fees and the transportation, very little is left for purchasing food.
- The composition/mix of foreign visitors (based on their country of origin) will determine the main preferences and consumption patterns of the foreign spectators. This will determine the eating habits in terms of white meat or red meat consumption.
- Foreign spectators can change their consumption patterns if they do not find the products or quality that they are used to at home. It is assumed that the visitors will then shift to the next preferred substitute according to their existing consumption patterns. The key uncertainty is thus whether the visitors will find the same product and quality that they are used to.
- The total number of overnight stays by foreign visitors is determined by the total number of visitors multiplied by their length of stay. There are a number of factors that can influence the number of overnight stays, for example the average amount of tickets sold per foreign visitor, the people accompanying a foreign spectator and the general economic climate. Although it is assumed that the current world economic crisis will not influence the amount of ticket sales, it could have an effect on the accompanying persons and how long they will stay. In other words, it is assumed that the typical soccer fan will have planned his/her trip to 2010 SWC well in advance and hence will not have to cancel the trip due to a lack of funding. Soccer games are generally attended by groups of men/women but not always as families. In other words, the international visitor groups are either, only groups of men that are soccer fans who would only stay for the games, or the entire family that would decide to stay for an additional period of time thereafter. To quantify different combinations of overnight stays, the following matrix was constructed.

**Table 2: Combinations of possible overnight stays**

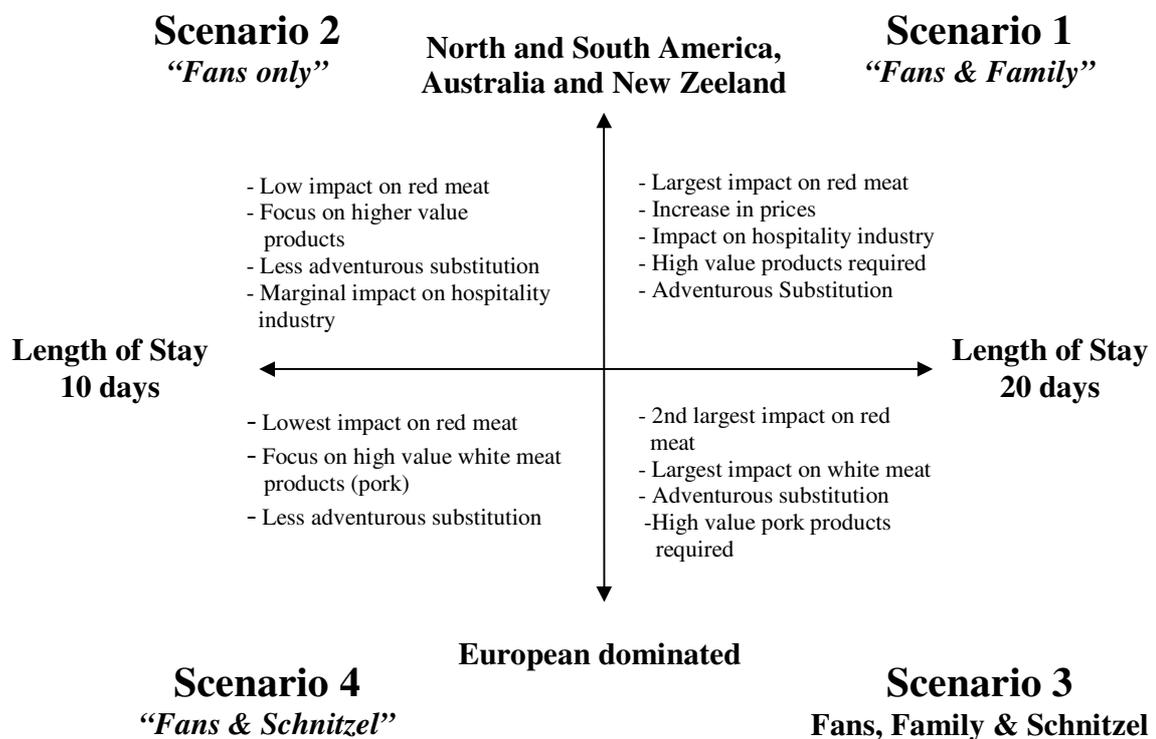
Visitors / Length of stay	10 days	15 days	20 days
300 000	3,000,000	4,500,000	6,000,000
400 000	4,000,000	6,000,000	8,000,000
500 000	5,000,000	7,500,000	10,000,000

- The different combinations indicate that if a small amount of visitors come, i.e. only fans without their families and stay only for the games that they have purchased tickets for, the total number of overnights stays could add up to 3000 000. If however, the soccer fans bring their families along and stay for a longer period of time, the total number of overnight stays could be more than three times as high at 10 000 000. Clearly, this wide variation in number of overnight stays will have a major influence on the extent to which the WCS will influence the red meat industry.



## OVERVIEW OF SCENARIOS

- In order to design the different scenarios, the two most prominent key uncertainties that have the lowest level of predictability but the highest impact on the red meat industry will be selected to form the two major axes of the possible scenarios.
- The two most prominent key uncertainties for the 2010 SWC are:
  1. The composition/mix of foreign visitors, based on their country of origin.
  2. The length of stay of the visitors



**Given the underlying rules, assumptions, and key uncertainties various scenarios can play out and can determine the impact of the 2010 FIFA world cup on the South African red meat industry.**

### **Scenario 1- Fans & Family**

- The economic crisis on world markets gets lighter and fans across the world decide to bring their partners and children along to the SWC.
- A higher number of visitors per group results in longer average stays and therefore more nights spent in total.
- Red meat (and chicken by the US) consumption is assumed to be the more preferred meat based on the composition of the foreign spectators. Hence, the impact here is greatest on the red meat industry.
- There is generally a higher demand in the hospitality industry (due to a high number of overnight stays) and therefore the demand for higher quality cuts of fresh meat increases sharply.
- A generally higher demand for meat also results in a higher importation of processed cuts.

### **Scenario 2: Fans only**

- Fans across the world decide to attend the games alone and travel in groups of friends leaving family and children at home.
- The number of visitors to South Africa is lower and hence impacts on demand are marginalised.
- There is still a higher focus on high value red meat but the overall price impacts are less.
- The total number of overnight stays is the lowest and hence fewer meals are served as fans stay only for the period for which they have tickets.
- There is still a positive impact on the red meat consumption as the composition of fans attending games is greater for the countries preferring red meat and chicken than for those preferring pork.

### **SCENARIO 1: MODEL SIMULATION**

Meat Types	Add. cons	Price shift	
Beef	875 tons	73 c/kg	2.8%
Lamb	67 tons	7.5 c/kg	0.2%
Pork	839 tons	102 c/kg	6.1%
Poultry	855 tons	27.8 c/kg	1.45%
<b>Sum</b>	<b>2636 tons</b>		

### **SCENARIO 2: MODEL SIMULATION**

Meat Types	Add. cons	Price shift	
Beef	263 tons	21 c/kg	0.8%
Lamb	20 tons	2 c/kg	0.06%
Pork	252 tons	30 c/kg	1.8%
Poultry	256 tons	8 c/kg	0.4%
<b>Sum</b>	<b>791 tons</b>		



## WHITE MEAT – SCENARIOS

### Scenario 3- “Fans, Family & Schnitzel”

- Pork is assumed to be the more preferred meat based on the composition of the foreign spectators. Under this scenario many Europeans will be visiting SA for the world cup. Hence, the impact here is greatest on the pork industry.
- As overnight stays are also longer consumption of pork meat is based on a few high value cuisines.
- It might even come to the fore that higher value pork products would need to enter the market as these are of high demand in the visitor’s home countries and therefore people would also like to consume them at the event.
- There could be more cases of “adventures substitution” from pork to other types of meat products as European visitors do not find the wide selection of pork products in SA that they are used to at home.

### Scenario 4: “Fans & Schnitzel”

- Fans come alone and stay for a shorter period of time.
- A shorter stay makes them less adventurous and in search of higher value meats. European visitors could, therefore probably, settle for the typical fast food chains if they do not find the wide variety of pork products that they are used to.
- Overall impact on the red meat sector is smaller as pork meat is the preferred meat type and only consumed for a short period of time.

### SCENARIO 3: MODEL SIMULATION

Meat Types	Add. cons	Price shift	
Beef	548 tons	69 c/kg	2.7%
Lamb	76 tons	7 c/kg	0.2%
Pork	1186 tons	119 c/kg	7.1%
Poultry	725 tons	26 c/kg	1.4%
<b>Sum</b>	<b>2535 tons</b>		

### SCENARIO 4: MODEL SIMULATION

Meat Types	Add. cons	Price shift	
Beef	164 tons	20 c/kg	0.8%
Lamb	23 tons	2 c/kg	0.06%
Pork	356 tons	35 c/kg	2%
Poultry	217 tons	7 c/kg	0.4%
<b>Sum</b>	<b>760 tons</b>		

- All scenarios will turn out to the benefit of the red meat industry with more meat being consumed.
- Under the highest number of overnight stays total meat consumption will increase by 2636 tons and under the lowest number of overnight stays total meat consumption will increase by 760 tons.
- The net effect on the red meat industry is relatively small in terms of absolute shifts in consumption patterns. Under the best case scenario (scenario 1) 875 tons of additional beef and 67 tons of additional lam will be consumed and under the worst case scenario (scenario 4) 164 tons of additional beef and 23 tons of additional lam will be consumed.
- The overall consumption of all types of meat in South Africa for 2008 was 2 425 815 tons. It was made up of 1 430 000 tons of poultry, 657 689 tons of beef, 181 740 tons of pork and 156 386 tons of lamb. Taking these total consumption figures into consideration, the absolute impact of the 2010 world cup on the total meat industry will be marginal.
- The possible impact on prices is presented in the form of annual averages. This implies that the shift in meat prices for the specific period of the world cup can be higher than what is presented in this report, especially when the timing of the world cup is taken into consideration. Traditionally, the number of slaughterings decreases in June and July. This will be the exact timing of the world cup and thus the additional demand of meat.
- Because a small impact on prices is expected, there will not be any major shift in imports of meat, except maybe for certain pork cuts.
- The amount of tickets sold to various countries can serve as an indicator to anticipate the composition/mix of foreigners who will eventually attend the world cup. Information on the actual distribution of tickets will be available before the world cup and can therefore serve as a critical final indicator of how the consumption patterns could evolve.
- The length of stay, and therefore, the total amount of overnight stays will remain a critical uncertainty throughout the world cup.
- The additional demand in red meat is not high, yet it will be for the higher valued fresh cuts. Thus, for the industry to obtain the best premiums and ensure that as much as possible locally produced red meat is sold, it is important for the industry to send out a clear message of the quality and safety of South African red meat.
- Although this report only focuses on meat consumption at the time of the world cup, it is important to raise the critical uncertainty regarding the consumption patterns following the world cup, especially when the possibility of job losses is taken into consideration once all the construction work has been completed.