

# Water Scarcity

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## A Threat to Women's Food Work and Livelihood

OLUSOLA OLUFEMI AND OLAJIDE OJO

*Le problème persistant pour plusieurs Premières Nations au Canada se traduit par le manque de sécurité autour de l'eau du à une implication limitée de la gestion de l'eau. Le savoir traditionnel des Anishinaabekwe peut prendre en charge une approche équilibrée et sa protection en suggérant des principes qui reconnaissent, maintiennent et établissent des relations socio-écologiques essentielles.*

*Omi l'àbùwè, Omi 'l'àbùmu enìkan kì bá ómi s'òtá.*

—Yoruba Proverb (Literally translates to: water for bathing, water for drinking, nobody makes enemy with water; water is so invaluable that living organisms cannot do without it.)

Water scarcity threatens the well-being of humans. Access to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use is a fundamental human right. These five core attributes of the right to water represent the foundations for water security yet they are widely violated (UNDP). It is estimated that by 2025, 2.7 billion people will experience water scarcity

(UN 2003). Presently, 748 million people are water insecure out of which 173 million rely on untreated surface water. If current trends continue, there will still be 547 million people without an improved drinking water supply in 2015 (WHO/UNICEF 2014). The roots of the water crisis can be traced to poverty, inequality and unequal power relationships, uneven distribution, and flawed water management policies that exacerbate scarcity (UNDP).

Nigeria is one of the 25 African countries that will experience economic water scarcity by 2025 (UNEP). Presently, about 48 percent of the inhabitants of the urban and semi-urban areas, and 39 percent of rural areas, have access to potable water in Nigeria. Poor planning, inadequate funding, insufficient relevant manpower, haphazard implementation, and lack of a national policy for water supply are all factors contributing to water scarcity in Nigeria (Federal Republic of Nigeria). Ibadan residents experience serious water supply problems such as dry taps in virtually every part of the city leading to the prevalence of children and women searching for water elsewhere (Adetunji and

Odetokun). About 9.4 percent of the Ibadan city population depends on pipe-borne water, 20.5 percent on boreholes, 41.4 percent on wells, 22.9 percent on streams and 5.8 percent on springs (DMS).

This paper contends water scarcity is a threat to women's food work and livelihood in Ibadan, Nigeria. The paper adopts ecofeminism and women's environmental ethic of care as a conceptual framework and suggests inclusion of women in water management and decision-making, and the use of low cost water technologies in water scarce communities. Women as water users and livelihood managers are disproportionately affected by water depletion and scarcity. Traditional gender roles ascribe the responsibility for household water provision, as well as agricultural and communal food activities to women in Nigeria. Women live day-to-day with water anxiety and stress of water scarcity. Access to safe and clean water 'Omi' (Yoruba); 'Ruwa' (Hausa) and 'Mmiri' (Igbo) in the three prominent languages in Nigeria, remains the Achilles' heel for majority of women in their efforts to be water and food secure.

From fetus to birth ... from socio-cultural through corporeal to material domains, women's water security has never been more profound and their water burden continues to impact on their livelihoods. (Olufemi "Gender, Environment"; *Concepts* 91)

### Conceptual Framework

Water scarcity is defined "as the point at which the aggregate impact of all users impinges on the supply or quality of water under prevailing institutional arrangements to the extent that the demand by all sectors, including the environment, cannot be satisfied fully" (UN Water 2006: 2). Water scarcity means lack of access to adequate quantities of water for human and environmental uses (White). Robbins, Hintz and Moore identified three different kinds of scarcity namely hydrological, techno-economic, and perceptual. Water scarcity could also be dynamic, absolute, relative, a social construct or manufactured (UNDP; UN-Water 2006). The concept of water scarcity (FAO) is ambiguous and complex and involves several dimensions, notably:

- Scarcity in availability of freshwater in acceptable quality;
- Scarcity in access to water services;
- Scarcity due to lack of adequate infrastructure.

The Millennium Development Goals<sup>1</sup> (MDG) in 2000 aimed to halve the proportion of people without sustainable access to safe drinking water and basic sanitation between 1990 and 2015. In spite of the progress made regarding the MDG drinking water target, 43 percent of people living in Sub-Saharan Africa still use unimproved drinking water sources (WHO/UNICEF 2014).

### Water Access in the MDG

- MDG 1: Access to water for domestic and productive uses (agriculture, industry, and other economic activities) has a direct impact on poverty and food security.
- MDG 2: Incidence of catastrophic but often recurrent events, such as droughts, interrupts educational attainment.
- MDG 3: Access to water, in particular in conditions of scarce resources, has important gender related implications, which affects the social and economic capital of women in terms of leadership, earnings and networking opportunities.
- MDG 4 and 5: Equitable, reliable water resources management programs reduce poor people's vulnerability to shocks, which in turn gives them more secure and fruitful livelihoods to draw upon in caring for their children.
- MDG 6: Access to water, and improved water and wastewater management in human settlements, reduce transmission risks of mosquito-borne illnesses, such as malaria and dengue fever.
- MDG 7: Adequate treatment of wastewater contributes to less pressure on freshwater resources, helping to protect human and environmental health.
- MDG 8: Water scarcity increasingly calls for strengthened international cooperation in the fields of technologies for enhanced water productivity, financing opportunities, and an improved environment to share the benefits of scarce water management. (UN-Water 2014; WHO/UNICEF 2013)

Water scarcity pushes women to rely on alternatives and unimproved water sources. Access to water is

challenging in Ibadan as well as several other urban cities and towns in Nigeria. The use of locally manufactured bottled or sachet water such as Eva, Nestle, Pure Water, or Dana is increasing. Physical water shortage, institutional failure, and lack of institutional capacity are observable in not only in the city of Ibadan city, but in most Nigerian communities.

### Environmental Ethic of Care

Women's environmental ethic of care is to protect and preserve environmental resources. Women's inputs and actions are recognizable on issues relating to biodiversity, climate change, environmental sustainability, environmental injustice, depletion and degradation of water resources, poisoning and pollution of water bodies. Women's familial role and food work involves using water for domestic, economic, cultural, spiritual, agricultural, industrial, and commercial purposes.

Ecofeminists focus on women's relationships with nature, the connections between the domination of women and the domination of nature, and the role of women in solving ecological problems (Sachs). Ecofeminism implies "the ideologies that authorize injustices based on gender, race and class are related to the ideologies that sanction the exploitation and degradation of the environment" (Sturgeon 25). Ecofeminism also tends to "essentialize nature itself and consider nature to encompass all ecological aspects of the environment as well as natural (biological) human needs and capacities" (Momsen 111). Ecofeminism focuses on the role of patriarchal society for degrading both the natural environment and the social condition of women (Robbins, Hintz and Moore).

The relationship between women and the environment is reflected in terms such as Mother Earth or

Mother Nature, giving women particular responsibility to *care* for the environment and its resources, which include water. Care-focused feminism is a branch of feminist thought, informed primarily by Carol Gilligan and Nel Noddings (2002, 1984) who are critical of how caring is socially engendered to women and consequently devalued. Care-focused

section discusses the findings from the case study.

### Case Study

With urbanization, increasing population, sprawling communities, and poor infrastructural capacity in Nigeria (with a population of 170 million), water recycling, rationing, and

and ineffectively distributed. Access to safe and clean water eludes most women and the physical, emotional, and economic toll of water scarcity is unquantifiable.

This pilot study adopts a qualitative design approach. Qualitative interviews (face-to-face interviews) and observations were used to obtain information and data for this study.

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## With urbanization, increasing population, sprawling communities, and poor infrastructural capacity in Nigeria (with a population of 170 million), water recycling, rationing, and sharing continues unabated among women. Women resort to acquiring water from unimproved sources such as burst pipes and stagnant puddles of rainwater along the road (in potholes).

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feminists regard women's capacity for care as a human strength, which can and should be taught to and expected of men as well as women (Tong).

Care ethicists agree that women are positioned differently than men in relation to caring practices, but there is no clear consensus about the best way to theorize sex and gender in care ethics (Sander-Staudt). Sara Ruddick, an early exponent of a theory of care ethics, explains how the practices of "maternal persons" (who may be men or women), exhibit cognitive capacities or conceptions of virtue with larger moral relevance. Ruddick's analysis, which forges strong associations between care ethics and motherhood, has been both well-received and controversial (Sander-Staudt).

Women have the competence to "care" because of gendered responsibilities to "care." Care as labour is evident as women interviewed in Ibadan respond to the need and demand for water in their productive and reproductive work. The task of fetching and/or providing water has long been associated with women and girls in different social locations and in many cultural settings. The next

sharing continues unabated among women. Women resort to acquiring water from unimproved sources such as burst pipes and stagnant puddles of rainwater along the road (in potholes). Wells, boreholes, local streams, and rivers are unsafe because of their proximity to septic tanks. Ponds, rivers and streams double up as commercial (car wash), domestic (drinking, cooking and laundry), and personal hygiene (bathing, toileting) spaces. Consumption of untreated water results in schistosomiasis, onchocerciasis, diarrhoea, and gastrointestinal illness. Other water borne diseases are cholera and typhoid fever.

The case study is Ibadan, the capital of Oyo State, Nigeria (Figure 1). Ibadan is located approximately 128 km north east of Lagos and 530 km Southwest of Abuja, Nigeria's capital city. Study locations include 21 purposefully selected areas that span three local government areas, namely Ido, Ibadan North, and Ibadan North West with a population of about 562,890 (Figure 2). Less than 30 percent of the population has access to safe and clean water supply in Ibadan. Water supply is inadequate in terms of quantity and quality; and is unevenly

An interview protocol was designed and administered among 50 women in these locations. Most of these women work in the informal sector and live in a patriarchal hegemonic cultural setting. The intent of the qualitative research is to understand the water scarcity situation as it impacts on women's food work and livelihood in the private and public spheres. This includes reproductive and productive work relating to food production, procurement, processing, provision, and distribution. Data was collected in April/May, 2014 and a computer was used to analyze the data obtained using frequency tables and GIS to do a spatial analysis.

Eleyele River and Waterworks are located in the study area. The Water Corporation of Oyo State is responsible for maintaining the Eleyele water works which supposedly supplements Asejire waterworks/dam (located in the outskirts of Ibadan) in processing, treating and distributing potable water to Ibadan city and its environs. In Ibadan, 9.4 percent of the population depend on pipe-borne water, 20.5 percent on boreholes, 41.4 percent on wells, 22.9 percent on streams, and 5.8 percent on springs (DMS).



Photo 1: MDG Borehole in the study area. Source: authors' fieldwork.



Photo 2: World Bank Water Project in the study area. Source: authors' fieldwork.



Photo 3: Woman grinder at work. Source: authors' fieldwork.

Dry taps are common in virtually every part of Ibadan and children and women can be seen searching for water (Adetunji and Odetokun). Ironically, most household taps in the study area have remained dry for years while government policy claims potable water provision to the citizenry. A respondent indicates:

*...presently treated water is limited and the available water is pumped directly to the city centre where residents enjoy occasional water supply. (A resident who is a civil servant)*

It is not uncommon to find collaborative projects by the State government and International agencies that provide water through boreholes as part of the MDG initiative (Photo 1). These projects are perceived by residents as a fire brigade approach to adequate water supply in the study area because the boreholes cease to function after the commissioning day. There is a Public Private Partnership effort supported by World Bank to supply potable water in the study area (Photo 2). The Oyo state government provided the facility while it was being managed by the host community and the residents pay a token to procure potable water.

### Findings

About 60 percent of the women interviewed were between 16 and 45 years old while 12 percent were below 15 years old. Sixty-four percent of the women have a tertiary (diploma, undergraduate or postgraduate) level of education while about 16 percent and 20 percent have only elementary and secondary education respectively. Twenty-eight percent of the women were students (in high school or college), 36 percent were traders in the informal sector. Women traders include grinders (women who grind

pepper, beans, and other food items; Photo 3); small scale food entrepreneurs; those who work in a restaurant/canteen or Bukaterias-‘Buka’ (Photo 4); bean cake sellers (‘Àkàrà’); grocery or provision sellers, and cassava flour (‘Gàrí’, processed cassava) producers. 18 percent of the women were civil servants and another 18 percent were teachers. In regards to income

travel less distance to fetch water in this urban community. This is an indication of improved water provision through self-reliance and less dependence on government. Water supply through the government is seemingly non-existent. It should be noted that distance traveled to access water and women’s experience is different in rural areas; it could be

drinking; washing dishes, personal hygiene, preparing children for school, packing lunches, and gardening. In the public sphere, women use water for productive activities which include peri-urban and backyard farming or community gardening, community food activities (wedding, funerals, festivals or other cultural engagements) (Photo 6); food process-

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**Water utilization depends on the scale of food work done by the women who use water to process foodstuffs like cassava and those who use water in their restaurants or Bukas.... Women are very conscious of the fact that water is a relatively scarce resource and this guides them in reducing, rationing and recycling water use for most domestic chores and food work.**

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28 percent of the women have no income (the students), 58 percent earn about ₦60000 (≤US\$301) or less, 8 percent earn above between ₦60001 and ₦90000 (between US\$301-US\$452), and six percent earn above ₦90000 (>US\$452) per month. About 60 percent of the women were married with an average of three children each.

### **Water Provision**

Water is provided by individuals (86 percent), neighbours (six percent) and private water tankers/vendors (eight percent). Eighty-two percent and 14 percent of the women rely on wells and boreholes respectively while only four percent rely on government for water supply. Neighbours sometimes locate free borehole water sources outside their property where women and children fetch water for free (Photo 5). Women meet with disappointment when the water house owner fails to pump water due to erratic power supply.

Ninety-two percent travel a distance of less than 100 metres to access water while eight percent travel more than 150 metres. Women

more than two kilometres of trekking one way to water sources.

Women’s experience cannot be generalized regarding time spent obtaining water. While four percent of the women effortlessly turn on the tap where water is piped to the house from a borehole or well, about 96 percent of the women spend more than an hour to access water. Water points are located within the compound through a tap or manual water collection from the well; while other women go to neighbours’ houses or the neighbourhood to access water. Seemingly, there is still better access now when citizens take it upon themselves to dig boreholes or wells compared to the last ten or 20 years when citizens waited on government water services.

### **Water Use and Availability**

Women use water for a myriad of activities both in private and public spheres. In the private sphere, women use water for reproductive activities like raising children (pregnancy, breastfeeding, weaning); laundry, household cleaning; food and meal planning, cooking and serving food;

ing, preparation and provisioning. Women’s use of water in the private and public spheres overlaps. Women’s triple role (productive, reproductive and community managers) revolves around water availability and accessibility.

Water utilization depends on family size—the number of children (school-aged children use lots of water), and the number of wives. Water use increases with family size, frequency of cooking, and domestic food work. Water utilization depends on the scale of food work done by the women who use water to process foodstuffs like cassava and those who use water in their restaurants or Bukas. About 56 percent of the women use less than 150 litres of water daily, while 44 percent use more than 150 litres of water daily. A 25-litre jug was used to ascertain approximated litres of water used, daily or weekly. Women are very conscious of the fact that water is a relatively scarce resource and this guides them in reducing, rationing and recycling water use for most domestic chores and food work.

When wells run dry or water is unfit for consumption, especially

during rainy season, or when there is no electricity to pump water, or the pumps are faulty due to high maintenance costs etc., about 66 percent of women resolve to purchasing water from water vendors. The cost of buying water during these periods varies. About 36 percent and 26 percent of the women spend between ₦1000-₦3000 (between US\$5-US\$15) and

rain water (during the rainy season) and putting money aside to buy water when it is scarce.

Eighty-six percent of the women interviewed indicate they often rely on rainwater during water scarcity while 14 percent do so less often. During the dry season (November to March) it is not uncommon for the wells to dry up and this is usually a

is available for about six hours every two days and off for one day, this comes to approximately 30 hours of power supply every week.

Women queue long hours waiting to obtain fuel from the gas stations to power generators and in turn pump water from wells or boreholes during fuel scarcity. The cost of fuel increases during these times (market volatility).

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**Searching for water during scarcity takes a lot of time away from women's other productive activities. An estimated 200 million hours are spent each day by women globally collecting water for domestic use and this is time not spent working at an income-generating job, caring for family members, or attending school.**

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above ₦3000 (>US\$15) on water respectively while 38 percent of the women do not spend any money on water.

Except when there is not enough rain or flooding or during the dry season, individually sourced water is always available most of the time because most residents have wells or boreholes or rely on neighbours' wells and boreholes and women can access water through these channels.

### **Water Scarcity**

Most women interviewed resort to alternative sources when there is water scarcity. About 20 percent of the women buy water, 42 percent rely on their neighbours, and 18 percent source water from the Church (Table 3). Women who obtain water from church, which is about two kilometres away from their residences, need to get their by either walking or taking public transportation. They obtain water free from the church; the only cost is the fare for public transport. Other measures taken during water scarcity include trekking long distances to get water, waiting long hours queuing for water where it is available, relying on

very testy period for water search on the part of women. Water quality is impacted during the rainy season (April to October) when water from some wells becomes muddy and women have to use alum to clear the muddiness.

*...Due to water scarcity three of us shared a bucket of water for our daily bath.... During the dry season, when the stream ran dry, we struggled to save water used for washing clothes to flush toilet.* (qtd. in Olufemi "Women" 428).

There is also a correlation between water and fuel scarcity. When there is no electricity to pump water into storage tanks, or to pump water from wells, most of the women interviewed expend a lot of money and energy to access water. Some of the women buy fuel (petrol or diesel) for their generators (if they have one) or draw water manually from these wells if depth is not very low. Due to the erratic nature of power supply there is a lot of time, cost and energy wasted by women to access water for food work inside and outside the home. In the study locations power supply

In some cases women contribute money to buy fuel for their generators to pump water. Cost is also expended on purchasing containers, drums and bowls to store water. There are both human and physical costs involved for women when accessing water during scarcity. Hidden costs during water scarcity include buying credit to make phone calls to neighbours to arrange to obtain water from their residence, spending extra money to purchase water, and emotional and physical stress from walking and searching for water.

### **Work**

In regards to the impact of water scarcity on women's productive work, about 78 percent indicate stress from walking, fatigue, reduced productivity, limited assimilation at school, difficulty in reading, and lateness to work or school. UN-Water/Africa report indicates "...The time spent fetching water results in low school attendance for girls, limited income-generating opportunity for women and increased levels of food insecurity" (122). Searching for water during scarcity takes a lot of time



Photo 4: Roadside Buka/food canteen. Source: author, 2013.



Photo 5: Borehole water point outside a house. Source: authors' fieldwork.



Photo 6: Woman involved in community food work. Source: author, 2013.

away from women's other productive activities. An estimated 200 million hours are spent each day by women globally collecting water for domestic use and this is time not spent working at an income-generating job, caring for family members, or attending school (Hutton and Haller; WHO 2010). Photos 7 and 8 depict children are drawing water from a well and women's early morning water run respectively.

Fourteen percent of the women indicate water scarcity does not have any impact on food provisioning work while 86 percent indicate water scarcity has tremendous impact on their food provisioning work, for example, women who use water for processing and production of cassava flour, or "Garí" (Photo 9).

Most women indicate water scarcity negatively impacts their food work. Due to lack of enough water available for cooking, women have to ration water for food preparation, have limited water for cleaning up, experience a reduction in food sales, and are forced to re-use water multiple times (recycling water for other uses) for other purposes like household cleaning, saving laundry or used dish water to clean drainages/gutters or flushing toilets among others. Reproductive and productive work is severely impacted when there is water scarcity. Families sometimes resolve to eating out and leaving some of the domestic chores undone until there is enough water to carry out these activities. Some household members seemingly patronize food vendors or street food hawkers and also buy bottled or sachet water to drink. The sachet water costs about ₦5 [US\$0.25] per sachet and it is easily accessible on the streets.

Excerpts from some of the women interviewed are seen below:

*...I buy water about 40 litres of water at ₦20/25litres [US\$0.10]*

*jerry can from a nearby commercial borehole. Sales are reduced when there is water shortage because of irregular power supply. When power is off, water cannot be pumped, my business turnover is reduced, we had to rinse pepper (pepper, tomatoes, onions) once instead of twice. (a food grinder and married mother of four)*

produce when it gets to the market. Water scarcity sometimes increases the cost of food stuff (market women have to sell produce at high costs) and it also increases the cost of prepared food in restaurants or 'buka' (women are mostly involved in these food enterprises) and household food budget. When there is fuel scarcity, farmers spend more money transporting their

### **Improving Women's Access to Water**

Water scarcity, in terms of economic (time and cost in obtaining water) or physical (not enough water) or environmental (natural phenomena, floods, drought) and/or artificial (human, institutional barriers, poor governance, lack of political

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**"When there is power cut, I walk longer distance to get to where there is generator to pump water from borehole and the case is even worse when there is fuel scarcity, when I had to wait for longer hours on the queue for water. As a result, I sometimes get late to school, [and] tired. It affects my school work anytime I go in search for water." (eleven-year-old student)**

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The married mother compromises the safety of her consumers by rinsing the pepper once. Most of the women reuse the same water several times during the course of the day to rinse peppers brought for grinding.

*When there is power cut, I walk longer distance to get to where there is generator to pump water from borehole and the case is even worse when there is fuel scarcity, when I had to wait for longer hours on the queue for water. As a result, I sometimes get late to school, [and] tired. It affects my school work anytime I go in search for water. (eleven-year-old student)*

*...I spend a lot of money buying water from tankers, who supply us with water every week, but we had to ration water when the water tanker/vendor does not have water to sell to us. This affects the amount of food we prepare for sale daily and our profit. (55-year-old restaurant owner)*

Farm productivity is also impacted when there is water scarcity and this subsequently affects the prices of

produce to the market and the costs are added onto the price of food stuffs. Most women are triply impacted by water scarcity because they are small scale farmers, market traders/food entrepreneurs/Buka owners and wives/mothers.

### **Health**

About 88 percent of the women indicate that water scarcity, the search for water, and carrying water on their heads or manually drawing water from wells impacts their health. The women complained of fatigue, headache/pain and neck pain. About 60 percent of the women experience mental and physical stress very often from water scarcity.

Carrying water in a large container on heads is more likely to have severe health implication to women and girls. The most common health problem is backache and headaches. Water scarcity presents with some water-borne illness among the women interviewed. About 46 percent of the women have experienced typhoid, 22 percent have experienced diarrhoea and cholera while ten percent have experienced gastrointestinal illness.

will), affects all aspects of human development, particularly health and productivity of women in the study. Water scarcity in Ibadan and other communities is systemic problem induced by ineffective planning, poor governance, and inadequate infrastructure. Women linked water scarcity to government insensitivity, poor public policy, and management. Policy and institutional failure are evident in the study as results show that 86 percent of women in the study do not rely on government water supply. Water in this case study is individually provided by residents. In the case study water scarcity affects women's productivity and health. Food work is reduced, livelihoods disrupted, loss of productive time queuing, reduced profit from reduced sales, water rationing, multiple re-use of water, increasing cost of producing and selling food items that depend on water. Women's health is also affected by water scarcity: 60 percent of the women have mental and physical stress, 46 percent have experienced typhoid fever and women experience pain, headaches and fatigue from carrying water on their heads.

The domesticity of women's labour





Photo 7: Children fetching water from a well. Source: authors' fieldwork.



Photo 8: Women carrying water. Source: authors' fieldwork.



Photo 9: Women processing cassava into gari. Source: authors' fieldwork.

in caring, nurturing, and providing sustenance in the private sphere through chores that involve water also extends to the market economy where women prepare food for sale (livelihood) in the market, Buka, streets or restaurants (public sphere). However, if care is largely embodied by women, it is devalued when in their food provisioning work women have to experience loss of productive time, energy, education and health due to water scarcity.

Cognisance has to be taken of the different needs and use of water by men and women. Women are positioned differently than men. This is not to say that men are unaffected by water scarcity, but the impact is different. It is considered the female moral duty, responsibility and obligation to care and nurture in the private and public spheres. Improved water access will reduce women's food work burden and women (and girls or their children) can spend the free time on other productive activities and have improved health and well-being.

Water scarcity as it relates to availability (quality and quantity), accessibility (economic, physical, affordability, cost, and distance), and agency (institutional capacity) threatens women's food work and consequently food security in water scarce regions and specifically in Ibadan. The water insecure are the food insecure. Women in this study are guided by three R's when using water: *reduce use, ration use and recycle used water*. Women's practical and strategic water needs can be met by easing their responsibility of care through:

- Equitable access to water distribution
- Developing low cost water technologies
- Engaging women in decision-making issues relating to the use and availability of water for

food provisioning work.

- Building capacity among women, local businesses, micro-enterprises and the informal food sector in water management to improve productivity.

To secure sustainable water for life and livelihoods and reduce the burden of women's food work in water scarce communities, planners should work with women and men to develop appropriate water management strategies to minimize unevenness and disparities associated with water scarcity; and promote equality and equity among the genders in water access.

### Conclusion

With one in eight people chronically malnourished and one in nine people without access to improved water sources, and about 49.6 percent of women constituting the global population, securing water and food sources sustainably and responsibly is imperative for food work and food security and thus for survival and sustenance of future generations. In water scarce communities like Ibadan, water scarcity is a threat to women's food work, and girl child's health in the public and private spheres. Water scarcity threatens women's food work in relation to physical, economic and personal well-being. Since "Women play a central role in providing, managing and safeguarding water" (The Dublin Principle, no. 3, UN, *authors' emphasis*), it is imperative to involve women in developing water management and governance strategies to reduce the burden and risk they face in search of water.

*Olajide Ojo obtained Bachelor of Science degree in Urban and Regional Planning from Obafemi Awolowo University, Ile-Ife, a Masters of Public Health degree in Environmental Health Sciences from the University of Ibadan*

*where he is currently also a PhD student in the Urban and Regional Planning Department. His research interests include social impact assessment, environmental impact assessment, pollution and pollution control, environment and health planning and transportation studies.*

*Olusola Olufemi has a PhD in Town and Regional Planning from the School of Architecture and Planning, University of the Witwatersrand, Johannesburg South Africa. She also obtained a Certificate in Food Security from Ryerson University, in Toronto, Canada. Her research and teaching career spans a period of over 25 years in Nigeria, South Africa, and Canada. She was a Visiting Professor at the University of Ibadan, Nigeria in 2013. Olusola Olufemi mentors young planners and her interests include social planning and advocacy, specifically in the areas of homelessness, gender and food security.*

<sup>1</sup>The MDG are broad international development goals established by the United Nations and agreed by world countries in 2000 at the Millennium Summit with the target date 2015. These are being revised into Sustainable Development Goals or SDG – Transforming Our World Agenda 2030.

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**JOANNA M. WESTON**

**Fire Girl**

birds whirl from your hand  
 free to seek the double moon  
 turn flight into a dream  
 where your face mirrors mine  
 and your fingertips transform  
 water droplets into feathers  
 that fly beside me  
 far from home or garden

*Joanna M. Weston's new poetry book, A Bedroom of Searchlights is forthcoming from Inanna in 2016.*

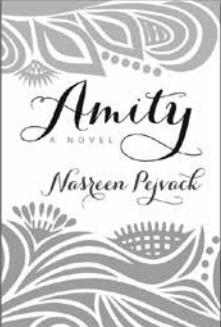


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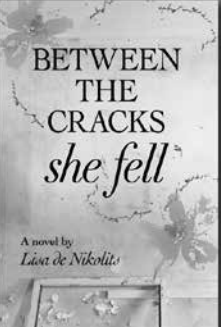
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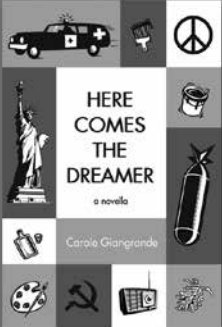
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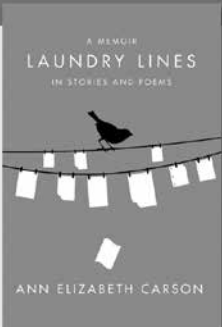
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Christina Park



A MEMOIR  
LAUNDRY LINES  
IN STORIES AND POEMS  
ANN ELIZABETH CARSON

## TARYN HUBBARD

### Excuse Me for Swearing

I'm sorry. That word should have never crossed my lips. I didn't see you there. You're still a woman, even on a jobsite. I shouldn't have said what I said in your presence.

Can I carry that ladder for you? Do you need help reaching that spot? Do you know what to do? I thought women liked caring professions, like nursing. Isn't that heavy? Why would you want to be here?

Oops. I'm sorry. Excuse me. Pardon my French. You shouldn't have heard that.

I'm all for equality. It's dangerous here. You have to be careful. Where'd you do your training? I support those Women in Trades initiatives if girls need extra help.

Why don't you spend time getting to know the girls in the office? Is that the goal? To eventually work in the office?

*Taryn Hubbard is a writer from the West Coast. She has published in CV2, Lemon Hound, Capilano Review, Event, Room Magazine, subTerrain, and others. When she's not writing, she works as a communications specialist in the public and private sectors, including five years at a trade union. tarynhubbard.com.*

## TERRY TROWBRIDGE

### On the Coexistence of Polyamorous and Asexual Lifestyles

A flower isn't neurotic  
when it strokes the ankle of every bee  
that peeks inside.  
Whether it knows or not,  
those petals will fall by the end of the month  
and the dirt will kiss them brown forever.

A bee is not neurotic  
for remaining celibate in its labour.  
Whether it knows or not,  
at the end of the decade its hive will be empty  
but honeycombs outlast their architects.

Bees are devoted to the memory of flowers.  
Their ecstasies are encoded for eons in progressions  
of hexagons, hive walls, housekeeping in perfect ratios.

*Terry Trowbridge is a PhD student in Socio-Legal Studies at York University. His poems have recently appeared in subTerrain, Carousel, The Dalhousie Review, American Mathematical Monthly, Whether Magazine (parenthetical), The Nashwaak Review, and other venues.*