



CENTRE FOR HUMAN SETTLEMENTS AND URBAN DEVELOPMENT JOURNAL

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA

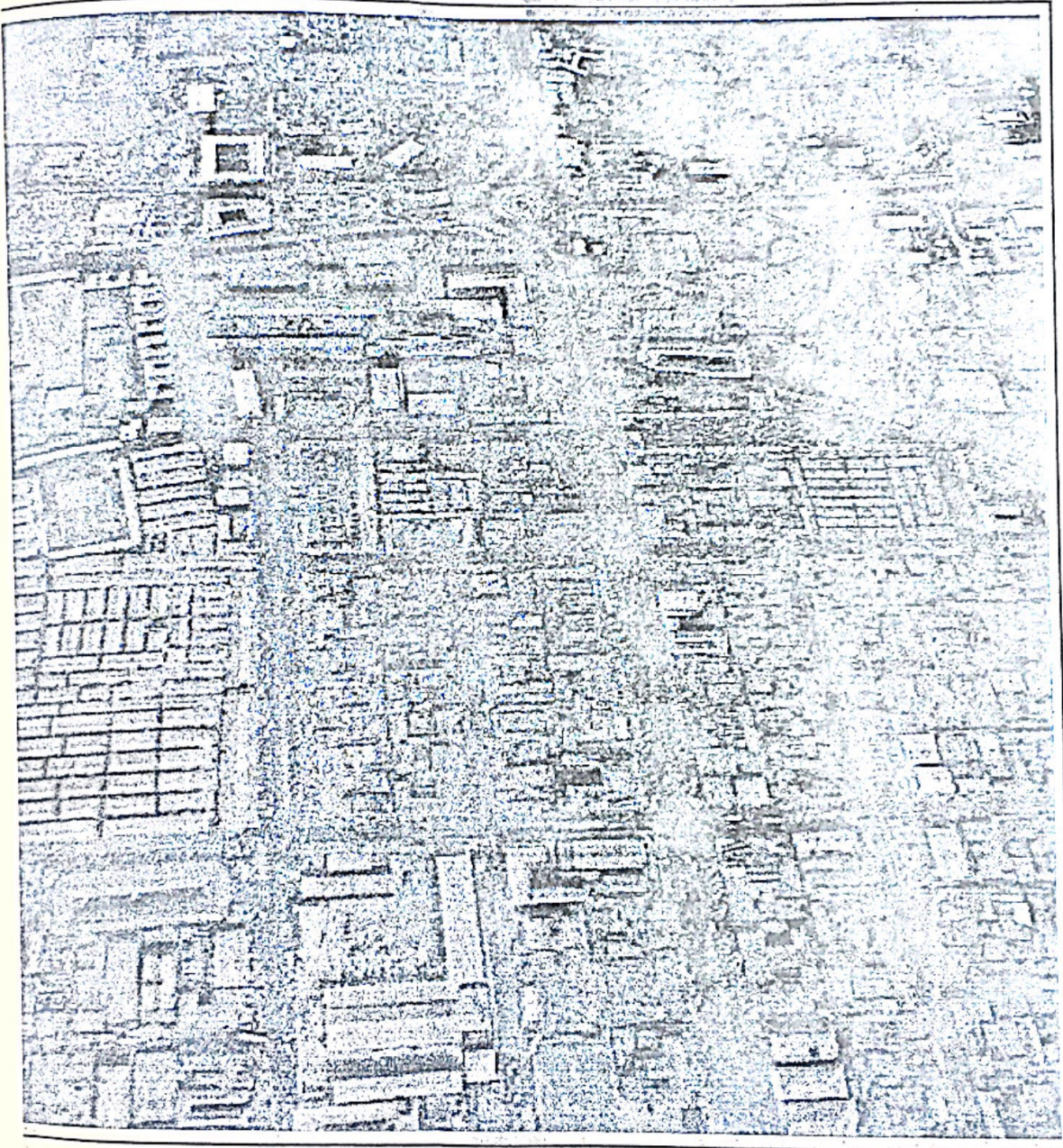
CHSUDJ



VOLUME 1 No. 1

DECEMBER 2010

MAIDEN EDITION



**CENTRE FOR HUMAN SETTLEMENTS AND URBAN DEVELOPMENT,
FEDERAL UNIVERSITY OF TECHNOLOGY,
P.M.B. 65 MINNA, NIGER STATE**

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CENTRE FOR HUMAN SETTLEMENTS AND URBAN DEVELOPMENT (CHSUD)



VOLUME 1 NO.1, DECEMBER, 2010. MAIDEN EDITION

Published by:
Centre for Human Settlements and Urban Development,
Federal University of Technology,
P.M.B. 65, Minna, Nigeria.
E-mail: chsud@futminna.edu.ng
Maiden Edition

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WOMEN AS STAKEHOLDERS IN THE SUSTAINABLE MANAGEMENT OF URBAN ENVIRONMENT

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Abstract

The complex nature of urban environmental problems and the inability of the earlier management approaches to resolve them call for new partnerships in our cities. This paper examines the different ways in which women's micro economic activities impact on urban environment and the efforts of the women in managing the problems in Minna, Niger State. It was found out that woman's economic activities such as dressmaking, food/drink making and agricultural produce processing contribute to refuse generation, environmental littering and pollution. However, the women in micro economic enterprise in Minna were found to play less active role in environmental management besides the sweeping of their immediate business premises. The paper noted the potential roles of women in citywide environmental management and concludes with recommendations on environmental strategies such as education, formation of environmental groups and networking as priority issues for better involvement in urban environmental management.

Introduction

Cities of the 21st century face a myriad of unresolved environmental problems which include poorly managed solid wastes, littering, unserviceable drainages, pollution and general environmental degradation. In most of the developing countries, these problems have assumed greater complexities and efforts to resolve them have not yielded much positive results despite government's efforts and huge financial commitments. These problems have imposed heavy health burden on urban residents and they remain major challenges to the city managers worldwide.

The existing backlogs of unresolved environmental problems in most developing countries are great indications of the need for new partnership in environmental management. In response to this need, the United Nations Center for Human Settlements (UNCHS) launched the Sustainable Cities Programme (SCP) in 1990 to address urban environmental problem through capacity building and popular participation. The SCP encourages partnership among all interest groups in the city. The programme is built on the principle that urban environmental problems affect every individual, group and organization in the city in all ramifications. Hence, sustainable environmental management requires a broad-base, active

participation of all those who can contribute to solutions and all those whose cooperation are necessary for successful implementation of environmental management programmes. The SCP introduced the concept of stakeholders in the management of urban environment. Stakeholders are actors who have interests in cities and whose decisions and activities affect the urban environment. According to the UNCHS (1994), they are those whose interests are affected, those who possess relevant information and expertise and those who control relevant implementation instruments. These actors are diverse in their interest, the level of impact on the environment and their capability for involvement. They include persons and organizations from the public sector (especially at the local level), the private sector (especially the business community), and the popular sector (especially communities and NGOs).

Women, in all parts of the world, are considered as major stakeholders in the urban environment. They constitute a sizeable proportion of the urban residents. As members of the business community, women have interests in commerce and industry most especially at the informal sector level. Women constitute a large proportion of the urban informal sector operators (Mayra and Margnerre, 1990) and about 55.7% of the urban informal

sector activities are operated by women (Strassmann, 1987).

There is no doubt that the micro economic activities of women have considerable impact on the urban environment. In many of the developing countries, women's role has extended beyond the traditional house keeping to that of working in the fields. Thus, as women collect fuel, fodder, water, etc. they set up the process of environmental change. However, the questions that may be asked are: In what ways have women's economic interests affected the urban environment? What are their contributions in environmental problem management and what are the areas for possible improvement? Against the backdrop of the increased recognition of the roles of women in development, this paper addresses these questions and explores the avenues for better future involvement of women as stakeholders in the management of urban environment.

Research Methodology

The paper utilizes from both the primary and secondary sources. The secondary data were drawn largely from the literature on known cases of women participation in environmental management. The primary data were collected with the aid of structured questionnaire, which sought information on the micro economic activities of women, the waste generated, the impact on the environment and women's roles in the management of the problems. The questionnaires were administered on 830 micro enterprise operators and food processors drawn from eight residential wards in Minna, Niger State. The selected wards include Nasarawa wards I, II and III, Sabon Gari, Minna Central, Makera and Limawa wards I and II. Oral interviews were also conducted on women leaders in the neighbourhood and a woman NGO at the Federal University of technology, Minna. The data collected were analyzed using simple descriptive statistics and the results were presented in frequency and percentage score tables.

Review of the Roles of Women in Environmental Management

Women are globally acknowledged as a dynamic, industrious and resourceful gender that contributes positively to environmental management in all societies. Sayne (1991) observed that women have continued to play the primary role in taking care of the earth planet and its inhabitants. The advocates of cultural ecofeminism (a broad canvas of ideas and practices, evolving largely from Western women's participation in the women's ecology and peace movements) portrayed women as "natural" environmental carers due to their role in nurturing life.

The global debate on women and environment has gradually shifted away from viewing women as mere victims of environmental burden to the recognition of the roles they could play in natural resource management, arising from their knowledge and the privileged experience gained from working closely with their environment. Right from the 1985 Third Conference of Women held in Nairobi, Kenya (where the Nairobi Forward-looking Strategies for the advancement of Women were adopted) to the 1992 United Nations Conference on Environment and Development, opinion on women advancement and their key role in the preservation and management of the environment have aggregated over the years. Specifically, chapter 24 of Agenda 21 specifies the global action for women towards sustainable and equitable development and one of its objectives urged national governments to implement strategies for the advancement of women's participation in national ecosystem management and control of environmental degradation.

Several cases of women involvement in environmental upkeep have been documented in the literature. As the custodian of good house keeping, they see

to the basic hygiene of the family and the surrounding and this involves the sweeping and cleaning of the surroundings, seeking the efficient disposal of wastes etc (NEST, 1991). At the neighbourhood level, women in many parts of the world have made important contributions in the maintenance of shelter and infrastructure. In Africa for instance, women have traditionally carried out maintenance work within the house and the larger physical environment of their neighbourhoods (Agbola, 1990).

Few concrete examples could be cited here. First, in Kirillapone, women, through a voluntary unpaid labour called *shrmadana*, have participated in the maintenance of public facilities. (Fenando, 1985; cited in Agbola, 1990). The Mabati women group in Nyeri, Kenya were also involved in the improvement of shelter conditions and related services since the early 1960s (Together Foundation and UNCHS, 2001) while in Samoa, traditional women societies were responsible for the maintenance of domestic water resources and sanitation (UNCHS, 1985; cited in Agbola, 1990). In India, Rani Tyagi (1992) has reported how rural women in the mountain areas of Himalayas have actively maintained and managed the ecosystem. According to the author, the famous forest movement called '*Chipko Andola*' was involved in a campaign against forest destruction in the Himalayas. Women groups in the area have also taken many initiatives to regenerate the forest by planting trees and protecting them.

These traditional rudiments of women's environmental management activities have been augmented by recent efforts of organized women groups whose activities are facilitated by national governments, the United Nations development agencies and NGOs. In Morocco, for instance, women from the Maghreb Forum for Environment and Development organized a campaign on deforestation and launched a tree-planting project in 1990 (Together

Foundation and UNCHS, 2001). Over 500 women participated in the "One Woman, Two Trees" programme in which trees were planted in public areas and schools throughout the Rabat metropolitan area.

The activities of United Nations Population Fund (UNFPA) and UNIFEM have also enhanced women participation and their potentials in city management. A good reference point is the Women's Co-operative for Education, Family Health and Sanitation, which was established in the Coura district of Medina by these bodies. This organization involved secondary school graduates in organizing efforts to collect household garbage, clean up sewage ditches and carry out public enlightenment campaign. The general outcome of this effort is the increase environmental awareness and change in household behaviour (UNFPA, 1996).

In addition to the voluntary activities of women in environmental management, women empowerment programmes in India have also demonstrated the effectiveness of women-run waste management outfits in solid waste management. In 1998 for instance, solid waste management in Kukatpally, India was entrusted on women self-help groups (Together Foundation and UNCHS, 2001) The groups were organized, trained and supported financially through banking institutions and fund from government schemes. The women-run solid waste management outfits were affirmed to achieve regular and effective garbage clearance, road sweeping and de-siltation of drains that brought about a qualitative and visible improvement in the living environment of Kukatpally city. Also in 2006, the Global Environment Fund (GEF) reported the activities of the Phnentsholing Women Association (PWA), an NGO in Bhutan, in promoting conservation and sustainable use of resources. The association collaborated with the city corporation to conduct a cleaning campaign which

included clearing of drains, waste collection and disposal as well as grass cutting.

There are several other acknowledged but undocumented efforts of women in environmental management in many parts of the world. In Nigeria, for instance, the National Association of Women in Academics (NAWACS) has carried out a number of environmental management activities. The Federal University of Technology, Minna chapter of NAWACS carried out a research on campus waste litter pattern in the year 2001. With financial assistance from the University, it thereafter mounted over 50 waste disposal baskets on steel frames and provided about 12 refuse collection drums placed at strategic places around the campus. The association also carried out environmental cleanliness education programme on diseases transmitted through dirty environment in

Women's Micro Economic Activities in Minna: Environmental Problems and Management Efforts

Women constitute a large part of the urban population and that about 55.7% of the urban informal sector activities are operated by women. These economic activities of women generate certain environmental problems. A survey of the micro economic activities of women conducted in nine residential wards in Minna shows that the women are engaged in a wide range of businesses which could be categorized under four major sub-economic activities (table 1). These sub-activities include sewing\dress making, food and drink making, agriculture\food processing and product\material making.

2002 and trained the University cleaners on the proper use of toilet cleaning tools and materials. The environmental management activities of NAWACS also included campus beautification exercise in which 12 shade trees and over 100 shrubs were planted in Bosso campus of the University between July and August 2002.

The cases cited are few examples of the activities of women in environmental management and upkeep as there are several other documented and undocumented cases worldwide. The different cases point to the capability of women folk and the potential contributions they could make to sustainable management of urban environmental problems. The next section considers the impact of women's micro economic activities on the environment of Minna town and the efforts made to manage the problems.

The components of these sub-activity areas have varying impacts on the immediate work place and the general environments. As shown in table 1, the different micro economic activities of the women generate both solid and liquid wastes that are disposed directly into the environment and which generate certain environmental problems. As the principal food processors (e.g cassava, locus bean and melon processing), for instance, women generate harmful wastes, which degrade the immediate environment and pollute the urban streams. The nature of the environmental problems\impacts generated by the variety of wastes produced include environmental littering, land, water, air and noise pollution, local atmospheric heating and general land degradation.

Table 1: Economic Activities of Women and Related Environmental Problems

Economic/Production Activities	Types of Waste Generated	Environmental Problems/Impact
Textile/Dress Making Sewing Dyeing Spinning Weaving Knitting and Dye	Pieces of threads Pieces of clothes and threads Pieces of threads Colored waste water	Environmental littering Refuse and littering Environmental littering Land pollution
Food and Drink Making Beer production Water packaging Malt and Zobo drinks Yogurt drinks Fruit drinks Confectioneries (bread/cake)	Soya beans paste Polythene wastes Polythene wastes Plastic/paper cans, Plastic/paper can, fruit remnants Steel cans, polythene, crumbs	Refuse\ air pollution Refuse and littering Littering Refuse and littering Refuse and littering Refuse, atmospheric heating
Agriculture/food processing Poultry keeping Poultry feed making Rice/corn/millet milling Cassava processing Cowpea bean/melon processing Fish smoking Yam smoking/frying Food vending	Animal dung , feed wastes Dusty shafts, paper/polythene Shafts Cassava peels, cyanide acid Yellowish/brownish pasty dirt, chaffs Fish scales, smokes and black soot Yam peels and ashes Food remnants, ashes, waste water	Refuse, noise and air pollution Refuse, air pollution Refuse, air pollution Refuse, land degradation Refuse, urban stream pollution Air pollution Refuse Refuse, aesthetic pollution
Handicrafts/Product Making Polythene bag making Stationeries production Soap making Candle making Pottery\ ceramics	Polythene wastes Pieces of paper Soap remnants Candle crump Pieces of mud, broken products	Littering, aesthetic pollution Littering, aesthetic pollution Chemical pollution Refuse, chemical pollution Land degradation, refuse

Source: Fieldwork, 2007

The survey findings shows that the wastes generated are managed by crude methods. As shown in table 2, majority (87.3%) of the 830 respondents interviewed dispose their refuse into any available open space in

the town. Only 10.5% of them use officially designated refuse dump sites while others dispose the refuse into open drainage\ nearby bush of even burn the refuse openly to cause air pollution.

Table 2: Methods of Wastes Disposal

Disposal Method	Frequencies	Percentages
Available open space	724	87.3
Official refuse site	87	10.5
Open drainage	7	0.8
Nearby bush	2	0.2
Open burning	10	1.2
Total	830	100.0

Source: Author's Analysis, 2007

Against the backdrop of the fact that economic activities of the women generate some wastes and environmental problems, the respondents were asked to mention the specific environmental management activities they are engaged in. The responses (table 3) show that the majority (78.2%) were merely involved in the sweeping of their business premises, another 13.8% were

engaged in occasional clearing of accumulated refuse while only 8.0% ever carried out general environmental sanitation. Generally, it was found out that all the respondents have poor perception of the negative environmental implications of their daily economic activities. Thus, no meaningful consideration is given to the proper management of the by-products of their businesses.

Table 3: Environmental Management Activities of Respondents

Management Activities	Frequencies	Percentages
Sweeping of business premises	649	78.2
Clearing of refuse	115	13.8
General environmental sanitation	66	8.0
Total	830	100.0

Source: Author's Analysis, 2007

The results of this research show that the women in Minna are urban stakeholders whose economic interest and activities affect the urban environment and who make little contribution to the management of the problems. The current management efforts are limited to the rudimentary cleaning of their immediate business environment. However, as stakeholders, the women have potentials for better involvement if given proper orientation and organization. What is required, therefore, is the creation of the necessary enabling environment. Achieving this however, requires the

identification of priority issues for better involvement.

Priority Issues for Better Involvement

The need for gender mainstreaming in urban environmental management cannot be over emphasized. Many global discourse and international conventions have stressed the need for tapping the potentials of women in environmental management. Specifically, Agenda 21 urges national governments to implement programmes that develop active participation of women, emphasizing their crucial roles in achieving the changes necessary to reduce or eliminate unsustainable pattern of consumption and production, in order to encourage investment in environmentally sound and

ldly productive activities. In order to
eve this feat, the following priority areas
better involvement of women are
posed.

(i) **Environmental Education**
formed environmental care awareness and
sciousness form the basis for
erstanding, co-operation and
icipation. In the Minna case study,
nen stakeholders have poor perception
he environmental problems arising from
r socio-economic activities. Awareness
ing through radio and television jingles,
lic drama, focused group sensitization
open air campaign is therefore
essary. The required environmental care
areness education and other awareness
rcises could be channeled through the
sting informal groupings in the
mmunity. Formal women associations
h as the National Council of Nigerian
omen (NCNW), Nigerian Army officers
ves Association (NAOWA), Police
ficers Wives Association (POWA),
deration of Muslim Women Association
Nigeria (FOMWAN), National
society of Women Journalists
AWOJ) and National Association of
omen Academics (NAWACS) should
efine their roles and pay more attention
the mobilization of urban residents (most
pecially women groups) towards
vironmental upkeep and good
anagement practices.

is known fact that women enjoy soft spots
d are often listened to when they care to
eak. The existing women associations
ould exploit the current favourable gender
olicy environment to contribute to positive
blic discussions and act as environmental
atchdogs. They should monitor and report
ses of environmental mismanagement
ith a view to seeking redress. The
sociations should start a nationwide
view of the management programmes of
vironmental agencies and municipal
thorities with a view to making positive
ontributions.

(ii) **Formation of Self-help Groups and Trade Associations**

Self-help groups and trade associations are
formidable platforms for meaningful
environmental management involvement.
Presently, the women micro enterprise
operators in Minna are not organized into
trade associations. The existing NGOs
should help organize the women into trade
associations to provide the necessary
platforms for involvement and networking.
Such associations will provide good
avenues for mutual assistance, information
dissemination and carrying out
environmental management activities.

(iii) **Networking**

Women are known to form a network of
social and economic support and co-
operation both at the neighbourhood level
and beyond. These avenues should be
explored to form a citywide link among the
formal and informal groups to review
environmental problems and draw up local
action plans on priority problems.
Activities at this level could, also include
sharing of experience and exchange of
programmes among neighbourhoods within
the town. For instance, the experience of the
Minna chapter of NAWACS in solid waste
management and tree planting should be
shared among women NGOs within the
town and beyond.

Conclusion

There is a growing consensus on the view
that women are stakeholders in the
management of the urban environment,
whose activities should go beyond the
traditional home cleaning. The current
global discourse on women, environment
and development as well as the documented
cases of the roles and potentials of women
in environmental management are all
pointers to the need for their proper
enlistment and full engagement in
environmental management. Women appear
to have great potentials in the management
of urban environmental problems. However,

as revealed in the Minna case study, their level of involvement is currently low. Enlisting their full co-operation and

References

Agbola, T. (1990). 'Women, Self Actualization on the Theory of Development' *African Urban Quarterly*, 5(1 & 2), 170 - 175.

Agbola, T. (1990); 'The Nature of Women's Involvement in Housing Development: A survey of the Literature'. *African Urban Quarterly*, 45 (3 &4), 178 - 184

GEF (2006). Role of Women in Environmental Conservation. *GEF Small Grant Programme*.
<http://sgp.undp.org/web/project/27/>

Myra, B. and Marguerite, B. (1990). 'Sex Differences in Access to Small Enterprises Development Fund in Peru' *World Development Journal*, 18, (5), 1 - 2.

NEST (1991). Nigeria's Threatened Environment: A National Profile. *Nigerian Environmental Study/Action Team* Ibadan: Intec Printers Ltd. pp 272 - 275

Rani, Tyagi (1992). *Role of Mountain Women in Environment Governance*.
www.encoinsee.org/

participation therefore requires positive actions in the priority areas identified.

Strassmann, W.P. (1987) 'Home-Based Enterprises in Cities of Developing Countries'. *Economic Development and Cultural Changes*. 36 (1), 1 - 2.

Together Foundation and UNCHS (2001). *Best Practices in Improving Living Environment*. 2001 Istanbul + 5 Version; CD-ROM, neostream.

UNCHS (1994). *Sustainable Cities: Concepts and Application of a United Nations Programme*, Nairobi: UNCHS, 1994 pp 8 -10 and 26 - 34

UNCHS (2005). Women in Cities. *Habitat Debate*, 11(1), 1-2.

UNFPA (1996). State of World Population, *United Nation Population Fund*, 1996.

United Nations (1992). Earth Report Summit. *Agenda 21: the report of the United Nations conference on Environment and Development (Earth Summit)* in Rio de Janeiro, 3 - 14 June 1992

United Nations (1995). Women Key to Development. *Partnership for Development*. 1(2), 1 - 2. October 1995