

## CHAPTER 4

### AGRICULTURAL ECONOMISTS IN NATIONAL GOVERNMENT<sup>21</sup>

S Ngqangweni <sup>22</sup>, D du Toit <sup>23</sup>, BJ van Wyk <sup>24</sup>, S Modiselle <sup>25</sup> and M Mokoena <sup>26</sup>

#### WHAT AGRICULTURAL ECONOMISTS IN THE NATIONAL GOVERNMENT DO:

- Provide policies and implementation standards for international trade
- Develop policies and monitoring mechanisms for agricultural marketing
- Develop strategies for agro-processing
- Facilitate and coordinate provision of development finance
- Promote compliance with Broad-based black economic empowerment
- Provide statistics and economic analysis
- Promote cooperatives and enterprise development

#### INTRODUCTION

Participation of national government agricultural economists in AEASA has been perceived as less than optimal in recent times. Yet AEASA as an association has its roots from the Department of Agriculture. Before the 1990s, a substantive part of the Agricultural Economics capacity resided within the then Department of Agriculture. AEASA itself was founded from within the Department of Agriculture (Van Wyk, 2001).

As at April 2013, there were approximately 60 agricultural economists employed by the national Department of Agriculture, Forestry and Fisheries (DAFF). Table 4.1 below provides the numbers of agricultural economists/economists at the different DAFF directorates. Most of these officials are associated with the departmental branch: Economic Development, Trade and Marketing. There is also a sizeable number of agricultural economists in the branch: Policy, Planning, Monitoring and Evaluation. The rest of the officials are thinly spread in other branches of the department. The typical areas of work that agricultural economists at DAFF are involved in are marketing, trade, business development and support, agro-processing and economic research, where their inputs are used for supporting policy-making, providing advice and information to clients and the sector at large, and in the monitoring of programmes.

<sup>21</sup> With valuable inputs by Günther Muller, Gerda van Dijk, Ezra Steenkamp, Deon Joubert, Billy Morokolo, Schalk du Toit and Andrew Wium

<sup>22</sup> Senior Manager: Markets and Economic Research Centre (MERC), National Agricultural Marketing Council (NAMC)

<sup>23</sup> Deputy Director: Statistics and Economic Analysis, Department of Agriculture, Forestry and Fisheries (DAFF)

<sup>24</sup> Retired, former Director: Production/Agricultural Economics in the national Department of Agricultural Economics and Marketing (DAEM and DAFF)

<sup>25</sup> Agricultural Economist, Economic Analysis Unit: Agricultural Research Council (ARC)

<sup>26</sup> Director: BBBEE Compliance, Department of Agriculture, Forestry and Fisheries (DAFF)

<sup>27</sup> Van Wyk, SP, 2001. *The history of the Agricultural Economics Association of South Africa: An overview of 40 years.*

**Table 4.1 Number of Agricultural Economists/Economists at DAFF (June 2013)**

Directorate	Number
Marketing	10
BBBEE Charters Compliance	6
Statistics and Economic Analysis	8
National Extension Support	1
International Trade	25
Agro-processing Support	3
Cooperatives and Enterprise Development	8
Development Finance	3
<b>TOTAL</b>	<b>64</b>

This chapter also highlights the role of agricultural economists at the national Department of Agriculture. The next section presents a historical perspective of the role of Agricultural Economists at the national Department of Agriculture, followed by a description of the current structure, capacity and functions of a typical Agricultural Economist at the DAFF. A section dedicated to assessing the nature of the relationship between AEASA and agricultural economists at DAFF follows before this chapter concludes with some final remarks.

## **HISTORICAL PERSPECTIVE OF THE ROLE OF AGRICULTURAL ECONOMISTS AT NATIONAL GOVERNMENT**

### **Origins and Development of Agricultural Economics Services**

In the early years of the previous century, government agricultural services were performed by a national Department of Agriculture that was dominated by natural sciences related services. Following the impact of the World War I on the economic state of farming, government commissioned Mr. Perish, a principal from the agricultural college at Glen to conduct the first official study based on Agricultural Economics in 1920. The study was followed by others focused on production costs of various agricultural commodities as well as the profitability of farming in specific areas.

Resulting from the outcomes of these studies, the need for an agricultural economic body to research and manage economic problems in the sector emerged. A resolution by the South African Agricultural Union (SAAU) in 1921 emphasised the need for such a body. A report, drafted in 1923, advocated the need for a dedicated division to focus on agricultural economic issues. Following a study tour to the United States Department of Agriculture (USDA), a division focusing on Agricultural Economics and Marketing was formed in 1925. With this, the platform for the growth and thriving of the Agricultural Economics discipline in South Africa was established. A wide range of useful contributions by agricultural economists originated during this period. These contributions eventually led to a need to extend agricultural economic services in government.

During the period from 1925 to the late 1950s, the core agricultural economic services (which included services relating to marketing; statistics; production economics; agricultural products grading and inspection services) remained in the Division: Economics and Marketing. In October 1958, the mentioned division together with the National Marketing Council and the Registrar of Cooperative Associations were merged to form a second new agricultural department called the Department of Agricultural Economics and Marketing. In 1966, a third national department, named the Department of Agricultural Credit and Land Ownership, was established.

As far as the important restructuring of economics-related services at divisional level is concerned, the Division: Agricultural Economic Research (still a division within the Department of Agricultural Economics and Marketing) in 1967 was divided into two separate divisions namely, the Division: Agricultural Marketing Research and the Division: Agricultural Production Economics. These developments stemmed from the awareness and consequent growing need for agricultural economic services in government. While continuing the services delivered before 1958, a range of new contributions followed from these newly created structures.

In the early 1970s, the national Division: Agricultural Production Economics, opened offices in all the Department of Agricultural Technical Services' agricultural regions namely, Western Cape, Eastern Cape, Natal, Free State, Karoo, Highveld, Transvaal, and South West Africa, which were serviced from the head office in Pretoria. This introduced a new dimension in delivering agricultural production economic services to farmers, directly as well as indirectly, through the technical extension services.

In April 1980, the three departments of agriculture (Agricultural Technical Services, Agricultural Economics and Marketing together with Agricultural Credit and Land Ownership ) merged to form the Department of Agriculture and Fisheries. It consisted of two components, namely, Agricultural Technical Services and Agricultural Economics and Marketing. In this dispensation, the Directorate: Agricultural Production Economics was incorporated into the Agricultural Technical Services component.

As a result of the introduction of a new government dispensation in September 1984, the Department of Agriculture again split into two separate departments consisting of the Department of Agricultural Development with an 'Own Affairs' focus (responsible for research and extension services to commercial white farmers), and the Department of Agricultural Economics and Marketing with a 'General Affairs' focus (attending to general agricultural issues such as general agricultural policy; agricultural statistics; marketing and trade; product standards and inspection services; and cooperatives,). Again the Directorate: Agricultural Production Economics was included in the Department of Agricultural Development, while the other economics related directorates mentioned formed the economics core of the "General Affairs" department.

The above mentioned two departments were reunited once more in 1994 in anticipation of the new constitutional dispensation. At that stage agricultural economists of the Directorate: Agricultural Economics (previously Production Economics) stationed in the agricultural regions were transferred to the newly formed provincial departments of agriculture (PDA), while those stationed at the head office formed a new unit at national level, which, together with the full

component of other economics related directorates, remained part of the national department. After the introduction of the new dispensation, the national Department of Agriculture underwent several restructuring processes to accommodate the new focus areas of service delivery and which in the end culminated in the present situation reflected in the next sub-section.

As far as later changes in the institutional structure for production economic services are concerned, a gradual shift in the focus and consequently the structure in terms of capacity, took place. This new move shifted towards a greater emphasis on non-farm management advice and tools like natural resources (land and water) economics and general farmer support policies and schemes. Two examples are firstly the creation of a separate Resource Utilisation Unit in the Division (Directorate): Production Economics as well as using the capacity that existed for regular production cost surveys (which were ended due to the gradual deregulation process in terms of the Marketing Act), for more regular determination of the economic and financial position of farmers who requested government support. This trend started in the 1980s and continued right into the start of new constitutional dispensation of South Africa in the 1990s.

### **Early Functions of Agricultural Economists**

The following role and functions of agricultural economists/economists at national level should be seen against the background of the aforementioned changes in the broader organisational structural changes of government services over the reporting period.

With regard to Production Economics related functions, there are a number of outstanding service areas that can be described as historically significant. The early big one that springs to mind is the first comprehensive agro-economic classification of all the farming regions in South Africa, through a national agro-economic survey over many years, from after the Second World War into the 1950s. This agro-economic survey culminated in a map showing the different farming regions of South Africa along with a descriptive manual. For many years to come, this map was used as the basis to conduct further studies in these homogenous areas, as well as to develop norms and standards for them.

The second landmark function related to Production Economics activities encompassed production cost studies for maize and wheat, which served as important guidelines during the price determination process by the marketing boards concerned, the department itself and finally, the Minister for Agriculture. These surveys were conducted annually on a rotational basis in the main maize and wheat production areas for many years up until 1982. The questionnaire and methodology used to calculate the production cost of commodities were refined over time to become the standard reference for various farm surveys as accepted methodology to use for related studies, among others, also for farm business studies.

<sup>28</sup> The name of the department for the agricultural services that remained in the original department was changed to the Department of Agricultural Technical Services.

<sup>29</sup> This department was established in 1966 in an effort to assemble all government farmer financing activities in one organisation.

<sup>30</sup> Research and extension services to Black farmers were delivered by agricultural institutions in the "homelands" mainly through development corporations.

Thirdly, the introduction of agricultural economic advice to farmers in the 1950s started a new approach to farming advice services by government. The awareness and application of sound economic principles contributed to increased farm profitability, which eventually resulted in improved economic sustainability in farming. Going hand-in-hand with the normal agricultural advice was the Record Book for Farmers developed by S. P. van Wyk during the late 1950s to early 1960s. This was followed by the Financial Record Book for Farmers in the early 1980s. The need for information on the economics and profitability of farming, for among others, advice to decision-makers in the department led to the development of record systems that were supported by a central database. The first one was the Mail in Record system, which was developed towards the late 1960s/early 1970s and was followed by the Financial Record (FINREC) system some years later, to serve this purpose.

Various other farm-level operational tools, apart from the farm record systems, were developed since the mid-1960s. These operational tools were widely used as building blocks on which economic/financial farm-level calculations were based such as for instance feasibility studies to evaluate investment in the sector, evaluation for agricultural credit application, general farm planning, etc. The introduction of the technique to compile enterprise budgets for farming enterprises added another dimension to agricultural economic services in the sector. This manual system was later also computerised by developing the COMBUD system. The Guide to Machinery Cost, which is updated on an annual basis, is another tool that stems from the early 1970s. It is used for farm-level planning and assists in costing farm operations and machinery planning decision-making. It also formed an integral part in the calculations of enterprise budgets. Lecturing Agricultural Economics as a subject at the agricultural colleges by Production Economics orientated agricultural economists also contributed towards the broadening of farm management principles in the sector. The training material that was developed by agricultural economists for this purpose was refined over time and became a useful reference during short courses for farmers and extension officers.

Apart from the above-mentioned major landmark services as well as mainly farmer advice functions and systems, the functions of the Production Economics economists at national level developed over time with regard to new service areas that related more directly to agricultural policy inputs, especially around agricultural natural resources matters (land and water), as mentioned earlier, as well as other intra- and interdepartmental cooperation and advice. Highlights relating to these functional areas are captured in the next few paragraphs.

As far as services relating to natural resources are concerned, the development, replanning and related aspects of irrigation schemes have proven to be very important service areas for production orientated economists at a national level. This has been the case for the biggest part of the second half of the nineteenth century. It is also a textbook example of interdepartmental cooperation in service delivery. It is further illustrated by the fact that the Production Economics Unit, during this period, had always been the economics representative of the national Department of Agriculture. The function is achieved in the liaison structures with the Department of Water Affairs as the responsible department for water schemes in South Africa. Through these formal structures, many joint ventures with regard to new and existing irrigation schemes have been planned and executed by the departments concerned. Other water policy matters like the principles for the determination of water tariffs in general and for irrigation purposes in particular, were also dealt with in the same manner.

A second important service area related to natural resources that developed in the late 1960's is the determination of the economic viability of farming units for the purposes of decisions related to the implementation of the Subdivision of Agricultural Land Act. This included the initial development of a methodology and setting of norms and standards to appraise applications for economic viability as required by the Act. The implementation consisted of executing the necessary calculations for each application as well as the review and possible adjustments of the variable norms and standards from time to time.

Another area with regard to natural resources is financial governmental support schemes for the agricultural sector related to the impact of extreme weather conditions (droughts and floods). As far as droughts are concerned, a distinction is necessary with regard to periodical droughts in extensive livestock areas and severe droughts over successive seasons that also seriously affect crop farmers.

Due to extensive drought during the 1980s until the early 1990s, many livestock areas in South Africa experienced extended periods of low rainfall which either depleted the small stock flocks and large stock herds to unviable numbers and/or unaffordable additional feed costs levels. An advisory committee (called the National Drought Committee) was operative at that time to advise the Minister on decisions relating to the management of the drought relief schemes. A senior management member of the Production Economics Unit was always a member of this committee to make inputs on economic aspects of the scheme.

Although always involved in advice on or the evaluation of economics related agricultural policies, the extent and volume of this role has understandably escalated during the period in preparation for, but especially after the dawn of the new constitutional dispensation in South Africa. Production economists formed part of the working groups/task teams that executed most of these exercises. A few examples in this regard were the development of a new White Paper on Agricultural Policy; a general review process of existing as well as development of new agricultural policies with international support; development of a draft agricultural labour/employment policy; and the development of a biofuels industry in South Africa with specific responsibility for the economic viability of producing biofuel crops on farm level.

The agricultural economists in the field of Production Economics also performed a wide range of other ad hoc functions, such as feasibility studies for agricultural projects; the evaluation of credit applications for financial/economic viability; and cost/benefit analyses of government spending mainly on agricultural research.

### **Summary of Historical Perspective**

In summary, it can be stated that production orientated agricultural economists at national government level started off in the 1960s with a mandate that was fundamentally focused on micro orientated production, resources economics, and farm management advice and tools development. Consequently, the process slowly shifted over time to a mandate that also included a broader scope of macro-economics and policy analysis. With the transfer of the micro-economics related functions to the newly created provincial departments at the start of the new constitutional dispensation in the mid-1990s, the shift in roles of production economics

related to agricultural economists at national level was complete. The total shift over approximately 50 years were partly due to shifts in the demand for government agricultural economic services, but most of all because of reorganisation and changes in the distribution of mandates on different levels of government.

Over time, agricultural economists/economists played an important role in the provision of agricultural statistics at national level. A wide range of agricultural statistics were collected, refined in tables and published in the Abstracts of Agricultural Statistics. This publication was updated annually since its first appearance in 1954 and can be regarded as the most comprehensive publication on agricultural statistics in the country. A similar case is the Report on the Sales of Perishable Agricultural Produce publication that first appeared in July 1963. The name was later changed to Statistics on Fresh Produce Markets.

Other key functions where agricultural economists/ economists were involved over time, and still are involved in, is in the collection and disbursement of information on agricultural national accounts. Part of the data sent on a quarterly basis to what is now Statistics South Africa is used to calculate the Gross Domestic Product (GDP) for agriculture, while data provided to the South African Reserve Bank is used to determine the level of growth and the confidence index in agriculture. Farm debt data are predominately provided to commercial banks and the Land Bank. Specific publications that flow from the collected agricultural statistics are Crops and Markets and Economic Review, both on a bi-annual basis. Another useful publication is Trends in the Agricultural Sector which analyses trends in the major agricultural commodities on an annual basis. Reliable and timely crop estimates of major field crops at provincial and national level are vital for decision-making in the industry. Estimation on expected yields is provided on a monthly basis throughout the production season.

On the trade front, agriculture economists/economists were involved in various trade agreements. Agriculture was not fully integrated in the international trade rules under the General Agreement on Tariffs and Trade agreed in 1947 that changed over a number of trade negotiating rounds. The Uruguay Round of negotiations introduced a new phase in international trade rules that led to the establishment of the World Trade Organisation (WTO). The latter development culminated in a new phase in agricultural trade policy in South Africa. The first trade round that fully integrated agriculture in trade rules commenced in the 1980s and was finally implemented in the mid-1990s (1995 to be exact). It was the first time for export subsidies and domestic support to be quantified, and reducing commitment agreements to be reached. The round was also fundamental in the conversion of non-tariff barriers into tariff only protection against imports. Agriculture economists/economists at national government participated in the negotiation process for the sector to ultimately finalise the scheduling of commitments for South Africa following a lengthy consultative process within the sector. They were also involved in the negotiating of the Trade Development and Cooperation Agreement between South Africa and the European Union. They made inputs and undertook the negotiations in collaboration with the Department of Trade and Industries. A separate Wine and Spirits Agreement with the European Union, in which the Department of Agriculture was the lead department, was also negotiated but never fully implemented.

The participation of agriculture economists/economists was also evident in the implementation of the South African Customs Union (SACU) agreement. Another important achievement was the re-negotiation of the South African Customs Union (SACU) agreement that was finally implemented in 2008. The final agreement on the South African Developing Community (SADC) trade protocol also adds to the list of contributions made by agricultural economists/economists at national government. Incorporated in the SADC protocol is the reduction of tariffs and rules of origin.

A less-known contribution by government agricultural economists is their role as lecturers at universities. During the late 1930s, universities struggled to generate funding to maintain their agricultural economic chairs. Shortly before World War II, the Department of Agriculture made posts available for agricultural economists to be lecturers at universities. Recruitment was done by the universities but final appointment remained the responsibility of the department. These lecturers were seconded departmental officials and performed their duties under its prevailing rules and regulations. Towards the late 1960s, these posts were transferred to form part of the university establishments. With this arrangement, government officials made a significant contribution towards further development of the agricultural economic chair at the various universities.

As the main employer of agricultural economists in the country over a long period, the South African national government has been the main source of experienced agricultural economists.

### **PRESENT FUNCTIONS OF AGRICULTURAL ECONOMISTS AT DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES**

The existing functions of agricultural economists are summarised in a matrix on Appendix 1. The box below highlights some agricultural economist personalities that played various roles in the national Department of Agriculture.

### **THE RELATIONSHIP BETWEEN AEASA AND AGRICULTURAL ECONOMISTS AT DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES**

A recent rapid online survey among 17 Department of Agriculture, Forestry and Fisheries agricultural economists revealed that less than a quarter were not members of AEASA. Interestingly, less than a fifth indicated that their careers had benefitted from their association with AEASA. However, there were some who stated that their contribution towards AEASA was inadequate. Included among their reasons were perceptions that AEASA was mainly an academic organisation with very little contribution by non-academics and the fact that managers' lack of interest in the association's matters result in less contributions by junior agricultural economists. For those who agreed that the contribution is adequate, they stated that AEASA provided a platform for agricultural economists to discuss real economic problems in the sector.



### Some Agricultural Economists in the national Department of Agriculture

Several agricultural economists who were active AEASA members served in the department.

SP van Wyk, together with HS Hattingh, generally recognised as the "fathers" of Production Economics and farm management advise to commercial farmers in South Africa, did pioneering work to establish the importance of the Agricultural Economist as a key member in multi-disciplinary teams in the fields of farm extension and research services. Harry Hattingh also attained the singular achievement to be the only Agricultural Economist that became a Director-General of the national Department of Agriculture during the old constitutional dispensation.

Since the new constitutional dispensation in the mid-1990s, AEASA benefited a great deal from Bongi Njobe and Masiphula Mbongwa, who became director-generals and were very supportive of the Agricultural Economics profession. Ms Njobe, in particular, was instrumental in leading the AEASA delegation to bid and host the International Association of Agricultural Economics (IAAE) conference in Durban in 2003.

The other group of agricultural economists occupied Deputy Director-General positions. In this respect, Prof Chris Blignaut ably led the branch that housed agricultural economists. Since then, most agricultural economists such as Sam Malatjie and Billy Morokolo acted as head of a branch at the Department of Agriculture, Forestry and Fisheries.

Deon Joubert might have been the first Agricultural Economist to occupy a Chief Director position after being the Director of Production Economics for many years. After his early retirement, Ben van Wyk acted as Chief Director for more than two years before Jerry Tube was appointed in this position. After a relatively short service period, his sudden passing interrupted plans to energise the department to be more active in AEASA activities. He also wanted agricultural economists to be more visible in agricultural policy and management.

At director level the longest serving Director of Production/Agricultural Economics was Ben van Wyk, who spent all his professional life serving the department. Ben was a very active member of AEASA (once as a Vice-President). He, *inter alia*, led the publication on the first 21 years of AEASA. The association has even accorded him an Honorary Membership (Note: Check names of other persons mentioned in the text box on page 39 that also became honorary members). Another longstanding member of AEASA in the Production Economics Directorate is Daan Du Toit.

As part of the "new guard" after 1994, other agricultural economists also made their mark at national level. This included Dr Simphiwe Ngqangweni who served as a Director of Economic Services and has been consistently active in AEASA, Dr Madime Mokoena who served as additional member of the AEASA Management Committee, and Salome Modiselle, who served as AEASA Secretary.

Other agricultural economists also played telling roles in other components (that traditionally employed B Com-trained economists) of the national department of agriculture. Ralf Otto (as Deputy Director of International Trade), who also served in the management of AEASA as Secretary/Treasurer, became a pillar of strength in South African teams for countless international trade negotiations, which included important agreements with the European Union. He published extensively in *Agrekon* on issues of international trade. Gunther Muller also started his career in the national department firstly at Production Economics and then in the directorate of Agricultural Marketing, where he also performed duties as an agricultural attaché overseas. Later he also made notable contribution in the Directorate: International Trade, which is involved in international trade agreement negotiations. Ezra Steenkamp is also an agricultural economist with a fairly long term of service in the agricultural marketing and trade directorates at national level. Although not employed at the national department of agriculture at present, Elizabeth van Reenen has an Agricultural Economics degree and has served for some time in the marketing/trade components that dates back some years into the old constitutional dispensation. There were also many other fully trained agricultural economists, especially in the field of Production Economics, that had productive and/or fairly long service records in the Department of Agriculture at national level. It would therefore be difficult to single out a few more individuals for the purposes of this book.

Recommendations that came out of the survey on how to improve the relationship between AEASA and agricultural economists at the department included:

- The need to create a platform (committee, think-tank meeting) to discuss real economic issues affecting the agricultural sector and share research output.
- Setting up of a web portal whereby ideas can be posted and shared on topical issues of the economy.
- Regular participation in the AEASA conferences through paper and poster presentations and workshops.
- Setting up of a mentorship programme whereby the young and upcoming agricultural economists can learn from experienced agricultural economists who are based at universities, agricultural colleges and in the private sector. This, in addition to the mentorship they would be receiving, from their colleagues in government.
- Aggressive marketing of the annual AEASA conferences to attract more agricultural economists in the department to attend.
- Deliberately reaching out to departmental staff and non-academia such as through providing platforms for them to share experiences so as to enhance understanding among AEASA members of what the department does and to collaborate on projects, etc.
- A review of the communication strategy by AEASA Management Committee to ensure that it keeps in contact with its members via various platforms including social media. The website of AEASA should also be constantly updated.

## CONCLUDING REMARKS

This chapter has outlined a historical evolution of the Agricultural Economics profession and its role in national government from as early as the 1920s. One of the key observations of the chapter is that the current levels of participation of national government in activities of AEASA are less than optimal despite a very strong historical alignment between agricultural economists at the national Department of Agriculture and AEASA. The chapter also tested views of agricultural economists currently working at the Department of Agriculture, Forestry and Fisheries and found that communication was one of the main weaknesses that AEASA had to address to better reach out to agricultural economists at national government. AEASA is currently addressing this matter by introducing a revamped website and communications portal.