

agriculture, forestry & fisheries

Department: Agriculture, Forestry and Fisheries **REPUBLIC OF SOUTH AFRICA**

FINAL PROPOSAL FOR A MEAT INSPECTION SERVICE IN SOUTH AFRICA

Meat Inspection Work Group Report

26 March 2013

PREFACE

This proposal must be read in conjunction with the following documents submitted in 2012 to the Honourable Minister:

- Ministerial Submission: Consultation with industry stakeholders: Implementation of a meat inspection service in South Africa Dated 26 November 2012 (annexure A).
- Initial proposal for a meat inspection service in South Africa: Work group report on meat inspection intergovernmental consultative process – Dated 23 November 2012 (annexure B). This document has been incorporated into this final submission with amendments following the public consultations process.

The process that was undertaken in the creation of this document until the final recommendation has been detailed in chapter 4. All stakeholders in government and the industry with an interest in meat and meat safety were consulted over a period of 16 months. The interactions with the stakeholders raised issues of note that the working group has taken into consideration.

The public consultative meetings with stakeholders were well attended and were all successfully held. The working group presented the initial proposal made to the Minister and this was followed by open and robust discussions and debates in which various views were presented by stakeholders on the gazetted meat inspection document. The following were the common and major comments that were raised at the meetings:

- 1.1. The implementation of a meat inspection service by government was long overdue. Government should not have privatized meat inspection in the first place, which led to the current challenges of unsafe meat entering the food chain.
- 1.2. The government had not implemented an independent meat inspection service since the Meat Safety Act, 2000 was enacted in 2000.
- 1.3. The proposal of the working group which recommends that government should take over meat inspection in the country was impractical and government would not be able to implement the service.
- 1.4. The meat industry cannot afford an increase in the cost of meat inspection at abattoirs.
- 1.5. Government must fund the additional cost for an independent meat inspection service. The true shortfall between what is currently generated by the industry for meat

inspection and what will be needed for the implementation of the proposed model must be determined.

- 1.6. The current meat inspection system of multiple service providers offering meat inspection at abattoirs was working to some extent in the absence of a formalized system and this needed to be improved instead of being completely discarded.
- 1.7. A meat inspection system which involves both government and the meat industry is the best way to implement a successful service.
- 1.8. Meat inspection personnel at abattoirs were poorly remunerated.
- 1.9. Government is the only entity that can service infrequently slaughtering low throughput and rural abattoirs.
- 1.10. There is a lack of enforcement of meat safety beyond the abattoir, i.e. once the meat leaves the abattoirs and goes to butcheries and retailers.
- 1.11. There is a lot of illegally slaughtered meat that is entering the food chain to the detriment of the health of the population and the economy.
- 1.12. The salaries of meat inspectors need to be reviewed and regulated by the minister.
- 1.13. The meat inspection service to be implemented must be equitably implemented across all animal species slaughtered, i.e., the system must be implemented in the same way and at the same time to all abattoirs in the country, including game abattoirs.
- 1.14. Phase 1 of the implementation phases as described in the gazette proposal is the best way to implement the system without total takeover by government.

The meetings with the meat industry organizations highlighted the following:

- 1.15 It is accepted by all stakeholders that government needs to be more involved in meat inspection.
- 1.16. The existing meat inspection system must not be totally discarded but be improved.
- 1.17 Phase 1 of the proposed model, which involves all animal species categories is the best compromise between what the industry proposed (a single assignee) and what government had proposed (total takeover by central government).
- 1.18 This means that the implementation will be through a combined government and multiple assignees model.
- 1.19 An advisory body must be created to work with the meat inspection bodies to be assigned and government and advice the National Executive Officer (NEO).
- 1.20. Government reserves the right to review the system at any time and implement remedial measures in cases of aberrances.
- 1.21. Norms and standards needed to be set up to regulate all assignees and government service to be used in the system.

- 1.22. The term independence needed to be properly defined in order to determine exactly who can participate as an assignee and who cannot. It is also important to clarify the relationships between all parties involved in the system in order to ensure that there is no compromise to the independence of the system.
- 1.23. The costing of the system will need to be revised once the Minister has given an "in principle" decision on the model to be used.
- 1.24. The capacitation of provincial Veterinary Public Health to monitor the system is critical.
- 1.25. The implementation of the system in the game industry will have to be properly looked at in order to ensure equity across all species but at the same time taking note of the nature of the game industry. Game meat is not been properly regulated at the moment and the game meat scheme that was approved by the Minister is aimed at controlling game meat provision. Most game farms have small "illegal abattoirs" and the implementation of an independent meat inspection service to all these abattoirs may result in the need of an additional 10 000 meat inspectors/examiners which may not be practical at the initial implementation phase.

The working group met to discuss the results of the public consultations and written submissions. It was noted that abattoirs were paying more money for meat inspection personnel to existing service providers than what the meat inspection personnel were receiving as salaries. However, the true cost of meat inspection could not be determined through the public consultations. The exercise to determine the exact cost of service for meat inspection will have to be carried out as soon as possible in order to be able to calculate the true shortfall that will be required to implement an independent meat inspection service.

Most high throughput red meat abattoirs preferred the usage of assignees to implement the service. Most low throughput red meat abattoirs and all rural abattoirs preferred government to offer the service at their abattoirs. The poultry industry was comfortable with the initial proposal by government as gazetted. The Department of Health indicated their willingness to assist where possible with the implementation of the service, especially at rural abattoirs through the environmental health services at local municipalities.

The training of meat inspection personnel must be given attention so that all meat inspection personnel are properly trained before they are employed to conduct meat inspection/examination at abattoirs.

It is therefore recommended that the Honourable Minister approve the proposal as documented this submission for the implementation of a meat inspection service across the country.

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Date: _____

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1. **DEFINITIONS**

In the context of this document, the following definitions apply:

- Meat Examiner A person with a minimum 6 months meat examination qualification employed to perform primary meat examination at an abattoir under supervision of a meat inspector;
- Meat Inspection Service means the performance of ante-mortem, primary and secondary meat inspections by a Registered Inspector and may include hygiene management and regulatory control as agreed on with the provincial executive officer for each abattoir and includes reporting of non-conformances to the provincial executive officer;
- Meat Inspector A person with a minimum 3 year relevant bio-scientific qualification employed to perform meat inspection service and verification of hygiene management at an abattoir;
- Meat Safety Act This refers to the Meat Safety Act, 2000 (Act 40 of 2000) hereafter referred to as the Act;
- National Executive Officer (NEO) means an officer of the Department of Agriculture who is a veterinarian and has been designated by the Minister of Agriculture to enforce the Meat Safety Act, 2000 (Act 40 of 2000) (Act) in terms of section 2(1) of the Act
- **Organoleptic Inspection** An inspection of meat and meat products at an abattoir by means of observation, palpation, smell and where necessary incision
- **Poultry Meat Examiner Level I (spotter)** A person with a minimum 6 months poultry meat examination qualification employed to perform primary meat examination at a poultry abattoir under supervision of a meat inspector
- **Poultry Meat Examiner Level II (Quality Assurer)** A person with a minimum 12 months poultry meat inspection qualification employed to perform primary meat examination and verification of hygiene management at a poultry abattoir

- **Provincial Executive Officer (PEO)** means an officer of a Provincial Department of Agriculture who has been delegated by the national executive officer with the consent of the MEC of that Province, to enforce the Meat Safety Act in the Province.
- **Registered Inspector** A person appointed and authorised in terms of the meat safety act to perform ante mortem, primary and/or secondary meat inspection
- Veterinarian A person as defined in section 1 of the Veterinary and Para-Veterinary Act;
- Veterinary Public Health (VPH) A component of Veterinary Services in the national and provincial Departments of Agriculture responsible for the administration of the Meat Safety Act, 2000 and other related Acts and legislations in order to safeguard human health from food-borne illnesses and zoonotic pathogens
- Veterinary Public Health Officer (VPHO) A person with a minimum 3 year bio-scientific qualification in the employment of the Government to perform Veterinary Public Health services. These officers are officially categorised under the occupational classification as Meat Inspectors in terms of DPSA policies.

2. OBJECTIVES OF THE SUBMISSION

The key factor to the submission is to ensure that provisions of the Meat Safety Act, 2000 related to meat inspection at abattoirs are implemented in the country. These provisions will be achieved through the following objectives:

- To provide the Honourable Minister of Agriculture, Forestry and Fisheries with information regarding meat inspection in South Africa;
- To present the Minister with possible options for a revised meat inspection service at all abattoirs in the country;
- To recommend to the Minister a preferred option for a meat inspection service in South Africa;
- To recommend the capacitation of provincial VPH services to monitor meat inspection as envisaged in this document;

3. BACKGROUND

3.1. Historical Overview

Meat safety can be traced back to the medieval civilizations of Europe with the earliest records of sporadic meat inspection being practised in France as early as 1162, followed by Germany in 1385. The need for a more formalized approach to ante-mortem and post mortem inspection of food animals is traced back to Bavaria to as early as 1615. It is also believed that the Canadian authorities promoted compulsory meat inspection as early as the 17th century with the US following suite during 1891. In reference to abattoirs, reports indicate that it was first introduced in Paris during the 18th century by Napoleon.

3.2. South African Overview

Prior to 1967, the responsibility of meat safety at abattoirs resided with the Department of Health. With the introduction of The Animal Slaughter, Meat and Animal Products Hygiene Act, 1967 (Act No. 87 of 1967), the Department of Agriculture became the responsible authority for regulating meat safety at abattoirs within the country. The Department together with the Local Municipalities became the sole service providers of meat inspection services within the country. The mandate of ensuring meat safety beyond the abattoir remained the responsibility of the Department of Health.

Meat inspection involved the ante-mortem and post-mortem inspection of animals at slaughtering facilities that were either owned or managed by municipalities or by the Abattoir Commission (Abacor).

With the deregulation of the agricultural commodities in the early 90s, the idea of private meat inspection service was conceived. The Abattoir Hygiene Act, 1992 (Act No. 121 of 1992) was assented to, to reflect this concept. This resulted in meat inspection services being performed by private organizations such as the Meat Board. Government meat inspection services were only retained and continued at selected exporting facilities until October 2011.

Following the political change within the country, and the introduction of the new Constitution (Constitution of the Republic of South Africa) (No. 108 of 1996), abattoirs became provincial competencies which impacted significantly on the approaches in regulating meat safety and meat inspection. Meat inspection personnel that were initially in the employment of the Government were either absorbed into private companies, reassigned other functions within the Government or laid off.

In addition to the deregulation of the abattoir industry, the shift in ownership of abattoirs from being owned or operated by Municipalities or Abacor, to fully privately owned businesses presented the industry with significant challenges. Meat inspection went through various phases starting with the abolishment of the Meat Board at the end of 1997 and the taking over of some meat inspection services by South African Meat Industry Corporation (SAMIC) and then finally when SAMIC handed its meat inspection services over to the International Meat Quality Assurance Service (IMQAS) company during 2000.

In short, modern day meat inspection is being performed by inspectorate in the employ of abattoirs, IMQAS, closed corporations or private individuals.

The Abattoir Hygiene Act, 1992 was replaced by the Meat Safety Act, 2000 (Act 40 of 2000) in the year 2000. In terms of this Act, all meat inspection service must be independent of the abattoir. In relation to meat inspection, Section 11 of the Act stipulates the following:

- 1. the owner of an abattoir must procure a meat inspection service for that abattoir;
- meat inspection services may only be performed by the national executive officer, a provincial executive officer, an authorised person or an assignee, who must perform that function independently from the abattoir;
- a person contemplated in the paragraph above must be a veterinarian, meat inspector, meat examiner, animal health technician or such other duly qualified person as may be prescribed

The Act, through its regulations, also prescribes the classification of abattoirs according to the number of slaughter units that can be slaughtered per day as follows:

	Red Meat	Poultry	Ostriches	Game	
High Throughput	21 –	2001 –	21 –	21 –	
Low Throughput	3 – 20	51 – 2000	3 – 20	3 – 20	
Rural	1 – 2	1 - 50	1 – 2	1 – 2	
	1 bovine	1 fowl	2 Ostriches	1 medium game	
	6 sheep	1 duck		6 small game	
1 Slaughter unit =	4 porkers	1 pheasant		Large game to	
	2 baconers	1 guinea fowl		be determined by PEO	
	1 sausage pig	½ goose]	,	
		¼ turkey			

Table 1: Abattoir categories and slaughter units as described in the Meat Safety Act and Regulations

In principle the Meat Safety Act, 2000 found a way to address the challenges faced by our meat industries and merging traditional inspection practices together with internationally acclaimed science-based approaches. It is therefore concluded that the Act has not abandoned the organoleptic approaches to meat inspection, but has endeavored to also embrace the new targeted risk- and system-based approaches of Hazard Analysis Critical Control Point (HACCP), International Standards Organization (ISO), Good Manufacturing Practices (GMP), Supplier Quality Assurance (SQA) and Quality Management System (QMS) in promoting adequate food safety management within South Africa.

3.3. The contribution of Meat and Poultry Production to the South African Economy (extract from DAFF strategic plan for 2012/13 to 2016/17 MTEF period)

- Production Animal production in 2010/11 increased slightly by 1,8% as a result of increases of 3,6% (24 698 tons) in cattle and calves slaughtered and 3,3% (47 000 tons) in poultry slaughtered.
- Producer prices of agricultural products Prices of animal products in 2010/11 increased by 3,6%. The average prices of pastoral products, slaughtered stock and poultry increased by 23,6%, 11,1% and 0,8%, respectively, while the prices of dairy products decreased by 6,5%.
- Gross value of agricultural production The gross value of animal products, horticultural products and field crops contributed 49,4%, 25,5% and 25,1%, respectively, to the total gross value of agricultural production. The poultry meat industry made the largest contribution with 18,0%, followed by cattle and calves slaughtered with 11,4% and maize with 10,9%.
- 4. Farm sector income The gross income from animal products was 4,7% higher than in 2009/10 and amounted to R68 599 million, compared to R65 550 million for the previous year. Producers earned R15 775 million from slaughtered cattle and calves, as against the previous R14 185 million—an increase of 11,2%. Income from slaughtered sheep increased by 5,5% to R3 707 million. Income from poultry meat production rose by 5,7% to R25 031 million.
- 5. Consumption expenditure on food The consumption expenditure on food for the year ended 30 June 2011 increased slightly by 2,7% and amounted to R353 105 million, as against the R343 892 million of the previous year. Expenditure on meat increased by 6,5% to R118 799 million.

Meat represented 34% of the expenditure on the food component. The increase in the demand for beef over the next decade is expected to match that of the past decade, averaging an annual growth rate of 3%. Although the consumption of chicken meat is projected to maintain a rapid rate of expansion at approximately 4% per annum, it will not match the sharp rise of 70% that occurred during the past decade; the reason being the projected lower rate of increase in real per capita income for the period 2011 to 2020. Some 2,3 million tons of chicken meat will be consumed by 2020. Chicken meat production is anticipated to grow by 38% from 1,4 million tons to 1,9 million tons over the next decade.

3.4. Summary

It becomes significantly evident that the Act places the responsibility for ensuring the effectiveness and the efficiency of any food safety management system squarely on the shoulders of the owner of such a facility. The principles embedded in the regulations promulgated under section 11(1)(e) of the Act is suitably aligned to the International trends in food safety management (i.e. risk and system-based approaches integral to a HACCP system).

However, in addition to these best practices the Act has in section 11(1)(b) mandated the owner of an abattoir to procure meat inspection services for his/her facility. Herein lies the key that no one person can ever procure any service from him/herself. Thus the Act has made it mandatory that meat inspection services can never be performed by the owner of a facility.

It is important to note that meat inspection may have different meanings depending on the context in which it is used. What is apparent is that facility management is deemed responsible and accountable for ensuring a safe product to the consumer. This does not absolve Government of its responsibility in terms of the Constitution to ensure that the citizens of our country have access to safe food.

Government has the overall responsibility to ensure that the two principles embedded in the Act are implemented and adhered to. The first principle is the performance of traditional meat inspection services and secondly the implementation of effective risk and system-based approaches in order to ensure the production of safe meat for all.

4. CONSULTATION PROCESS

4.1. First Consultative Process

A DAFF led consultative process took place between 2008 and 2010, and made the following recommendations:

- The industry proposed that a single industry created assignee shall be appointed by the Minister in terms of section 4 of the Meat Safety Act, 2000
- Such assignee would be compulsory across the entire country and across all red meat abattoirs.
- Industry also proposed a system whereby abattoirs will do all financial transactions relating to meat inspections through a Section 21 Company and not directly with the assignee or its service provider.

4.2. Second "inter-Governmental" Consultative Process

Outcomes and recommendations of the "first consultative process" were not acceptable to some Provinces. Certain Provinces objected to a single industry created assignee model and this necessitated the re-opening of a new inter-Governmental consultative process. The process started in October 2011 and concluded in October 2012.

A meeting of all Government stakeholders in Agriculture dealing with Meat Safety was organized in October 2011 through the national Chief Directorate of Animal Production and Health to review the process and it was decided at the meeting that a new process would have to be embarked on in order to ensure that all necessary consultations were carried out and the process was transparent. An Independent Meat Inspection (IMI) core working group, which consists of provincial and national representatives, was formed at the meeting to conduct the consultation process and to develop a revised document on meat inspection.

The IMI core working group met subsequently in November 2011 to prepare the way forward and met with the meat industry represented by the Red Meat Industry Forum (RMIF) and the South African Poultry Association (SAPA) in the same month. The meeting with the industry mandated the IMI core working group to consult all Provinces with the view of getting the views of the provincial stakeholders other than the managers in Veterinary Services. Representatives of the RMIF and SAPA were invited to accompany the IMI core working group to present their proposed IMI model in Provinces and to clarify any issues raised on their model. The consultation process started in November 2011 and ended on the 26 January 2012. The provincial Veterinary Services stakeholders consulted raised issued ranging from the perception that the IMI core working group was consulting in order to rubber stamp a decision made a long time ago to assign the IMI service to an industry assignee, to total appreciation of the renewed consultation process. The results of the consultations were presented to the meat industry on the 28 February 2012, followed by a presentation at the National VPH Advisory Committee meeting of 29 February – 01 March 2012.

The recommendation of the IMI working group was presented to the MinTech (Veterinary Working Group) on the 08 March 2012 and 18 April 2012. The MinTech (VWG) approved the recommendation of the working group, with a provision that legal advice be sought from the State Law Advisors on the legalities of the decision. A meeting was held between the State Law Advisors and the IMI working group on the 19 April 2012 and a formal legal opinion was received at the end of June 2012.

The advice from the State Law Advisors was studied and the State Law Advisors cautioned the Department on various considerations to be looked at if such an option would be followed, including the amendment of the Act (Refer to sections 29, 33 and 34 of the legal advice of 25 June 2012). In July and August 2012 the core working group then reassessed all options and a new recommendation was made.

Comparative analysis of meat inspection systems in different countries was conducted. In September 2012, the Department sent a delegation to attend a meat and poultry inspection seminar organized by the US Department of Agriculture in Washington DC, USA which was used as an opportunity to learn from other countries on the meat inspection systems they operate. The results of the analysis have been summarised in chapter 6.

4.3. Public Consultations

Approval was granted by the Honourable Minister to consult with the meat industry on the proposal of the work group of 23 November 2012. The Director of Veterinary Public Health then issued a letter through the government gazette to all abattoir industry stakeholders on the 04th January 2013, which informed stakeholders of the public consultative process and called for comments until the 22nd February 2013 (annexure C).

The working group report on meat inspection service in South Africa document entitled "A proposal on meat inspection service in South Africa" (annexure A) was also gazetted on the 4th January 2013 to give the public the recommendation of the working group and also to enable

the public a chance to prepare for the consultations. The public consultation meetings were conducted from the 29th January 2013 to the 20th February 2013 as follows:

Date	Province	Location
29 January 2013	(National Consultation)	Pretoria
30 January 2013	Eastern Cape	East London
04 February 2013	Western Cape	Cape Town
06 February 2013	Northern Cape	Kimberley
08 February 2013	Free State	Bloemfontein
11 February 2013	Gauteng	Heidelberg
12 February 2013	North West	Mahikeng
14 February 2013	Limpopo	Polokwane
18 February 2013	KwaZulu Natal	Pietermaritzburg
		Richards Bay
20 February 2013	Mpumalanga	Ermelo

Table 2: Public consultations schedule

A presentation was made to the Parliamentary Portfolio Committee on Agriculture on the 26 February 2013 to update honourable members of parliament on the progress made thus far on the meat inspection service in South Africa, following an instruction by the Committee in November 2012 to give feedback and progress on the subject.

A meeting with the national Department of Health and the South African Institute of Environmental Health was held in Durban on the 4th March 2013 to discuss the proposal. This was important because meat safety is a joint responsibility of the 2 Departments. It has been indicated in the proposal that the Department of Health and local municipalities will be critical in ensuring the safety of meat and meat products after they are approved at abattoirs and ports of entry into the country.

A meeting with representatives from the Red Meat Industry Forum (RMIF) and the South African Poultry Association (SAPA) was held on the 11th March 2013 to discuss the way forward following the public consultative meetings across the country. The meeting with the meat industry stakeholders decided to set up a task team consisting of both government and the meat industry to work on a joint proposal that will be submitted to the Minister.

4.4. Recommended Models

After the consultative process, the following options for the meat inspection service, in order of preference to be implemented were recommended:

- i. To create capacity within Government (DAFF) to render the meat inspection service across the country
- ii. A combination of Government operated service and assignee(s)/authorised person(s).
- iii. A multiple assignees/authorised persons model in which Government would decide on which assignees/authorised persons are allocated to what abattoirs
- iv. A single assignee/authorised person model as proposed by the red meat industry.

The above mentioned preferences are hereby discussed.

i. Capacity within Government

All Provinces indicated that a fully capacitated Government model would be an ideal way to implement a uniform meat inspection service across the country. The following pronunciations were made:

- Meat inspection is an important function that guarantees the safety of meat to the consumer.
- Meat inspection was for a long time a function of Government and had worked successfully until it was privatised after 1992. Meat inspection service had functioned well until Government Veterinary Public Health organizational structure was effectively dismantled during privatization.
- Since 1992 meat inspection service is conducted by the private sector and it is clear that the private sector has not effectively performed meat inspection service hence the current challenges.
- Given the challenges experienced by the private sector to render the service, it is clear that a decision to remove this service from Government was unfortunate, and has placed consumer safety at risk,
- As such capacity to render meat inspection service within Government should be reestablished,
- Capacity to monitor the meat inspection service be created in Provinces

ii. Combination of Government and Assignee(s)/Authorised Person(s)

In this model Government would handle "smaller" abattoirs and allow inspection at "busy" abattoirs to assignee(s)/authorized person(s). This was also seen as a possible phasing in model for the implementation of a Government operated model.

iii. Multiple Assignees/Authorised Persons Model

In this model, It was felt that the Government would be one to decide on which assignees/authorised persons would be allocated to which abattoirs. An example for the implementation of this model which was popular was a situation in which different assignees/authorised persons could be allocated to various geographical areas of the country such as different Provinces.

iv. A Single Assignee/Authorised Person Model

As indicated in the first option, all Provinces advocated the capacitation of Government to conduct meat inspection across the country. The single assignee model was actively opposed by eight of the nine Provinces as an alternative. In the Province in which this was seen as an alternative, the reasoning was that it would be necessary to implement this option as an alternative to a Government operated model because this would ensure a standard approach to meat inspection across the country and the overheads would be lesser than in a multiple assignee route.

5. PROBLEM STATEMENT

5.1. Status Quo

Abattoirs in South Africa are registered according to categories as defined in the Meat Safety Act and are classified according to species slaughtered and daily throughput. Red meat and poultry abattoirs account for the majority of the meat that is legally sold in the country. The rest of the meat that is legally sold comes from game, ostrich, crocodile and rabbit abattoirs, and some imported. The discussion in this document will therefore be focussed on the red meat and poultry abattoirs.

Province	High Thro	ughput	Low Thro	ughput	Rural	
FIOVINCE	Red Meat	Poultry	Red Meat	Poultry	Red Meat	Poultry
Eastern Cape	12	2	19	11	35	6
North West	10	10	12	20	10	0
Mpumalanga	12	5	19	13	0	2
Gauteng	10	7	15	23	0	1
Limpopo	10	3	13	6	39	0
KZN (North)	8	0	9	10	5	3
KZN (South)	9	7	7	14	2	2
Free State	25	4	25	33	17	0
Western Cape	20	8	36	9	1	3
Northern Cape	13	0	24	12	8	0
	129	46	179	151	117	17
Totals	Total	Red Meat	425			
	Tota	al Poultry	214			

The total numbers of red meat and poultry abattoirs in the country are as follows:

 Table 3: Total number of abattoirs in South Africa in 2012

High throughput abattoirs in both red meat and poultry abattoirs account for 97% of the meat produced locally. These abattoirs are located in major towns and cities where there are services and infrastructure such as roads, water and electricity. The low throughput and rural abattoir form the majority of the abattoirs but produce only 3% of the total meat production.

Meat inspection in red meat abattoirs is provided by service providers who are directly hired by the abattoirs to render the service. The independence of the service provided can therefore not be guaranteed as the choice of a meat inspection service provider is totally a decision of the abattoir owner. Meat inspection service has not been extended well to rural and some small low throughput abattoirs due to their location far away from towns. The non affordability of the meat inspection service has also been a negative factor in the non availability of the service to smaller abattoirs.

The meat inspection service in poultry abattoirs is provided by poultry meat examiners who are under direct employment of the abattoirs. Poultry abattoirs were given an exclusion from Government meat inspection service in 1983 (**Annexure A**) and were compelled to have inhouse systems for ante and post mortem inspection.

5.2. Independence of Meat Inspection

The Act does not define "independence of meat inspection" but states in section 11(1)(c) that meat inspection services may only be performed by the national executive officer, a provincial executive officer, an authorised person or an assignee, who must perform that function independently from the abattoir. Furthermore, in terms of section 11(1)(m), meat and animal products must be inspected, marked and dealt with in accordance with the prescribed methods by a person contemplated in paragraph (c), as mentioned above.

The World Organization for Animal Health (OIE) regards technical independence as the ability of a veterinary or para-veterinary professional to exercise his/her profession with due diligence, ethically and impartially, and free from any financial, hierarchical, political, or otherwise pressures.

Based on the above, the State Law Advisors are of the opinion that it is not necessary to include a specific definition for "independence of meat inspection" (refer to section 12 of the legal opinion of 25 June 2012). In the context of this document, independence of meat inspection is understood as follows:

"Independence of meat inspection" means that a person contemplated in section 11(1)(c), who renders meat inspection service at an abattoir –

- may not be in the employment of the abattoir in any capacity and/or receive any direct remuneration from the abattoir for the meat inspection service rendered;
- (2) may not in relation to the abattoir, be a supplier, client or have any contractual relationship other than a contract for rendering of meat inspection services, and where the NEO and/or PEO deems practicable, may perform hygiene management and meat classification and, be a professional advisor but only in a capacity as a Registered Inspector;
- (3) may not have a representative of any abattoir in its management and administration;
- (4) may not be subjected to any situation that may compromise their objectivity in performing the meat inspection service.

5.3. Veterinary Public Health in South Africa

Veterinary Public Health is a component of Veterinary Services in the country which is responsible for the enforcement of the Meat Safety Act, 2000. Abattoirs are constitutionally competencies of Provinces and therefore Provincial Executive Officers in the Provinces in

collaboration with the NEO oversee the enforcement of the Act. Veterinary Public Health Officers are employed by the Department of Agriculture, Forestry and Fisheries (DAFF) and Provincial Governments to administer the Meat Safety Act, 2000 and to collaborate with other stakeholders to ensure that consumers are protected against unsafe meat.

It must be noted that historically officials currently classified as Meat Inspectors were primarily in the abattoirs performing online meat inspection services. However, their functions have evolved over the years to include broader VPH matters. It has been debated over the years that the occupational classification be renamed into VPH Officers/Practitioners.

A 2012 analysis of the capacity of Veterinary Public Health technical officials in the Provinces show that the component is seriously understaffed to meet the challenges of meat safety in the country. The figures as indicated below are based on the existing provincial organograms, needs assessments conducted in Provinces and all activities that form part of the Veterinary Public Health component.

	Filled Posts	Vacant/unfunded Posts	Ideal No. of Posts	Variance
State Vets (VPH)	10	14	32	22
Technical Managers	5	5	12	7
Control VPHOs	12	8	29	17
VPH Officers	64	42	159	95

 Table 4: Number of VPH posts in the country

The creation and funding of these posts are critical in the monitoring of meat inspection service as envisaged in this document. VPH officers will need to undergo continuous professional development and keep up to date with developments in the abattoir industry.

Veterinary Public Health has a regulatory function in terms of enforcing the Meat Safety Act. Hurdles in the implementation of the meat inspection services include the lack of resources such as transport, human capacity, budget, equipment, etc. VPH officers have to conduct abattoir audits and also address issues dealing with illegal slaughtering of animals. The latter is by nature unpredictable and cannot always be planned. It is therefore important that resources be made available for officers to be able to carry out service delivery.

The cost to capacitate Veterinary Public Health service in the country is estimated at **R 41 325 366** based on the 2012 cost to employer packages as indicated below:

	Number of posts needed	Unit Cost to Employer	Total
State Vets (VPH)	22	R 464,919	R 10,228,218
Technical Managers	7	R 358,047	R 2,506,329
Control VPHOs	17	R 291,432	R 4,954,344
VPH Officers	95	R 248,805	R 23,636,475
		TOTAL COST	R 41,325,366

Table 5: Cost to employer to fill the needed posts in VPH

VETERINARY PUBLIC HEALTH PERSONNEL												
	Assi	stant Dire	ector	State Vet – VPH			Co	Control VPHO		VPHO/Meat Inspector		
	Filled Posts	Vacant Posts	Ideal no. of posts	Filled Posts	Vacant Posts	Ideal no. of posts	Filled Posts	Vacant Posts	Ideal no. of posts	Filled Posts	Vacant Posts	Ideal no. of posts
Eastern Cape	0	1	1	1	4	5	4	2	6	18	22	40
Northern Cape	0	0	3	0	1	2	1	1	3	7	1	14
Western Cape	0	0	1	1	1	6	1	0	5	8	2	21
North West	1	1	1	0	0	2	0	3	4	9	5	15
Mpumalanga	1	0	1	3	0	4	3	1	4	5	2	12
KZN (North)	1	0	1	0	1	1	1	0	1	1	2	3
KZN (South)	1	1	1	2	2	2	1	1	1	2	2	2
Gauteng	1	0	1	2	2	4	0	0	3	8	4	12
Limpopo	0	1	1	3	2	5	1	0	2	10	0	14
Free State	0	2	2	1	3	6	1	0	2	6	2	40
TOTAL	5	6	13	13	16	37	13	8	31	74	42	173

 Table 6: Total number of VPH technical officials per Province

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5.4. Impact of the Lack of Meat Inspection

Food-borne illnesses account for the majority of illnesses reported in most developed countries. According to a World Health Organization (WHO) report of 2005, there were 1,8 million deaths from diarrhoeal diseases caused by contaminated food. It has also been reported that 30% of populations in industrialized countries succumb to food-borne illnesses every year. Food-borne disease is a common public health problem worldwide, but is generally under-reported and poorly investigated in South Africa and southern Africa at large (Frean et al., 2003; http://www.nicd.ac.za).

The 2006 South African Health Report attributed 15% of mortality in children below age 5 to gastroenteritis. Nyiko Hlungwani and colleagues described an unfortunately frequent occurrence of a rural funeral linked to food-borne outbreak in South Africa (http://www.nicd.ac.za). Increased incidences of food-borne illness have been reported across South Africa's Provinces (http://www.nicd.ac.za).

Considering the estimated underreporting in food-borne illnesses in South Africa, the estimated medical costs, productivity losses and value of premature deaths due to diseases caused by five food-borne pathogens (*Campylobacter*, non-typhi *Salmonella*, *E. coli* O157, *E. coli* non-O157 STEC and *Listeria monocytogenes*) runs into billions of rand per year (Frean, 2003; http://www.nhls.ac.za).

Food-borne diseases create an enormous burden on the economy. Consumer costs include medical, legal, and other expenses, as well as absenteeism at work and school. For many consumers who live at a subsistence level, the loss of income due to food-borne illness can perpetuate the cycle of poverty. Chronic diseases caused by contaminated food, like reactive arthritis or temporary paralysis, can be even more damaging than the initial disease and add dramatically to the medical costs and lost wages.

Costs to national Governments stem from increased medical expenses, outbreak investigations, food recalls, and loss of consumer confidence in the products. Food-borne diseases lead to increased demands on already overburdened and poorly funded healthcare systems in developing countries. The cost of food safety scares goes beyond monetary losses and can put consumers off a product permanently. Annually, 2 billion cases a year of food poisoning worldwide result in nearly 2 million deaths. "Unsafe food has tragic consequences and the global cost to the food industry is huge.

Tourism is of great economic importance for South Africa and food-borne illness can damage the reputation of the country as a tourist destination and has huge consequences for its economy. In 1998 outbreak of cholera in Tanzania cost US \$36 million. In addition, children's exposure to pesticides in the African 24 Region is suspected of causing immunological and endocrine defects, neurotoxic disorders, and sometimes cancer.

In sub-Saharan Africa, where approximately 25 million adults and children live with HIV/AIDS, food-borne infections can cause particularly serious complications, including death. In 1992, a large outbreak of bloody diarrhoea caused by *E. coli* 0157 occurred in Swaziland associated with consumption of beef and untreated water. An outbreak of *E. coli* 0157 in Egypt during 1994 resulted in the death of children and severe diarrhoea in others. A follow-up survey of 175 foods from slaughterhouses, supermarkets and farmers' homes detected *E. coli* 0157 in 6% of unpasteurised milk, 6% of fresh retail beef, 4% of boneless chicken, and 4% of lamb meat samples.

WHO has documented numerous food safety and quality problems that have affected food exports and imports in African countries. Prevalence of Bartonellae, a zoonotic disease has been reported at 22.5% in South African individuals (Tratariset al., 2012).

A retrospective data analysis of the National Health Laboratory Service (NHLS) laboratory information system on human echinococcosis serology, microscopy and histopathology results in eight Provinces (excluding KwaZulu-Natal) showed an overall positivity rate in submitted diagnostic samples of 17.0%, with the Eastern Cape (30.4%), North West (19.0%) and Northern Cape (18.0%) Provinces showing highest rates (Mogoye at al., 2012).

The apparent incidence of leptospirosis in the South African population is moderately high. Of the people sampled in Cato Crest (Durban, KwaZulu-Natal Province), (19.8%) were seropositive for leptospirosis. Of the clinical samples sent to the Special Bacterial Pathogens Reference Unit from all over the country for testing in 2009, (9%) were IgM positive; in 2010 and January 2011 to May 2011, (6.5%) and (12.5%), respectively, were IgM positive (Saif et al., 2012). The seroprevalence of *T. gondii* in selected populations, namely HIV-positive and HIV-negative individuals, and a more general sample biased towards pregnant women, was therefore investigated and found to be 9.8%, 12.8% and 6.4% respectively (Kistiah et al., 2012)

In chicken meat samples, the prevalence of *E. coli* contamination was 60 percent, 100 percent, 44.4 percent, 100 percent and 80 percent in five different regions of northwest Province (Mabote et al., 2011). *Listeria* spp. (22%), *Enterobacter* spp. (18%), *Staphylococcus aureus*

(3.2%) food-borne Pathogens were recovered from Ready-to-Eat Foods from Roadside Cafeterias and Retail Outlets in Alice, Eastern Cape Province (Nyenje et al., 2012).

Likewise, a number of studies have confirmed the presence of harmful bacteria in meat in the US. After collecting ground beef samples from meat processing plants around the country in 1996, the USDA determined that 7.5% of the beef samples were contaminated with *Salmonella*, 11.7% were contaminated with *Listeria monocytogenes*, 30% were contaminated with *Staphylococcus Aureus*, and 53.3% were contaminated with *Clostridium perfringens*. Federal health authorities in the USA have estimated that food-borne diseases sicken 76 million people, cause 325,000 hospitalizations, and kill 5,000 Americans every year.

The UK has reported 2 million cases annually. 5.4 million cases and 120 deaths were reported in Australia, and 750 000 cases and 400 deaths in France. Developing countries, of which South African is one, do not have systems to keep proper statistics of food-borne illnesses and poisoning. It has been suggested that the rate of infection and poisoning in these countries is much more than in developed countries.

The cost of food-borne illnesses to any country can be categorized as follows:

- i. Loss of productivity
- ii. Health care services
- iii. Food safety recalls and condemns
- iv. Food borne illnesses surveillance and investigations
- v. Loss of tourism
- vi. Potential loss of export markets (e.g. EU/FVO mission reports on meat inspection in South Africa)

Food-borne illnesses cost \$152 billion annually in the USA, 1,25 billion Australian dollars and \$14 billion dollars in Australia and Canada respectively.

6. MEAT INSPECTION IN OTHER COUNTRIES

The Department investigated meat inspection services in more than 50 countries including SADC, strategic partners such as Brazil, China, Russia, etc and many developed and developing countries such as Jamaica, Trinidad and Tobago, Northern Ireland, Finland, Russia, Denmark, Liberia, Dominica, Guatemala, Germany, Malaysia, Netherlands, South Korea, Honduras. It can be concluded that internationally almost all Governments directly handle meat inspection. Where agencies have been established, these were still agencies of Government and as such they are extensions of Government. Where agencies are completely private, a permanent Government employee is on site on a full time basis to provide oversight and guarantee independency and impartiality. Key elements in certain countries are highlighted hereunder:

6.1. Botswana

The Division of Abattoir Hygiene and Meat Quality Control ensures Veterinary Public Health controls through the supervision of meat inspection and hygiene maintenance of all export abattoirs and approved municipal and private abattoirs. Meat inspection is regulated under the Livestock and Meat Industries Act of 2007. All meat inspection personnel in Botswana are employed by Government and assigned to abattoirs.

6.2. Namibia

Meat inspection in Namibia is under control of the Departments of Agriculture and Health. Veterinary services is responsible for meat inspection at export abattoirs, whereas non exporting abattoirs are inspected by inspectors from either the Ministry of Health or Local Municipalities. The location of meat inspection service in the Ministry of Health has made it difficult for animal disease control as there is not always reporting by health inspectors to Veterinary Services on animal diseases identified during meat inspection.

6.3. Zimbabwe

Meat is inspection services are be provided by Department of Veterinary Services in the Ministry of Agriculture, Mechanisation and Irrigation development, Municipalities or the Ministry of Health. The Department of Veterinary Services provides services to all export abattoirs and to local abattoirs within cities and towns. Inspectors form Ministry of Health service rural abattoirs where there are no veterinary inspectors whilst municipalities normally provide the service in

municipal abattoirs and some areas where the Department of Veterinary Services does not have inspectors provide the service.

In the long run, the Department of Veterinary Services intends to provide meat inspection services to all abattoirs in the country. Qualified inspectors who wish to work in private capacity have to be authorised by Director of Veterinary services and are only granted permission in exceptional circumstances where the Department of Veterinary Services or the Ministry of Health cannot provide the service. The same arrangement also applies to abattoirs intending to employ their own inspectors. In the past the Government used to concentrate on export establishments as they also produced the bulk of the meat that was also consumed locally.

Due to trade restrictions, production in the export facilities declined resulting in the emergence of local abattoirs particularly in cities and towns to fill in the supply gap. The focus of the Government is now on the local abattoirs since they now produce almost all of the meat which goes into the market. The Department of Veterinary Services is currently building capacity in order to provide meat inspection services in all abattoirs.

6.4. European Union

The control of meat in the European Union is regulated under Regulation EC 854/2004 which defines how the European Community Members should carry out control of meat safety. Individual EU countries make country specific legislation which should be in line with the EU regulation as indicated above.

6.5. United Kingdom

The Food Standards Agency (FSA) is responsible for meat inspection duties in fresh meat premises in England, Scotland and Wales. The FSA is an independent Government department which reports to parliament and is controlled by a board appointed by parliament.

The FSA is the central competent authority in the UK responsible for carrying out official controls. These controls require specified inspections of all animals, carcasses and offal through risk-based audits to verify that approved fresh meat premises comply with EU Food Hygiene Regulations.

The Food Standards Agency (FSA) is reviewing the current system of meat hygiene inspection in abattoirs. A number of research projects are currently being undertaken in the UK to consider "modernization" of meat inspection service towards a more risk based system rather than the traditional organoleptic system currently in place. A risk based meat safety system involves the monitoring and control of the product from the farm to the consumer by eliminating and/or minimizing meat-borne illnesses before the animal is converted to meat at the abattoir.

The system at the abattoir involves the monitoring and auditing of the production, hygiene and meat inspection systems. It has been argued that illnesses due to meat are more related to microbiological contamination rather than the parasitic infestations such as cysticercosis which can be visually inspected. Microbiological contamination cannot be seen with a naked eye and therefore visual inspection alone would not be able to eliminate meat-borne illnesses.

Meat inspection services were subsidized by Government in the UK. Decisions were taken to recover full cost of meat inspection from the meat industry. The estimated cost of the recovery was set at £20m a year during 2011. The decision was based on the fact that the cost of regulation was said to be covered by those being regulated i.e. Food Standards Agency (FSA) should not subsidize meat inspection services.

6.6. United States of America

The Food Safety and Inspection Service (FSIS) under the United States Department of Agriculture (USDA) in the USA is responsible for meat safety and the setting of food safety standards, regulatory control and law enforcement dealing with noncompliance. Meat inspection in the USA is done either by the FSIS (federal program) or state inspection services (State Meat and Poultry Inspection (MPI) programs) in different states of the country. The federal programme is aimed at abattoirs that are trading across the country (interstate) and those exporting to other countries. Abattoirs under the state inspection programmes are limited to trading within their states only and are also not allowed to export.

More than 7,600 FSIS inspectors carry out the inspection laws in over 6,500 privately owned meat, poultry, egg product, and other slaughtering or processing plants in the United States and U.S. Territories. State Meat and Poultry Inspection (MPI) Programs are an integral part of the nation's food safety system. About 1,900 meat and poultry establishments are inspected under State MPI programs. All of these establishments are small or very small. State MPI programs are characterized as providing more personalized guidance to establishments in developing their food safety oriented operations. FSIS provides approximately \$50 million dollars annually to support the 27 State MPI programs currently operating.

State MPI programs operate under a cooperative agreement with FSIS. Under the agreement, a State's program must enforce requirements "at least equal to" those imposed under the Federal Meat Inspection Act and the Poultry Products Inspection Act. In States with inspection

programs, establishments have the option to apply for Federal or State inspection. FSIS provides up to 50% of the State's operating funds, as well as training and other assistance. FSIS provides guidance to state MPI programs under these agreements.

The States without their own inspection services have given up their meat or poultry inspection programs. USDA assumed the inspection function of these plants in addition to plants already under USDA inspection. State inspected plants would normally qualify for federal inspection due to the "equal to" requirement for state inspection programs. All plants under Federal inspection are eligible to sell in interstate commerce.

FSIS conducts at least annual comprehensive reviews of State Meat and Poultry Inspection (MPI) programs and their requirements, including enforcement of those requirements with respect to slaughter, preparation, processing, storage, handling, and distribution of livestock carcasses and parts, meat and meat food products, and poultry products.

Large poultry abattoirs under the FSIS meat inspection service have their own plant inspectors in addition to FSIS inspectors, who are responsible for primary carcass and offal inspections. The FSIS inspectors at these abattoirs carry out final checks on-line and are also responsible for hygiene verification at the abattoirs to determine the quality of the products.

6.7. Canada

The Canadian setup is similar to the USA setup. The Canadian Food Inspection Agency (CFIA) under the Department of Agriculture is responsible for meat inspection at federal abattoirs in the country. Provincial departments of agriculture are responsible for meat inspection in smaller abattoirs that are restricted to trading in those Provinces only. The number of inspection personnel in Canada over the past 10 years has increased as follows:

	March 2002	March 2004	March 2006	March 2008	March 2010	March 2012
CFIA Population	5,467	5,754	6,121	6,961	7,272	7,291
Inspection Staff	3,596	3,871	4,165	4,571	4,703	4,841
Inspectors / Field Inspection Staff	2,409	2,573	2,823	3,030	3,342	3,534

6.8. Australia

Meat inspection in Australia is conducted under the Australian Export Meat Inspection System (AEMIS). Post-mortem inspection is delivered either by officials from the Department of Agriculture, Fisheries and Forestry (DAFF) called Food Safety Meat Assessors (FMSAs) or Australian Government Authorized Officers (AAOs) who are legally bound to DAFF to perform inspections in accordance with a detailed set of DAFF controlled instructions. A Food Safety Meat Assessor (FSMA) will assist the veterinarian in performing verification activities. An additional roving FSMA will be available for facilities with a larger verification workload. Where AAOs perform primary inspection all carcases are subject to assessment by FSMA.

All abattoirs in Australia have on-plant veterinarians (OPVs) working for DAFF who are responsible for ante mortem inspection and verification of post-mortem inspection and processor hygiene practices. Abattoirs have an option of choosing the Government FMSA inspection service or the AAOs to carry out inspection at their abattoirs. The assurance of independence of meat safety in the latter option is through the on-plant veterinarians who are stationed at these abattoirs on a full-time basis

6.9. New Zealand

During 1985 New Zealand authorities assessed the scientific basis for traditional meat inspection. The core business provisions were ante-mortem and post-mortem inspection services.

A 1994 report by Price Waterhouse stated international climate allows devolvement from Government employed inspections to other forms of controls. The New Zealand authorities decided to move away from a state controlled inspection service to an industry led service, which resulted in state employees giving way to industry personnel who would be carrying out the same function (2010).

6.10. Conclusion on the analysis of meat inspection internationally

An analysis of trends in meat inspection by developed countries shows that Government meat inspection service is still the preferred option to conduct the service at abattoirs and meat processing plants. Some countries have allowed some degree of self control related to meat inspection at abattoirs, but in all cases Government employed personnel are available on site either on the line or monitoring the work of plant inspectors and are final authority on the safety of the product.

It is therefore important to South Africa that the solution to Independent Meat Inspection should take a look at the experience of other International countries, but also to look at the intricacies and uniqueness of South Africa considering that there are 2 economies operating in South Africa, a first class economy/livelihood right next to the poorest of the poor. The solution must be able to ensure equitable access to safe and wholesome meat across the entire country.

7. SCOPE OF MEAT INSPECTION AT ABATTOIRS

The scope of meat inspection service at abattoirs consists of the following components:

- i. Ante-mortem inspection;
- ii. Carcass and offal inspection;
- iii. Verification of hygiene management;
- iv. Regulatory control;
- v. Monitoring of condemns disposal;

The tasks listed above are aimed at ensuring that meat and meat products that are not fit for human consumption do not enter the food chain.

Ideally the powers of meat inspection personnel at an abattoir should include:

- i. Decision making on fitness of animals for slaughter during ante-mortem inspections
- ii. Decision making on carcasses and offal Pass, condemn
- iii. Slaughtering may only start with the consent of the meat inspection personnel in charge
- iv. Stop the slaughter line if non compliances warrant such
- v. Issue instructions to comply with provisions of the Act.
- vi. Control slaughter line speed

According to the Regulations under the Meat Safety Act, 2000 the PEO of each Province determines the number of Registered Inspectors required at each abattoir in the Province. In order to determine the number of Registered Inspectors needed at a particular abattoir, the following factors are considered:

- i. Abattoir throughput;
- ii. Abattoir structural design;

- iii. Number of inspection points;
- iv. Line speed;
- v. Manual vs Mechanical line;
- vi. Number of shifts;
- vii. Number of lines operating at any given time;
- viii. Fatigue factor Inspectors need to continuously get breaks from the slaughter line in order to recharge their eyesight;
- ix. Additional responsibilities such as verification of the hygiene management and regulatory control;
- x. Ability of meat inspection component to perform ante-mortem inspection, primary inspection and monitor the security and disposal of condemned material;

7.1. Red Meat and Game Abattoirs

In addition to the need for primary meat inspection at abattoirs, provisions must also be made for the services of Veterinarians to conduct secondary meat inspection on detained carcasses. Veterinarians at abattoirs may perform the following:

- i. Conduct secondary meat inspection;
- ii. Conduct assessments of the abattoir hygiene;
- iii. To prepare and submit monthly reports to PEO on secondary meat inspection and their assessment of the abattoir operations in relation to meat safety;
- iv. The veterinarian may engage any personnel in the abattoir when carrying out their responsibilities

Due to the nature of the work performed by Veterinarians, it is also suggested that Veterinarians be on call at abattoirs instead of working full time or for a defined number of hours. This may be impacted upon or enhanced by the introduction of Compulsory Community Services (CCS) for Veterinarians once the legislative framework has been concluded.

The following table serves as a guideline in determining the minimum number of inspection personnel required in a red meat abattoir:

Throughput	Vets	Meat Inspectors	Meat Examiners	Meat Classification	Rotation factor!! (Abattoir specific)
0 - 2	SV	0	1		
3 – 15*	Vet on call**		1		
3 – 15	Vet on call	1			
16 - 50	Vet on call	1	1		
51 -100	Vet on call	1	1		
101 - 150	Vet on call	1	2		1 MI
151 - 300	Vet on call	2	2	1	1 MI
300 - 500	Vet on call	2	3	1	1 MI
501 -	Vet on call	2	4	1	1 MI

Table 8: Recommended number of inspection personnel at red meat abattoirs in South Africa

* - This will only be applicable in situations where a number of abattoirs can be grouped together and serviced by a rotating Meat Inspector in addition to the Meat Examiners stationed at the abattoirs. The role of the rotating Meat Inspector will be a supervisory one and also focus on quality assurance aspects rather than primary meat inspection at these abattoirs. Abattoirs in this category may have to agree to synchronized slaughtering strategies in order to enable the Registered Inspectors to be available for and during the slaughter of animals.

** - Vet on call can either mean a Private Veterinarian or a State Veterinarian

It is proposed that rural throughput abattoirs may employ the services of Meat Examiners, who will be required to work under the direct supervision of the VPH personnel in the Province.

The majority of abattoirs conduct meat classification which is done in accordance with the Agricultural Product Standard Act, 1990 (Act 119 of 1990). It is an acceptable practice within the abattoir industry for meat inspection personnel to also conduct meat classification. However, it is proposed that where a meat inspector/classifier may be employed at an abattoir, he/she may only be allowed to conduct meat classification after fulfilling his/her mandatory responsibilities in terms of meat inspection. A further recommendation is for meat classification to only take place at a time when slaughtering is not actively taking place.

This is aimed at ensuring that the primary focus of the inspection personnel, which is meat inspection, is not compromised. Abattoirs slaughtering above 150 units per day will be expected to have a dedicated meat classifiers.
In view of the scope of meat inspection and the scientific principles upon which it is founded it remains a physically intensive practice. A Registered Inspector may during the course of his/her work encounter fatigue. Fatigue, if it becomes excessive or sustained for long periods of time may give rise to a condition referred to as "carpal syndrome" which may negatively impact on the efficiency as well as the quality of meat inspection.

Additional inspectors may need to be employed at abattoirs slaughtering above 100 units per day to ensure that the inspection personnel take necessary breaks from the slaughter lines by applying a rotation system of duties including primary inspection on the line, ante-mortem and post-mortem inspection, verification of the hygiene management systems, regulatory control and monitoring disposal of condemns.

7.2. Poultry Abattoirs

7.2.1. Trend in the Poultry Meat Inspection

The poultry industry has made significant advances in their use and application of innovative technology to enhance their operational capacities. The equipment used at high throughput facilities has become highly automated and significantly impacted on increases in line speed and production capacities. The structure, design, layout as well as the remarkable increases in line speeds have made it impossible for a Registered Inspector to conduct proper meat inspection within the poultry industry.

In order to ensure that the products delivered to the consumers are diseases and pathogen free, a review of meat safety risk management and quality assurance practices must be conducted. In essence the role and the responsibility of Government should also be clearly defined. Increased attention must be given to hygiene management and the prevention or control of diseases in live birds in order to reduce the risk of food-borne illnesses.

The poultry industry has managed to implement and maintain a level of self-regulation in terms of their management and production systems which may be evident within the majority of high throughput plants. These are attributed to market forces as well as consumer demands and demands from retail. It would therefore be advisable to consider these positive outcomes and to ensure that it continues to develop notwithstanding the establishment and implementation of independent monitoring and auditing structures.

7.2.2. Meat Inspection Option in Poultry Abattoirs

It is common practice within the poultry industry to train candidates in a wide variety of disciplines ranging from poultry meat inspection to quality control and quality assurance practices. The industry could stand the risk of losing employees in whom time and money were invested. In light of the large numbers of Registered Inspectors (poultry meat examiners level I and II) that are already in the employ of poultry abattoirs it may not be advisable for a complete reshuffle of the meat inspection service.

It is therefore proposed that poultry abattoirs continue to use Registered Inspectors in terms of Poultry Meat Examiners level I and II that are already in their employ to do the primary inspections on the line. In addition the plant will also be required to procure the services of an additional Registered Inspector with a three year bio-scientific qualification. According to the Regulations under the Meat Safety Act, the PEO of each Province determines the number of Registered Inspectors required at each abattoir in the Province.

The additional Registered Inspector(s) as mentioned above will be employed by Government, will be on-site on a full time basis during slaughter. The daily activities of these inspectors in poultry abattoirs will be:

- Visual observation of the registered meat inspectors (poultry meat examiners level I and II) at frequent intervals;
- 2. To monitor hygiene management system and effecting regulatory control at abattoirs;
- 3. To assess the competency of the meat inspection component of the abattoir;
- 4. To provide continuous feedback to the PEO/NEO on the performance of the abattoir in relation to meat inspection and abattoir hygiene;
- 5. To approve all products for human consumption;

The poultry production process averages a four to six week growth cycle, upon which birds may be presented for slaughter. Live bird production capacities may be negatively affected by risks such as increased mortality rates as well as the frequent occurrence of disease outbreaks. This in effect may not pose any significant problems to major role players, but may greatly impact on the sustainability of smaller stakeholders within the poultry industry.

The lack of a feasible supply of birds may result in inadequate production volumes and increased variability in the slaughter capacity of the plant. Increased variability in slaughter capacities may affect the ability of a facility to source adequate meat inspection services. The cost implication of sourcing meat inspection at these abattoirs remains a challenge, due to the fact that it become extremely costly to hire the services of an inspector or a poultry meat

examiner level I or II. Grouping these abattoirs together and assigning them to particular inspectors/examiners may address the problem.

All high throughput abattoirs will be required to employ the service of a Veterinarian to be responsible for the health of the birds at the supplier farms. All low and rural throughput facilities may be required to ensure adequate access to the services of Veterinarians when and if needed.

The table below serves as a guideline in determining the minimum number of Registered Inspectors required in a poultry abattoir:

Throughput	Meat Inspectors	Poultry Meat Examiner Level II	Poultry Meat Examiners Level I
1 – 50*	0	0	In-house PMEs
51 - 500	0	1	In-house PMEs
501 – 2 000	0	1	In-house PMEs
2 001 – 10 000	1	0	In-house PMEs
10 001 – 50 000	2	0	In-house PMEs
50 001 – 150 000	3	0	In-house PMEs
150 001 -	4	0	In-house PMEs

Table 9: Recommended number of inspection personnel at poultry abattoirs in South Africa

* - Abattoirs slaughtering 1 - 50 units per day (rural) will have a centrally placed Government employed Meat Inspector who will rotate amongst these abattoirs to monitor the performance of in-house poultry meat examiners and carry out quality control.

The meat inspectors referred to in the table above will have a 3 year bio-scientific qualification, whereas the poultry meat examiner level II will be hired with a 1 year qualification. Provincial VPH officers will monitor the performance of the meat inspection personnel and in-house poultry meat examiners.

7.2.3. Challenges of Rural Abattoirs

Rural throughput abattoirs are generally located on farms or in small villagers far away from towns and in areas where meat inspection services may not be readily available. Based on the initial cost of compliance, the amount of meat to be produced, the operational costs involved as well as the need for meat inspection services, the feasibility of such facilities does not economically justify the employment of a Meat Inspector.

Many small scale, subsistence or emerging farmers are faced with challenges which may restrict their access to a slaughter facility and in turn limit accessibility to the broader market. The fact that these farmers cannot legally convert their livestock into meat in order to receive a higher return on investment, may add to the financial burdens experienced within such communities. Any attempts by rural communities or small scale farmers to develop abattoirs are usually stifled by the non-availability of meat inspection services within the area.

South Africa is in a developmental state and therefore Government has a role to develop rural communities and develop business enterprises. Government is expected to assist in providing meat inspection service at "developmental" abattoirs in order to ensure fair trade and that communities can slaughter their livestock not far from where the animals are raised. In addition to the above, Government also has the fundamental responsibility of ensuring that consumers within these communities have access to safe meat.

7.3 Meat Imports

Consumers and stakeholders within the poultry industry have over the past years raised concern about the impact of poultry imports on the country's meat industry. Concerns raised vary from statements that imported meat may:

- a. be uncompetitively cheap;
- b. negatively affect the local production capacities and;
- c. negatively impact on meat safety within the country.

The Department of Agriculture, Forestry and Fisheries is responsible for regulating the importation and exportation of meat and meat products within the country. Meat may only be permitted to enter the country subject to an Official Veterinary Inspection conducted at the country of origin and at the port of entry by officials in the employ of DAFF. The above inspection, by a State Veterinarian, may take into account certification criteria of exporting countries as well as importing requirements in South Africa. Consignments of meat are only permitted to enter the country or be released to the relevant importer upon compliance with these criteria.

The regulatory authority beyond the ports of entry is nestled with the Department of Health under the National Health Act, 2003 (Act No.61 of 2003) and Foodstuff, Cosmetics and

Disinfectants Act , 1972 (Act No 54 of 1972) as amended. This may create challenges in that the monitoring of the product until consumption is fragmented and usually not carried out effectively due to the difference in focus and priorities of local municipalities which are responsible for the implementation of these Acts.

Serious allegations have been cited where the safety of consumers as well as the safety and the quality of products have been compromised due to malpractices that occurred at various stages within the production chain. These include allegations that imported meat are reprocessed or re-packaged following the Official Veterinary Inspection upon which the product is then released to the relevant importer. Claims are made that meat are being thawed, reprocessed, injected with brine or other additives and re-packaged before re-entering the food chain. The introduction of meat inspection services in such facilities will play a significant role in enhancing the safety of imported meat into the country.

An increased pool of meat inspection personnel through the envisaged programme for meat inspection service will enable Government to monitor the meat once passed fit for consumption at ports of entry until it enters the domestic market. Authorization of meat inspection personnel under different legislations will be explored to enable the inspectors to have legal authority over the product beyond the ports of entry until it is sold to the public.

8. MEAT INSPECTION TRAINING

The red meat and poultry regulations under the Meat Safety Act prescribe that a person who can perform meat inspection/examination must have an appropriate bio-scientific qualification approved by the NEO, or either red meat examiners certificate or a poultry meat inspectors/examiners certificate for red meat or poultry abattoirs respectively.

There are currently seven academic institutions in South Africa that offer training in environmental science at diploma and degree levels. The training in animal health is offered at two universities in the country. The University of Pretoria is the sole provider for training of veterinarians in the country, who are involved in secondary meat inspection. Certificate courses in red meat and poultry meat inspection/ examination is offered by private institutions and is not very well monitored.

It is hereby recommended that the monitoring of training in meat inspection be reviewed to ensure that more focus is given to training of meat inspection personnel. The Department of Agriculture, Forestry and Fisheries will need to work closely with the Department of Higher Education and other stakeholders in the control and monitoring of the training.

9. OPTIONS FOR MEAT INSPECTION

As indicated in the chapter on the consultation process, the options for the implementation of a reviewed meat inspection service as discussed with Government Provincial stakeholders and the meat industry are as follows:

- 1. Government service under the Public Service Act
 - a. Central appointments
 - b. Provincial appointments
- 2. State owned enterprise
- 3. Assignee
- a. Single assignee
- b. Multiple assignees
- 4. Combination of Government and assignee(s)

The options are discussed hereunder.

OPTION 1: <u>GOVERNMENT OPERATED INSPECTION SERVICE (CENTRAL</u> <u>APPOINTMENT)</u>



Diagram 1: Government operated inspection service (Central appointment)

In this option, all meat inspection personnel are employed by DAFF under the direct control of the NEO to service abattoirs in the country. The NEO will liaise with the PEOs in the coordination of the service. The meat inspection personnel will be monitored by the PEOs who will provide constant feedback to the NEO on the performance of the service. The NEO will also reserve the right to audit and monitor the performance of the meat inspection personnel at all abattoirs in the country.

The advantages of this option are:

- Full Government control of meat inspection service across the country
- Uniform standards of meat inspection at all abattoirs
- Job stability for inspectors and examiners with a resultant retention of experienced staff
- Inspectors and examiners free to make professional decisions on meat safety without fear of dismissal
- Government will be able to support abattoirs in rural communities and these will be given as much attention as high and low throughput abattoirs
- Government tool to address unemployment e.g. unemployed Animal Health Technicians (AHT's) could be trained as meat inspectors

The disadvantages are as follows:

- Possible socio-political risks as a result of other competing priority areas
- Perceived long turnaround time in Government to employ personnel and procure resources

OPTION 2: <u>GOVERNMENT OPERATED MEAT INSPECTION SERVICE</u> (PROVINCIAL APPOINTMENTS)



Diagram 2: Government operated meat inspection service (Provincial appointments)

The meat inspection personnel are employed at provincial level by the PEOs to service abattoirs. Meat inspection service in the Provinces will be a separate unit from Veterinary Public Health in order to ensure that there is no conflict of interest for the same unit to conduct inspections and also audit its performance. The NEO will liaise with the PEOs in the coordination of the service. The meat inspection personnel will be monitored by the PEOs through Veterinary Public Health Officers. The NEO will reserve the right to audit and monitor the performance of the meat inspection personnel at abattoirs.

The advantages of this option are:

- Full Government control of meat inspection service
- Job stability for inspectors and examiners Retention of experienced staff
- Inspectors and examiners free to make professional decisions on meat safety
- Government will be able to support abattoirs in rural communities and these will be given as much attention as high throughput abattoirs

The disadvantages are:

- Possible differences in standards between Provinces will impact negatively on maintenance of essential national standards
- Provincial political dynamics such as different priorities may negatively affect service
- Possible socio-political risks
- Perceived long turnaround time to employ personnel and procure resources



OPTION 3: STATE OWNED ENTERPRISE

Diagram 3: State owned enterprise model

In this option, a state owned non profit company will be developed to handle meat inspection on behalf of the NEO. The Government, through DAFF will be the sole shareholder in the company. The NEO will be part of the board of directors to represent the interest of Agriculture and Veterinary Services in the company. The company will conduct meat inspections at all abattoirs in the country and will be monitored and audited by the PEOs.

The advantages of the state owned enterprise are:

- Full Government control of meat inspection service through a fully Government owned company
- Uniform standards of meat inspection across the country
- Job stability for inspectors and examiners Retention of experienced personnel
- Salaries determined by board of directors outside the Public Service Act. Flexible remuneration to attract and retain experienced personnel
- Closer ties with VPH will enhance performance and confidence in inspectors/examiners
- Quicker decision making as compared to a full Government service
- Government tool to address unemployment e.g. unemployed AHT's could be trained as meat inspectors

Disadvantages:

- May not be able to recover all monies owed by abattoirs in order to break even
- Possible political pressures on decision makers and SOE management
- Poor performance records of most SOEs
- May have an expensive management structure
- Will need amendments to the Act

OPTION 4 <u>COMBINATION OF GOVERNMENT AND ASSIGNEE(S)/AUTHORIZED</u> <u>PERSON(S)</u>



Feedback=====Audit and verification functionDiagram 4: A Combination of Government and assignee(s)/authorized person(s) model

In this option, both the Government and assignees will be able to conduct meat inspections at abattoirs. Abattoirs may be grouped in various forms in order to be able to allocate them either to Government meat inspection service or an assignee/authorized person. An example as indicated in the diagram above is the grouping of abattoirs according to how busy they are. Busy abattoirs will be allocated to assignees/authorized person and "struggling" and developmental abattoirs to be under the Government inspection service.

Advantages:

- Meat inspection service to all abattoirs in the country
- Subsidization of "developmental" abattoirs through Government meat inspection service
- Government readily available in case of non performance by assignee/authorized person
- Could be a transition into a full Government service

Disadvantages:

- Possible differences in standards of meat inspection
- May lead to unfair competition between assignee/authorized person and Government serviced abattoirs. Assignee/authorized person serviced abattoirs may pay more than the Government serviced abattoirs or vice versa
- Duplication of management structures
- Possible disparities in salaries of meat inspection personnel between assignees/ authorized person and Government

OPTION 5 MULTIPLE ASSIGNEES/AUTHORIZED PERSONS



Diagram 5: Multiple assignees/authorized persons model

In a multiple assignees/authorized persons model, a number of assignees/authorized persons are appointed centrally by the NEO to conduct meat inspection at different abattoirs. Options on the allocation of assignees/authorized persons to different abattoirs may include the following:

 Assignee(s)/authorized person(s) to conduct meat inspection at all abattoirs in a specific Province

- Assignee(s)/authorized person(s) to conduct meat inspection at all abattoirs in the country in a particular abattoir category (red meat, poultry...)
- Assignee(s)/authorized person(s) to be designated particular abattoirs based on their locations in the country regardless of provincial boundaries
- Assignee(s)/authorized person(s) to be offered the option of engaging any abattoir they would like to service

Advantages:

- Opportunity for smaller service providers to conduct meat inspection service
- Poor performing assignees/authorized persons may be terminated without a collapse in the meat inspection service
- No monopoly of the service
- If Government assigns areas of service for assignees/authorized persons, closer relationship between VPH and assignees/authorized persons may benefit the implementation of the service

Disadvantages:

- Fragmented and cumbersome communication lines
- If assignees/ authorized persons compete for abattoirs, there could be undercutting and possible corruption
- Different interpretations of legislation and policies
- Central control by the NEO and PEOs may not be possible
- Differing standards for meat inspection throughout the country
- Multiple management structures may increase overall costs (duplication)

OPTION 6 SINGLE ASSIGNEE/ AUTHORIZED PERSON



Diagram 6: Single assignee/ authorized person model

A single assignee/authorized person to be designated by the Minister will conduct meat inspections at all abattoirs in the country. An IMI forum which will consist of all stakeholders will control and regulate the functions of the assignee/ authorized person. The forum will also be an arbitrator between the assignee/ authorized person, Government and industry. The NEO and PEOs will monitor the performance of the inspection personnel at abattoirs.

The advantages of this option are:

- Uniform standards of meat inspection throughout the country
- Free market principles can be applied by assignee when subcontracting service providers
- Development of SMMEs through subcontracting of smaller service providers
- Allowing Government to focus on auditing and monitoring of abattoirs

Disadvantages

- Assignee/ authorized person may not be able to service rural and some low throughput abattoirs because of their locations and cost of service
- Government does not have total control over the meat inspection service
- Subcontracting different standards of meat inspection could be applied at abattoirs
- Possible monopoly by assignee/ authorized person
- Possible underpayment of employees
- Assignee/ authorized person may be negatively affected by economic challenges, e.g.
 - Economic downturn which may lead to laying off of staff and therefore increasing unemployment in the country
 - Assurance of meat inspection may not be guaranteed if the assignee/ authorized person is not able to conduct inspections at all abattoirs

10. RECOMMENDED MEAT INSPECTION OPTION

10.1. Preferred Option

The provincial consultations conducted between November 2011 and January 2012 indicated that the preferred option for the implementation of independent meat inspection is through a Government operated service. After reviewing the consultative process and analysing all the options available, and also considering the legal opinion from the state law advisors, the IMI working group hereby proposes the option of a creation of a unit to be responsible for meat inspection at DAFF (Option 1). This may be achieved through strengthening and increasing the capacity within the Department.

10.2. Implementation of the Model

The implementation of the Government meat inspection service will be over a number of phases to ensure that there is a smooth transition from the current setup to full Government takeover of the service. The different phases of the service may vary in their time scales depending on variables in each phase. The phases are as follows:

Phase 1:

- 1. The first phase of the model will see the capacitation of the Department for rendering the Meat Inspection Service.
- 2. Meat inspection will be provided at all rural abattoirs and infrequently slaughtering low throughput abattoirs. As indicated elsewhere in this document, the challenges of rural communities lie in their location far from towns where meat inspectors/examiners are usually based, they slaughter small quantities and also slaughter infrequently. All these factors make it difficult to afford the cost of meat inspection.

Different options to avail meat inspection at rural abattoirs will be explored, which includes locating examiners at strategic areas to handle more than one abattoir in the area in a coordinated slaughter schedule. Another option is the training of qualifying community members as meat examiners. These meat examiners will then service the abattoirs in their communities and be paid for their service. VPH officers and animal health technicians who would have received training in meat inspection could also offer inspection services at these abattoirs.

- Meat inspection service at high throughput and frequently slaughtering low throughput abattoirs will be offered by the existing service providers. The Department will need to be prepared to take over the full service in case the service providers fail to deliver the service.
- 4. At least one meat inspector to be employed by the Department to all high throughput and frequently slaughtering low throughput abattoirs to monitor and ensure independency of meat inspection by service providers on a full time basis.
- 5. Appointment of regional supervisors, relief personnel and trainers These officials will be monitoring the implementation of the meat inspection service at all abattoirs, whether covered in this phase or not.

Timeframe: 1 – 3 years

Phase 2:

The Department to take over meat inspection service at the remaining poultry abattoirs and ostrich abattoirs.

Timeframe: 1 year

Phase 3:

The Department to take over meat inspection service at the remaining red meat, crocodile, game and rabbit abattoirs.

Timeframe: 2 years

10.3. Government vs Industry Proposed Models

A comparison between the proposed red meat industry model and the model proposed above was conducted to indicate the differences. In the comparison, the major difference was the salaries offered to the inspection personnel. The IMI core working group felt strong that the salaries proposed by the industry were unacceptably low and may be viewed as exploitation of the personnel to be employed. The high turnover of meat inspection personnel currently could be attributed, inter alia, to these low salaries.

The comparison below indicates the differences in the remuneration under the 2 proposals:

	Industry Proposal	Government Proposal
Qualification	3 year	3 year
Experience	2 years	2 years
Salary (total package per month)	R5 000	R15 500

 Table 10: Comparison of industry and Government proposals on salaries of meat inspection

 personnel

An assessment of the 2012 remuneration scale for public service show that the proposed industry salary for a meat inspector with a 3 year qualification is equivalent to salary level 1, which is even less than the remuneration of cleaners and general workers in Government.

11. COST OF MEAT INSPECTION

The costing model used in this submission is aimed at calculating the total cost of meat inspection in the country. The two biggest determinants in the costing of meat inspection are the remuneration packages of the meat inspection personnel and the number of meat inspection personnel at a particular abattoir.

11.1. Costing Model

Meat inspection personnel will be appointed under the Public Service Act,1994 (Act 103 of 1994) and therefore the remuneration scale as published by the Department of Public Service and Administration will be used in the determination of the salaries. It has been recommended that the inspection personnel not be appointed at the same level as the Veterinary Public Health Officers due to the different nature of their responsibilities.

Below is a table depicting the different levels of appointment as envisaged:

Government salary scales	Remuneration Scales (cost to employer)	VPH salary levels	Red meat inspection personnel levels	Poultry inspection personnel levels
5	R 145 700 - R 167 500		Meat Examiner	Poultry meat examiner level II
6	R 170 300 - R 196 500			
7	R204 900 - R 237 200		Meat Inspector	Meat Inspector
8	R 248 800 - R 289 900	VPH Officer	Relief Inspector	
9	R 291 500 - R 347 300	Control VPH Officer		
10	R 358 100 - R 417 669	Assistant Director		
11	R465 000 – R547 700	State Veterinarian		

Table 11: Placement of meat inspection personnel on public service remuneration scale

The total number of meat inspection personnel needed was based on the recommendations indicated in chapter 7. A relief inspector will be required for approximately every 12 meat inspectors/examiners employed to cover for periods of absence from work due to leave and unforeseen circumstances. The table below indicates the number of meat inspection personnel needed at all abattoirs in the country.

Description	Vets (total hours/year)	Meat Inspectors Meat Examiners/ Poultry Meat Examiners II		Relief Personnel/ Supervisors/ Trainers
Red Meat		387	481	72
Poultry		152	161	21
Game	21108	29	7	3
Ostriches	21100	11	9	2
Crocodiles		1	2	
Rabbits		0	0	
Total	21108	580	660	98

Table 12: Total number of meat inspection personnel needed to service all abattoirs

The number of meat inspection personnel for each implementation phase is shown below:

PHASE	Meat Inspectors	Meat Examiners	Poultry Meat Examiners Level II	Relief Personnel/ Supervisors/Trainers
1	325	200	10	44
2	111		160	18
3	144	290		36
Total	580	490	170	98

Table 13: Number of meat inspection personnel in each implementation phase

The cost to government for meat inspection personnel at all abattoirs over a period of 10 is as follows:

Phase	Year	Total Cost
	1	R 99,576,485
1	2	R 154,318,999
	3	R 178,680,841
2	4	R 265,959,759
	5	R 346,726,593
	6	R 436,227,991
3	7	R 462,401,670
	8	R 490,145,770
	9	R 519,554,516
	10	R 550,727,787

Table 14: Cost to government for meat inspection over a period of 10 years

Table 15 on the next page shows the calculations for the amounts indicated in table 12 above

	Base year (2012)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimated CPIX		6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Meat Examiner	R 145,700	R 154,442	R 163,709	R 173,531	R 183,943	R 194,979	R 206,678	R 219,079	R 232,224	R 246,157	R 260,927
Poultry Meat Examiner II	R 145,700	R 154,442	R 163,709	R 173,531	R 183,943	R 194,979	R 206,678	R 219,079	R 232,224	R 246,157	R 260,927
Meat Inspector	R 204,900	R 217,194	R 230,226	R 244,039	R 258,682	R 274,202	R 290,655	R 308,094	R 326,579	R 346,174	R 366,945
Relief Inspector/Supervisor	R 248,800	R 263,728	R 279,552	R 296,325	R 314,104	R 332,951	R 352,928	R 374,103	R 396,549	R 420,342	R 445,563
Veterinarian (per hour)	R 800	R 848	R 899	R 953	R 1,010	R 1,071	R 1,135	R 1,203	R 1,275	R 1,352	R 1,433
Total Human Heads per Annum											
Meat Examiner		100	180	200	200	345	490	490	490	490	490
Poultry Meat Examiner II		6	8	10	170	170	170	170	170	170	170
Meat Inspector		200	300	325	436	508	580	580	580	580	580
Relief Inspector/Supervisor		20	35	44	62	80	98	98	98	98	98
Veterinarians (Hours/year)		21104	21104	21104	21104	21104	21104	21104	21104	21104	21104
Salary Package per year											
Meat Examiner		R 15,444,200	R 29,467,534	R 34,706,206	R 36,788,579	R 67,267,916	R 101,272,335	R 107,348,675	R 113,789,596	R 120,616,971	R 127,853,990
Poultry Meat Examiner II		R 926,652	R 1,309,668	R 1,735,310	R 31,270,292	R 33,146,509	R 35,135,300	R 37,243,418	R 39,478,023	R 41,846,704	R 44,357,507
Meat Inspector		R 43,438,800	R 69,067,692	R 79,312,733	R 112,785,147	R 139,294,830	R 168,579,648	R 178,694,427	R 189,416,093	R 200,781,058	R 212,827,922
Relief Inspector/Supervisor		R 5,274,560	R 9,784,309	R 13,038,290	R 19,474,465	R 26,636,042	R 34,586,900	R 36,662,114	R 38,861,841	R 41,193,552	R 43,665,165
Veterinarians		R 17,896,192	R 18,969,964	R 20,108,161	R 21,314,651	R 22,593,530	R 23,949,142	R 25,386,090	R 26,909,256	R 28,523,811	R 30,235,240
Total Human Capital Cost		R 82,980,404	R 128,599,166	R 148,900,701	R 221,633,133	R 288,938,827	R 363,523,325	R 385,334,725	R 408,454,809	R 432,962,097	R 458,939,823
Admin Cost	20%	R 16,596,081	R 25,719,833	R 29,780,140	R 44,326,627	R 57,787,765	R 72,704,665	R 77,066,945	R 81,690,962	R 86,592,419	R 91,787,965
Total Cost of Service		R 99,576,485	R 154,318,999	R 178,680,841	R 265,959,759	R 346,726,593	R 436,227,991	R 462,401,670	R 490,145,770	R 519,554,516	R 550,727,787

 Table 15: Detailed costing of government meat inspection service over a period of 10 years

11.2 Funding Options

The Meat Safety Act, 2000 prescribes that the owner of an abattoir must procure a meat inspection service for the abattoir. The PEOs are responsible for the determination of the number of inspectors and examiners needed at each abattoir in the Provinces in accordance with section 76(1) of the Poultry Regulations No. R153 of 2006 and section 84 of the Red Meat Regulation No. R1072 of 2004. The PEOs have to consider the following before making a decision on the number of inspection personnel at an abattoir:

- 1. Abattoir design
- 2. Number of inspection stations
- 3. Line speed
- 4. Structural and management aspects

This means that it is the responsibility of the abattoir owner to fund the cost of meat inspection at his/her abattoir. This provision of the Act is a challenge to smaller abattoirs, especially rural abattoirs and low throughput abattoirs that slaughter infrequently. It is therefore crucial that a decision that will be made on meat inspection be able to allow smaller abattoirs to operate and still receive the inspection service as required. In terms of animal and human diseases control, abattoirs are stations at which most zoonotic and harmful diseases are eliminated. This therefore means that Government has a financial obligation in terms of disease control at abattoirs.

There are different options on how to recover the cost of meat inspection per abattoir, namely:

- 1. Cost per individual meat inspection personnel allocated to a particular abattoir, or
- 2. Cost per slaughter units allocated to the abattoir as per the maximum throughput indicated on the registration certificate., or
- Cost per throughput category. In this option, high, low and rural throughput abattoirs will have a pre-determined rate independent of the number of inspectors or their allocated slaughter units, or
- 4. Cost per slaughter unit categories to be determined. In this case a system of grouping abattoirs into categories to be determined independently to the prescribed categories will be created and abattoirs charged according to the category they fit into, or
- 5. Cost determined according to actual slaughter figure at a predetermined rate per slaughter unit.

The predetermined rate for the abovementioned cost recovery options should include the following costs:

- 1. Relief personnel
- 2. Administrative personnel and overheads
- 3. Transport and accommodation for relief personnel

11.2.1. Current status

11.2.1.1 Revenue received from abattoirs

Abattoirs are currently charged by service providers per meat inspection personnel, with an additional amount for administration costs. The percentage of money charged to abattoirs for administration costs has been a subject of debate, with the service providers justifying the amounts and opponents viewing this as excessive, in some cases the inspectors/examiners receiving less than 50% of the amount charged. The working group has not been able to get the exact amount on money generated from abattoirs for meat inspection in order to determine the shortfall, if any, that will be required for the service. However it is estimated that red meat and poultry abattoirs each generate an amount of R80 million for the service with a total of R160 million.

Using the estimates as given above, the revenue to be generated for meat inspection over a period of 10 years at a 6% annual escalation is as follows:

Year	Total revenue generated
1	R 160,000,000
2	R 179,776,000
3	R 190,562,560
4	R 201,996,314
5	R 214,116,092
6	R 226,963,058
7	R 240,580,841
8	R 255,015,692
9	R 270,316,633
10	R 286,535,631

Table 16: Estimated revenue for meat inspection to be generated over 10 years.

11.2.1.2. Cost of meat inspection to the consumer

The current cost to the consumer for meat inspection on red meat has been estimated by the RMIF to be R10 – R15 per slaughter unit.

11.2.2. Options on how to cover shortfall

A comparison between the total cost for meat inspection over a period of time and the current revenue generated for meat inspection at abattoirs indicates different amounts of deficits as shown below:

Year	Total Cost	Total revenue generated	Excess/Shortfall	
1	R 99,576,485	R 160,000,000	R 60,423,515	
2	R 154,318,999	R 179,776,000	R 25,457,001	
3	R 178,680,841	R 190,562,560	R 11,881,719	
4	R 265,959,759	R 201,996,314	-R 63,963,445	
5	R 346,726,593	R 214,116,092	-R 132,610,501	
6	R 436,227,991	R 226,963,058	-R 209,264,933	
7	R 462,401,670	R 240,580,841	-R 221,820,829	
8	R 490,145,770	R 255,015,692	-R 235,130,078	
9	R 519,554,516	R 270,316,633	-R 249,237,883	
10	R 550,727,787	R 286,535,631	-R 264,192,156	

Table 17: Excess/shortfall for meat inspection over a 10 year period

Options to cover the shortfall include:

- i. Abattoirs to pay more for the service without an increase on the meat price;
- ii. Abattoirs to pay more for the service with a factorial increase in the price of meat; or
- iii. Government to fund the shortfall

It is worth noting that regardless of the model for meat inspection to be implemented, the cost of salaries for the meat inspection personnel will be the same. A comparison between the model presented by the Red Meat Industry Forum (RMIF) and the model proposed in this document shows a vast difference in the salaries for the meat inspectors and examiners.

The industry model indicates that the salaries of the inspection personnel will be increased annually over a period of time to narrow the gap between the salaries paid in Government and those paid to the inspection personnel currently. A calculation based on the industry submission shows that it will take **10,5 years** to eliminate the variance.

12. CONTRIBUTION OF MEAT INSPECTION SERVICE TO THE NATIONAL OUTCOMES

Agriculture as a Department contributes towards realization of three (3) out of the 12 national outcomes:

Outcome 2: A long and healthy life for all South Africans
 Outcome 4: Decent employment through inclusive economic growth
 Outcome 7: Vibrant, equitable and sustainable rural communities contributing towards food security for all
 Outcome 10: Protect and enhance our environmental assets and natural resources.

Output 4 of Outcome 2 refers to strengthening health system effectiveness and in our proposal this will refer to slaughter statistics and passive disease surveillance.

One of the key challenges identified with the current meat inspection service is the deteriorating technical independence of meat inspection thereby increasing the risk of exposing the general public or the consumer to food-borne disease outbreaks which are costly to the country. Part of the challenges includes retention of experienced meat inspection personnel.

The proposed meat inspection service seeks to address the challenge of retention of experienced personnel through improved salaries in line with Government determined salary packages for meat inspector category; thereby contributing to Outcome 4 (decent employment). As a result, a total of 1 317 decent jobs will be retained to the sector.

The creation of meat inspection service will also contribute towards the realisation of Outcome 7 by focusing on output 2: Improved access to affordable and diverse food and output 4: Job Creation linked to skills training and promoting economic livelihoods. The skills development and subsequent employment of community members as meat examiners will achieve the objective of this outcome.

It is expected of the Department to embark on an integrated programme of rural development, land reform and agrarian change with a view to supporting the subsistence sector and smallholder agriculture by transforming them to participate throughout the value chain to address food insecurity and underdevelopment. Creation of community abattoirs through provincial departments of agriculture will be a tool to address this resolution, and therefore meat inspection at such abattoirs becomes crucial in the value chain.

13. CONCLUSION

The contribution of red meat and poultry to the economy of the country is significant and it is expected to grow in future as discussed in chapter 3. It becomes critical that meat that is produced is safe for human consumption. The promulgation of the Meat Safety Act, 2000 is believed to have ushered in a new dispensation in modern day meat safety within the country. New risk and system-based approaches to meat production was introduced in the Act during 2000, but the innovative regulatory framework was introduced during 2004, 2006 and 2007 for red meat, poultry and ostrich respectively.

Meat inspection has always been a primary responsibility of Governments across the world. Recent trends to privatize this service seem to indicate that Government remains central to the successful implementation. In countries where agencies have been considered, such agencies are extensions of Governments and are whole Government owned. In countries where such meat inspection service providers are fully private, a full time Government official at the abattoir is always present to ensure impartiality.

In the South African Context, like the rest of the world, meat inspection has been the function of Government until the early 90's where this service was privatized through the promulgation of the Abattoir Hygiene Act, 1992 (Act 121 of 1992). This meant that abattoirs would employ their own meat inspection personnel to perform meat inspection and Government Veterinary Public Health structure was effectively dismantled. Experience has shown that the decision to privatize was unfortunate.

The Meat Safety Act, 2000 re-introduced the principle of performance of meat inspection independently from the abattoirs. The Act also introduced the concept of abattoir owners procuring meat inspection service from either Government (NEO/PEO) and/or private entities (authorized persons/assignees).

The comprehensive inter-Governmental consultative process has clearly indicated that Government is best suited to render meat inspection service if this service is to be independent and impartial. Eight of the nine Provinces clearly objected to the single assignee model as proposed by the meat industry as an option.

It is proposed that the Department be capacitated and strengthened to be in a position to render the meat inspection service.

14. **RECOMMENDATIONS**

The submission to the Minister of Agriculture, Forestry and Fisheries is therefore to recommend the following:

14.1 The Minister to grant an "in principle" approval for the implementation of a meat inspection service through a combination of multiple assignees at high throughput and busy low throughput abattoirs and government at infrequently slaughtering and all rural abattoirs.

This must be seen as Phase 1 of the implementation of the initial proposal by the working group for government to conduct meat inspection at all abattoirs. Should this phase of the model function effectively with the guarantees of an independent meat inspection as envisaged, then it is recommended that this phase be continued indefinitely.

- 14.2. All operating abattoirs to have at least one government employed meat inspector in a supervisory capacity on a full time basis during slaughter.
- 14.3. All meat inspection personnel to be appointed by government to be fully funded by the Department.
- 14.4. All meat inspection personnel to be procured by abattoirs to be fully funded by the abattoirs. Exemptions to this provision may be granted to small and rural abattoirs at the discretion of the National Executive Officer.
- 14.5. The Minister allows further discussions and work by the working group and the meat industry to finalize the following:
 - 14.6.1. The costing of the service. The model as proposed will most likely result in the cost to government being lower than the calculated amounts as reflected in this document.
 - 14.6.2. The definition of the term "independence". This will clarify who may and who may not be allowed to participate as an assignee at all forms of involvement (shareholding, management, technical, operational...)

- 14.6. The MinMec through the Minister to capacitate Veterinary Public Health units in the Provinces to be able to monitor the implementation of the meat inspection service.
- 14.7. The Minister to communicate her decision to the meat industry.

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