

## TOP OCCUPATIONS IN DEMAND



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# LIST OF TOP OCCUPATIONS IN DEMAND

## 1. INTRODUCTION

- 1.1. Human Resource Development Council (HRDC) was established by an Act of Parliament in 2013. The main objectives of the council are to:
  - 1.1.1 Provide for policy advice on all matters of national human resource development
  - 1.1.2 Co-ordinate and promote the implementation of the national human resource development strategy
  - 1.1.3 Prepare the national human resource development plan
  - 1.1.4 Plan and advice on tertiary education financing and work-place learning
- 1.2 In order to achieve this objective HRDC has adopted sectoral planning approach in which the employers define current and future skills needed in the labour market. This approach will address the issue of mismatch of supply of graduates and demand from the labour market. However, the long-term goal of human resource development is to produce a globally competitive human resource.
- 1.3 Twelve sector committees have been established and are at different stages with respect to sector human resource development plans. Development of skills across the sectors will contribute significantly to economic growth and diversification.
- 1.4 Dissemination of information on skills needed by the labour market is vital to inform human resource development planning, curriculum and programme development, funding strategies and immigration strategies.

## 2. PURPOSE

- 2.1. This document provides a list of occupations that have been identified by the employers as being in high demand at a national level. Priority skills in each occupation have been identified and these includes both the core skills and soft skills.
- 2.2. Prioritization of occupations in demand is informed by national priorities as outlined in the VISION 2036, National Development Plan (NDP 11) and long term strategies of the different sectors of the economy. Development of the human capital is essential in achieving the VISION 2036 pillars mainly Pillar1: Sustainable Economic Development and Pillar 2: Human and Social Development. The two pillars emphasise transformation of our economy to a knowledge based economy and producing a globally competitive human resource as key strategies for driving economic growth and diversification.
- 2.3. A list of occupations in high demand will inform decision making and planning in wide a range of issues which includes but not limited to:
  - 2.3.1 Human resource development planning at both sector and national level.
  - 2.3.2 Skills development at both pre-service and in-service level (work-place learning)
  - 2.3.3 Institutional planning at Tertiary level and Technical and Vocational Education
  - 2.3.4 Curriculum review and programme development
  - 2.3.5 Funding strategies and allocations of students' sponsorship
  - 2.3.6 Promotion of linkages between job seekers and employers

- 2.3.7 Immigration strategies that includes issuing of work permits and visas
- 2.3.8 Inform tertiary education investors on priority skills needed by employers

### 3. LIFESPAN OF THE LIST OF OCCUPATIONS IN DEMAND

- 3.1. The list of occupations in demand will be reviewed and published annually to align it with labour market trends. It is expected that most of the top occupations will remain in the list as the list includes both current and future skills. However, as the economy grows, there will be emerging skills needed especially in a knowledge based economy which is driven by science, technology, innovation, research and development.
- 3.2. The Labour Market Observatory (LMO) will play a critical role in monitoring labour market trends and will produce information that will continually update the top occupations in demand. The LMO will also monitor the high impact indicators of graduate employability and level of skills development. Furthermore, the LMO will provide a platform to link job seekers and employers.

### 4. LIST OF OCCUPATIONS IN DEMAND

#### 4.1 Definition of Concepts

- 4.1.1. **Occupations in high demand:** These are occupations that are currently experiencing shortages in the labour market (short term) and occupations that show relatively strong employment growth (long term).
- 4.1.2. **Skill:** it refers to competencies required to carry out tasks or activities of an occupation.

#### 4.2 Occupations in High Demand

- 4.2.1. The list of occupations in demand will comprise of Top Occupations in each sector as depicted in Table 1 below.

**Table 1: Executive Summary of Top Occupations in Demand**

Occup Code	Occupation	Occup Code	Occupation
<b>Health</b>			
2211	Generalist Medical Practitioners	xxxx	Specialist Radiographers
2212	Specialist Medical Practitioners	xxxx	Radiotherapists
2262	Pharmacists	xxxx	Specialist Pharmacists
2221	General Nursing Professionals	xxxx	Nursing Specialists
3213	Pharmaceutical Technicians and Assistants	xxxx	Health Education Professionals
3212	Medical and Pathology Laboratory Technicians	xxxx	Health Education Assistants
5321	Health Care Assistants	xxxx	Perfusionists
2634	Psychologists	xxxx	Medical Physicists
2261	Dentists	xxxx	Orthotics
3251	Dental Assistants and Therapists	xxxx	Biomedical Engineers
2264	Physiotherapists	xxxx	Biomedical Technicians
2266	Audiologists and Speech Therapists	xxxx	Medical Laboratory Scientists
2240	Paramedical Practitioners	xxxx	Occupational therapists
xxxx	General Radiographers		
<b>Public Sector</b>			
2611	Lawyers	xxxx	Specialist Lawyers
5411	Fire Fighters	xxxx	Procurement (Supply Chain) Professionals
2164	Town and Traffic Planners		
<b>Agriculture</b>			
2631	Agriculture Economists	xxxx	Soil scientists
2250	Veterinarians/Pathologists	xxxx	Beekeepers
8341	Farm machinery operators	xxxx	Beekeeping processors
9213	Farm managers and workers	xxxx	Dairy scientists/technologists
2149	Agriculture engineers	xxxx	Agriculture Climatologists
xxxx	Horticulture production specialists	xxxx	Feed specialists
xxxx	Entomologists	xxxx	Artificial Insemination
xxxx	Agronomists and Breeders	xxxx	Plant pathologists
xxxx	Animal scientists and Breeders	xxxx	Irrigation specialists
xxxx	Range ecologists		
<b>Information and Communication Technology</b>			
2521	Database Designers and Administrators	2511	Systems Analysts
2434	ICT Sales Professionals	2512	Software Developers
2153	Telecommunications Engineers	2513	Web and Multimedia Developers
2656	Announcers on Radio, Television and Other Media	xxxx	Data Centre Managers
2522	Systems Administrators	xxxx	ICT Security Managers
2523	Computer Network Professionals	xxxx	IT Service Managers
2514	Applications Programmers		
<b>Creative Industries</b>			
1349	Arts Managers	2655	Actors
2163	Product and Garment Designers	2659	Creative Directors
2166	Graphic and Multi Media Designers	2654	Film, Stage and Related Directors and Producers
2651	Visual Artists	2161	Building Architects
2431	Advertising and Marketing Professionals	2642	Journalists
2432	Public Relations Professionals	3432	Interior Designers and Decorators
2149	Light Engineers	7531	Tailors, Dressmakers, Furriers and Hatters
7532	Garment and Related Patternmakers and Cutters	2149	Sound Engineers
2633	Philosophers, Historians and Political Scientists	2653	Dancers and Choreographers

Occup Code	Occupation	Occup Code	Occupation
<b>Tourism</b>			
3434	Chefs	2424	Training and Staff Development Professionals
1412	Restaurant Managers	2162	Landscape Architects
1411	Hotel Managers	2133	Environmental Protection Professionals
5131	Waiters	5419	Security and surveillance officers
5132	Bartenders	9112	Housekeepers
4224	Hotel Receptionists	5142	Beauticians and Related Workers
5113	Travel Guides	4221	Travel Consultants and Clerks
<b>Education and Training</b>			
2342	Early Childhood Educators	2320	Vocational and Technical Education Teachers
2352	Special Needs Teachers	xxxx	Special Needs Lecturers
<b>Research, Innovation, Science and Technology</b>			
1223	Research & Development Managers	xxxx	Intellectual Property Rights Specialists
3314	Statistical, Mathematical and related associate professionals	xxxx	Commercialisation Specialists
xxxx	Science and Technology Researchers	xxxx	Research and Innovation Fund Managers
xxxx	Grant & Contract Specialists	xxxx	Researchers
xxxx	Incubation Specialists	xxxx	Research Technicians
<b>Finance and Business Services</b>			
1211	Finance Managers	3315	Valuers and Loss Assessors
1219	Business Services and Administration Managers	3334	Real Estate Agents and Property Managers
1223	Research and Development Managers	2412	Financial and Investment Advisors
1224	Small Business Managers	2413	Financial Analysts
1346	Financial and Insurance Services Branch Managers	xxxx	Project Managers
2411	Chartered Accountants	xxxx	Procurement & Supply Technicians
3312	Credit and Loans Officers		
<b>Transport and Logistics</b>			
3115	Mechanical Engineering Technicians	8211	Mechanical Machinery Assemblers
3153	Aircraft Pilots and Related Associate Professionals	8212	Electrical and Electronic Equipment Assemblers
3154	Air Traffic Controllers	8342	Earthmoving and Related Plant Operators
3155	Air Traffic Safety Electronics Technicians	8343	Crane, Hoist and Related Plant Operators
8332	Heavy Truck and Lorry Drivers	8344	Lifting-Truck Operators
8311	Locomotive Engine Drivers	9333	Freight Handlers
8312	Railway Brakes, Signal, Shatter and Switch Operators	1324	Supply, Distribution and Related Managers
<b>Mining, Minerals, Energy and Water Resources</b>			
2142	Civil Engineers	2263	Occupational Health & Safety Specialists
2149	Water Engineers	2263	Occupational Hygienists
2149	Mechatronics Engineers	3115	Heavy Plant Mechanics
2149	Control and Instrumentation Engineers	3119	Instrumentation Technicians
2114	Geologists and Geophysicists	3119	Solar System Technician
2114	Geotechnicians	7212	Tuners
2114	Geochemistry Specialists	8342	Heavy Machine/Plant Operators

Occup Code	Occupation	Occup Code	Occupation
2631	Mineral Economists	7412	Fitters
2631	Energy Economists		Gauging Assistants
7127	Refrigeration & Air Conditioning Technicians	721/722	Millwright Technicians
2152	Industrial Electronics Technicians	3117	Process Operators/Metallurgical Operators
2113	Water Chemists	8111	Mining Operators
2152	Electronics Engineers	3139	Process Controller Technicians
2529	System Application Programme (SAP) Specialist	3139	Operations Controllers/Foremen
xxxx	Borehole Mechanics	xxxx	Energy Managers
xxxx	National Energy Accounts Specialists	xxxx	Energy Modelling Specialists
xxxx	Pricing and Tariff Setting Specialists		
<b>Manufacturing</b>			
2141	Industrial Engineers	7322	3-D Printers
2145	Chemical Engineers	8153	Sewing machine Operators
2149	Manufacturing Engineers	7532	Fabric Layers/Cutters
7318	Leather Works Specialist	7534	Upholsters
3116	Chemical Technicians	7532	Pattern makers
3115	Mechanical Technicians	7211	Mould makers
3113	Electrical Technicians	7212	Welding/Fabrication Technicians
7313	Jewellery designers & manufacturing	7522	Furniture designers & manufacturers
8153	Sewing machine mechanics	8189	Computer Numerical Control Operators
8342	Machine/Plant/Engine Operators	xxxx	Tool and Die Technicians
8182	Furnace maker/Operators	xxxx	Powder coating Technicians
2163	Production Designers	xxxx	Embroiders
xxxx	Nano Technologists	xxxx	Product Appraiser and Quality Assurance Specialist
xxxx	Textile Technologists	xxxx	Food Science & Technologists
xxxx	Industrial Technologists		
<b>Construction</b>			
7112	Bricklayers	7126	Plumbers
7123	Plasterers	7113	Stonemasons
7114	Shutter/form workers	7212	Coded welders
7214	Steel fixers	7215	Riggers
7115	Carpenters	xxxx	Special coaters
7121	Grass roof thatchers		

Source: Occupation codes are derived from- Statistics Botswana (2015) Botswana Standard Classification of Occupations. Note xxxx refers to occupations with no codes *that will be discussed* with Statistics Botswana