

The Untapped Resource

Gender and Diversity in the Water Workforce



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Executive summary

This report is part of a collaborative effort by United States Agency for International Development (USAID) and the International Water Association (IWA): the Project on Women Professionals in the Urban Water sector. The report aims to help water utilities identify and overcome institutional barriers to women's involvement at all levels in the sector. A more gender-diverse workforce is better for business, particularly one with a customer base as diverse and universal as that served by the water sector. Increased inclusion of women in the water sector presents an obvious opportunity to progress business goals alongside social and developmental goals. The report presents five key recommendations through which the needed change can be achieved.

Lesson one:

Combatting low literacy

A shared focus on improving education through policy, funding and industry interventions will help combat a fundamental block to more women entering the water sector as professionals. The Utilities sector is particularly well placed to combat poor literacy levels, and low percentages of girl children entering into secondary school, because they could provide bursaries for female students as well as incentives for them to take up maths and science.

Lesson two:

Creating gender-equal attitudes amongst young men and women

By creating opportunities for men and women to work together, access training in gender concerns and promote gender-equal attitudes within the workspaces, Utilities can help both genders achieve their full potential as change agents.

Lesson three:

Seeking out skilled facilitators

Along with a growing awareness of, and interest in the field of increasing gender-equality, comes a new, growing resource pool: experienced facilitators who practice participatory methods designed to level the playing field to ensure that the voices of some are not muted whilst others are amplified.

Lesson four:

Partnerships and intersectoral co-operation

No one sector can drive this change alone. Utilities need the support of Donor organisations and NGOs working with gender issues and development concerns. They are also in a position to facilitate increased co-operation, and forge partnerships.

Lesson five:

Champions, committees and commissions

Society at large would benefit from committees and commissions that work on specific focus areas under the overarching theme of increasing the participation of women in the water sector: be this community liaison, donor focus, internship programmes or/and open day or showcasing achievements in the workforce.

1. Introduction

This report is part of a collaborative effort by United States Agency for International Development (USAID) and the International Water Association (IWA): the Project on Women Professionals in the Urban Water sector. The report aims to help water utilities identify and overcome institutional barriers to women's involvement at all levels in the sector. A more gender-diverse workforce is better for business, particularly one with a customer base as diverse and universal as that served by the water sector. Increased inclusion of women in the water sector presents an obvious opportunity to progress business goals alongside social and developmental goals.

A 2014 report by the IWA, **An Avoidable Crisis: Human Resource Capacity Gaps in 15 Developing Economies**¹, drew global attention to some of the critical issues facing the water sector. Using data from 15 countries, the report showed that the immense shortage of skilled workers in the Water, Sanitation and Hygiene (WASH) sectors undermine progress towards meeting the water and sanitation targets of the Millennium Development Goals, and raised questions about how realistic WASH targets under the Sustainable Development Goals will be without greater investment in human resources.

Despite significant investments in infrastructure, technological innovation and institutional reform, the report found big gaps remained: investments had not been matched by the necessary focus on the size, competencies and enabling environment for the human resource base needed to design, construct, operate and maintain water and sanitation services to meet international targets, and go beyond towards universal coverage. Many developing and emerging economies lack significant numbers of water professionals with the necessary knowledge, experience and specialist skills to meet the rising demand for water and sanitation services.

- In 10 countries reviewed in the second pilot study under the *An Avoidable Crisis* study there was a cumulative shortfall of 787, 200 trained water and sanitation professionals in order to reach universal coverage;
- On average, only 16.7% of the workforce in all 15 countries studied was reported to be female professionals.

To ensure sustained efforts towards building adequate professional and technical capacity, *An Avoidable Crisis* provided an overarching recommendation for capacity development strategies at national level, with high-level political buy-in and involvement from multiple stakeholders. At the regional and global level, the report called for concerted action to collect relevant human resources data, and for further research to strengthen the evidence base on which action plans and strategies could be built.

In 2015, the **Global Risks** report² highlighted the most significant long-term risks worldwide. Drawing on the perspectives of experts and global decision-makers, the report plotted a range of global risks that measured the likelihood of the risk occurring, and the scale of impact each risk carried. It was a wake up call for the water sector worldwide. The risk of 'Water Crises' was identified as the top global risk, with an impact score higher than that of 'Weapons of Mass Destruction' and a likelihood score higher than 'Terrorist Attacks' and 'Fiscal Crises'.

Read this way, it is no exaggeration to state that **waters have been fought over lower-impact risks, and several inter-governmentally coordinated preventive measures are already in place to head off less likely risks.**

This puts the water sector in the global spotlight, and creates the opportunity to corral resources towards forestalling a crisis already acknowledged as 'highly likely to have devastating impacts' on communities around the world.

HOW BEST CAN THIS BE ACHIEVED?

An important part of the answer comes from research - literature review, survey, and semi-structured interviews - commissioned by USAID and IWA in 2015. It highlighted various aspects of gender diversity in the water sector workforce: What keeps women from considering careers in water utilities? What particular challenges do they face, that their male counterparts perhaps do not? What are the opportunities and what are the enabling factors that make it easier to recruit, train and retain skilled women in the sector?

This report tackles these questions and builds upon the previous research to present the many benefits of tapping into the water sector's greatest 'Untapped Resource'.

This report outlines the opportunity, the incentive and the imperative we have to identify ways of making policy and systemic changes towards the greater inclusion of women across the sector.

There is a strong case to focus attention on encouraging, recruiting, training and retaining more women water professionals. From early education all the way up to leadership positions at major water utilities, the inclusion of women in the workforce will improve the business, for investors, regulators and customers alike.

¹ <http://www.iwa-network.org/downloads/1422745887-an-avoidable-crisis-wash-gaps.pdf>

² <http://reports.weforum.org/global-risks-2015/#read>

There are so many amazing women in the water industry, but I think it is really interesting that we think it is unusual to have women leaders in the water sector. It's almost as if, as we get more technically competent, we feel it is unusual to have women in the sector. I think the challenges that we face as we go forward are not just technical – they're about integrating with our community, they are about listening to our community. I think it is really important that we do that. The only way to do that is to have our water utilities reflect the make up of their customers. *Sue Murphy*

Sue Murphy CEO of Water Corporation in Western Australia and winner of the IWA Women in Water Award, 2014. In each year from 2009 to 2014, Sue has been listed in the top 100 most influential engineers in Australia by Engineers Australia.

The need to proactively build greater gender diversity is common to both the Global North and the Global South. Although advances have been made in some countries, there continues to be a bias towards male participation – from students pursuing the Science, Technology, Engineering and Mathematics subjects, to those entering the workforce in technical fields, and all the way up to management and leadership across industries and business sectors. The water sector is no different, and it continues to employ far higher numbers of men than women, although the proportions might be less remarkable in countries where gender diversity has been a focus area.

The opportunity remains greatest for developing countries to unlock the potential of their girls and women. Increasing urbanisation in these economies, coupled with the number, size and scale of new infrastructure projects, creates an even more pressing need for a larger, more skilled, and more diverse workforce. At the same time, greater investment in, and focus on, the education of girls as a development imperative³ means there are already established channels for reaching them and encouraging their participation. Boosting opportunities for women in the water sector could therefore create the bridge between a job market for newly-empowered women, while creating a much-needed pipeline of skilled workers to fill the capacity gap already identified as a critical shortage.

While making recommendations on how to unlock this untapped resource, this report also presents case studies from places where efforts have already met with success. Lessons from these can be readily applied in similar environments.

For water utilities, the tremendous benefits of increasing gender diversity in their workforce is a critical message. This report will inspire and provide guidance on how to break down the institutional barriers that prevent women's education and employment in the sector. In this way, it sets a roadmap for achieving greater gender diversity across the sector: for sociological and developmental reasons, but equally, for economic and business ones.



³ <http://www.ungei.org/index.php>

2. Why unlock the untapped resource?

In recent years, many international declarations and commitments have been made in support of gender equality. The Dublin Statement (1992) recognised the pivotal role of women; the Rio Declaration (1992) recognised their full participation as essential to sustainable development; the World Summit on Sustainable Development called for ensuring that infrastructure and services are gender sensitive; and the Millennium Development Goals include many targets on gender equality and the empowerment of women.

This is particularly relevant in the water sector, where there is evidence to show that water and sanitation services are generally more effective if women take an active role in delivering them: from design and planning, to the ongoing operations and maintenance required to make services sustainable. A World Bank evaluation of 122 water projects found that the effectiveness of a project was **six to seven times higher** when women were involved than when they were not ⁴.

A Gender Scan of Water Utilities published by the ADB ⁵ in 2011 concludes that, "Gender diversity in the workforce stimulates more vigorous discussion on policy discussions and operational approaches, resulting in smarter business decisions. Companies that are able to effectively tap into the growing female workforce by offering gender-friendly policies in the workplace and gender-sensitive products or services to external customers, are more profitable, competitive, sustainable and have a more dedicated and loyal workforce than their competitors who do not provide such policies or services."

The recent IWA/USAID study, entailing a survey, semi-structured interviews and a literature review, examined the sector for evidence that supported the improvement of water services through gender equality. The research examined:

- What are the incentives, bottlenecks and opportunities for female water professionals?
- What gender equality initiatives have been introduced at the utilities level?
- Whether a relationship between increasing female participation in an organisation and improved performance exists?

The findings present a complex picture, but there are two messages that resonate: men and women have equal competencies in almost all domains; but they are often not perceived as such. (See box 1 Perception and Reality)

There are isolated instances where either men or women are deemed to be more competent or apt in a particular sphere. For instance, both the quantitative and qualitative sections of our survey revealed unanimous concurrence of the perception that men are better suited to hard physical labour than women; and that women have greater social skills than men. Nonetheless, there is also anecdotal evidence to contradict both these assertions.

What is clear from our findings is that a **diverse workforce would bring together different, complementary skill sets**, and would **more accurately reflect the demography of society** in terms of female and male citizenry.

This diversity is essential if the varied demands around the issue of urban water management and service delivery are to be met.

Box 1 - Perception and Reality

The survey of the IWA/USAID study asked a selected sample of respondents in sub-Saharan Africa a comprehensive battery of questions to better understand the different qualities that men and women have and how these attributes would assist them in their work in the WATSAN sector.

We asked respondents whether they believe that male or female employees are better at hard physical labour. The response was overwhelming – with very little variation from one country to another – that it is men who are considered better at hard physical labour. Around 83% of respondents feel that men are more capable than women when it comes to hard physical labour and 0% feel that women could do hard physical labour better than men. Only 10% feel that men and women are equally able to perform tasks that require hard physical labour. Our qualitative interviews back up this evidence with almost all our expert respondents confirming that this is a domain for men.

However, when we look at the Working for Water Programme, we have found evidence of women being able to do hard physical labour just as well as men. In fact, most public works programmes, such as the WfWP have a workforce of 50/50 men and women and there is no discrimination between men and women in the workforce where both perform the same, often heavy duty and physically taxing, tasks.

Evidence from the quantitative component of the study is also contested by some of our expert respondents who feel strongly that men and women are equally able to perform tasks that require hard physical labour.

As one respondent from Tanzania said:

"Because women dedicate themselves in their work all the time, when they decide to work they work really hard . . . that is actually happening; maybe because of the environment we (women) have put ourselves in; because we have taken the saying of "women are weak." But women are not weak. If you tell someone to go and dig a trench, she is afraid. But the fact is it's not true that women cannot take a shovel and dig a trench. I can give an example of myself: if I go to the site and find they are digging a trench, I join them in the digging. So we can, we can!"

⁴ www.unicef.org/esaro/7310_Gender_and_WASH.html

⁵ Gender_Scan_Water_Utilities_Aug2011.pdf emailed by Kirsten. Need to find source.

Role of women professionals in urban water sector

The IWA/USAID survey conducted by IWA with water professionals in nine African countries during October 2014 and April 2015 ⁶, gathered data to provide evidence of the role of women in urban water management. While there is little quantitative evidence of performance being improved due to workforce diversity and gender equality, our research in Africa reflected on qualitative data from expert professionals working in the sector, and who are thinking through the relationship between improved performance and gender equality in the workforce.

Excerpts from the IWA/USAID anecdotal survey:

BURKINA FASO

Yes, the presence of women improves performance because diversity provides an ideal situation where there is a good ambience within the workforce. . . . multi-disciplinarity is an important factor that must be taken into consideration as it improves the performance of the organisation.

BURKINA FASO

Our presence (women) in the organisation made an impact by filling up a gap in the workforce and by bringing groundwater specialization to the organisation

GHANA

I think it is in our interest to increase workforce diversity because the benefits come to the organisation. The various uses of water drive and inform the organisation towards diversifying.

MALI

We have had an increase in finding development partners. We expanded our expectations and reinforced capacities. The management of water points is attributed to female professionals and yes, the employment of women increases performance.

SENEGAL

There is a greater integrity and transparency in the management of finances Women manage finances of our organisation better and also could assure the sustainability of the water services in areas of concern

SENEGAL

Yes, women have a vested interest in having a sector that is performing well and therefore they will do their best to reach their objective

SOUTH AFRICA

Yes, having people from various environments, religions, and backgrounds can help us view water challenges in a wider, broader way and thus gaining more input into solving the country's water challenges

SOUTH AFRICA

The strength lies in diversity; technical skills and softer skills. Both complement each other and this is a great advantage

TANZANIA

It is important to put women in the water sector because first they are good producers. If you assign work to a woman, she will do it. But if you assign work to a man, he can and work as if he is a man and he will tell you with this work I reached here and stop. If give directions to a woman she will follow them until she finishes the work

ZAMBIA

Yes, because women working in the water sector simply have a passion for it. Women appreciate better than their male colleagues the challenges of not having water and sewerage services and hence are much more focused and dedicated to resolve the problems.

ZAMBIA

Women play a critical role in the selection of appropriate technology and positioning of water and sewerage facilities. When selecting the technology for toilets, men tend to overlook the biological differences between men and women and the chores that women perform such as bathing their babies and also taking care of the elderly and the sick.

⁶ Burkina Faso (51), Ghana (90), Mali (24), Mozambique (21), Niger (30) Senegal (39), South Africa (44), Tanzania (29) and Zambia (71)

⁷ Case studies from:

<http://www.bridge.ids.ac.uk/sites/bridge.ids.ac.uk/files/Docs/GENDER%20&%20WATER.pdf>

Green, C., with Baden, S., 1994, «*Gender Issues in Water and Sanitation Projects in Mali*», Briefing commissioned by the Japanese International Co-operation Agency, Sussex: IDS, BRIDGE

Quisuimbing, A.R., 1994, «*Improving Women's Agricultural Productivity as Farmers and Workers*», World Bank Discussion Paper Series No. 37. Quoted in UNDP, 2003.

Gender initiatives and impact on performance

Amongst a host of other questions, male and female survey participants were asked if they knew of any specific gender initiatives that were designed to encourage more women into the industry. They were also asked if they had personal knowledge of cases when engaging women professionals had changed the performance of the water organisation; if yes, to describe what happened and the impact. The following are answers received to one or both of these questions.

Excerpts from the IWA/USAID anecdotal survey:

MALE RESPONDENT, ZAMBIA:

When Nkana Water & Sewerage Company employed a female Managing Director, a wind of change blew . . . brought with it a sense of integrity and transparency in the system. This resulted in the improvement of service delivery and enhanced cash generation for the organisation.

FEMALE RESPONDENT, ZAMBIA:

(In the) Nkana Water and Sewerage company, the Managing Director is a woman. She has brought total change where sanitation is concerned in peri-urban areas by striving to put up modern toilets not pit latrines. Upgrade of water networks [was done] so fast.

FEMALE RESPONDENT, TANZANIA:

Employment of district engineers at national level, and a programme of empowering women at degree level conducted at University of Dar es Salaam led to improvements at the field level too. Workers became (more) free to express situations they are facing at the office to women leaders than men. In the unit I am supervising, my subordinates were working in dangerous and very stressful working environment, often it looks like there was no hope for next day. So I came in, studied the situation, brought them closer and joined them at the field. They became more free (to) tell me what they wanted for their work to be improved. Luckily we are progressing and taking one issue after another. Now everybody is happy, they feel acknowledged. Indeed, there is a reason to come to the office.

FEMALE RESPONDENT, SOUTH AFRICA:

The Women in Engineering programme - WomEng – is aimed at attracting, developing and nurturing the next generation of women engineering leaders. WomEng presents an invaluable platform for the advocacy, advancement and education of females entering the engineering industry.

FEMALE RESPONDENT, GERMANY:

Older co-workers say, that the productivity in my organisation increased when the first women were employed. They brought a more structured, organised, goal-oriented working attitude with them.

FEMALE RESPONDENT, KENYA:

Women led community projects are more sustainable and transparent than male led ones.

MALE RESPONDENT, SOUTH AFRICA:

The 'Bring a Girl to Work' initiative: annually, girls come along to work to be introduced to the engineering work environment.

FEMALE RESPONDENT, KENYA:

There is a national gender policy which is cascaded down to all public sector institutions to comply with and report to the National Gender commission on implementation on a quarterly basis. In water companies which are headed by women professionals, notable improvement has been noted in their performance especially service delivery and industrial relations.

The Customer-Case for Gender Diversity

In addition to the benefits to the business and to the workforce highlighted by the anecdotal survey, a compelling reason to target greater gender diversity is to build a workforce that is more authentic in both its representation and reflection of the customer base.

In rural contexts, including more women in the management of water brings immediate benefit to the customers. Critically, excluding them can put projects at risk, as seen in the two case studies highlighted.

In the urban context, as the *An Avoidable Crisis* report shows, rapid urbanisation and technical complexities create high demand in cities; and the complexity of systems in the urban WASH sector results in the highest demand for professionally qualified staff in urban areas. As this demand rises, complete with its diverse customer base, finding more women to fill key roles across all levels of the water sector will prove one of the keys to success.

Case study 1 ⁷:

Community-Managed Wells in Mali – How an initiative can fail if women are not involved in planning

The Macina Wells project in Mali failed to incorporate an understanding of gender roles and inequalities in project planning. Management of the wells was handed over to (male) community leaders without consulting women in the planning of the new resource or its continued management. Women were allocated cleaning tasks. The systems and equipment set up were impractical for women, though they were the ones primarily responsible for collecting water from the well. As a result, at peak times, women dismantled the equipment and went back to their old ways of collecting water. Moreover, the men who were involved as caretakers failed to adequately fulfil their roles since water and sanitation were seen as a domain for women.

Case Study 2 ⁷:

Philippines Communal Irrigation Project – Ensuring women's participation

This project implemented measures to involve women at all levels through recruitment of female community organisers, ensuring women as well as men participated in water user associations and supporting women in taking up leadership roles. The project both exceeded its targets for increased paddy yields and women's involvement made the payment of fees more consistent since it was the women who, in this context, controlled family finances.

3. How can we unlock the untapped resource?

As we have established, there is tremendous opportunity, as well as a pressing need, to accomplish greater gender diversity across the water sector. Considering the many identified advantages of improved gender diversity – better representation of the customer base and a greater combination of skills across the workforce, amongst others – and the urgency with which the sector must fill the human resource capacity gaps in order to head off impending international water crises, it is clear there is no time to waste in bringing more women into the WASH workforce.

Over the past few decades, many leaders from the public, private, donor and NGO communities have received gender training. There are a few initiatives underway to develop simplified gender tools that can be adapted to local realities and the needs of each organisation. Yet, despite improvements in the representation of women in middle and higher management, progress has been slow and patchy from industry to industry, and one country to another.

The IWA/USAID study results, coupled with an analysis of the prevailing barriers to women's participation, show us that we need to focus attention on each of the following four areas if we are to achieve results in this critical area:

- **Policy**
- **Industry (particularly in the Utilities sector)**
- **Education**
- **Funding**

Rather than attempting an exhaustive list of the many ways in which each of these areas can contribute to, and be improved by increased gender diversity, in subsequent sections we highlight the overarching motivations and list exemplary case studies to illustrate the point: coordinated inter-agency efforts and a sector-wide commitment to improving gender diversity can and do result in impressive advancements. Given the urgency of the situation, these systemic changes can often be achieved at the rapid pace needed.

That said, it is important to recognise that gender issues are culturally embedded, and that it will take change beyond these four points to influence change at the societal level. Whilst this report highlights best practices and makes some suggestions for driving change, the real impact on women's workforce will remain intertwined with the norms and values embedded in culture. Societal change must necessarily be a vastly inclusive process, even if that means slowing down the pace of change; the norms and values in each cultural setting will impact just how fast progress will go.

In recent years, there has been a significant amount of attention on the need to improve gender diversity, and several strategies drawn up. And yet it is worth acknowledging that in writing this report, it proved challenging to identify clear case studies representing successful implementation of these strategies, examples that have had an impact on women brought into the sector. This suggests that there simply are not enough instances of successful implementation, and those that exist are not publicised well enough to drive wider change.

Have you been part of a project where strategies for improving gender diversity have been implemented? Have these efforts resulted in visible, quantifiable success? We would love to hear more about such projects, and spread the word to drive further change, and hopefully, replicate your success! Do get in touch at water@iwahq.org.

Policy

A clear commitment to gender diversity in social planning, or the process by which policy-makers try to improve conditions in the community through devising and implementing policies, can result in dramatic improvements. These policies may take the form of laws, regulations, or incentives for improving conditions for female professionals in the water sector. It is also important to recognise that policy changes, in order to be impactful, must be consistently applied at all levels: inter-governmental, national, as well as institutional or organisational policies.

In 1995, at the Fourth World Conference on Women ⁸, 189 governments committed to “ensure women's equal access to and full participation in power structures and decision-making.” To fulfill this strategic objective, governments also pledged to progress towards the goal of “gender balance in governmental bodies and committees as well as in public administrative entities and in the judiciary.” However, in most countries, these commitments have still not been translated into reality, neither at a national nor at local levels.

An enabling environment requires relevant associations, societies and institutional settings to establish gender equality as a standard against which performance of decision makers can be monitored and evaluated. It demands strong normative foundations, including national laws and global human rights frameworks, such as the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW).

⁸ <http://www.un.org/womenwatch/daw/beijing/platform/declar.htm>

The adoption and domestication of relevant international protocols has a direct impact on women's participation in the workforce; in Mozambique, for instance, the ratification of CEDAW in 1992, the enactment of the Children's and the Trafficking In Person Bills in 2005 and 2007 respectively are also major achievements by the government in promoting and protecting the rights of women and girls. A Women's Bill has been drafted and will soon be brought to the National Assembly to be considered for enactment ⁹.

In at least one instance, this has resulted in a direct improvement: as part of their gender policy, FIPAG (the Fundo de Investimento e Património de Abastecimento de Água, an asset holding company in Mozambique) has introduced a gender focal point. This person is responsible for investigating gender issues in their own organisation as well as the utilities that fall under the umbrella of FIPAG, and can therefore propose solutions for gender issues.

A gender focal point can also be used by employees to flag up issues they face on the workforce (discrimination, unequal treatment, unequal opportunities and even abuse). It thus provides tremendous support to female water professionals; without the presence of such a person to whom such issues can be reported/responded to when they arise, situations like these would often cause female professionals to leave the organisation.

There are many policies that affect economic opportunities for women and allow them to take an equal place alongside men in the workforce. In recent years, many economies have made changes increasing or neutral to gender parity. Regulatory restrictions on women's economic participation are associated with real economic outcomes. Women, Business and the Law ¹⁰ and World Bank Enterprise Surveys data show that lower legal gender parity is associated with fewer women participating in the ownership of business enterprises. Using the Gini coefficient of inequality as a proxy, Women, Business and the Law data show that policies encouraging women to join and remain in the labor force are associated with less income inequality ¹¹.

While some policy improvements have been made, real change proved harder to find through our research. IWA invites any readers who may be part of a project where they have experienced positive change through the adoption of national/international policies, to publicise these better throughout the network, such that they can influence further positive change in this direction.

Policy Case Study 1:

Maputo Protocol

On an Africa-wide level, one of the most important contributions to creating a legally enabling environment was the African Union's adoption in Maputo on July 11, 2003, of the Protocol to the African Charter on Human and People's Rights on the rights of Women in Africa. The Maputo Protocol, as it is known, guarantees wide-ranging rights to women, including the right to take part in the political process, social and economic equality with men, to retain control of their reproductive rights and to end Female Genital Mutilation. Pertinent to this report is Article 13 (Economic and Social Welfare Rights) which state that parties shall adopt and enforce legislative and other measures to guarantee women equal opportunities in work and career advancement and other economic opportunities. Although the Women's Protocol was adopted by all 54 members of the African Union, it has only been ratified by 36 members. Ratification is a critical first step towards incorporating the rights enshrined in the African Charter and Women's Protocol within the member states, as one of the obligations arising from the ratification of the Protocol is the duty to enact domestic laws that give effect to the rights protected in these instruments ¹².

Policy Case study 2:

National Gender Policy in South Africa:

In South Africa, the Office on the Status of Women has drafted a National Gender Policy that builds on the draft 'National Policy for Women's Empowerment' drawn up by the gender unit in the Reconstruction and Development Programme (RDP) Office. The National Gender Policy recommends that:

1. All planning should seek out and respond to the needs of local women.
2. Participatory action research methodologies should be used to involve rural women in natural resource management and increase livelihood options.
3. Women should be trained in pump and water systems management and repair maintenance as a priority.
4. Policy makers should be trained to recognise and cater for the economic roles of women, and the strategic importance of water to their economic activities beyond the domestic sphere.

⁹ <http://www.gafspfund.org/sites/gafspfund.org/files/Documents/Attachment%208%20Women%20and%20Gender%20Policy.pdf>

¹⁰ http://cso-effectiveness.org/IMG/pdf/report_on_gender_equality-2.pdf

¹¹ wbl.worldbank.org

¹² www.ahpc.org

Industry

generally, and the Utilities sector in particular:

Policy development is not a one-off process; the development of a gender policy at national level is a necessary starting point for focusing attention on gender concerns. But, as we have seen in the FIPAG example from Mozambique [on page 8], it is equally important to revisit gender policies at the organisational level - particularly those that have been in existence for some time, evaluate the team's performance, review lessons learnt, and develop and launch revised policy commitments accordingly ¹³.

For organisations which have already taken some steps towards promoting gender sensitivity (for example, through providing staff with training and guidelines), development of a gender policy is an opportunity to consolidate and formalise the steps they have taken, and think strategically about the future (see 12 policy focus points for industry). A gender policy provides a valuable opportunity to involve staff and other key stakeholders in thinking through why gender and social equity are important to the organisation's work, and what the implications are for practice. The development and implementation of gender policy require an on-going strategy for the capacity building of all members and partners of the institution or organisation.

12 core policy focus points for industry are:

01. Length of paid maternity leave
02. Length of paid paternity leave
03. Ratio of the length of paid paternity to paid maternity leave
04. Laws penalising or preventing employer from firing pregnant women
05. Laws requiring employers to give the same or an equivalent position to female employees when they return from maternity leave
06. Laws requiring employers to provide break times for nursing mothers
07. Tax deductions applicable to women
08. Legal quotas for women on corporate boards
09. Legal quotas for women in parliaments
10. Legal quotas for women in local governments
11. Laws mandating equal remuneration for women and men for work of equal value
12. Laws mandating non-discrimination in hiring practices

Source: World Bank women business and law ¹⁴

The Sustainable Development Goals (SDGs) challenge the water sector to capitalise on a once-in-a-generation opportunity to accelerate improvements in services while simultaneously connecting water to the broader sustainability agenda across environment, health, energy, agriculture and industry. This will require the drastic transformation of sector-wide practices, and has to start with those who drive the transformation: human resources.

IWA's *An Avoidable Crisis* report highlights that in many

countries the sector is confronted with serious constraints on its ability to respond to future demand; on top of workforce shortages, and the impact of retirement on dwindling human resources in coming decades, the sector's workforce lacks diversity. This is most clearly illustrated by the poor level of participation by women professionals, as highlighted in twelve developing countries that participated in IWA research into human resources and workforce diversity.

The percentage of women professionals in water utilities is higher in industrialised countries. Take, for instance, Suez Environnement, where women occupy 27.6 % of managerial positions ¹⁵; or Veolia, where approximately 20% of the workforce ¹⁶ is female, although this varies from country to country, Asian (China 33%) and Central and Eastern European (Hungary 28%, Czech Republic 24%) countries having a higher percentage of women employees than the average.

In the commercial sector, the business case for workforce diversity has already been made. While diversity is a much broader issue than gender alone, studies highlight that increased gender diversity in leadership results in better performance of up to 30%, and that companies with three or more women on the board rated 73% higher in performance ¹⁷.

Industry Case Study:

Working for water project in South Africa

The Working for Water project is the largest public-funded project in the world to eradicate alien invasive plants and improve the water resources of the nation. The project has created over 180,000 full time jobs in South Africa over the past two decades. Minister Edna Molewa sees this as 'an example of integrating environmental conservation and poverty eradication objectives.' The (then) Department of Water Affairs and Forestry ¹⁸ employs local people and 52% of the benefits from training and income generation accrue to women. Women equal men in all aspects of the project where they are subjected to hard physical labour, often in remote rural settings. Women have been trained as high altitude skilled workers, be it piloting helicopters or scaling difficult mountains in a workspace that has been 'traditionally masculine'.

The programme currently has 300 projects in all nine provinces of South Africa. Working for Water is globally recognised as one of the most outstanding environmental conservation initiatives in Africa and in the world. The Department specified benefits rather than number of jobs, in recognition of the fact that women are frequently in the lowest paid jobs, either because of lack of skills or the worth accorded to certain job categories. This is an excellent example of a decision to allocate resources in a gender-aware way as women are not simply getting jobs but are acquiring life skills and business acumen through training in a wide range of activities.

¹³ Resource Guide: Mainstreaming Gender in Water Management. Version 2.1 November 2006

¹⁴ CSO Effectiveness org/IMG/pdf/report_on_gender_equality-2.pdf

¹⁵ <http://sustainabledevelopment.suez-environnement.com/advancing-equal-opportunities.html>

¹⁶ <http://www.finance.veolia.com/docs/CSR-2014-EN.pdf>

¹⁷ Catalyst. 2007. The Bottom Line: Corporate Performance and Women's Representation on Boards (2004–2008). <http://www.catalyst.org/knowledge/bottom-line-corporate-performance-and-womens-representation-boards>; McKinsey & Company. 2013. Gender Diversity in Top Management: Moving Corporate Culture, Moving Boundaries. Women Matter 2013. Paris. http://www.mckinsey.com/features/women_matter

¹⁸ Renamed the Department of Water Affairs and Sanitation

Education

A foundation of quality education is the first step towards creating a skilled workforce, for the water sector as well as other vital industries. Government strategies and policies can also enable the education sector and stimulate the labour market with an influx of trained workers. However, education is not receiving as much support from the water sector as it could. Instead of access to education (or the lack thereof) being viewed as a constant barrier, we need to modify our approach and provide greater encouragement for education to be a constant incentive for progress - for boys, and for girls. In Sri Lanka, for instance, the Government's free education policy, with a rigorous system to ensure high standards, as well as its focus on water and sanitation service provision, has made enormous impacts on the sector ¹⁹.

Similarly, following the success of the JFFLS programme in Mozambique (reference case study below) 18 other countries introduced a similar approach with significant creative adaptations and innovations from the original project design, in keeping with different local contexts.

Education Case Study 1:

Encouraging gender-neutral education: Zambia

To overcome the problem of fragmentation, the Zambian Government has set up the Integrated Education Sector Investment Programme to deal with all issues pertaining to the formal and non-formal education, as well as technical skills training. One of the strategies identified is the use of role models ²⁰. At the same time, the Ministry of Education put in place a policy which requires both boys and girls to learn Home Economics and Industrial Arts. Previously, Home Economics was offered to females only and Industrial Arts to males only. The Ministry of Education Policy document has a section dealing with gender issues in Education. It addresses the problem of inadequate access to education, low achievement and low participation of girls in Mathematics, Science and Technology ²¹. Findings gathered during the survey conducted by IWA/USAID, suggests that in order to mitigate for barriers of entry into the sector, internship programmes offer positive rewards. Apart from encouraging women to take on science, technology, engineering and maths (STEM) subjects, internship programmes that provide women exposure to what they can expect from the work environment encourage them to adapt to the potential challenges of the sector.

Education Case Study 2:

Junior Field and Life Schools project

In January 2014, as a response to the HIV/AIDS epidemic and the large numbers of orphans and vulnerable children, the Food and Agricultural Organisation (FAO) introduced the Junior Farmer Field and Life Schools (JFFLS) project in Mozambique. The project was introduced as a pilot exercise in one urban and three rural faith-based organisations near Chimoio, the provincial capital of Manica as a partnership between the FAO, the UN World Food Programme (WFP), the Provincial Directorates of

the Ministry of Agriculture, the Ministry of Education, and the Ministry of Women and Coordination of Social Action. The project included a school-feeding programme, with around 100 children as direct beneficiaries. In 2004, the pilot exercise was expanded to include 24 more schools. To date there are 58 JFFLS linked with formal schools in Mozambique alone and more than 10,000 girls and boys have been trained.

The success in Mozambique had further positive impact. As a result of government commitment in Mozambique, Rwanda, Burundi, Kenya and Malawi, the Ministry of Agriculture and Education are providing extension staff and teachers as master trainers to train rural facilitators of the schools. JFFLS has been introduced in vulnerable communities where the transmission of traditional knowledge from generation to generation has been severely disrupted by high HIV rates, war, displacement and death; and where the associated erosion and fragmentation of social capital has led to diminished coping strategies, increased gender disparities, limited skills and low self-esteem. This approach has been successful in regions of chronic emergencies (due to conflicts or natural disasters such as drought) where affected communities are highly dependent on farming for food and income security.

It provides a platform for integrating multiple interventions and bridging activities, such as agricultural and life skills development; legal empowerment; vocational educational training opportunities; and employment promotion. The JFFLS approach includes an employment-oriented component, which encourages and supports young women and men to participate in existing young farmer's or women's cooperatives, through which they can access resources and market their produce more easily.

Education case study 3

Sri Lanka's free education policy

Sri Lanka is at the forefront of human resources development in the South Asia region, as its education system has a very high standard and the government's free education policy (15 universities offer free education) has contributed to high literacy rates (95%). This has resulted in high availability of human resources from the education and training sectors generally. Generally, graduates are considered to be of a high standard.

For the water sector, this reliable influx has meant that the number of female staff in the WASH sector has grown steadily over the past three decades, though there is still a great need to encourage more women into the mechanical engineering space.

Undoubtedly one of the results of this focus on quality education, is that the country seen a dramatic 99% coverage of WASH services in the urban population, and as high as 95% coverage in rural populations (JMP, 2015).

¹⁹ <http://www.iwa-network.org/downloads/1422744575-Briefing-Note-Sri-Lanka-final.pdf>

²⁰ The theme of role models has reverberated through the current IWA/USAID study.

²¹ www.unesco.org/education/educprog/ste/pdf_files/girls/reports.pdf

Funding agencies:

Funding agencies have significant influence over the prioritisation of resource allocation towards competing needs, particularly in the developing world. They can play a big part in creating an enabling environment for positive impact that fits their broad agenda. The deliberate linking of developmental goals (such as improved education for girl children and increasing the number of skilled women in the Water Management sector) with social justice ones (such as empowerment of women) can deliver tremendous benefits across the entire spectrum, and accelerate a particular society's progress towards multiple goals. However, the important thing is for this focus, on deliberate cross-linking of goals, to be maintained throughout the delivery of funded programmes of work and not be reduced to tokenistic inclusion for the sake of meeting funding criteria.

Funding Case Study 1:

Funding bursaries and internships

As part of the research commissioned by IWA/USAID for the writing of this report, a respondent from a utility in South Africa observed that "scientific studies are very expensive, and parents discourage their children to choose this option as they will not be able to pay for fees" but that it was, nonetheless important to raise awareness about scientific curricula available.

On the other hand, as one of our respondents from the public sector in South Africa states:

"There are a lot of bursaries for everyone, in-house training programmes and short courses.' And also '...in South Africa, there are affordable further education & training institutions which offer water training. Moreover, the Government & Water Institute offer scholarships for training in the water field."

This suggests that making bursaries available to female students, or providing institutional funding to make further education more accessible and cheaper for all, would greatly increase the number of qualified women available to take up jobs in the water sector.

Funded internships are another effective way to enable greater participation by women, because once a female student has qualified, her entry into the sector is more likely if internship programmes that follow up on the curricula are available to her:

"... there are internships, but this is not only in water sector, but for all graduates in various sectors. Collaborations between water utilities and Universities, NGOs and private companies will ensure that graduates will be taken up to the water sector/getting jobs and working experience within the sector ²²"

Funding Case Study 2:

South Africa's Mabule Sanitation Project

The Mabule Sanitation Project in South Africa was a joint initiative between the Department of Water affairs and Forestry (DWAF) and the community with funding from the NGO Mvula Trust. DWAF has provided funding for sanitation projects in communities where there is gender-balanced decision-making. The initiative established a brick-making project for latrine construction that employs mainly women, generates cash, and provides the community with affordable bricks. Mabule village now has safe and attractive toilets, as well as improved health and hygiene. There is increased acceptance of women's leadership roles by community members, as well as an increased collaboration between women and men ²³.

Applying a similar focus on improving gender diversity when funding capacity development projects could help create, and promote the growth of, a more gender-balanced pool of skilled professionals for the water sector.

²² Interview water sector professional South Africa

²³ Source: M. Jabu, 2006. South Africa: Women in Sanitation and Brick Making Project, Mabule Village. In: Office of the Special Adviser on Gender Issues and Advancement of Women, Gender, water and sanitation: case studies on best practices. New York, United Nations (in press).

4. Recommendations and lessons learned

Conclusion:

As we have seen from each of the case studies in this report, as well as when considering all focus areas in a comprehensive fashion, it will take concerted, coordinated action on all fronts to ensure that there is overall commitment to gender diversity.

There are five key lessons for this important area of focus for the water sector, and each of these must be applied in order to drive this much needed change.

Lesson one:

Combatting low literacy

A shared focus on improving education through policy, funding and industry interventions will help combat a fundamental block to more women entering the water sector as professionals. The Utilities sector is particularly well placed to combat poor literacy levels, and low percentages of girl children entering into secondary school, because they could provide bursaries for female students as well as incentives for them to take up maths and science.

In many cases, despite the fact that primary education is free and compulsory, children are unable to benefit from this because the schools are derelict, there are no text books or a poor teacher/child ratio does not allow children to maximise these opportunities. By implementing schemes like 'adopt a girl child' or even better, 'adopt a school', a Utility can improve the situation for individual girls, but, more importantly, create replicable examples that will drive an even greater change at a wider, sectoral and/or national level.

Lesson two:

Creating gender-equal attitudes amongst young men and women

By creating opportunities for men and women to work together, access training in gender concerns and promote gender-equal attitudes within the workspaces, Utilities can help both genders achieve their full potential as change agents.

By providing access to facilities, encouraging gender-equal policies and showcasing the achievements of successful female employees, the Utilities sector can help profile strong role models; and show subsequent generations of women that there are no limits to their ability to compete equally for jobs in the scientific and technical fields. This will also help men to work past existing cultural and societal norms, and be viewed not as obstructions, but as partners in support of women's progress along their career pathways.

Lesson three:

Seeking out skilled facilitators

Along with a growing awareness of, and interest in the field of increasing gender-equality, comes a new, growing resource pool: experienced facilitators who practice participatory methods designed to level the playing field to ensure that the voices of some are not muted whilst others are amplified. This requires iterative training sessions throughout the year;

in the Utilities sector, for instance, these sessions ought to be attended by senior management as well as middle management, human resources and administrative staff. Adopting a 'training of trainers' approach will also build up capacity within each Utility and help widen the pool of available facilitators. In turn, these facilitators become valuable resources for the Utility. The participatory approach encourages champions – in other words it identifies movers and shakers who can make change happen within an organisation.

Lesson four:

Partnerships and intersectoral co-operation

No one sector can drive this change alone. Utilities need the support of Donor organisations and NGOs working with gender issues and development concerns. They are also in a position to facilitate increased co-operation, and forge partnerships. For instance, a utility organisation might schedule an Open Day to which they invite schools, faith based organisations, NGOs, CBOs etc. to showcase their work, as well as profiling women in the workplace. Forming these connections can assist them in the work of bringing about change in the workplace. In the same way that partnerships with donors, NGO's etc. could provide guidance, technical assistance and 'savoir faire' regarding gender and development concerns; partnerships with Ministries are essential, so that successful interventions are viewed as 'evidence' for advocating policy changes and multi-sectoral investments in the area.

Lesson five:

Champions, committees and commissions

Society at large would benefit from committees and commissions that work on specific focus areas under the overarching theme of increasing the participation of women in the water sector: be this community liaison, donor focus, internship programmes or/and open day or showcasing achievements in the workforce. For instance, schools and early learning spaces are critical for change – this is where children are socialised into thinking that science and maths are too difficult, or that boys can do things better than girls. Identifying champions for scholarships and bursaries, or encouraging and profiling the achievements of star performers from amongst the female student population, would help dispel these myths.

In conclusion, it is equally important to maintain an ongoing evaluation of the efforts towards encouraging gender diversity; if something is not being measured or assessed in some way, then progress - or the lack of it - cannot be seen and it cannot be managed. The systematic recording and communicating of progress - or the lack of it - in achieving gender equality gives direction and authority to efforts to integrate gender equality into the mainstream. Just as individuals need gender equality targets and objectives, so too do organisations and nation states.

Progress towards them must be assessed. Only then will we in the water sector be able to drive much-needed change towards greater participation of those representing 'half of our customer base', and fill this capacity gap in time to avoid the impending human resources crisis in the water sector.



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