

Women, Waste Management and Environmental Opportunism

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Abstract

This is a discussion of some of the activities routinely undertaken by women in connection with a little but significant aspect of the environment. The location is a small part of the human habitat named Osun State in Africa's most populous country. A feature of the environment that is under focus is waste management which is a process that includes waste generation, collection, disposal, re-cycling, and treatment. Women provide crucial agency in the process. Ecofeminism enables this study of an instance of how much is taken from the environment while the environment is rewarded with waste with implications for environmental sustainability.

Keywords: women; Osun State; waste management; environmental sustainability.

Introduction

Women are born strong and proactive or the task of gestating and sustaining the foetus in their body for nine months and nursing the baby for several months thereafter before weaning would have been apportioned to men. It is for this reason that ecofeminism gives credit to women for ensuring the survival of the human species. From time immemorial, patriarchy in many ways stifled women's initiative and denied them agency in sundry aspects of life in several countries of the world. Patriarchy is why women trailed behind men in education for a long time. To counter perennial male dominance over women and the environment, ecofeminism draws attention to biological as opposed to gender categorizations and the economic and environmental underpinnings of the arrangement (Kemp and Squires 1997). Cultural ecofeminism bases its argument on the biological roles of female fertility and child rearing: women have a special, natural, and empirical relationship with nature physiologically and psychologically. The act of rearing and tending make women naturally closer to nature than men; women are more ethically sensitive and biologically equipped for caring than men are. Hence, women have shouldered the daunting task of ensuring the continuity of humanity. Apart from this, women have functioned in many environmentally related roles clearing the garden, or farming, fetching water from village streams or rivers for bathing, drinking and cooking, washing of clothes, utensils, preparing food, generating waste and disposing of culinary leftovers as part of their waste management chores.

Women weave fabric using handlooms. They do traditional textile tie-and-dye for home and outdoor wear. They prepare local (black) soap, pomade, and other home-made cosmetics to meet personal and family beauty care and taste. They plait the hair for family members and other members of the community often free of charge. The many cultural and other services provided by women domestically and communally though enormous are usually rendered gratis. Also, a lot of this is done in silence. A part of the sociological upbringing of the woman has until recently been a quiet acceptance by women of the patriarchal structure. Women have been connected to the environment because of their proactiveness and natural endowment to preserve society by ensuring its survival and continuity.

One important activity that connects women to the environment both sentimentally and physically is waste management. One can argue that patriarchy denied women education for long so

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that women could continue to cooperate with men in the reckless depletion of earth's resources. The process continues to threaten sustainable environmental development. However, the compromised perception levels can be mitigated through three models of behavioural change or environmental citizenship, personal change and social change proposed in environmental education (Johnson & Mappin, 2005). This essay examines two women's creative and innovative energy in the human habitat.

Eco-sustainability

Waste management is closely linked to eco-sustainability strategies in different parts of the world (Mmeriki 2018; Addo, Adei and Acheapong 2015; Yoadaet *al.* 2014). In the past three decades, policymakers and governmental and nongovernmental establishments seem to have become more concerned about the connections between the environment, prosperity, and the lack thereof, and gender issues. These organizations began to make changes regarding natural resources and environmental management with specific consideration for the role of women. One such organization is the World Bank. The United Nations Environment Programme (UNEP) emphasized that sustainable development was not possible without decisive empowerment of women. The above statement was also reiterated at the Beijing Fourth World Conference on Women (1995); the World Summit on Sustainable Development (2002) and Millennium Development Goals (MDGs). The same idea was expressed during the ten-year review and appraisal of the implementation of Beijing Declaration and Platform of Action and at the 49th Session of the United Nations Commission on the Status of Women. A sustainable environment is therefore of great concern to all and must be addressed by all.

The inclusion of women in issues relating to the environment is also emphasized in four of the eight MDGs: Goal no. 2 stresses gender equality and empowerment; goal no.3 emphasizes universal primary education; goal no.6 sets to eradicate deadly diseases like malaria which have environmental bearing as a result of poor waste disposal mostly by women; while goal no.7 talks on environmental sustainability. Such projections and expectations on the relevance of women in the sphere of environmental upkeep may not be unconnected to the fact that in some places around the world, women play visible roles in the exploitation of natural resources. For instance, *Conserve Africa*, an NGO, explains that Article 14.2h of the Convention for the Elimination of all Forms of Discrimination against Women (CEDAW) also enjoins states to ensure that women enjoy adequate living conditions particularly in relation to housing, sanitation, electricity, water supply, transport, and communication. The Beijing Platform of Action borders on advocacy for the empowerment of women in respect of resources management and access. Its strategic objective K1 urges for active involvement of women in environmental decision-making; while strategic objective K3 enjoins states to put strategies in place to assess the impact of development and environmental policies on women.

The demand by these international organizations on women and the environment may be attributed to the fact that women are great exploiters of nature resources. In the attempt to access these nature resources, the environment's bounties, being limited, can be exhausted. Mazrui describes the bond between the woman and the environment in *The African Renaissances: A Triple Legacy of Skill, Values and Gender*. Accessing water for domestic purposes may require trekking long distances. In the urban areas, the story is different as most women depend on well water which requires a lot of energy to draw up (few homes can afford pumping machines and the fuel to run the pumping machines using a generator to provide the energy in the event of electrical power outage which seems to be the rule rather than the exception). One of the common environmental problems exhibited by

several of Nigeria's towns and cities is poor sanitation, especially of the unplanned neighborhoods. Some communities with similar challenges as observed in the country have been able to overcome these problems. Adebayo and Anyawu (2005) remarked that Indian women recorded success in solving environmental problems through their understanding of the cause and effects of land use and erosion, and other ecological problems. These women were even able to reclaim some damaged sites. The move supports this fact that if women are well-informed about environmental matters, they will engage in more positive measures to protect and preserve the environment. There is a close connection between environmental education and the attitude to the environment and its resources.

Ecofeminism

There are exploitative interactions between human and non-human constituents of the earth's surface. These interrelationships lead to distortions in the natural process and hence environmental pollution. Women's domination of the environment, and men dominating women, together makes the woman to be a major victim of the effects of environmental degradation and pollution. Environmental education on domestic practices of women will create awareness among women about their relationship with the environment and how to minimize the negative effect on women. The knowledge will make for the sustainability of the environment. The behavioural change or citizenship model of environmental education proposes a strategy of a type that involves pro-environmental action. Pro-environmental women will in the model be those women who would have also indicated that they were willing to act in favour of environmental sustainability. There are studies that have shown that although persons may possess a good knowledge of environmental issues and may display a positive attitude towards the environment, they may not be ready to act against environmental degradation. The success and failure rates of waste management vary from country to country across the globe (Rodseth *et al.* 2020; Gopinath 2020; Masood, Barlow *et al.* 2014). Abbas and Singh (2014) recorded a 64% high level of environmental knowledge and positive attitude towards the environment among students whom they studied. There was only a mere 25% level of participation in environmental protection activities recorded.

Studies have found that a gap exists between possession of environmental knowledge and the development of pro-environmental attitude. It has also been found that there is a gap between possession of pro-environmental attitude and willingness to act against environmental degradation (Kollmuss and Agyeman, 2002). Fewer still have investigated the reasons why even pro-environmental persons refuse to act against environmental degradation (Maity 2018). Although the conceptual framework of this study includes "willingness to take action" as a criterion for categorizing a respondent as pro-environmentalist, it concedes that there are reasons which lead pro-environmental women to be willing to take concrete action. Gender, institutional, economic, cultural, and motivational factors may explain why pro-environmental persons fail to act against environmental pollution and degradation.

Kollmuss and Agyeman (2002:48) submit: "Women usually have a less extensive environmental knowledge than men but they are more emotionally engaged, show more concern about environmental destruction, believe less in technological solutions, and are more willing to change". The observation is tenable, especially in Osun State (the focal point of a more extended study of which this is a small part) where women are prejudicially denied formal education and are driven to scour the environment for survival items for the upkeep of family and wider society. Despite the Beijing resolutions and subsequent reiterations, these efforts still go largely unrewarded as women source for basics (water for drinking, water for washing, water for gardening; crops for

food, process food, herbs for medicine to fight the likes of malaria fever – a killer more deadly than HIV/AIDS; domestic animals; wood for cooking, wood for roof-rafters, wood for furniture; etc. etc.) while the environment is given back so little apart from domestic waste. The COVID-19 pandemic and the measures introduced to contain the crisis have in some ways foregrounded the need routinely to show greater personal and public interest in environmental sanitation. However, there are other aggravating factors.

Ecofeminism addresses some of the conceptual and ethical inequities of the patriarchal structure that overburdens women while at the same time side-lining them when it comes to rewarding women for their input. Ecofeminism holds that patriarchal structures are the cultural origin of natural and gender domination. Ecofeminist advocacy is about a unified mental and natural liberation of women. It calls on women to play a leading role in the ecological movement (Chen 2014). Ecofeminism probes the relationship between natural domination and gender domination. It pays attention to its sociological underpinnings to achieve the liberation of both woman and nature. Ecofeminism is dependent on ecological science and the political sociology of the environment from a woman's perspective.

Waste management is a process involving waste generation, waste collection, waste disposal, waste re-cycling, and waste treatment (Nathanson 2019). The process implies that there must be a level of infrastructure available for its actuation. Some pro-environmental action can be taken in a practical sense only when relevant infrastructure is provided and exists in a functional sense. Such facilities would include recycling bins, waste collection places, transportation of waste, etc (Maity 2018 and Mmeriki 2018). In the 1980s the military dictatorship in Nigeria started a social awareness strategy that targeted environmental cleanliness which encouraged communities to take a few hours off in the morning once a month to clean up their living, working, and business premises. To this end, a curfew was imposed on pedestrian and vehicular movement to ensure compliance with the decree. The practice worked for a while continuing even under a democratic dispensation but has become ineffective owing to general apathy on the part of the public. There is a glaring lack of requisite public infrastructure for waste collection, waste removal and waste disposal befitting a rapidly growing population.

However, under a democratic dispensation, the government in Lagos State in the southwest of the country was able to set a new standard of environmental aesthetics and cleanliness during the 2000s. The State administration provided the necessary structures and facilities for waste collection, waste removal and waste disposal as well as some legal sanctions at a public level to elicit responsible behaviour by individuals to environmental cleanliness. One or two other State governments were able to emulate the experience of Lagos State about environmental responsibility and cleanliness. But many of the States have been inconsistent in their handling of environmental issues. In the States where the practice is alive it has fallen into routine and the frequency has been stepped up officially from a monthly to a weekly exercise confined to work and business premises and open markets in a bid to revive interest.

Economic Factor

Women tend to make economic decisions when it comes to the choice of action to take that would impact the environment. If cooking with firewood is economically cheaper than cooking with gas, the former is selected although this can have a much greater damaging effect on the environment than the latter. But it will be wrong to assume that such economic decisions come easy in an increasingly complex and unpredictable economic system. For example, for many years in the country cooking

with gas was cheaper than cooking with kerosene.

A lot of women (with formal education) whom I interacted with as friends and colleagues believed otherwise. They were convinced that using the kerosene stove was cheaper than using gas (electrical power was not in contestation because it was erratic and unpredictable). Then after some persuasion they tried gas and returned with the verdict that it was cheaper to use gas for domestic cooking than to use kerosene. The attitude to kerosene was the reason for gas being cheaper by the elementary principles of economics. The demand for gas was not as high as that for kerosene which many women (and men) believed for a long time was a cheaper means of cooking than gas. This was so because they could buy kerosene in smaller measures than they could cylindered gas. But by kerosene eventually added up to more than what an equivalent supply of energy from gas would cost over a comparable period of usage.

The attitude to wood for cooking is a comparable example: except for large-scale outdoor cooking, using a tripod of (granite) stones to support the huge pots in the traditional cooking arrangement, wood energy can cost more than using gas or kerosene. Again, this can be explained in economic terms: urbanization and deforestation have driven the supply source of forest wood farther away from easy reach of the prospectors for wood for cooking to points where the wood from felled trees would have to be conveyed in a vehicle to the wood market for sale. This process adds to the overhead and net cost of the firewood and can make it comparable in price to kerosene or gas. In the not-too-distant past in locations before massive urbanization, the woman would have ferreted for the wood and carried the bundled “booty” on her head. She would have had to trek from the “bush” to the house, where she would then proceed to cook with the wood for the family with no costing of any part of the effort, let alone a monetary reward on her input. The stress level carried by women remains unabated regardless. It only takes a new form in an urban setting.

Cultural Factor

Cultural practices dictate both the environmental consciousness and pro-environmental behaviour of people. Depending therefore on the limits allowed by culture, people act or do not act against environmental degradation. For example, the attitude to human waste disposal is culture related in many parts of the country as is evidenced in communities described in geography as “indigenous”. The settlements tended to be characterized by houses set up to shelter human beings that have all facilities except a toilet in a realistic and decent sense of the word. Admittedly, it is an architectural phase which every society has passed through at one time or another going by historical and archaeological records.

In the traditional setting in the southwest of the country before the advent of the pit latrine modality, an open space not very far from the house, named aatan in Yoruba, was set apart in lieu of a loo. The space dedicated to disposal of a corpse would similarly depend on the cultural and spiritual practice of the community. These all have ecological implications which formal and informal environmental education seeks to correct using one or another of the models of behavioural change, personal change, and social change (Johnson and Mappin 2005).

Motivation Factor

As with perception, motivation is a significant factor in waste management. According to the behavioural change or environmental citizenship model, a critical mass of pro-environmental women could “snowball” perception to a point that may begin to reverse an adverse environmental stance in the community, as the saying, little drops of water make up the mighty ocean. Beyond

mere awareness, there is a related kind of motivation that is monetized with respect to solid waste management which distinguishes between refuse or municipal solid waste and construction and demolition waste which is not part of municipal solid waste (Nathanson 2019). In the general context of inadequate infrastructure for formal waste management, some women in the country have found a niche and are suitably motivated to bridge the gap between domestic waste collection/disposal and the recycling of waste material. This is more so because material recycling facilities are few and far between in the country. Private business interest has been drawn circumstantially to an area of neglect by urban and rural municipal authorities that should be taking care of the environment for the general good (Nzeadibe 2015).

Two notable stories of women initiative and agency in connection with environmental sustainability are worth mentioning. The first is a waste collection and recycling initiative by a young woman with formal education. Bilikiss Adebisi Abiola (2019) is the chief executive officer (CEO) of Wecyclers a waste recycling outfit she started in 2012 in Lagos State and former capital city of Nigeria. She paid willing households some amount of money to motivate them to sort their domestic waste into plastic and metal which they took to collection points set up by the company. The company arranged for the sorted waste to be carted off on tricycles designed for the purpose to the company's waste deposit depot. There the waste materials were processed for sale to industrial buyers of the waste materials. Her own motivation for setting up the company was predicated on the data that Lagos State was a city of 20 million people who generated 10,000 tons of waste every day with about 20% of the waste made up of plastic and metal. She estimated the economic potential (profit) of the waste recycling project in Lagos State at USD 700m. Although still fledgling, an important part of the company's mission was to rid the environment of dirt and slums which were breeding grounds for bacteria and other disease and sickness carrying parasites that bred in an unclean environment. To this end, the company enjoyed the support of the Lagos State government and multinationals such as Coca Cola and DHL.

Domestic waste management will continue to be an important matter in the country, as in many parts of Africa, for demographic, health, and aesthetic reasons (Zhang and Wang 2010). At the level of public administration, failure to provide adequate infrastructure (for example, road network, trucks) for waste collection, removal and disposal is a natural guarantee that waste will pile up in homes, in the streets and at the roadsides, or be dumped in streams, lakes, rivers, etc. (Rodseth *al.* 2020). The careless massing of waste near human dwelling is a health hazard because the waste dumps become breeding places for malaria carrying mosquitoes and vectors of lassa fever, ebola, cholera, typhoid, diarrhoea, and other parasites. Apart from environmental pollution, indiscriminate dumping of waste assaults a sense of environmental aesthetics as may be observed along many of the country's highways which have become unauthorized dumping grounds for assorted municipal waste and debris from construction and demolition (Mohee and Simelane 2015).

Failure of public pipe-borne water supply after the first decade of political independence created a gap that the private business entrepreneur entered into to begin the "pure water" business which sold drinking water to people in polythene sachets. This business has aggravated the problem of waste collection and waste disposal as the polythene bags of "pure water" litter the streets as they are dropped off indiscriminately after use. The "pure water" business was initially unregulated and so it started cholera and typhoid epidemics that took human life through careless and unhygienic processing and handling of retailed water. The fatality abated only after the "pure water" business was officially brought under the regulatory authority of National Agency for Food and Drug Administration and Control (NAFDAC) whose most effective and efficient performance as a public

outfit was under director-general Professor Dora Akunyili (2001-2008). During her tenure she received a total of 930 international and local awards in recognition of her brave and unprecedented meritorious service at the headship of NAFDAC (NAFDAC Website). As with the “pure water” business, failure of public infrastructure for effective waste removal and disposal from homes and public places was the main reason private entrepreneurs came into waste collection, waste disposal, and waste recycling as money-making ventures.

Some important deductions follow from the waste collection, disposal, and recycling scenario outlined above:

(i) Waste collection and disposal can be good business in a densely populated city like Lagos; (ii) waste collection and disposal can be lucrative business in a relatively industrialized setting like Lagos; (iii) waste collection and processing can profit a private business in Lagos because the city has a track record of being environmentally pragmatic as during the last 15 years or so; iv) the business can for this reason attract government and multinational moral, material and financial support the way Abiola’s Wecylers has done; v) absence of good roads gives advantage of reach to waste business run on non-fuel mechanical waste carriage; (vi) access to the market for recycled waste is more cost effective in Lagos than in, for example, a place like Osun State that is farther from the market; (vii) the waste collection/removal/recycling business has a better chance of viability and survival in the long term in Lagos because of demographic and industrial presence than in Osun State where those metrics are weaker; (viii) the odds seem stacked against the monetised motivation option in Osun State; it is circumstantially unsupportable of waste removal, recycling, and disposal as a profit-making business on the scale envisaged by Wecyclers in Lagos State; (ix) finally, the private venture is selective about the type of waste it wants (plastic and metal, for Wecyclers); what happens to the rest of the waste? (Nathanson 2019:n.p).

This latter question can only be addressed in a larger study. A hint of what can happen is contained in the second story of entrepreneurial initiative and agency.

The BBC Pidgin programme did a documentary on Intissar Bashir-Kurfi and her business project in the country’s capital territory. She had a waste collection and recycling business that used discarded “pure water” polythene sachet to make interlocking tiles for use in building construction. She motivated students at a secondary school in Gwarinda estate, Abuja, to pick up discarded pure water bags by giving them solar powered torch gifts proportionate to the quantity of poly waste they brought to her collection points. The waste was then processed into tiles which could be used for house and road construction purposes because of the advantage that the tiles had of being produced from material that was not readily biodegradable. The business needed 500 pure water bags to make a single tile. There could be no shortage of raw materials for making the tiles because, according to her, the country generated 32 tons of waste annually of which only 20 to 30 percent of it was collected. In this way she aimed to help the country solve the problem of environmental pollution caused by faulty and ineffective waste management (Bioenergy Consult 2020).

Both women entrepreneurs discussed above had some formal education. They were impelled in part by an ailing national economy that was characterized by growing joblessness and declining infrastructure to be proactive. CEOs Abiola and Bashir-Kurfi and an increasing number of other women have demonstrated initiative and agency in roles traditionally reserved for men because of

their high level of perception and motivation in Lagos State and Abuja Capital Territory, respectively. Their interventions are economically beneficial and environmentally friendly –and augur well for sustainable environmental development, by their own admission. However, the business niche which the women have found is opportunistic. This is to be expected because capitalism runs on opportunism in both a positive and a negative sense. For example, if administrations in the country were more alive to their responsibilities to the people and provided pipe-borne water to homes and business premises, as should normally be expected, the pure water trade in all its ramifications would only be marginally economically viable. Pure water packaging and distribution would only be an exceptional complementary source of drinkable water for the generality and not the rule as is presently the case in the country. Imagine trying to run an itinerant pure water business in a middle level income economic setting like Botswana. It would be a flop –and this will be because the availability of pipe-borne water in homes and public places will render such a project redundant and unviable.

Conclusion

The Beijing resolutions have drawn attention to women's plight and the threat to the environment. While policies have since been formulated in many African countries to ameliorate the situation, their actualization has been affected by peculiar local cultural, economic, and socio-political circumstances. An instance is the issue of waste management and sustainable environmental development. Women are still in large measure engaged in household activities that are harmful to the environment because of difficult economic realities and a general absence of adequate infrastructure due in large part to inept governance. Therefore, it seems reasonable to conclude that sustainable environmental development is a general responsibility of all citizens and residents in the country and not only women.

It is so because there is a limit to what the woman can accomplish, despite her endowment with strength and her acknowledged capacity for endurance and resilience, without complementary capacitation by relevant organs of society. It is the main reason the achievements of women have remained modest since Beijing. The travails of women's initiative and proactivity in all spheres of life will be reduced in a general climate of education and accountability. There is the need to redirect creative and innovative energy positively. Women and men, indeed everyone – young and old – will benefit. So too will the environment. Ecofeminism raises perception levels in men and women especially.

Core assumptions of ecofeminism include the following: a) oppression of women and oppression of nature are related; b) understanding the importance of the link is necessary to fully appreciate the oppression of nature and the oppression of women; c) the theory and practice of feminism must include the ecological approach which addresses the interdependence of elements within the ecosystem; d) resolution of ecological problems must include the feminist point of view. Based on these crucial assumptions, all ecofeminist strategies focus on eliminating the subjugation of women and ameliorating the domination of nature. The argument is that an understanding of the relationship between nature and women will facilitate the realization of the main goals of ecofeminism. Waste management is about women's household practices that impact the environment and have implication for environmental sustainability. Increased awareness levels and suitable motivation will empower women for greater involvement in decisions that favour the human habitat and speak for environmental sustainability.

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