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UFS·UV
DIRECTORATE FOR INSTITUTIONAL
RESEARCH AND ACADEMIC PLANNING (DIRAP)
DIREKTORAAT VIR INSTITUSIONELE
NAVORSING EN AKADEMIESE BEPLANNING (DINAB)

21 April 2015

HEQSF Reference number: H06/14601/HEQSF

Qualification reference number: 8784

Authorised Qualification name: Master of Science in Dietetics

Directorate: Accreditation

Council on Higher Education

P.O. Box 94

Persequor Park

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Email: heqsfonline@che.ac.za

Dear Colleagues

RESPONSE TO THE DEFERRAL OF THE HEQSF-ALIGNMENT AND ACCREDITATION

HEQSF review comment

"This degree is not accredited with the HPCSA (Professional Board for Dietetics and Nutrition). The exit level outcomes are generic. It does not indicate how the Dietician, specifically, will use and apply these skills and knowledge after qualifying. The compulsory credits are 136. No indication is given on the number of electives to be taken to get to the prescribed 180 credits. Another 44 credits are needed to reach 180, but there are no elective modules with that amount of credits. Please explain why this Master's degree (in Dietetics) only has 180 credits while the following 2 have 240 credits (Master of Nutrition structured + mini dissertation) and Master of Nutrition (Dissertation). From the wording of the documents it is clear that all 3 are presented in the same division/school. Please explain differences in Master's degrees with regard to number of credits required."

Response

This degree is not accredited with the HPCSA (Professional Board for Dietetics and Nutrition).

This qualification is not approved as such by the HPCSA as correctly mentioned by the accreditation committee. This qualification does not lead to professional registration as was indicated by mistake on our submission. Therefore, it is requested that the following amendments are made to reflect that this qualification does not lead to professional registration:

1. The professional class currently indicates *Professional* and should be changed back to indicate *Non-professional* on the HEQSF system.
2. Removing the name of the professional body, *Health Professions Council of South Africa (HPCSA)* and change to indicate *not applicable*.

The exit level outcomes are generic. It does not indicate how the Dietician, specifically, will use and apply these skills and knowledge after qualifying.

The purpose of the Master of Science in Dietetics is to educate and train skilled professionals and develop researchers who can contribute to the development of knowledge in the field of dietetics at an advanced level to specialise in the areas of therapeutic nutrition, community nutrition or sport nutrition. After careful consideration the exit level outcomes were amended to better reflect the attributes of a trained Dietician.

After successful completion of the Master of Science in Dietetics, the student would have attained the following competencies:

- Specialist knowledge, a high level of theoretical engagement and intellectual independence as well the ability to relate knowledge to the resolution of complex problems in Dietetics as a specialist in therapeutic nutrition, community nutrition or sport nutrition.
- Design, select and apply appropriate creative methods, techniques, processes or technologies to complex practical and theoretical problems in the practice of Dietetics.
- Address the intended and unintended consequences of dietary interventions.
- Demonstrate innovation and professional expertise to engage with and critique current research and practices in Dietetics.

The compulsory credits are 136. No indication is given on the number of electives to be taken to get to the prescribed 180 credits. Another 44 credits are needed to reach 180, but there are no elective modules with that amount of credits.

It was difficult to express how the curriculum design is implemented and managed on the prescribed HEQSF-online format. Students have specific streams (specialisations) they can follow, for which the institution makes provision for different module codes to ensure that students stay within their stream, even though the core of the curriculum remains the same. Because the upload did not allow us to indicate a module as both a compulsory or an elective, as well as the fact that the total tally at the end of the modular section will not reflect how the curriculum worked, it was loaded as electives. No space was provided to specify the rules of combination for the constituent modules and, where applicable, progression rules from one year to the next.

Students may choose to specialise in Community Nutrition, Sport Nutrition or Therapeutic Nutrition. Clarifications in relation to the compulsory and elective modules are outlined in the table below. Each student selects the specialisation/field of interest, between Community Nutrition, Sport Nutrition or Therapeutic Nutrition and includes all the compulsory modules from the prescribed discipline for the study year. Therefore, students are required to select all modules in the specialisation area as well as complete all compulsory core modules. All core modules are listed after which each specialisation area with its different compulsory modules is listed in the table below.

Module Code	**Module name**	**NQF Level**	**Credits per module**	**Compulsory/ Optional**	**Year**	**Total Credits per year**
Master of Science in Dietetics						
Core modules						
MDEM7900	Dietetics Mini - Dissertation	9	60	Compulsory	1	180
MRES7905	Research Methodology	9	20	Compulsory	1	180
MART7909	Evidence-based Nutrition	9	36	Compulsory	1	180
Compulsory Modules for the Community Nutrition specialisation						
MCOM7938	Advanced Community Nutrition I	9	32	Compulsory	1	180

MCOM7948	Advanced Community Nutrition II	9	32	Compulsory	1	180
Compulsory Modules for the Sport Nutrition specialisation						
MSPT7938	Advanced Sport Nutrition I	9	32	Compulsory	1	180
MSPT7948	Advanced Sport Nutrition II	9	32	Compulsory	1	180
Compulsory Modules for the Therapeutic Nutrition specialisation						
MTNU7938	Advanced Therapeutic Nutrition I	9	32	Compulsory	1	180
MTNU7948	Advanced Therapeutic Nutrition II	9	32	Compulsory	1	180
			Compulsory Credits: 116 **Elective Credits as per specialisation:** 64 **Total Credits:** 180 **Total Credits at NQF 9:** 180			

However, a typographical error was made in the original submission, indicating 80 credits for mini-dissertation instead of 60 credits. Therefore, it is requested that the following amendment is made to reflect the correct credits for the mini-dissertation:

1. Amend the credits of the mini-dissertation to 60 credits toward the qualification.

Please explain why this Master's degree (in Dietetics) only has 180 credits while the following 2 have 240 credits (Master of Nutrition structured + mini dissertation) and Master of Nutrition (Dissertation). From the wording of the documents it is clear that all 3 are presented in the same division/school. Please explain differences in Master's degrees with regard to number of credits required.

Even though these qualifications are presented in the same division, there are vital differences in the purpose and outcomes of these qualifications. Furthermore, the Master of Science in Dietetics and the Master of Nutrition (and their respective variants), do not share the same designator, adding to the list of differences in these two sets of qualifications. The addendum indicates the difference between these designators and scope of practice.

The Master of Science in Dietetics was approved with the Department of Higher Education and Training (DHET) with the total minimum time recorded as one (1) year, attaining 120 minimum credits on the old NQF rules, now re-aligned to a minimum of 180 credits on NQF exit level 9 as per HEQSF requirement. In the curriculum review process both variants of this qualification were amended to align with the HEQSF in terms of the minimum total

time for the qualification as well as the minimum prescribed total credits. This was done for both the dissertation and course work variant, without having to change too much in terms of content and structure. Also, in terms of the dissertation variant, a non-credit bearing component was added to the Master of Science in Dietetics (which is deemed aligned and accredited by the HEQSF). The principles guiding the institutional curriculum review included a principle stating that certain developmental modules could be included to build foundational required knowledge and skills without including them as part of the credit bearing modules. Some concerns were also raised by the Faculty and the Department in relation to research quality and preparedness of students. Therefore, it was decided to include the Research Methodology module in the dissertation variant of this qualification as a 20-credit compulsory module towards this qualification. This was done in an effort to better prepare students to conduct research and be successful in completing a Master's Degree by dissertation.

For the latter mentioned qualification, the two variants of the Master of Nutrition (which are both deemed aligned and accredited by the HEQSF), was originally approved by DHET with the total minimum time recorded as two (2) years, attaining 240 minimum credits on the old NQF rules. In the re-curriculation process the Master of Nutrition by coursework was amended to align with the HEQSF in terms of the minimum total time for the qualification. However, due to the nature of the Master of Nutrition, how it was formerly approved by DHET, and the volume of learning required in this specialised field, it was decided to keep the credits at the originally approved 240. The motivation also stems from the fact that this qualification was developed and designed in consultation with the Health Professions Council of South Africa (HPCSA) with its inception.

Thank you for your consideration and continued support pertaining to the response addressing the comments made by the accreditation panel. We trust that you will find this response adequate to validate its accreditation and HEQSF alignment.

Kind regards

Ms SJ Paulse

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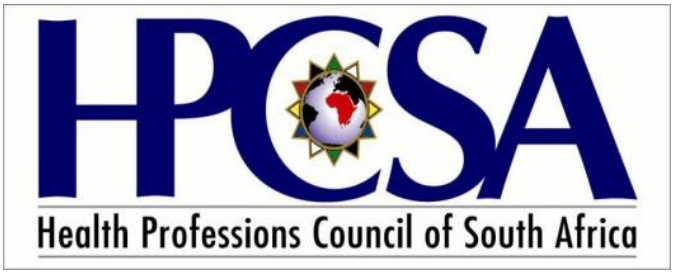

PROFESSIONAL BOARD FOR DIETETICS AND NUTRITION

FINAL DRAFT REPORT

THE ROLES AND COMPETENCIES OF THE NUTRITION PROFESSIONAL IN THE WELL-BEING OF THE SOUTH AFRICAN POPULATION

30 January 2015

Prof E Wentzel-Viljoen (Chairperson)
Ms M L Moeng (Vice-Chairperson)
Prof S M Hanekom
Ms M Matlhatsi
Ms M Moloi
Mr T Nageli
Mr G T Tshitaudzi
Ms K Morris
Mr A Rasekhala
Prof E C Swart

This document will be finalized after the Stakeholder meeting of 23 February 2015 and the Education Committee meeting of the Board on 24 February 2015

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1 PREAMBLE

As a statutory body, the HPCSA is guided by a formal regulatory framework and this includes the founding Act, the Health Professions Act 56 of 1974. The vision of the HPCSA is “Quality and Equitable Health Care for All”.

The motto of the HPCSA is: Protecting the public and guiding the professions.

The Professional Board for Dietetics and Nutrition has its own vision and mission, namely:

Vision

A trustworthy, credible, transparent and accountable Board that serves the interest of the profession and the public

Mission

To protect and serve the public and guide the profession

The above is given practical effect through ensuring excellence of dietetics and nutrition service delivery and thereby protecting the South African public by:

- Maintaining and enhancing quality of practice
- Safeguarding the integrity of dietetics and nutrition professionals registered with the Board
- Promoting the nutritional health of all South Africans
- Being a Board that is willing and able to be efficient in their support and service delivery
- Communicating effectively to all stakeholders.

The purpose of this report is to provide comprehensive information on the background and process followed for the decision taken regarding the future training of the Nutrition Professional[1] (NP). The decision was taken collectively by the all the members of the Task Team, representing the stakeholders of the Board.

[1] For the purpose of this document a Nutrition Professional is a dietitian and/or nutritionist

The content of this Report deals only with those issues that forms part of the mandate of the Professional Board for Dietetics and Nutrition of the HPCSA. The Board has no jurisdiction over issues such as remuneration by the public service.

2 INTRODUCTION

The registration of the dietetics profession with the HPCSA was promulgated in 1980 and the first Professional Board for Dietetics was established in 1981 with Prof Elma Nel from the then Natal University as the Chairperson. The first task of the Board was the development of the minimum standards for the training of dietitians. Since then the competencies of the dietitian have been revised by working groups in 1994 and in 2001. The most significant development in the competencies of the dietitian during this period has been the extension of the area of community nutrition from none in 1980, to about 5% in 1987 (then identified as functions performed by Department of Health), to at least 25% in 2001.

After a long and interrupted process which started around 1980, momentum towards the registration of a Nutritionist was gained again in 2000 with regular meetings and workshops between 2000 and 2005 when the registration of this cadre was finally approved by the Professional Board for Dietetics and documentation for promulgation prepared. The register for nutritionists was eventually promulgated in the Government Gazette in 2008 with the Grandfather clause registration process closing in March 2010.

Currently the training of both dietitians and nutritionists is of high quality and a number of registered dietitians and nutritionists are working outside the country in for example the UK and Australia.

In 2012 the Professional Board for Dietetics and Nutrition formed a Task Team to look into the overlap between the two professions. The Report of the Task Team was circulated to the stakeholders in 2013 and the comments received discussed at a Board meeting. At this meeting the decision was taken to do a comprehensive situation analysis to inform the Board and stakeholders on decisions to be taken regarding the two professions. A Second Task Team was then appointed at the Stakeholder meeting of February 2014.

Given the current burden of disease profile, the scopes of practice of the dietetic and nutritionist professional, the training of nutrition professionals, the lack of community service position for nutritionists, the local and global economic climate and a range of other situations that are influencing the nutrition agenda in South Africa, it is necessary to review the position of the two nutrition professions in South Africa. It is also time to address the situation of the nutrition/dietitian assistant.

This document sets out to provide the purpose of the situation analysis, the process followed, the findings and the decision of the Board on the way forward.

3 FIRST TASK TEAM

3.1 BACKGROUND

At a meeting of the Professional Board with the heads of training institutions and provincial managers on 23 February 2012 it was recommended that a Task Team be appointed to address the scopes and outcomes for dieticians and nutritionists. The following people were appointed:

- Prof E Wentzel-Viljoen (Chair of the Professional Board)
- Ms L Moeng (Chair of the Education Committee of the Board)
- Prof A Dannhauser (HESA representative on the Professional Board)
- Prof R Blaauw – Stellenbosch University
- Prof SM Hanekom – North-West University
- Mr D Matthews – Dept of Health, Limpopo Province
- Prof R Swart – University of the Western Cape
- 1 Representative from ADSA
- 1 Representative from NSSA

Subsequent to the appointment of the Task Team the Education Committee recommended that a facilitator be appointed to facilitate the process. The meeting of the Task Team was held on 17 – 18 October 2012, at the HPCSA, Madiba Street, Pretoria.

The following people attended the meeting:

- Prof Edelweiss Wentzel-Viljoen (Convener)
- Mrs Lynn Moeng
- Prof Grieta Hanekom (HESA representative on the Professional Board)
- Prof Reneé Blaauw
- Mr Daddy Matthews
- Prof Marius Smuts (Representative from the NSSA)
- Ms Berna Harmse (Representative from ADSA)
- Mr Emmanuel Chanza (Professional Board manager)
- Mr Sibusiso Nhlapho (Committee co-ordinator)
- The workshop facilitator: Prof Leon Coetsee

The mandate of the Task Team was as follows:

1. to revisit the scope of the profession of Dietitians and to develop the scope of the profession of Nutritionists;
2. to ensure that the overlap between the scopes of the professions was acceptable;
3. to revisit/ draft the outcomes for Dietitians and Nutritionists training;
4. to set up a framework for cross referral between the Dietetic and Nutrition professions;
5. Guidelines for the training, competencies and scope of practise of nutritionists;
6. Evaluation of guidelines for DT and NT;
7. To submit recommendations to the Board in terms of the delivery of programmes.

The Task Team reported back to the Professional Board with a Report dated 26 October 2012. This Report was tabled and discussed at the Stakeholder meeting of 27 February 2013.

In the following sections the purpose, scope and competencies of the nutritionist and dietitian is given as presented in the Report (26 October 2012). The Task Team used the SGB documents of the Professional Board as basis (Dietitian - July 2009; Nutritionist – March 2010).

3.2 PURPOSE, SCOPE AND COMPETENCIES OF THE NUTRITIONIST

The **purpose** of the Nutritionist was formulated as:
The nutritionist will address population based nutrition related problems and its causes through appropriate programmes and policies.

The **scope** of the Nutritionist was formulated as:
Optimizing the well-being of the population by:

- Utilizing a comprehensive body of knowledge of principles of nutritional sciences
- Assessing the nutritional situation of groups, communities and populations using relevant methodologies
- Effectively communicating to inform and to change behaviour
- Using evidence-based theory and practice to plan, implement and evaluate suitable programmes
- Taking responsibility for using/applying appropriate nutrition policies, strategies and guidelines
- Managing human, financial, and other resources to ensure optimal and equitable delivery of nutrition services at PHC and population level
- Identifying, implementing and communicating relevant nutrition-related research
- Applying critical and creative thinking in working effectively with the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner

The **competencies** of Nutritionist were identified and summarised as:
Optimizing the well-being of the population by:

- Utilizing a comprehensive body of knowledge of principles of nutritional sciences to supply safe food in an ethical, responsible manner to communities/population groups during the different stages of the life cycle of healthy individuals
- Assessing the nutritional situation of groups, communities and populations using relevant methodologies
- Appropriately applying communication skills to mobilize communities/populations to change their behaviour to foods/nutrition in order to prevent diseases and to improve quality of life

- Using evidence based theory and practice to plan, implement and evaluate appropriate programmes to address nutrition related problems and associated causes as well as maintain nutritional well-being
- Applying appropriate nutrition policies, strategies and guidelines
- Planning and executing an effective food service system based on specified needs in the healthy
- Conceptualise, plan, implement, monitor and evaluate and document appropriate nutrition policies, strategies and guidelines
- Managing human, financial and other resources to ensure optimal and equitable delivery, of nutrition services at PHC and population level
- Identifying, implementing and communicating relevant nutrition-related research
- Applying critical and creative thinking in working effectively with the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.

3.3 PURPOSE, SCOPE AND COMPETENCIES OF THE DIETITIAN

The **purpose** of the Dietitian was formulated as:
The dietitian will use dietary measures to treat, prevent and manage nutrition related diseases.

The **scope** of the Dietitian was formulated as:
Contributing to optimizing the nutritional well-being of individuals and groups by:

- assessing the nutritional status and concomitant health risks of clients/patients and groups
- conceptualizing, planning, implementing, managing, evaluating and documenting an appropriate nutritional prescriptions for individual patients and clients with specific dietary needs in different settings
- developing appropriate intervention strategies to address nutrition and related health issues and diseases
- planning and executing an effective food service system based on specific needs of the healthy and ill

- communicating effectively
- Managing human, financial, operational procedures, policies, and other resources
- Identifying, implementing and communicating nutrition related research.

3.4 OVERLAP BETWEEN THE SCOPES OF THE TWO PROFESSIONS

The overlap between the professions is highlighted by shading in the table below.

NUTRITIONIST	DIETITIAN
Contribute to the optimisation of the nutritional well-being of the population by…	Contribute to the optimisation of the nutritional well-being of individuals/groups by...
Utilizing a comprehensive body of knowledge of principles of nutritional sciences	Utilizing a comprehensive body of knowledge of principles of nutritional sciences
Assessing the nutritional situation of groups, communities and populations using relevant methodologies	Assessing the nutritional status and concomitant health risk of clients / patients using relevant methodologies
Conceptualising, planning, implementing, monitoring and evaluating and documenting suitable intervention programmes	Conceptualising, planning, implementing, monitoring and evaluating and documenting appropriate nutrition prescriptions for patients/clients with specific dietary needs
Conceptualising, planning, implementing, monitoring and evaluating and documenting appropriate nutrition policies, strategies and guidelines	Conceptualising, planning, implementing, monitoring and evaluating and documenting appropriate intervention strategies to address nutrition related health and disease issues
Planning and executing an effective food service system based on specified needs in the healthy	Planning and executing an effective food service system based on specified needs in the healthy and/or the ill

NUTRITIONIST	DIETITIAN
Effectively communicating to inform and change behaviour	Effectively communicating to inform and change behaviour
Managing human, financial, operational procedures, policies and other resources to ensure optimal and equitable delivery of nutrition services at PHC and population level	Managing human, financial, operational procedures, policies, quality assurance and other resources
Identifying, implementing and communicating relevant nutrition-related research	Identifying, implementing and communicating relevant nutrition-related research
Applying evidence based theory and practice	Applying evidence based theory and practice
Applying critical and creative thinking in working effectively with the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner within a human rights perspective	Applying critical and creative thinking in working effectively within a multidisciplinary environment contributing to the personal, social and economic development of society in an ethical and professional manner within a human rights perspective

4 SECOND TASK TEAM

4.1 APPOINTMENT OF THE TASK TEAM

The Report of the First Task Team were tabled and discuss at the meeting of the Professional Board with the heads of training institutions and provincial managers on 26 February 2014. At this meeting it was recommended that the First Task Team be expanded to include wider stakeholder representation and that a staff member of the University of Venda should also be included. The following people were appointed:

- Prof R Blaauw – Stellenbosch University
- Prof SM Hanekom - Board member: HESA representative
- Ms C Julsing-Strydom - Representative of ADSA
- Mr D Matthews – Department of Health, Limpopo Province
- Ms V Mbhatsani – University of Venda
- Ms L Moeng - Board member: Chair of the Education Committee
- Ms P Sepoloane (Malibe) – National Department of Health
- Prof M Smuts - Representative of NSSA
- Ms Lenore Spies – Department of Health, KwaZulu-Natal
- Prof R Swart – Board member: Representing Nutritionists
- Mr G Tshitaudzi – Board member and National Department of Health
- Prof E Wentzel-Viljoen - Chair of the Professional Board and Chair of Task Team

The Task Team was mandated to further work on the existing situation analysis and presents to the Board a comprehensive overview and a suggestion on the way forward.

4.2 MANDATE AND PROCESS OF THE TASK TEAM

The Task Team met the first time on 17 March 2014. During this meeting the purpose and term of reference were agreed on by the Task Team.

Purpose of the situation analysis is to define the roles and competencies of the Nutritional Professional (NP) in the well-being of the South African population. The terms of reference were outlined as follows – an indication is also provided it was done or not:

Terms of reference	Reached or not
To provide appropriate background information of the current situation	Yes
To describe the role of the nutrition profession (current and future opportunities) in the different Sectors	Yes
To describe the skills and competencies required to execute these roles	Yes
To establish the number of known practitioners in the Sectors	No

Terms of reference	Reached or not
To establish the required number of NP in the Sectors	No
To compare the skills and competencies of the NP as identified with the current skills and competencies for dietitians and nutritionist as contained in the SGB documents	Yes
To make a recommendation to the Professional Board for Dietetics and Nutrition on the way forward by 11 July 2014	Yes

At the meeting of 17 March 2014 tasks were allocated to the members who were presented and discussed in subsequent meetings.

Members were tasked to get information from the following stakeholders on the role and responsibilities of the NP, currently or in the future:

- Association for Dietetics in South Africa (ADSA)
- Nutrition Society of South Africa (NSSA)
- Department of Health – National and Provincial
- Department of Education, including Early Childhood Development
- Department of Agriculture
- Department of Social Development
- United Nation agencies, e.g. Unicef
- NGO's

All the information gathered from the stakeholders was used to put together the purpose, scope and competencies of the nutrition professional.

The Task Team met on the following dates at the HPCSA in Pretoria:
17 March 2014
16 April 2014
13 May 2014
19 June 2014.

The Report, dated 11 July 2014, was the outcome of the deliberations of the Second Task Team.

The Report was communicated to the stakeholders, comments requested and discussed at various forums, i.e.:

- Open meeting at the Biennial Nutrition Congress on 17 September 2014, Pretoria
- Meeting of the Heads of Dietetic/Nutrition Departments on 17 September 2014, Pretoria
- A Unicef workshop on “Strengthening the human resource base for nutrition in East and Southern Africa region” held in Burundi from 25-28 August 2014. South Africa, Uganda, Madagascar, Rwanda, Ethiopia, Burundi, Mozambique and Kenya representatives attended the meeting.

At the Professional Board meeting of 25 September 2014 the Board considered the comments received from the stakeholders. Since the majority of the stakeholders agreed to the principle that there should be only one nutrition profession in future, the Board decided to proceed with this. The valuable comments received from stakeholders were included in this Final Report of January 2015.

5 CURRENT NUTRITION SITUATION IN SOUTH AFRICA

The nutrition situation in South Africa is given to provide additional background to the need to relook at the competencies needed by a nutrition professional in the current situation AS WELL AS in the coming years. In addition, it will also give the Board the opportunity to ensure that the competencies are also in line with the strategic planning of the National Department of Health.

5.1 BURDEN OF DISEASES IN SOUTH AFRICA

South Africa has four concurrent epidemics, a health profile found only in the Southern African Development Community region. Poverty-related illnesses, such as infectious diseases, maternal death, and malnutrition, remain widespread, and there is a growing burden of non-communicable diseases. Although South Africa is considered a middle-income country in terms of its economy, it has health outcomes that are worse than those in

many lower income countries. Within the public sector, key challenges are presented by the large inequalities in the distribution of infrastructure and financial and human resources between geographical areas, and inefficiency in the distribution of resources between levels of care.

Health indicators are determining a demand for health workforce development and service provision, which must be addressed. Under-five mortality, infant mortality and maternal mortality in South Africa are still high. The under-five mortality rate has reduced from 56 (2009) to 42 (2011) per 1000 live births, whereas the 2015 MDG target is 20. The infant mortality rate has also gone down from 40 (2009) to 30 (2011) per 1000 live births, which is equally far from the 2015 MDG target of 18. The Neonatal mortality rate (<28 days) has remained static at 14 (2011) per 1000 live births. Notable is the maternal mortality ratio which has risen from 369 (2001) to 625 (2007) per 100,000 live births, almost doubling and almost 20 times higher than the 2015 MDG target of 38.

HIV/AIDS accounts for 31% of the total disability-adjusted life years of the South African population, with violence and injuries constituting a further cause of premature deaths and disability. There has been a rapid increase in infectious diseases, with tuberculosis becoming the leading registered cause of death, and the proportion of the deaths due to infectious and parasitic causes has increased from 13.1% to 25.5% from 1997 to 2006. The National Burden of Disease Study highlighted the need for the provision of a wide range of health services, but emphasised the *need to promote health and prevent disease*. In addition, other non-fatal health problems such as adult-onset hearing loss and cataract-related blindness feature among the leading single causes of health loss. Interpersonal violence and alcohol harm are other risk factors from the social sphere. These are accompanied, on the one hand, by risk factors related to poverty and under-development, such as under-nutrition, unsafe water, sanitation and hygiene and indoor smoke from solid fuels, and on the other hand by risk factors associated with an unhealthy lifestyle related to tobacco, diet and physical activity.

5.1.1 Burden of non-communicable diseases

The WHO estimates of the burden of disease in South Africa suggest that non-communicable diseases caused 28% of the total burden of disease measured by disability-adjusted life years (DALYs) in 2004. Cardiovascular diseases, diabetes mellitus, respiratory diseases, and cancers together contributed to 12% of the overall disease burden, and neuropsychiatric disorders (such as schizophrenia, bipolar depression, epilepsy, and dementia) accounted for 6%. On the basis of the DALYs per 100 000 population, the WHO estimates place the burden from non-communicable disease in South Africa as two to three times higher than that in developed countries, and similar to that in some other sub-Saharan countries and central European countries that fall into the highest burden quintile. These diseases are on the increase in rural communities in South Africa; they disproportionately affect poor people living in urban settings, and are driving a rise in the demand for chronic disease care.

Many non-communicable diseases share common risk factors such as tobacco use, physical inactivity, and unhealthy diet that translate into cardiovascular disease, diabetes, and cancer. The South African adult population has high levels of these risk factors, and large proportions of the burden of disease can be attributed to these potentially modifiable risk factors. In childhood and adolescence, paradoxically, obesity and stunting coexist—both of which increase the risk of non-communicable diseases in adult life. The burden of disease related to non-communicable diseases is predicted to increase substantially in South Africa over the next decades if measures are not taken to combat the trend. An insight into the extent of and risk factors for non-communicable diseases in South Africa is crucial for effective advocacy and action.

The Global Burden of Disease study 2013 (Ng et al, 2014) described the prevalence of overweight and obesity combined and obesity alone for South Africa. From this it is clear that South Africa is facing a major challenge regarding the prevention of overweight and obesity.

Table: Age-standardised prevalence of overweight and obesity combined and obesity alone for girls, boys, men and women for 2013

Boys < 20 years		Men >= 20 years		Girls < 20 years		Women >= 20 years	
Overwt & obese	Obese	Overwt & obese	Obese	Overwt & obese	Obese	Overwt & obese	Obese
18.8%	7.0%	38.8%	13.5%	26.3%	9.6%	69.3%	42.0%

Adapted from Ng et al, 2013

5.1.2 Burden of malnutrition in South Africa

Sound nutrition is a basic human right and a prerequisite for the attainment of a person's full intellectual and physical potential. Nutrition is also the outcome of development processes in society and not simply a service to be delivered. Improving nutrition is therefore an ethical imperative, a sound economic investment and a key element of health care at all levels. South Africa is in a nutrition transition in which under-nutrition, notably stunting and micronutrient deficiencies, co-exist with a rising incidence of overweight and obesity and the associated consequences such as hypertension, cardiovascular disease and diabetes. Within the context of the HIV and AIDS pandemic and food insecurity, the high prevalence of under-nutrition, micronutrient deficiencies and emergent over-nutrition presents a complex series of challenges. Under-nutrition has stayed roughly constant in South Africa since the early 1990s. Despite our relatively high per capita income, we have rates of child stunting (SANHANES-1 (Shisana et al, 2013): 0-3 yrs 26.9% (boys) & 25.9% (girls); 7-9 yrs: 10% (boys) & 8.7% (girls)) comparable to low-income countries in its region, and higher rates of stunting than lower-income countries in other regions. In addition; children's nutritional status varies considerably among the nine provinces and possibly within each province. This has bearing on targeting and prioritization for interventions and resource allocation.

A similar pattern emerged for the prevalence of underweight, with almost one out of ten children being affected nationally. Wasting is less prevalent, affecting one out of twenty children nationally. In line with global trends, there is an alarming increase in the prevalence of overweight and obesity among all South Africans. The SANHANES-1 (Shisana et al, 2013) reported that in 2012, when the study was done, the prevalence of overweight and obesity among children aged 2-14 years was significantly higher in girls (16.5% & 7.1%) than

boys (11.5% & 4.7%). About 26.6% of women are overweight (excluding obesity) and 24.9% are obese. The South African National Youth Health Behaviour Survey reported that 20% and 5% of grades 8 to 11 learners were overweight and obese respectively.

While substantial progress has been recorded with regard to folate and iodine status, findings on other micronutrient deficiencies among women and children from the National Food Consumption Survey (NFCS) indicate that problems persist and nutritional status may be deteriorating. About 63.6% of children between 1 and 9 years were vitamin A deficient (NFCS 2005) and the prevalence of vitamin A in women of child bearing was age at 27.2%. SANHANES-1 (Shisana et al, 2013) reported that the prevalence of Vitamin A deficiency dropped to 43.6% in children.

The prevalence of anaemia in children and women was at 27.9% and 29.4% respectively in 2005. About forty five per cent (45.3%) of children were found to be zinc deficient. South Africa has essentially achieved the virtual elimination of Iodine Deficiency Disorders (IDD). At both the national and provincial level there has been a consistent increase since 1998 in the percentage of households using and consuming salt with an iodine content of more than 15ppm. However, the Limpopo Province needs special attention given that it had both the lowest mean iodine concentration at 20ppm and the lowest percentage of households with adequately iodized salt (45.3%). The new data from SANHANES-1 (Shisana et al, 2013) reported for the under-five year olds, that the prevalence of anaemia was 10.7%, mild anaemia 8.6% and moderate anaemia 2.1%.

5.1.3 Changes in the burden of diseases in South Africa from 1990 - 2010

The Global Burden of diseases, injuries, and risk factor study 2010 (Institute for Health Metrics and Evaluation, 2013) showed changes in the top 25 causes of YLLs (years of life lost) due to premature mortality from 1990 to 2010. The following table indicates the major changes (details not given).

Table: Ranks for top causes of YLLs rom 1990 - 2010

Rank 1990	Disorder 1990	Rank 2010	Disorder 2010
1	Diarrheal diseases	1	HIV/Aids
2	Lower respiratory infections	2	Diarrheal diseases
3	Tuberculosis	3	Interpersonal violence
4	Interpersonal violence	4	Lower respiratory infections
5	Preterm birth complications	5	Tuberculosis
6	Stroke	6	Stroke
7	Ischemic heart disease	7	Preterm birth complications
8	Neonatal encephalopathy	8	Diabetes
9	Mechanical forces	9	Mechanical forces
10	Congenital anomalies	10	Ischemic heart disease
11	Diabetes	14	Hypertensive heart disease
12	HIV/Aids		
13	Protein-energy malnutrition		
25	Hypertensive heart disease	47	Protein-energy malnutrition

Only some changes showed, specifically those with a potential nutrition-related indication.
The top 10 causes of DALYs (taking into consideration both YLLs and YLDs) in 2010 were HIV/AIDS, diarrheal diseases, interpersonal violence, lower respiratory infections, tuberculosis, diabetes, stroke, preterm birth complications, COPD and major depressive disorder. Globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal and nutritional causes of DALYs are generally on the decline.

The three risk factors that account for most of the disease burden in South Africa are alcohol use, high body-mass index, and high blood pressure. The leading risk factors for children under 5 and adults aged 15-49 years were suboptimal breastfeeding and alcohol use, respectively, in 2010.

5.2 THE SOUTH AFRICAN GOVERNMENT

5.2.1 The South African Government Development Agenda: Vision 2030

The National Planning Commission (NPC) was established by the President "to take a broad, crosscutting, independent and critical view" of the challenges and opportunities facing South Africa. This resulted in the release of a Diagnostic Document in 2011 which identified the main challenges confronting the country and also examined their underlying causes. The Diagnostic Report of the NPC sets out South Africa's achievements and its shortcomings since 1994. While the country has made some progress in reducing poverty, poverty is still pervasive because many working households still live close to the poverty line. The commission was then tasked to develop a vision of what the country should look like in 2030, and a plan for achieving that vision, based on the diagnostic review of the current situation. The plan consists of 9 pillars, which will enable South Africa to realize its 2030 vision. Amongst these pillars, three of them have made an extensive reference to nutrition. They are:

- Improving the quality of education, training and innovation

In order to improve the quality of education in South Africa, the NPC acknowledge the role that proper nutrition and diet can play in the physical and mental development for children under the age of three. The commission made recommendation on child nutrition, with specific reference to addressing micronutrient deficiencies. As part of early childhood development and nutrition, the commission also recommended the design of a nutrition programme for pregnant women and young children to be piloted by the Department of Health for two years.

- Quality health care for all

The commission acknowledges that good health is essential for a reproductive and fulfilling life. Long-term health outcomes are shaped by factors largely outside the health system: lifestyle, nutrition, education, diet, sexual behaviour, exercise, road accidents and the level of violence. The commission makes recommendations with regard to areas that should be prioritized in order to realize quality health care for all, as well as addressing social determinants of health. They include; sex education, nutrition, exercise, and combating smoking and alcohol abuse, and a focus on maternal and infant health care.

- Social protection

Effective social protection and welfare services are an integral part of our programme for inclusive economic growth and central to the elimination of poverty and reduction of inequality. At present, given South Africa's extremes of unemployment and poverty, many people regularly experience hunger and find it difficult to meet the basic needs of their families. To achieve the objectives of broader social security coverage, the commission proposed the following reforms, amongst others: an acceptable minimum standard of living must be defined as the social floor, including what is needed to enable people to develop their capabilities, and this includes nutrition as one of the elements.

5.2.2 National Department of Health Priorities and Policies

The mission of the Department of Health is to improve health status through the prevention of illness, disease and the promotion of healthy lifestyles, and to consistently improve the health care delivery system by focusing on access, equity, efficiency, quality and sustainability. National Department of Health is responsible for the national health policy. The nine provincial departments of health are responsible for developing provincial policy within the framework of national policy and public health service delivery. Three tiers of hospitals exist namely; tertiary, regional, and district level. The primary health-care system—a mainly nurse-driven service in clinics—includes the district hospital and community health centres. Local government is responsible for preventive and promotive services. The private health system consists of private practicing health professionals and private hospitals, with care in the private hospitals mostly funded through medical schemes.

One of the major goals of the South African government's Medium Term Strategic Framework (MTSF) for 2014–2019 is to achieve Outcome 2: A long and healthy life for all South Africans. The Strategic Plan of the National Department of Health (NDOH) provides a framework of the implementation of health sector priorities for 2015-2019. The National Department of Health Strategic Goals are:

1. Prevent disease and reduce its burden, and promote health;
2. Make progress towards universal health coverage through the development of the National Health Insurance scheme, and improve the readiness of health facilities for its implementation;

3. Re-engineer primary healthcare by: increasing the number of ward based outreach teams, contracting general practitioners, and district specialist teams; and expanding school health services;
4. Improve health facility planning by implementing norms and standards;
5. Improve financial management by improving capacity, contract management, revenue collection and supply chain management reforms;
6. Develop an efficient health management information system for improved decision making;
7. Improve the quality of care by setting and monitoring national norms and standards, improving system for user feedback, increasing safety in health care, and by improving clinical governance;
8. Improve human resources for health by ensuring adequate training and accountability measures.

These goals are aimed at creating a well-functioning health system capable of producing improved health outcomes. Despite efforts to transform the health system into an integrated, comprehensive national health system, and significant investment and expenditure, the South African health sector has largely been beset by key challenges inclusive of:

1. a complex, quadruple burden of diseases;
2. serious concerns about the quality of public health care;
3. an ineffective and inefficient health system; and
4. spiralling private health care costs.

A number of policy initiatives have been put in place in order to achieve the departmental goals, with specific reference to improving the nutritional status of all South Africans. The following policy documents outline ***nutrition-specific interventions*** that address the immediate causes of suboptimum growth and development:

- Roadmap for Nutrition in South Africa (2013-2017)
- Maternal, Neonatal, Child, Women's Health and Nutrition Strategy (2012-2016)
- Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA) Strategy (2012-2016)
- Strategic Plan for the Prevention and Control of Non-Communicable Diseases (2013-2017).

Nutrition-specific interventions included in these strategic documents include, amongst others:

- Preconception nutrition
- Maternal dietary supplementation
- Micronutrient supplementation and/or fortification
- Breastfeeding and complementary feeding
- Dietary supplementation for children
- Dietary diversification
- Feeding behaviours and stimulation
- Treatment of severe acute malnutrition
- Disease prevention and management
- Nutrition interventions in emergencies

Nutrition-sensitive interventions that address the underlying determinants of malnutrition include programmes and services from various government departments and civil society such as:

- Agriculture and food security (e.g. Agriculture, Forestry and Fisheries, Rural Development and Land Reform)
- Social safety nets (e.g. Social Development)
- Early child development (Social Development and Basic Education)
- Maternal mental health (Health)
- Women's empowerment (various government institutions and civil society)
- Child protection (various government institutions and civil society)
- Classroom education (Basic Education)
- Water and sanitation (Water Affairs, Human Settlements, Health)
- Health and family planning services (Health)

Complementary strategies and an integrated approach to ensure optimal nutrition for all South Africans is a pre-requisite. Routine operations of government through existing sector-specific actions alone will not successfully and effectively address malnutrition. High level political will and sustained commitment to improving the nutrition security through a multisectoral approach that involves several government departments at national, provincial and local level, the private sector and civil society, is of critical importance.

Building an ***enabling environment to support nutrition interventions and programmes*** to enhance growth and development and their health consequences is important. Some of the initiatives include:

- Rigorous evaluations
- Advocacy strategies
- Horizontal and vertical coordination
- Accountability, incentives regulation, legislation
- Leadership programmes
- Capacity investments
- Resource Mobilisation

Some of the policy initiatives that the National Department of Health has put in place to create an enabling environment for effective delivery of health and nutrition related interventions and programmes include, amongst others:

- Human Resources for Health Strategy
- National Health Insurance
- Re-engineering of Primary Health Care
- Mid-level workers Policy
- Office of Standards Compliance

A brief explanation of these policy initiatives is outlined below:

A. Human Resources for Health

From 1994, the health sector in South Africa has been affected by a legacy of mal-distribution of staff and poor skills of many health personnel, which has compromised the ability to deliver key programmes, notably for HIV, tuberculosis, child health, mental health, and maternal health. The staffing crisis is especially acute at the district level and has persisted, despite 60% of the health budget being spent on human resources. There has been a substantial increase in the number of nutrition workforce in the public sector since 2004. This increase has been attributed to the integration of nutrition related interventions into HIV/AIDS care and treatment programmes. More financial resources were allocated to nutrition related interventions, including recruitment of qualified nutrition personnel. However, this has not been the case in the past few years.

Human resources have also been unevenly distributed between the public and private sectors, within the public sector (between the provinces in favour of those that have large, mostly urban-based medical schools), and in the case of dietitians, between hospitals and primary level care. Despite the development of a national human resources strategy in 1999/2000 and a human resources plan in 2006, there have been few concrete proposals, and fewer actions, to address the human resource needs for the nutrition programme, especially at community and primary levels. Important positive policies have included increased uptake by medical schools, legislated community service for newly graduated dietitians, the introduction of Nutritionists, and the proposed introduction of mid-level health workers in the form of Assistant Nutritionist/Dietitian. Unfortunately, the initiative to start producing mid-level workers has not yet started due to lack of policy direction from the National Department of Health.

The process of planning improvements in Human Resources for Health is guided by the national Department of Health's 10 Point Plan. It incorporates *human resources planning, development and management* as one of the priorities. The fifth point in the 10 point plan, *"Improving human resources, planning, development and management"* has six documented strategic priorities in the Medium Term Strategic Framework (MTSF) for 2009–2014:

- Refinement of the HR plan for health;
- Re-opening of nursing schools and colleges;
- Recruitment and retention of professionals, including urgent collaboration with countries that have an excess of these professionals;
- Focus on training of PHC personnel and mid-level health workers;
- Assess and review the role of the Health Professional Training and Development Grant (HPTDG) and the National Tertiary Services Grant (NTSG);
- Manage the coherent integration and standardisation of all categories of Community Health Workers.

Work has started on the determination of norms and staffing needs for the country for primary and secondary care. (For this reason the HR of the Department of Health was invited to a meeting of the Second Task Team to inform them of the possible changes). This is being done with support from the World Health Organization (WHO) using the Workload Indicators of Staffing Needs (WISN) method with the aim of improving the HR data extraction, capture and analysis. This will ensure the appropriate level and mix of staff at

facilities. Six provinces have been trained in WISN and it will be used within all 11 NHI pilot districts to estimate and cost future staff requirements.

B. Re-engineering of Primary Health Care (PHC)

In a move to improve the health status of the population, the South-African Department of Health has reviewed the way PHC services are delivered and has defined the 'PHC Re-engineering' approach. This approach builds a stronger preventative component with a ward-level community and home-based intervention by Community Health Workers supervised by a nurse and a refocused nurse-based school health programme. At the same time curative services are re-enforced in clinics and Community Health Centres through strong links between community-based and facility-based services and through a higher quality of care in facilities with systematic clinical governance and support from a district specialist team. However, a strong element of its success is dependent on the availability of *the right quantity of the right categories of staff.* The PHC system will be located in a district-based service delivery model focusing especially on maternal and child mortality. The three main streams are:

a. ***District Clinical Specialist Support teams:*** These teams will consist of four specialist clinicians (paediatrician, family physician, obstetrician & gynaecologist and anaesthetist), an advanced midwife, advanced paediatric nurse and advanced PHC nurse and will be deployed in each district.
b. ***School Health Services:*** This programme aims to address basic health issues amongst school going children such as eye care, dental and hearing problems, as well as immunisation programmes in schools. Contraceptive health rights, teenage pregnancy, HIV and AIDS programmes, and issues of drugs and alcohol in school will be part of this initiative.
c. ***Municipal Ward-Based Primary Health Care Agents*****:** This team will be based in a municipal ward and will involve about 7 PHC workers or PHC agents per ward comprised of 6 community health workers and a specialist PHC nurse.

The Minister has stated that improved management of health care institutions and health districts will be essential to facilitate the re-engineering of PHC.

C. National Health Insurance

South Africa is in the process of introducing an innovative system of healthcare financing with far reaching consequences for the health of South Africans. The National Health Insurance commonly referred to as NHI will ensure that everyone has access to appropriate, efficient and quality health services. The NHI is intended to bring about reform that will improve service provision. It will promote equity and efficiency so as to ensure that all South Africans have access to affordable and quality healthcare services regardless of their economic status. To successfully implement a healthcare financing mechanism that covers the whole population such as NHI, four key interventions need to happen simultaneously: (a) a complete transformation of the healthcare service provision and delivery (b) the total overhaul of the entire healthcare system (c) the radical change of administration and management, and (d) the provision of a comprehensive package of care underpinned by re-engineered Primary Health Care. Therefore, improvement of the quality of health care in the public health system is at the centre of the health sector's reform endeavours. As part of the overhaul of the health system and improvement of its management, hospitals in South Africa have been re-designated as follows:

- District hospital;
- Regional hospital;
- Tertiary hospital;
- Central hospital; and
- Specialized hospital.

Health care services will be rendered at different levels of care with specific core packages.

D. Mid-Level Workers (MLW) Policy

A small number of MLWs are trained at Higher Education Institutions (HEI), specifically at the Universities of Technology. These are Emergency Medical Care Technicians, Radiographer Assistants, Pharmacy Technicians, and Forensic Pathology Assistants. Clinical Associates are the only MLW trained in a Faculty of Health Sciences at the University of the Witwatersrand (Wits), Walter Sisulu, and Pretoria Faculties of Health Sciences. The training output of MLWs is very small since there was a delay with the finalization of the policy by the National Department of Health to develop MLWs. Some Provincial departments of health such as Kwazulu-Natal have started to address this by making their own plans given the lack of a national plan and the demand for MLWs in the services. The issue of formalizing and expanding the training of MLWs at HEIs would require

thorough planning and development phases. The requirements, based on service plans, should be determined, how the training would be financed, and the plans for employment and career pathing. HEIs did express capacity challenges which should be addressed through appropriate planning and financing. It is important to formalize the training and accreditation of MLWs to meet the needs of the country and ensure that training is standardized throughout and agreed upon by all stakeholders.

5.2.3 Strategic implications for Human Resource Development for nutrition within the context of the South African developmental agenda and the Health System

The Department of Health's role in providing overall guidance on activities that contribute to improving nutritional status of all South Africans has generally been characterised by good policies, but with short-comings on the implementation, monitoring, and assessment of these nutrition interventions throughout the system. The scarcity of nutrition personnel, especially in rural areas and at lower levels of the health system, have presented one constraint to policy implementation, but another key constraint is that at all levels of the health system there has been inadequate leadership and management of the available resources. This was also identified during the Landscape Analysis on identifying bottlenecks to scale-up evidence based nutrition interventions to address child and maternal under-nutrition. Poor stewardship at the policy level and weak management and supportive supervision at the implementation level are major obstacles to improving the health system in South Africa.

The extensive and changing burden of disease in South Africa has several implications for human resource development and planning on nutrition in South Africa:

1. Scaling up nutrition programmes will require substantial resources to enable government to strengthen their institutions and management capabilities in the nutrition sector.
2. The scarcity of nutrition personnel, especially in rural areas and at lower levels of the health system, have presented one constraint to policy implementation, but another key constraint is that at all levels of the health system there has been inadequate leadership and management of the available resources
3. Training and development for nutrition professionals should provide for a wide spectrum of conditions, with specific reference to these areas
    a. Maternal nutrition

   b. Child nutrition
   c. NCD
   d. TB
   e. HIV/AIDS

4. Addressing social determinants of nutrition needs to be high on the training agenda, which should include nutrition sensitive programmes.
5. Innovative approaches, communication and advocacy are needed, in particular for the non-communicable diseases
6. More emphasis should be put on the preventive and curative nutrition services
7. In order to meet the demands at facilities, as well as at community level, a different nutrition cadre, in the form of a mid-level worker should be explored. Should we expand the scope of mid-level worker to include food service management or can these cadres undergo an additional year of training on management of the food service unit? Could these be our future 'food service managers' who are adequately trained in nutrition?
8. To advocate for the implementation of nutrition sensitive interventions and policy advocacy issues on the basic causes of malnutrition would require different set of skills such as economics, communication, leadership, advocacy, social sciences, advanced clinical and public health issues, etc. A need to ensure that nutrition indicators for nutrition-specific and nutrition-sensitive interventions are located within an additional number of vertical goals, such as gender equity, education, and employment will require strong advocacy skills. All these indicators should be linked across the different goals to generate a horizontal nutrition goal. These sets of skills may require advanced training, preferably at a post graduate level.
9. With the implementation of the NHI, facility-based nutrition interventions, with specific reference to the management of food service units, will become the cornerstone of improving quality of care to patients. This critical area of patient care provides the profession with a 'window of opportunity' to become the voice of nutrition through improving quality of care at the facility level. However, a decision should be made whether to revisit the expected outcomes of the current food service module for the dietetics training or to develop a new cadre with strong leadership skills to lead facility-based interventions, need to be discussed.
10. A need to have experienced nutrition leaders at the district level is long overdue. This is the future of implementation of health programmes, including nutrition through the

three streams of Primary Health Care. Strong coordination, communication, advocacy and technical skills will be needed. Given an environment of limited funding, maximizing resources and preventing duplication of effort require high levels of collaboration and coordination among stakeholders working to develop and implement nutrition programmes.

11. Training platforms for nutrition professionals should be revisited to ensure that the proposed skills that these cadres should have, are adequately embedded at different levels of their development.
12. Training and development should also equip nutrition professionals with the necessary skills to lead nutrition in the private sector, non-governmental organizations, or any other level wherein food-system policies are implemented.

5.2.4 Other initiatives within the State structures

The Cabinet has established an Inter-Ministerial Committee (IMC) on Food Security, jointly led by the Ministers of Social Development and of Agriculture, Forestry and Fisheries, aimed at fighting food insecurity, hunger and malnutrition. The IMC has been tasked with delivering an integrated, intersectoral food security programme based on the Brazilian 'Fome Zero' (Zero Hunger) programme which has played a key role in addressing citizens' rights to food. Efforts to observe this right will generate demand for the supply of nutritious food, and the government intends to use the state procurement of food as a catalyst for local food production and procurement. Female-headed households, children, people with disabilities, and people who are falling prey to gaps in social assistance will form part of the primary target.

No positions for nutrition specific professionals have been made in the Department of Social Development.

The Zero Hunger Programme of the Department of Agriculture seeks to link subsistence producers and smallholder producers/producers to government institutions such as government schools (i.e. to supply the School Nutrition Programme), public hospitals and prisons, and in the medium term also be a conduit through which food produced by smallholders can be used to meet the nutritional needs of low-income individuals and

households in communities at large. As such, the Zero Hunger Programme seeks to provide a boost to existing smallholder producers/producers, and an opportunity through which subsistence producers can start generating a sustainable income through farming, and thereby become smallholder producers in their own right. While Zero Hunger has not been adopted yet as a formal policy, its implementation is already being tested and refined through the collaboration of DAFF and the provincial departments of agriculture and by means of linking it to the Comprehensive Agricultural Support Programme (CASP).

The department of Agriculture also include a focus on employee health and wellness. The department will align with the approved Employee Health and Wellness (EH&W) Framework for the public service led by the DPSA. The DAFF will continue to render services and advocacy programmes in disease management, HIV counselling and testing, psychosocial services and access to health information through the Health Promotion and Employee Assistance Programme (EAP). All the employees of the department will access the services as per the Batho Pele principles. The HIV and AIDS Strategy for the Agriculture, Forestry and Fisheries Sector (HASAFFS) will be implemented to ensure accessibility to care and support, the importance of adherence to treatment and disclosure, and good nutrition for employees in the department and the sector.

Through its strategic objectives, the Agricultural Research Council will drive the transfer of technology and commercialisation, ensure sustainable use and management of natural resources, enhance nutrition, food security and safety and manage and mitigate agricultural risks.

However no positions for appointment of nutrition professionals have been made within the Department of Agriculture.

National Policy on Food and Nutrition Security (2013): South Africa has progressively engaged in the fight against hunger and poverty through its policies and programme interventions since the democratic dispensation (1994). An integrated approach to ensuring delivery of food security programmes has been pursued through the implementation of the Integrated Food Security and Nutrition Programme (NPFNS). Government of South Africa approved the National Policy on Food and Nutrition Security and the Household Food and Nutrition Security Strategy in 2013 to continue responding to the hunger challenges in the

country. The National Policy on Food and Nutrition Security provides a common reference for all players in tackling the food and nutrition insecurity problem with emphasis on synergy that will minimize undue duplication and inefficient deployment of resources. Recognizing the importance of implementing the food and nutrition security programs and plans, Government strategically assigned particular Ministries to co-lead its commitment areas.

The Household Food and Nutrition Strategy recognizes measures including social grants, feeding schemes, fortification of staples, moderation of food prices and subsistence farming supports to address household-level food and nutrition insecurity. However, the Strategy alludes to limitations of these interventions, as inadequate and recommends that they must be expanded, enhanced or better focused, used in more effective combinations, and/or complemented by additional interventions. It is also clear that, because of the complexity of both the challenge and necessary responses, better programme co-ordination and monitoring are essential. As a response to the above challenges, the Intergovernmental Technical Working Group on food and nutrition security has developed an integrated food and nutrition security implementation plan.

6 CURRENT TRAINING AND REGISTRATION OF NUTRITION PROFESSIONALS IN SOUTH AFRICA

6.1 TRAINING OF NUTRITION PROFESSIONALS

Currently training of dietitians is taking place at 10 Universities in South Africa, namely:

- Nelson Mandela University – Port Elizabeth; Eastern Cape Province: started in 2013
- North-West University – Potchefstroom; North West Province
- Sefako Makgatho Health Science University (previously the University of Limpopo; Medunsa) - Pretoria; Gauteng
- Stellenbosch University – Bellville, Tygerberg; Western Cape Province
- University of Cape Town – Cape Town; Western Cape Province
- University of KwaZulu Natal – Pietermaritzburg; KwaZulu Natal
- University of Limpopo; Turfloop Campus - Polokwane; Limpopo Province
- University of Pretoria – Pretoria; Gauteng

- University of the Free State – Bloemfontein; Free State
- University of the Western Cape – Bellville; Western Cape Province

Nutritionists are currently trained at 3 Universities, namely:

- North-West University – Potchefstroom; North West Province
- University of KwaZulu Natal – Pietermaritzburg; KwaZulu Natal
- University of Venda – Thohoyadou; Limpopo Province

The University of KwaZulu Natal has indicated that they will not take in new students in this programme in 2014 and thus phase it out over time. The intake of nutrition students at North-West University is also low (less than 10 per year). UNISA and the University of Pretoria have formally indicated that they are investigating the possibility to train nutritionists.

At present the Professional Board is not accrediting any new applications for training of dietitans or nutritionists and will not do so until such time that the final decision regarding the training of nutrition professionals has been taken.

6.2 STUDENTS ENROLLED IN DIETETIC OR NUTRITION PROGRAMMES - 2014

Dietetic student numbers for 2014 (new students)

University	Nr of applications	Nr selected	Nr registered
UCT	49	20	14
UWC	136	54	34
UL (Turfloop)	258	39	39
Sefako Makgatho Health Science University			
UKZN	1591	40	24
UFS	210	11	11
NWU	80	51	41
UP			
SU	104	55	38
NMMU	42	30	26

Dietetic graduates from 2010 - 2013

University	2010	2011	1012	2013
UCT	13	14	14	15
UWC	21	24	8	23
UL (Turfloop)	25	25	34	39
UL (Medunsa)	18	21	11	
UKZN	36	32	23	
UFS	18	18	7	13
NWU	26	26	22	24
UP	27	20	17	
SU	18	24	32	34
NMMU	-	-	-	-

Nutritionist student numbers for 2014 (new students)

University	Nr of applications	Nr selected	Nr registered
U Venda	121	50	40
UKZN	0	0	0
NWU	6	10	9

Nutritionist graduates from 2010 - 2013

University	2010	2011	2012	2013
U Venda	26	8	15	22
UKZN	5	4	4	
NWU	0	0	0	0

6.3 REGISTRATION OF NUTRITION PROFESSIONALS IN SOUTH AFRICA

The registration of nutrition professionals as on 8 January 2014 is given in the table below.

Category	Number
Dietitian	2 734
Student dietitian	1 418
Nutritionist	180
Student nutritionist	259
Total	4 591

This only captures the numbers registered in each category and does not give where each category may be employed, be it private sector, government sector, industry or registered but non-practicing professionals.

6.4 CURRENT INFORMATION REGARDING WORK ENVIRONMENT OF THE DIETITIAN AND NUTRITIONIST

A sms survey was done to establish were the dietitians and nutritionist are currently working. Although the response rate was not very good (n=289), the survey showed that more than 60% are working in public service, 21% in private practice and about 10% in the academic environment.

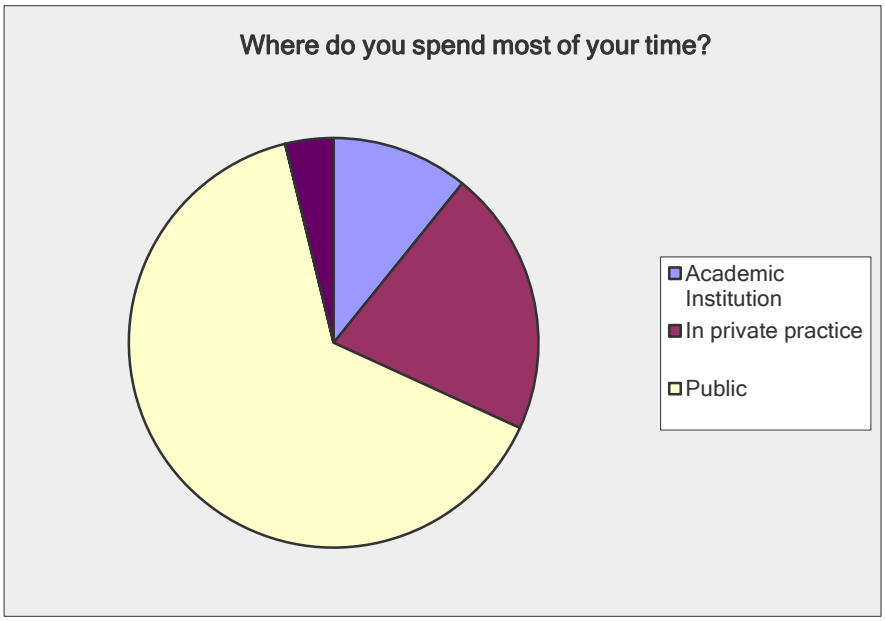

Figure 1: Current work environment of dietitians and nutritionists (2014)

6.5 INTERNATIONAL COMPARISONS REGARDING NUTRITION PROFESSIONAL TRAINING

It is difficult to obtain relevant information on the training of undergraduate dietetic and/or nutrition programmes in Africa. A recent study by Sodjinou et al (2014) assessed the capacity for human nutrition training in West Africa. The following countries participated (divided according in three major language groups): Anglophone countries (Ghana, Liberia, Nigeria, Sierra Leone and The Gambia); francophone countries (Benin, Burkino Faso, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger, Senegal, and Togo) and Lusophone countries (Cape Verde and Guinea-Bissau). They reported that 83 nutrition programmes are offered in these 16 countries. Of these 32 were BSc programmes, 34 MSc programmes and 17 PhD programmes. Nigeria offered 15 of the undergraduate programmes. Six countries did not offer any nutrition programmes. The programmes are heavily oriented to food science (46%), with little emphasis on public health nutrition (24%). The programmes required 3 to 4 years full-time study. The authors of the study concluded that these programmes have a number of challenges including the need to emphasize for community-based management of acute malnutrition, overnutrition and chronic non-communicable diseases. There is also a need to have competency-based training in nutrition.

Information of other countries is difficult to get, but we know that Ghana and Kenya are training dietitians. Zambia and Rwanda is also in the process of developing training for dietitians.

6.6 SUMMARY

Although improvements in some selected aspects of the nutritional status of the population have been documented, it is clear that the improvements are not sufficient. Swart *et al.* (2008) indicated that South African nutrition strategies and programmes are in line with current international recommendations and that the limited success of these is due to inadequate implementation. They suggested that the improvement of impact of these strategies are dependent on programme choices, the development of a range of capacities such as technical, operational, programme / action research, information management and strategic capacity as well as the provision of adequate numbers of **appropriately trained** human resources.

From the comments received from different stakeholders it is also clear that the training and registration of two nutrition professionals with the current overlap between the scopes of practice and the unclear role delineation is not viable. The attempt by the first task team to create differences between the two professions by ensuring that dieticians and nutritionists will operate at a facility and community level respectively has resulted in uncertainties and antagonism between the two professions at the implementation level and did not clarify the matter sufficiently for employers. At some levels there is also a perception that the new cadre of nutritionist is a duplication of the dietitian. Yet, the gap in service delivery to address nutrition problems at the community and household level has not been closed. Furthermore, the polarization of the nutrition workforce does not serve either of the professions or the future of nutrition in South Africa well.

7 THE NEW NUTRITION PROFESSIONAL

7.1 THE DECISION OF THE BOARD

The Professional Board for Dietetics and Nutrition decided, based on a collective decision making process of the First and Second Task Teams as well as the input and comments received from stakeholders, on 25 September 2014 that in future only one nutrition professional will be trained and registered. The Professional Board acknowledges that a small number of individuals are not in favour of the training only one nutrition professional. The Board also acknowledges that this process will take some time to complete.

In addition, the Board decided that a comprehensive analysis is necessary to establish the need and competencies of a mid-level worker and will not be further discussed in this document.

This section will deal with some of the issues around the new nutrition professional. The purpose, scope and competencies are based on the work of the Second Task Team.

7.2 NAME OF THE NUTRITION PROFESSIONAL

The name of the new nutritional professional has not yet been finalized. Different names should be considered taking into account the implications that it could have, i.e.:

- Dietitian and/or Nutritionist interchangeable – could lead to confusion with the public
- Dietitian: rationale – far more current dietitans than nutritionists
- Nutritionist – could be confusing
- Professional Nutritionist
- Another suggestion is the name “Dietitian/Nutritionist” meaning one can work as a dietitian or nutritionist. Nutritionist or Public Health Nutritionist is associated with the scope of our current nutritionist in Australia and Europe, but in the African context it is associated with both our current nutritionist and dietitian. In the UK and Europe a dietitian or clinical dietitian is associated with our current scope of a dietitian.

7.3 ROLE OF THE DEPARTMENT OF HEALTH

Although the HPCSA does not have any jurisdiction over the Department of Health, or vica versa, both organisations report to the Minister of Health. The mandate of the HPCSA, however, prescribes that the strategic plans, aims and objectives of the HPCSA Council, and thus its Boards, should be in line with the strategic plans of the Department of Health.

Therefore, the Human Resources department of the National Department of Health has been involved with the process from the beginning and attended the first meeting of the Second Task Team. However, the Professional Board will meet again with the HR to discuss the career path of the nutrition professional within the Department of Health, assistance with training (work integrated learning using different platforms) of the nutrition professional and the community service year.

Since remuneration structure is not within the mandate of the Professional Board we suggest that current employees of the Department of Health as a dietitian and/or nutritionist should engage at the same time with the Human Resources department regarding the distinction in roles and competencies on different levels of care and compensation at these levels. In addition, the compensation for specialization (professional masters) and post-graduate studies should be discussed.

7.4 PROFESSIONAL MASTER'S DEGREE

The Higher Education Qualification Sub-Framework (HEQF, 2013) stated that the primary purpose of the professional Bachelor's degree is to 'provide a well-rounded, broad education that equips graduates with the knowledge base, theory and methodology of the discipline and fields of study, and to enable them to demonstrate initiative and responsibility in an academic or professional context'. The HEQF does however also make provision for alternative routes to a particular outcome through various combinations of qualifications. A Master's degree on NQF exit level 9 was always a possibility, but now the HEQF also make provision for a Professional Master's degree. The primary purpose of a professional Master's degree is to educated and train graduates who can contribute to the development and

knowledge at an advanced level such that they are prepared for advanced and specialised professional employment.

7.5 CONCEPTUAL FRAMEWORK

Figure 2 below provides a conceptual framework for the training registerable Dietitians/Nutritionists (NQF exit level 8), as well as post-graduate qualifications, including Master's degree (NQF exit level 9) and a Doctoral degree (NQF exit level 10).

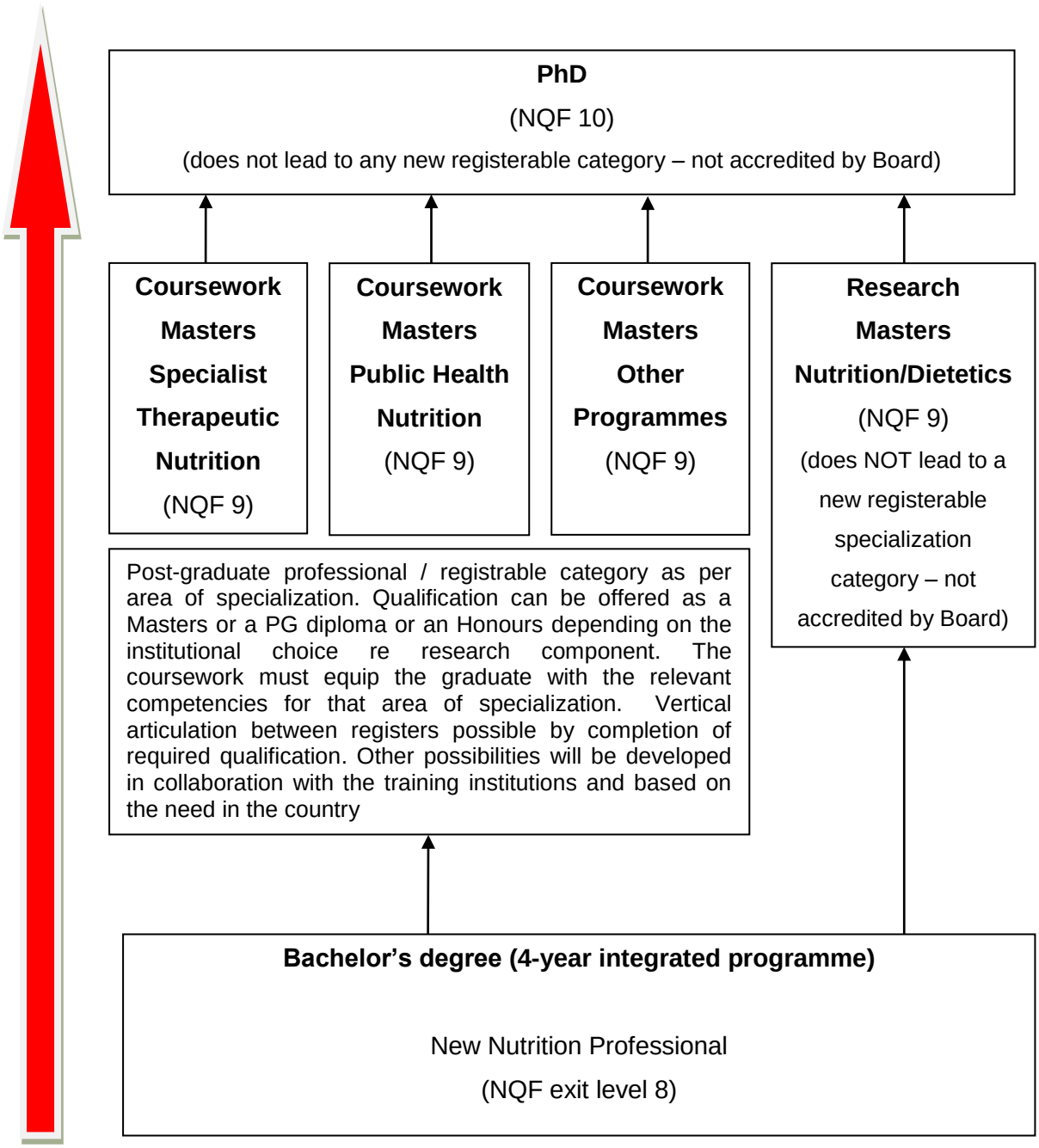

Figure2: Conceptual framework of nutrition professionals

The above conceptual framework is underpinned by the following:

- The professional qualification for a nutrition professional will be at NQF level 8 (four year Bachelor degree as default position although alternative combinations of qualifications should be possible – within the limitations of the HEQF). Work integration should be planned from the first year level
- The nutrition professional will register with the Professional Board of the HPCSA

- Community service will follow the 4-year degree
- Registration in the Independent Practice category as a nutrition professional (the actual name that will be used in future) is possible after the community service
- This registration will be maintained by complying with the CPD rules and regulations of the HPCSA
- A professional Master's degree could lead to specialization in a specific field and will therefore be regulated and accredited by the Professional Board. Registration in a specialization sub-category with the Professional Board is then possible
- PhD qualifications will not lead to a registerable qualification and will therefore not be regulated by the Professional Board (initial registration is still in place)
- It is suggested that a Masters in Nutrition/Dietetics by full thesis would not include a wide enough range of competency development in any specialization area and will therefore not lead to a registerable qualification (initial or specialization sub-category registration still in place). It will therefore not be regulated by the Professional Board.

The inclusion of professionals, other than nutrition professionals (including dietitians and/or nutritionists) to register in a specialization sub-category has not been discussed and is therefore not addressed here. These are professionals who have experience and competencies in nutrition and who could offer a lot to the multidisciplinary approach to deal with nutrition-related problems in South Africa. Examples include those with a background in economics, development, epidemiology, agriculture, etc.

7.6 PURPOSE AND SCOPE OF THE NUTRITION PROFESSIONAL

The **purpose** of the nutrition professional is:

The nutrition professional will use appropriate policies, programmes and dietary measures to treat and manage nutrition related diseases and promote the nutritional well-being of the individual, community and population.

The **scope** of the nutrition professional is formulated as:

Contributing to optimizing the nutritional well-being of individuals, groups, communities and the population by:

- utilizing a comprehensive body of evidence-based nutrition theory and principles
- assessing the nutritional status, nutrition situations and concomitant health risks of clients/patients, groups, communities and the population using relevant methodologies
- conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutritional prescriptions for patients/clients with specific dietary needs in different settings
- conceptualizing, planning, implementing, managing, monitoring, evaluating and documenting appropriate nutrition interventions programmes for groups, communities and the population with specific needs in different settings
- planning and executing an effective food service system based on specific needs of the healthy and ill
- communicating effectively to inform and to change behaviour
- taking responsibility for using/applying appropriate nutrition policies, strategies and guidelines
- managing human, financial, and other resources to ensure optimal and equitable delivery of nutrition services at all levels of service delivery
- identifying, implementing and communicating nutrition related research
- applying critical and creative thinking in working effectively with the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.

In the following section the competencies of the nutrition professional is described in more detail indicating different levels.

7.7 COMPETENCIES OF THE NUTRITION PROFESSIONAL

The competencies of the nutrition professional are based on the work done by the Second Task Team (and include some of the current competencies of a dietitian and nutritionist) as well as discussions with and comments received from stakeholders.

Refinement of the competencies, including examples of the different competencies and assessment criteria, will be developed in collaboration with the training institutions. Details on the level of the competency, i.e. entry-level (NQF 8) or post-graduate level (NQF 9) will be also be finalized in collaboration with the training institutions.

COMPETENCIES OF THE NUTRITION PROFESSIONAL

The nutrition professional will be able to:

NUTRITIONAL AND OTHER BASIC SCIENCES
Nutritional science • Understand the science and principles of human nutrition, the relationship between nutrients found in food and their influence on human physiology, nutrition assessment and application to health • Understand the factors determining the nutrient requirements in different stages of the life cycle • Understand the influence of different factors in promoting healthy eating during the life-cycle • Demonstrate the ability for in-depth cause analysis of nutrition-related health issues based on appropriate conceptual frameworks and scientific and contextual information • Understand factors contributing to nutritional well-being and the multicausality of nutritional problems (causative processes and risk factors) **Food science** • Understand the science of food • Understand the principles of food production technology **Food systems** • Understand theories of development • Understand indigenous knowledge in food, nutrition and development **Social science, sociology, nutritional anthropology and other concepts** • Understand the underlying economic and social conditions as related to food and nutrition security • Understand the influence of local conditions (ecological, social and economic) on the adoption and effectiveness of various nutrition-related programmes • Identify cultural and religious influences on food preferences, acceptance, preparation, etc **Governance** • Understand the functioning of the different health care structures in South Africa

The nutrition professional will be able to:

SCREENING / NEEDS ASSESSMENT / SITUATION ANALYSIS

Individual nutrition assessment and diagnosis
• Assess nutritional status and the concomitant health risk of clients/patients and groups in communities/ institutions / schools by applying the following (only one or a combination):
  o socio-demographic evaluation
  o anthropometric evaluation and body composition analysis
  o biochemical evaluation
  o clinical evaluation
• dietary evaluation
• Integrate, analyse, classify (where appropriate) and interpret nutritional assessment data to identify nutrition and related health risks and problems
• Predict types and severity of nutrition-related health issues, based on the appropriate methods of nutritional assessment, which may occur in individuals or communities
• Diagnose, based on the appropriate methods of nutritional assessment, the type and severity of the nutritional disorder or special nutritional needs of individual patients/clients
• Assess patient/client/group food preferences
Community assessment and diagnosis
• Conduct a comprehensive nutrition situation analysis or community diagnosis (incl sanitation, water, etc)
• Identify, characterize and prioritize nutrition-related problems in different socio-economic, occupational, age, cultural and religious groups in communities and populations
• Identify and monitor vulnerable and at risk groups
• Understand nutrition indicators relevant to health, development and management systems and participate in operation of information systems

The nutrition professional will be able to:

NUTRITION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION
Nutritional care for individuals • Select, plan, implement, monitor, evaluate and document appropriate nutrition care and education for individual patients/clients with specific disease conditions or special nutritional needs in different settings. Take appropriate action after monitoring and evaluation if needed • Collaborate with the different members of the health care team to select, plan, implement and evaluate the nutrition care and education of individual patients/clients with specific disease conditions or special nutritional needs • Participate in multidisciplinary ward rounds and provide nutritional recommendation to managing the patient • Promote and monitor patient/client compliance with the nutrition care plan • Provide home-based nutrition support (tube feeds and NTP patients) • Compile normal and therapeutic menus to comply with patient/client and/or group nutritional needs and food preferences • Apply evidence based dietary measures as part of managing patients, critical patients and patients with multiple diagnosis requiring complex medical care • Understand drug-nutrient interaction **Nutritional care at Public / Communities levels** • Conceptualise, plan, implement, monitor, evaluate and document appropriate intervention strategies to address nutrition and related health issues of groups in communities and/or the public and to improve wellness • Develop and implement a comprehensive monitoring and evaluation framework for nutrition interventions • Operationalize plans for nutrition and integrate within the provincial, district and local authority • Understand the factors for success of nutrition programmes • Apply analytical skills in the evaluation of food and nutrition security in a particular community • Collaborate with relevant stakeholders in the selection, conceptualisation, planning, implementation, monitoring, evaluation and documentation of appropriate intervention strategies to address nutrition and related health problems of groups in communities and/or the public • Facilitate and monitor community or public participation in the selection, planning, implementation and evaluation of appropriate intervention strategies • Understand the principles and concepts in monitoring and evaluation of nutrition programmes • Adapt the intervention strategy/nutrition care plan/food service based on feedback from continuous monitoring of the quality of nutrition service delivery • Identify and recommend nutrition indicators to measure nutrition performance and outcomes • Evaluate, analyse, interpret and act upon appropriate nutrition indicators • Establish links and referral system to community support groups and health facilities

NUTRITION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION
• Provide technical support to support groups focusing on diseases of lifestyle, breastfeeding, etc • Compile the database of the causes of malnutrition • Identify vulnerable children, women and /or elderly and enrol them to appropriate programmes • Measuring the effectiveness of the orphans and vulnerable children (OVC) programme in improving nutrition of the individuals (example by checking the anthropometric measurements of beneficiaries before enrolment to the programme and continue monitoring progress) **Nutrition service delivery** • Monitor patient/client/group satisfaction with nutrition service delivery • Support implementation of nutrition services (both at facility and community settings) **Inter- and Intra-sectoral support and co-ordination** • Provide technical support to other stakeholders • Initiate and strengthen Private Public Partnership e.g. to create demand and supply for nutritious foods • Provide technical support and monitor and evaluate nutritional services provided in ECD centres, community nutrition centres, old age homes, etc

The nutrition professional will be able to:

FOOD SERVICE (MANAGEMENT)
• Plan, execute and control food procurement, storage, production, distribution, and consumption of the final product • Develop and standardise normal and therapeutic recipes for specific needs of patients/clients and/or groups in communities • Apply food quality standards as well as procedures to monitor food standards with reference to nutritional, sensory and microbiological aspects • Interpret and apply specifications for food preparation areas, space and equipment needed for optimal work flow and production based on the menu and purchasing and production policies • Compile food and nutritional product specifications • Integrate the food service system in nutrition service delivery in the private and public sectors, as well as community settings • Adapt the food service based on feedback from continuous monitoring of the quality of nutrition service delivery • Plan and implement drop-in centres/soup kitchens (select food items and plan the menu, purchasing of products and overseeing the programme • Plan and implement poverty relief programmes such as food parcel distributions to poor households • Plan and implement programmes for emergency situations in communities

The nutrition professional will be able to:

FOOD AND NUTRITION SECURITY
• Understand the concepts of food and nutrition security • Identify food and nutrition problems and factors influencing food and nutrition security • Identify and understand the causes of food and nutrition insecurity at household, community and national level • Understand the consequences of food and nutrition insecurity • Understand the concepts of multisectoral approaches (i.e. agriculture, water, sanitation, social development, etc) in addressing food and nutrition insecurity

The nutrition professional will be able to:

COMMUNICATION AND ADVOCACY
Communication • Understand the concepts of behaviour change communication (BCC) • Understand how to implement behaviour change communication • Communicate effectively with individuals and groups in different contexts • Communicate effectively using the oral, written and electronic media • Use effective communication techniques in persuading, informing and educating the public on nutrition (communication for behaviour change) • Develop information, education and communication material and disseminate • Apply basic marketing skills and principles • Harness innovation and technology in nutrition advocacy and communication • Translate nutritional knowledge and guidelines into food-based advice within socio-economic-cultural contexts • Understand and apply the principles of health promotion **Advocacy (could also be with Leadership)** • Advocate for nutrition-related issues • Advocate for and incorporate nutrition objectives into development projects • Plan and implement nutrition-related campaigns • Mediate in nutrition matters between authorities at various levels of health, education, social service systems, and others systems such as finance • Act as a catalyst by facilitating the prioritization of nutrition considerations at the community level • Advocate for child and women health rights (advocacy for reduction of child and maternal mortality; focusing on prevention of diarrhoea, malaria, pneumonia and malnutrition in communities) • Liaise with other role players in relevant settings such as education or social services, regarding for example food quality, safety, socio-economic circumstances, etc • Collaborate with members of food industry to ensure their compliance with dietary guidelines, food regulations and other legislative frameworks, and objectives of local food and nutrition policy • Network with other relevant role players through the provision of knowledge and information on food, nutrition and health • Develop a variety of nutrition and health promotion activities and materials using different media such as newsletters, pamphlets, publications, public relations and audio-visual material, to support various activities in health care relevant to nutrition • Stimulate and contribute to mass-media initiatives on matters of nutrition and health

COMMUNICATION AND ADVOCACY
• Determine needs for nutrition services, including nutrition health promotion • Assist with the planning and implementation of a vegetable garden (planting, fertilization and watering)

The nutrition professional will be able to:

MANAGEMENT AND LEADERSHIP

Management
• Understand and apply all the processes needed for management using an appropriate system including
  ○ Development of a business plan
  ○ Human resource management
  ○ Financial management
  ○ Time management
  ○ Procurement (supply chain) management
  ○ Operational management
  ○ Programme management
  ○ Project management
  ○ Legislation
Leadership
• Understand leadership skills
• Communicate the importance of nutrition on the national development agenda
• Provide leadership at all levels of the health care system, coupled with a strong sense of responsibility and accountability for the development and improvement of nutrition services as an integral component of the health system
• Establish effective networks and strong alliances
• Build relationships with internal teams including systems and marketing in developing and implementing new wellness products
• Provide strategic and policy direction
• Ensure timely and decisive action on pertinent nutrition issues in the country
• Understand the process of mentoring and coaching
• Liaise with relevant stakeholders at various levels and sectors in the implementation of nutrition programmes
• Make a case for resources and prioritization of nutrition actions
• Mentor junior nutrition staff members

The nutrition professional will be able to:

EDUCATION, TRAINING, PROMOTION AND CAPACITY BUILDING
• Assess the training needs of individuals and/or groups in communities/ institutions involved in nutrition service delivery to build capacity in this regard • Plan and provide nutrition education/training to individuals and groups as identified • Use effective communication techniques in persuading, informing and educating individuals and groups on nutrition • Provide (plan, organise, implement and evaluate) nutrition information to relevant groups (professionals, organisations, public) and in different settings • Communicate to the nutrition community and higher learning institutes on practical experience, lessons learned and competence needed in community nutrition • Develop educational materials and use them as an aid in nutrition counselling and education • Co-ordinate and provide training to other health professionals & stakeholders • Develop and disseminate nutrition information, education and communication material • Train community members to administer growth monitoring • Facilitate and co-ordinate individual, organizational and systemic capacity • Participate in national and provincial conferences and workshops to improve the knowledge base and competency of health professionals and planners • Provide, use and maintain appropriate tools, equipment, job aids **Health hygiene education programmes and promotion** • Plan low cost behavioural changes that can improve health and nutrition • Health and hygiene education and promotion • Educate mothers on complimentary feeding • Facilitate programs that will improve breastfeeding practices • Development of community support groups for example for EBF, CBF, OVC programmes

The nutrition professional will be able to:

RESEARCH

Basic research
• Understand and apply the principals of nutrition-related research
• Understand and apply epidemiological sciences
• Assess, critically review and apply relevant scientific information, in order to identify research needs in the public health sector
• Initiate, undertake and participate in all aspects of the research process:
  o the identification of a research problem and formulation of a research question
  o the design of an appropriate research project
  o the presentation and dissemination of the results
  o the writing of a research report
  o the identification and formulation of practical applications of the research results
• Partake in research initiated by other health care professionals and provide expertise in the evaluation of nutritional status/nutrition interventions
• Partake in operational research of delivery, implementation and scale up of nutrition actions
Applied research skills (statistics; epidemiology: survey and field study design; data handling, analysis, and interpretation; application to community needs assessment, programme monitoring, and evaluation; qualitative and quantitative methods)
• Understand and apply the principles of human nutrition and epidemiology sciences – including factors influencing food patterns and nutritional status
• Understand how scientific information is used to develop policies and programmes, public health strategies, dietary recommendations and guidelines, and government and international reports
• Identify research areas based on scientific literature and public health needs, develop hypotheses, design protocols to test hypotheses, execute research with appropriate methods, analyse and interpret results, and communicate results to fellow scientists, practitioners, and beneficiaries through appropriate channels
• Critically evaluate, interpret and summarise key findings of original research papers
• Use scientific information to develop policies and programmes, public health strategies, dietary guidelines, protocols, and government and international reports

The nutrition professional will be able to:

STRATEGIES, POLICIES AND GUIDELINES
Policies • Understand policies and legislation relevant to nutrition (local, national and international) • Contribute to formulation of nutrition policy at various levels (local, regional, national), by communicating nutritional needs and scientific methods to address these needs • Contribute to development of policies pertaining to politics and economy of nutrition • Develop implementation guides for nutrition policies • Conduct evidence based policy reviews and updates • Advise relevant authorities on inclusion and integration of nutritional considerations in general health development • Contribute to development of policies pertaining to politics and economy of nutrition • Evaluate the effects of nutrition policies in other sectors • Evaluate the impact of policies in other sectors on nutrition • Evaluate other sectors' policies effectiveness and sensitivity in addressing nutrition • Lead interdisciplinary groups in planning food and nutrition policy • Advocate for the streamlining nutrition policies into other governmental policies • Communicate and disseminate policies to the stakeholders • Translate food and nutrition legislation, policies and guidelines to other stakeholders o within health o other government departments o developmental partners o private sector o NGO's/CBO's etc **Strategies** • Understand strategies relevant to nutrition (local, national and international) • Develop nutrition strategies at various levels (local, regional, national) • Develop implementation guides for nutrition strategies

STRATEGIES, POLICIES AND GUIDELINES
Norms and standards • Develop norms and standards for nutrition on different levels • Implementation of nutrition norms and standards **Protocols, guidelines and standard operating procedures (SOPs)** • Develop nutrition protocols and SOPs • Provinces will adapt and formulate provincial polices in line with national • Develop guidelines for school tuck-shops/lunchboxes **Tenders specifications and labelling** • Develop tender specifications and evaluate alignment thereof with latest literature • Facilitate and conduct compliance monitoring • Be an expert in food labelling and understand the regulations that relate to the labelling and advertising of foods • Understand the marketing of food-stuffs and the laws and legislation thereof and nutrition-related claim and the restrictions around these areas

The nutrition professional will be able to:

CRITICAL CROSS-FIELD OUTCOMES / STUDENT ATTRIBUTES
Personal qualities (of leadership, dedication, motivation for working in community nutrition in cross-cultural settings, and an entrepreneurial spirit) • Identify and solve problems using responsible decision making processes, based on critical and creative thinking • Work effectively with others as a member of a team (composed of the social, behavioural and health sciences/professions), group, organisation and community • Organise and manage oneself and one's activities demonstrating accountability and responsibility • Collect, analyse, organise and critically evaluate information • Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion • Use science and technology effectively and critically, showing responsibility towards the environment and health of others • Understand the world as a set of related systems by recognising that problem-solving contexts do not exists in isolation • Contribute to the full personal development and the social and economic development of the society at large • Demonstrate ethical and professional behaviour and conduct • Perform self-evaluation and maintain and expand professional competence • Participate in workshops/seminars to gain knowledge and skills • Develop a value system for nutrition work (tolerance and sensitivity for different attitudes and values) • Operate within a human rights framework (embracing processes that lead to community capacity development) and ensure ethical and professional standards of conduct

7.8 PROFESSIONAL SPECIALIZATION AREAS

The concept of specialization should be further discussed with stakeholders, especially the Department of Health. Specialization in a specific area should be an option available to the nutrition professional but should not prevent the nutrition professional without specialization to work at any level within the public health services. A number of issues around specializations must be discussed, including the position of the current workforce. Appropriate professional names for specific specialists' categories should also be defined, for example, when obtaining a professional master's degree in therapeutic dietetics is the name/category then a Therapeutic dietitian or a Clinical dietitian?

Once the need for a specialization area has been established, the content and competencies of the professional specialization areas will be developed in collaboration with stakeholders once and if the suggested framework has been approved by the Professional Board for Dietetics and Nutrition.

The specialization areas will register with the current Board in a sub-category of specialization.

7.9 TIME FRAME

The Professional Board realises that this will be a long process. The competencies must be 'converted' to programmes by the training institutions, accredited by the Professional Board and then submitted to the Department of Higher Education and Training for accreditation. Accreditation by the DHET can take up to two years. This process will be driven by the Board and started immediately.

8 CURRENT REGISTER AND SCOPE

A number of issues must be addressed as part of this decision to train and register in future only one nutrition professional. This section will discuss some of these issues.

8.1 DEALING WITH THE CURRENT TRAINING AND REGISTRATION PROCESS

The current training and registration will proceed as usual until such time that the new process has been finalised.

No new programmes, based on the current competencies of dietitians and/or nutritionists will be approved for training of dietitians and/or nutritionists at any training institution.

8.2 PRACTITIONERS CURRENTLY REGISTERED AS A DIETITIAN OR NUTRITIONIST

Those persons registered as a dietitian will continue to work within the scope of a dietitian. Those persons registered as a nutritionist will continue to work within the scope of a nutritionist.

However, if a dietitian would like to register or work within the scope of the new nutrition professional, the dietitian will have to prove that she/he has the competencies required to work within the scope of a nutrition professional.

If a nutritionist would like to register or work within the scope of the new nutrition professional, the nutritionist will have to prove that she/he has the competencies required to work within the scope of a nutrition professional.

The Professional Board will develop guidance for both the dietitian and nutritionist regarding the additional competencies needed. The Professional Board could also consider a Grandfather clause system or a Professional Board Examination system to make it possible for dietitians and/or nutritionists with appropriate training and/or experience to register in the new category as a nutrition professional.

A number of reskilling courses should then be developed by any of the Higher Education Institutions to address these ‘gaps’ in competencies of either a dietitian or nutritionist. A dietitian or nutritionist who would like to have the new interchangeable qualification may

apply to the HPCSA for registration on providing evidence of successful completion of the accredited courses / qualifications towards the needed competencies.

8.3 SCOPE OF THE DIETITIAN AND NUTRITIONIST

The purpose and scope of the dietitian will be updated based on the work of the First Task Team. The Legal Department of the HPCSA confirmed that it is needed to also publish the purpose and scope of the nutritionist. This will enable the Professional Board to take action against persons who are not registered as either a dietitian or nutritionist with the HPCSA and that work within the scope of a dietitian or nutritionist. The Legal Department of the HPCSA advised that the scopes of the professions are broadened.

8.3.1 Purpose, scope and competencies of the Dietitian

The **purpose** of the Dietitian:
The dietitian will use dietary measures to prevent, treat, and manage nutrition related diseases.

The **scope** of the Dietitian:
Contributing to optimizing the nutritional well-being of individuals and groups by:

- Utilizing a comprehensive body of knowledge of principles of nutritional sciences to supply safe food in an ethical, responsible manner to communities/population groups during the different stages of the life cycle of healthy individuals
- Assessing the nutritional status and concomitant health risks of clients/patients and groups using relevant methodologies
- Conceptualizing, planning, implementing, managing, evaluating and documenting an appropriate nutritional prescriptions for individual patients and clients with specific dietary needs in different settings
- Conceptualising, planning, implementing, monitoring and evaluating and documenting appropriate intervention strategies to address nutrition and related health issues and diseases

- Planning and executing an effective food service system based on specific needs of the healthy and ill
- Effectively communicating to inform and change behaviour using appropriate methodologies and techniques
- Managing human, financial, operational procedures, policies, and other resources
- Identifying, implementing and communicating nutrition related research
- Applying evidence based theory and practice
- Applying critical and creative thinking in working effectively within a multidisciplinary environment contributing to the personal, social and economic development of society in an ethical and professional manner within a human rights perspective.

8.3.2 Purpose, scope and competencies of the nutritionist

The **purpose** of the Nutritionist:
The nutritionist will address population based nutrition related problems and its causes through appropriate programmes and policies.

The **scope** of the Nutritionist:
Contributing to optimizing the well-being of the population by:

- Utilizing a comprehensive body of knowledge of principles of nutritional sciences to supply safe food in an ethical, responsible manner to communities/population groups during the different stages of the life cycle of healthy individuals
- Assessing the nutritional situation of groups, communities and populations using relevant methodologies
- Appropriately applying communication skills to mobilize communities/populations to change their behaviour to foods/nutrition in order to prevent diseases and to improve quality of life
- Using evidence based theory and practice to plan, implement and evaluate appropriate programmes to address nutrition related problems and associated causes as well as maintain nutritional well-being
- Applying appropriate nutrition policies, strategies and guidelines

- Planning and executing an effective food service system based on specified needs in the healthy
- Conceptualising, planning, implementing, monitoring and evaluating and documenting appropriate nutrition policies, strategies and guidelines
- Managing human, financial and other resources to ensure optimal and equitable delivery, of nutrition services at PHC and population level
- Identifying, implementing and communicating relevant nutrition-related research
- Applying critical and creative thinking in working effectively with the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.

8.4 LEGAL IMPLICATIONS

All the processes will be done in collaboration with the Legal Department of the HPCSA. The Legal Department will also be requested to prepare the documents to update the scope of the dietitian and the nutritionist.

8.5 TIME FRAME

The Legal Department will be requested to prepare the documentation for the Regulation of the scope of practice of the Dietitian and Nutritionist as soon as possible.

9 CONCLUSION

The First Task Team of the Professional Board for Dietetics and Nutrition was mandated to address the scope of practice of the dietetic and nutritionist professions. After the Report of the First Task Team a Second Task Team was appointed to expand on the work of the First Task Team. Changes in the macro and micro environment of the two professions necessitate it to re-look at the environment in which the nutrition professional must function.

National data on the nutritional status of the population shows that it is not optimal and that it should be addressed as a matter of urgency. Changes in the training of nutrition professionals will contribute to this. Although training of dietitians and nutritionists are not for public health services only, the Department of Health is a very important and the largest employer of nutrition professionals. At present the nutritionists are more vulnerable than the dietitians regarding employment due to the lack of positions for nutritionists in the public sector.

The Professional Board for Dietetics and Nutrition decided, based on a collective decision making process of the First and Second Task Teams as well as the input and comments received from stakeholders, on 25 September 2014 that in future only one nutrition professional will be trained. The details of the competencies of this nutrition professional, as well as the areas of specialization, will be developed in collaboration with the training institutions as well as other relevant stakeholders. From the competencies it is clear that both the training of the dietitian and nutritionist will have to change to reach the competencies of the new nutrition professional. These changes in the training of the nutrition profession will contribute to address the current unfavourable nutrition situation by using appropriate policies, programmes and dietary measures to treat and manage nutrition related diseases and promote the nutritional well-being of the individual, community and population.

In addition, the need and training of a mid-level nutrition/dietetic assistant (NQF exit level 6) will be thoroughly investigated in collaboration with all stakeholders, including the Department of Health.

The Professional Board acknowledge the valuable work of both the Task Teams and the other stakeholders. Without the dedication and insight of these Teams it would not have been possible to produce this document. We thank you sincerely.

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