

Have we forgotten about gender transformation?

A case study of gender profiles for postgraduate students from environment learning pathways as an enabler to transformation

Ms Lameez Eksteen

Environmental Leaders Programme, World Wide Fund for Nature, South Africa

Introduction

A report by the Council for Higher Education (CHE) in 2009 showed that enrolment numbers for females are higher than their male counterparts at undergraduate and honours level studies at universities across the country. However, in further postgraduate level studies the number of females drops significantly in all learning areas *except* the Natural Sciences (CHE, 2009).

Two further studies by the Human Science Research Council (HSRC) in 2009 and the Department of Environmental Affairs (DEA, 2010) confirms this trend of a higher ratio of female graduates to males qualifying from learning pathways that lead to careers in biodiversity and the broader environmental sector. In both studies female numbers are twice as many as male post graduates who are seeking employment in the sector.

These greater female to male ratios should serve as a key enabler for gender transformation in the sector. However a recent study of conservation skills generally shows two males to every female employed in the sector, the exact opposite of the numbers coming through from our learning institutions. This is with the exception of the *professionals* skills group into which post graduates are likely to be absorbed. In this skills group there appears to be a shift away from the general trend of 2 males to 1 female in the conservation sector to an increased balance between males and females. This is perhaps indicative of efforts to target more women into science.

Problem statement

Despite the gender trends reflected in graduate studies from across universities in South Africa, female representivity remains lower in certain skills groups, particularly in leadership positions where there is still a dominance of males employed in in conservation organisations.

Objectives

Sustainable Development Goal 5 seeks to *ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life*. In addition, the National Biodiversity Strategy and Action Plan of 2015, seeks to ensure a transformed biodiversity sector representative of South African society, which according to Statistics South Africa (StatsSA) (2017), reflects a 51.3% female demography to 49.7% male.

Against this background we undertook a study to explore the current gender trends of postgraduate students graduating from environmental learning pathways and whether these trends reflect changes in the employee profile of organisations in the sector. This analysis was to assess how far we have come since 2010 and the launch of the Biodiversity Human Capital Development (BHCD) Strategy: 2010 to 2030¹ and the Environmental Human Capital Development Strategy for the same period,² both with a key objective of supporting transformation in the sector.

Methods

A conservation skills audit was undertaken in 2015/2016 to assess employee profiles in conservation organisations, as a subsector of the environment sector. Data was collected from 144 organisations in relation to the national skills planning system and guided by the structure of the Organising Framework for Occupations (OFO)³.

This study showed that, generally the sector remains male dominant by a ratio of approximately 2 males for every female across occupations and employment levels. This trend is similarly evident across diverse kinds of organisations from national, provincial and local government organisations to private reserves and NGOs, except for Research Institutions, that reflects a female dominance across organisations. However, gender profiles analysed within major skills groups (see below), reflects a change in this ratio in the professionals major groups to a more equal representation of males to females. This is discussed in more detail below.

In this study, a sample of 1345 graduates from across universities in South Africa was also analysed to assess the gender profiles of new graduates seeking employment in the environment sector. This data sample was drawn from across the WWF-SA internship

¹ Human Sciences Research Council (2009) Guidelines for a Human Capital Development Strategy in the Biodiversity Conservation Sector. Pretoria.

² Department of Environmental Affairs (2010) Environmental Sector Skills Plan for South Africa. DEA, Pretoria.

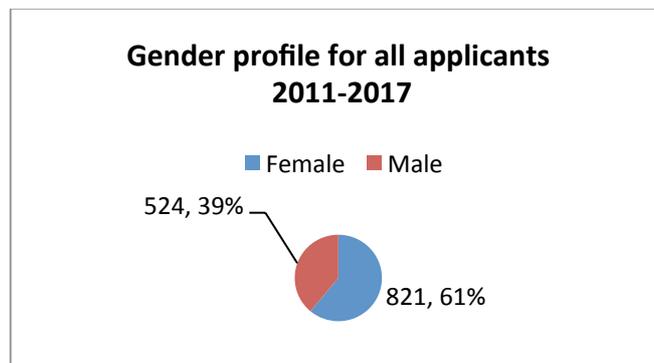
³ OFO is a coded occupational classification system, which encompasses all occupations in South African.

application database, collected between 2011 and 2017. The sample includes predominantly Master's and Honours graduates for 2011 to 2015 and across all academic levels including undergraduate profiles in 2017. This analysis shows the same gender profile as reflected in earlier studies (as above), in a ratio of 2 females to each male.

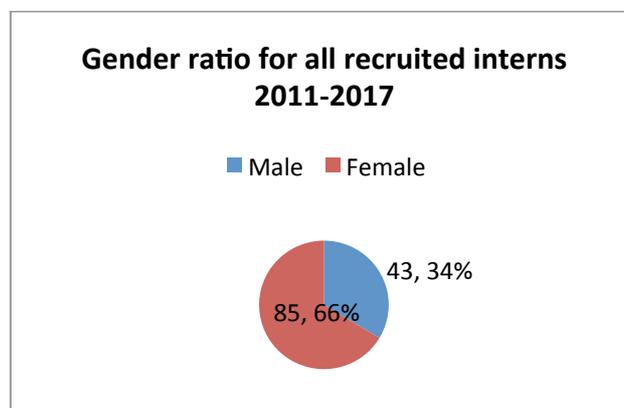
The study combined these two areas of analysis to assess the extent to which the gender profiles of graduates from universities seeking employment in the environment sector is reflected in employee profiles of organisations in the sector.

Gender trends reflected in postgraduate intern sample

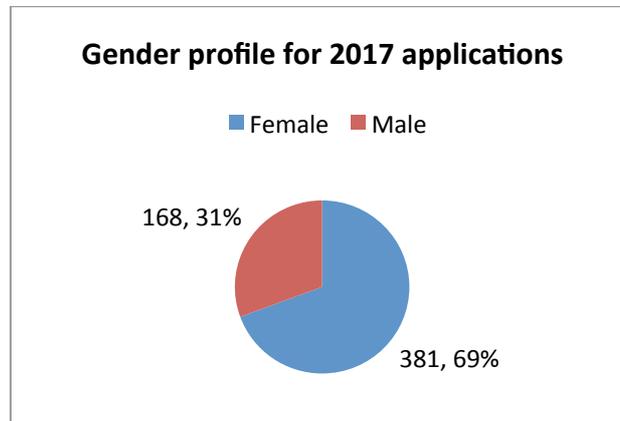
The data sample includes 524 (39%) males and 821 (61%) females, indicating roughly a two to one ratio of females to males graduating from environmental learning pathways and seeking employment in the environment sector. These ratios remain in line with the findings of the HSRC study informing the BHCD Strategy as above.



This ratio was verified by a further analysis of a related sample of interns placed through the programme. A total of 128 interns were placed through the WWF-SA Internship Programme between 2011 and 2017. The gender split in this sample is 43 (34%) males to 85 (66%) females, similarly reflecting a two to one ratio of females to males, being absorbed into the sector.



A third related sample, consisting of the most recent data of graduates qualifying in 2016, was analysed, and starts to indicate a move towards a three females to one male ratio. This sample had 381 (69%) females and 168 (31%) males.



Gender trends in the sector

Results from the conservation skills audit reveal a dominance of males in the sector in all major groups⁴ except Professionals and Technicians and Associated Professionals.

The Professionals and Technicians and Associate Professionals major groups are likely the groups where postgraduates from environmental learning pathways are employed. Some occupations in the Professionals major group include, for example Botanists, Conservation Scientists, Ecologists and Environmental Economist. The Life Sciences Technician and Environmental Practices Inspector are examples of occupations in the Technician and Associated Professionals major group.

These two major groups start showing evidence that the gender gap is closing, as Professionals have 2477 (57%) males and 1872 (43%) females. Further, in the Technicians and Associate Professionals major group the males are 1333 (52%) and females are 1227 (48%) showing a more balanced gender profile.

This gender balance is however not the trend in the Managers, Skilled⁵ Workers and Elementary Workers major groups. In the Managers major group, with occupations such as Chief Executive Officer, Policy and Planning Manager and Research Manager, there are 387 (41%) females and 553 (59%) males. The HSRC (2009) report suggests that the biodiversity sub-sector had 40.9% females in Management positions in 2007. A decade later, this percentage slowly progressed by 0.1% showing a leadership profile in conservation

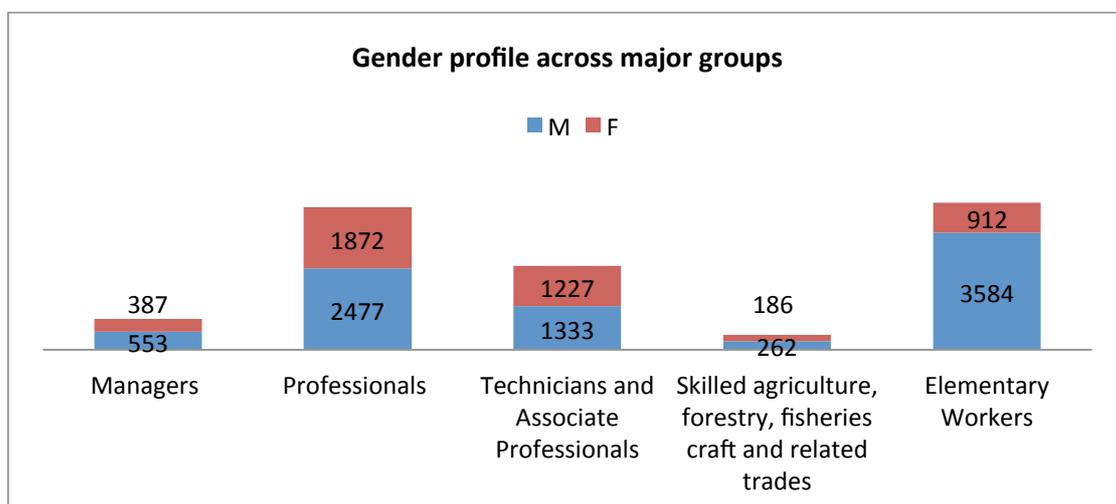
⁴ Occupations are organised into eight major groups or skills categories, ranging from Managers to Elementary workers. Conservation occupations occur within five major groups only

⁵ Skilled agriculture, forestry and fisheries craft related trades

organisations that is less representative of the SA gender demographic. This slow growth of females into leadership is not evident in Research Institutions where females outnumber males in leadership by 68.6% in the 2009 HSRC study. Similar gender trends were found by the recent conservation skills audit, which indicated 811 (55%) females and 668 (45%) males in leadership positions in Research Institutions, showing a continued female dominance. This could be attributed to interventions by Department of Science and Technology (DST) to grow women in science, particularly in leadership positions.

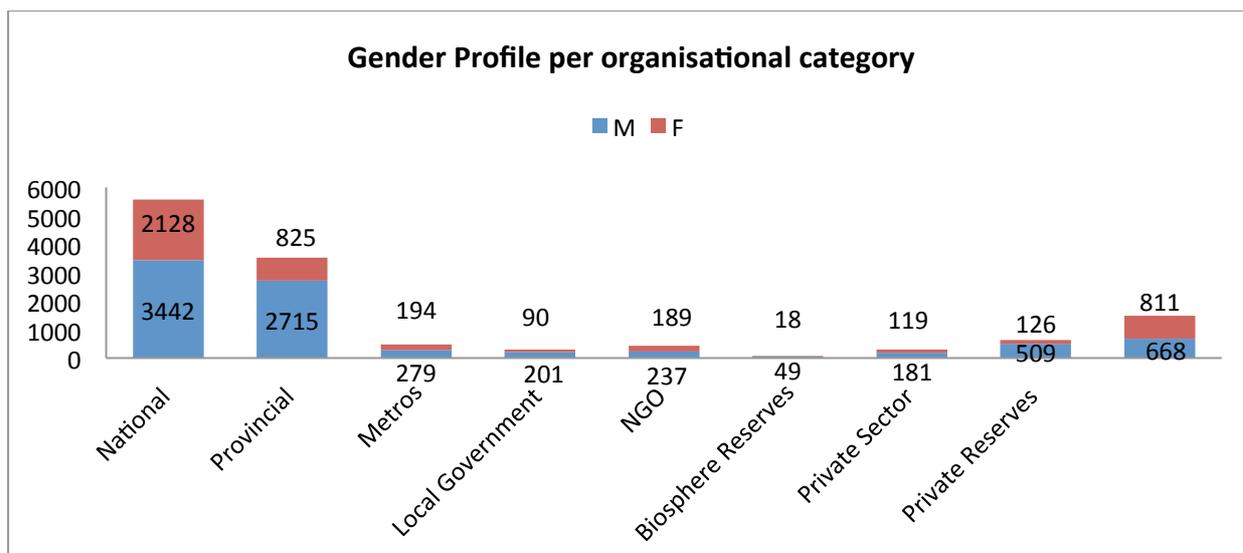
The Skilled Workers major group consists of only one occupation in conservation, that is the Horticulturalist. Females accounted for 186 (42%) and males 262 (58%) in this skills group. The male dominance could be attributed to the often physical nature of the occupation. A similar gender trend was found by HSRC in 2009, which reported a 66.6% male dominance. This suggests progress towards a balanced gender profile in the Skilled Workers major group over the 10 year period, by 8.6%.

Gender transformation continues to be slow in the other major groups. The gap between males and females is especially high in the Elementary Workers major group which has a gender difference of 3584 (80%) males and 912 (20%) females. This is a result of historical gender roles, as occupations in this major group may require the use of hand-held tools and physical effort, for example, deemed to be occupations for males such as Field Rangers and Garden Workers.



Gender profiles within different organisational categories

Males are dominant in all organisational categories except in Research Institutions where there are 811 (55%) females and 668 (45%) males. As above, this could relate to the DST interventions to build female capacity in the science field.



In all remaining organisational categories the ratios are two males to every female with the gap broadening in Biosphere Reserves with 73% males and 27% females; Provincial Agencies 77% males and 23% females; and Private Reserves 80% males and 20% females. This could be attributed to the Field Ranger occupation which is predominantly employed in these three organisational categories and historically favours the employment of males due to the physical nature of the occupation.

Conclusion

The study provides a basic quantitative overview of the gender profile of postgraduates qualifying from environmental learning pathways and seeking access to careers for the environment. This data was compared to employment data from a recent conservation skills audit. Results showed that female graduates are twice as many as their male counterparts and trend enabling transformation is starting to reflect in two of the skills groups, namely Professionals and Technicians where postgraduates are likely employed

Significant interventions are still required to bring about transformation in the Managers major group where the gender gap between male and females has grown very slowly in the 8 years since the 2009 HSRC study and where much change is required.

The biggest gender gap exists in the Elementary Workers major group. Significant interventions at this skills level similarly need to be accelerated, possibly through programmes like the EPWP⁶ in national, provincial and local government.

Ultimately, our collective efforts at transforming the environment sector are bearing fruit at the Professionals and Technicians skills levels. Much more is needed at other skills levels to

⁶ Expanded Public Works Programme

effect gender transformation that achieves the goals of female participation and representation as outlined in the SDGs and the NBSAP.

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