SWAZI WOMEN AND ISSUES OF ENVIRONMENTAL DEGRADATION AND CONSERVATION

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Abstract

This paper attempts to inquire into the factors which have forced Swazi women to undertake activities which result in environmental degradation. The paper demonstrates how women have played a major role in bringing about sustainable development. Initiatives taken to promote environmental conservation by Swazi women are considered. The paper emphasizes the need for recognition and support for existing knowledge and status of women as a valuable human resource.

Introduction

The relationship between women and the environment is not static. As the years progress, the relationship between women and ecological processes undergoes significant changes in response to heavy ecological stress. In present day Swaziland, women in rural areas have inherited a situation where their rights and access to cultivable land have decreased. Places from which they gather such vital necessities as fuelwood and water have grown scarce. The conditions in which their urban counterparts live are not encouraging either; their wide-ranging environmental problems of pollution, poor sanitation, and housing justify the assertion that life has become hard for the woman irrespective of her place of residence.

This paper in the first part addresses the problem at hand by studying the constraints faced by women in their economic and social roles in the Swazi setting. Further, it gives an exposition on issues of agricultural production, education, and environmental degradation. To bring the discussion to a climax, the second part of the paper demonstrates that, despite the fact that women have indulged in environmentally unfriendly activities through no fault of their own, they have felt it incumbent to spearhead activities aimed at environmental conservation.

Socio-Economic Roles; the Status of Swaziland Women in Relation to the Environment

Before entering into a discussion of the constraints faced by Swazi women in their socio-economic roles, it is important to note that women, as a group, are not homogeneous. Consequently environmental degradation generally affects women differently. In addition to the class distinction, we note that inequalities among women arise due to seniority and have an impact on the nature of division of labour, resource utilization, control, and decision making powers. For example, the arrival of a bride in the household implies relief from a significant number of domestic chores for her mother in-law.

Broadly defined, Swazi women's roles can be categorised as either productive or reproductive. Women's productive role refers to their contribution to national product and welfare, and income generation for the

household. Women are engaged in both formal and informal productive activities.

Women constitute a majority (52.8%) of the Swazi population and their

participation in formal wage employment is increasing. Most women in the private sector are unskilled workers and as a result their earnings are very low. The influx of textile industries in the Matsapha industrial site has led to a significant increase in the number of women hired as casual labourers in the private sector. Emission of toxic waste products of these firms has adverse implications for the environment but women have to continue working because it provides an important source of income for the survival of their families. In the public sector, women have tended to dominate the professional fields of nursing and teaching. Despite their dominance in these

fields women, on average, earn less than men due to the fact that they are mainly involved in less rewarding jobs. This does not in any way suggest the

existence of official discrimination in the labour market.

The worsening economic situation has forced large numbers of urban women into informal sector services. The informal sector includes a wide variety of activities such as fruit and vegetable vending, shoe-repairing, dress-making, and traditional crafts. A series of studies on informal sector activities have revealed that informal sector earnings are, on average, less than formal sector earnings. Women will, nevertheless, continue to engage in informal sector activities since the little income they generate lessens their economic dependence upon men and as such has potential to increase their bargaining power within the household. This, essentially, is a reiteration of the view that to a great extent the relationship between nature and women is a socially constructed one.

Informal sector activities, though indispensable to women, are not without serious adverse implications for ecological processes. For example, a lot of the traditional crafts involve the use of special grass to produce mats and other household items. The increasing market demand for these products, coupled with the non-decreasing responsibilities of women, necessitates increased production which results in depletion of material inputs. The indiscriminate cutting of grass has, in some areas, resulted in serious soil erosion. A similar example is the use of clay for the craft of pottery which has resulted in the creation of dongas. One of the lucrative informal sector activities is medical practice. A significant number of women are involved in traditional

healing. Such people have frequent interaction with nature as they search for and study different plants and animals to find ways in which certain plant and animal tissue can be used to produce different types of medicine.

With regard to women's reproductive roles, we note that women spend more time on work within the household which has no exchange value. This includes collecting fuelwood and water and food production and preparation. Lack of alternatives to supply food, shelter, and energy has forced women to engage in practices which are destructive to forest resources. Access to clean water is a major problem to women. Studies have revealed that women spend more than three hours per day collecting water; each trip to the river requires that they travel, on average, slightly more than a kilometre. Time and energy consumed collecting water affect the productive opportunities of women and thus result in a decline of their incomes. It is this loss of livelihood base which causes women to be caught up in the vicious cycle of environmental degradation and poverty. In the urban areas women's domestic duties have also resulted in various forms of degradation. A case input is the use of plastic bags to carry groceries, which, among other things, results in high levels of solid waste pollution.

In-depth studies of the role played by women in production and reproduction have revealed the unequal gender relations in Swazi society. While women carry a heavy load in production and reproduction, they do not enjoy similar rights in terms of access and control of resources, which include land and credit. Moreover, they do not enjoy similar rights in decision-making processes. The lack of decision making power has reduced women's economic power considerably. Unequal access and control over productive resources make it extremely difficult for women to respect traditional beliefs and practices essential to the realization of sustainable development.

The legal framework itself with its gender biased dual system of laws aggravates the situation. In both common and customary law systems the woman is treated as a minor to her husband. Comparatively, customary marriage poses a more severe infringement on the rights of the woman. "In a customary marriage most property, especially land and cattle, belong to the husband. A wife traditionally owns her household utensils and certain traditional cattle such as the "Insulamnyembeti" (Armstrong, A. and Margo, R., 1985:60). In practice, the ownership referred to in this quote does not improve the woman's control over resources since her personal

property remains under the control of her husband throughout his lifetime. The limited property rights for married women have caused them considerable hardships. For example, even if a woman can buy cattle with her wages, they remain under the control of her husband and she cannot dispose of them at will. This has adverse implications for the ability of women to produce collateral in order to obtain a loan from a bank. Lack of credit poses a major drawback to women's efforts at initiating environmentally friendly incomegenerating projects. The fact that the death of a husband does not necessarily dissolve a customary marriage is a further complication since it does not free the woman to exercise control over household resources.

Agriculture, Education, and the Environment

Dispite the increasing efforts at diversification, agriculture is still the mainstay of the Swazi economy; it accounts for approximately 20% of Gross Domestic Product. Women are involved formally and informally in agricultural practices both in urban and rural settings. In the urban area, an increasing number of women find jobs as labourers in agro-based industries such as in large sugar and pineapple plantations. Women are in most cases subjected to high levels of exploitation.

Women's productive role explains their prominence in both subsistence and commercial agriculture. Since it is the woman's responsibility to provide food for her family, she is forced to engage even in those agricultural activities traditionally labelled as men's duties. This is especially so in the absence of men, due to migrant labour. It is not unusual therefore for women to take over activities, such as field clearing, previously done by men.

In recognition of the central role played by agriculture in the economy, government embarked on a Rural Development Area Programme (RDAP). The RDAP, initiated in 1970, can be considered to be the primary instrument for developing agricultural production on Swazi Nation Land (SNL). This programme was designed to provide, among other things, crop and livestock extension, soil conservation measures, and construction of water systems. To achieve its goal the RDAP has focused largely on helping farmers make the transition from subsistence to commercial agriculture. The RDAP has been useful to women, but only to a limited extent, mainly because it has ignored the fundamental problem of land tenure which poses a serious

inhibition to women's efforts at agricultural production. Patrilineal inheritance of land denies women primary rights to land.

Even with the RDAP in place, women have continued to experience effects of environment destruction resulting from a variety of malpractices in agricultural production. Problems of overstocking and overgrazing have worsened the state of soils, particularly in the Lubombo region where rains are very scarce. Poor agricultural extension services have resulted in women continuing to use environmentally unfriendly farming methods as they lack material and technical resources to invest in environmental renewal. The only section of the RDAP which has had direct impact on female farmers is the Home Economics Section designed specifically to improve the quality of life among rural families. Apart from strengthening the participation of rural women in agriculture, the Home Economics Section of the RDAP has been instrumental in getting women to engage in a variety income-generating projects.

The success of the RDAP in promoting agricultural production has particularly been hampered by the recurring drought. Drought has increased women's workload and reinforced cycles of poverty and environmental degradation. Finally, we note that the RDAP does not address itself to the needs of special groups such as female-headed households.

Apart from the education provided by the RDAP, communities have their own informal education structures. All communities have a traditional council, called *libandla*, chaned by the chief of the area. The council deals with, among other things, development-related matters which include finding new and more effective agricultural techniques and implementation of other non agricultural projects aimed at improving community life. It has been observed, however, that educated people in the various communities have no interest in attending council meetings, yet the success of council activities hinges largely on the expertise available in the community. During council meetings, women sit on one side and normally feel very uncomfortable about participating in the proceedings. Mourning widows stay away from all public meetings. Clearly, community efforts at providing environmental education are seriously handicapped.

With regard to the country's formal education system, we note that it was not until very recently that a course was introduced to specifically address

issues on the environment. Data on enrolment in institutions of higher learning depict an under representation of women in natural sciences. For example, at the University of Swaziland figures for the 1994/95 academic year indicate that, out of a total enrolment of 302 students in natural sciences, only 92 (30%) are female. Moreover, the curriculum itself does not appear to have a strong component on environmental issues.

Women and Environmental Conservation

Official national declarations on issues of environmental protection in many countries have indicated the realization of the importance of broad-based and grassroots participation. However, much still remains to be done in the way of formulating concrete policy measures and programmes to create room for meaningful participation and fostering co-ordination and networking of the activities. In these endeavours, aimed at promoting sustainable use of natural resources, community participation in general and women's participation in particular draws much of its strength from the knowledge already possessed of the environments in which they live. For women, their contact with their environment is clearly visible in their daily survival as well as incomegeneration activities.

In recent decades, development planners and policy-makers have realized the close link between environmental degradation and poverty. The realization has spurred them on to integrate environmental protection and broad-based policy strategies of poverty-alleviation. This is deemed to be a necessary ingredient for the meaningful achievement of the goals of sustainable development. This section is an attempt to show historical and contemporary initiatives that Swazi women as individuals and as a group have adopted towards environmental conservation with special reference to agricultural and incomegenerating activities. Further, it attempts to show how their efforts could form an important base upon which other related organizations can collaborate towards the achievement of the goals of sustainable development.

Women working as individuals or as groups try to put into practice the knowledge they have acquired over the years, on how best to interact with their environment. This is despite the fact that they may not be fully aware of the adverse effects of their actions on the state of the environment.

Swazi women do possess traditional knowledge, often passed down through generations, which they apply either consciously or unconsciously to their immediate environment on which they depend for their survival. That the knowledge is applicable in their day-to-day activities makes it practical and its rewards readily tangible for their well-being and that of their families and communities.

Traditionally, Swazi women used a variety of indigenous species of trees and other plants and animals for different purposes. For example, they would carefully select certain tree species for fuel. Consequently, much harder and stronger tree species which burn slowly and yet produce sustainable heat were preferred to other types of light woods or pulp. Likewise, whether for domestic or commercial purposes, selective use of certain parts of trees and other plants was made as opposed to felling down whole trees. For example, traditional skirts and various other attire for all members of the family were made from tree leaves often combined with soft tree bark. Similarly, most traditional jewellery often entailed picking only the plant seeds. Though traditional wares and utensils such as sleeping mats and sieves were made from grass, special emphasis was put on carefully choosing the right season in order to allow the grass to regenerate.

In agricultural activities, women have also been found to draw on their traditional and often extensive knowledge of soil conservation to effect techniques such as terracing, crop rotation and agro-forestry (Dankelman and Joan; 1989:115).

Swazi women's application of such traditional knowledge in farming practices has often served them well and even enabled them to better cope with natural hazards such as drought. For example, most Swazi women greatly benefited from the traditional knowledge of proper seed selection to suit certain specific environmental conditions. The use of kraal manure and compost for fertilizer often assured many of them at least a harvest sufficient for subsistence.

This was until widespread introduction and adoption of the so-called hybrid, hy-yield seed varieties and use of chemical fertilizers and extensive irrigation, whose full expression came in the policy package and implementation strategies of the rural development area programmes (RDAP's) of the 1970s. Unfortunately, though this 'agricultural revolution' did change farmers' attitudes in reducing the previous methods of farming to an inferior

level, it did not provide a corresponding viable alternative to many of the women. These new techniques and services were out of reach of most women, both financially and technically. Ultimately, most of the supporting structures of the RDAP and other related programmes in the form of extension services, technical support, and credit facilities, bypassed the majority of women who were regarded by development planners and other experts as farmers' wives and not as farmers themselves.

Availability of some of the basic essential resources such as clean water and fresh garden vegetables in the rural areas have enabled women to provide for their families' subsistence needs. As will be shown in the three projects discussed below, it is especially notable that all the three water scheme projects encourage the establishment of vegetable gardens. Further, the scheme ensures that irrigation needs do not conflict with the more important use of providing drinking water.

One such organization is the Emanti Esive, a non-governmental organization founded in 1985. Its philosophy emphasizes the water project as a framework for the community to gain experience and skills that will help them take control of their own lives (Emanti Esive:1). In this regard, Emanti Esive adopts an integrated approach in its bid to tackle the problems of rural water supply in a way that forms the basis of a wider process of community This includes sanitation, health education, nutrition, and agriculture as well as the strengthening of the community's organizational To date, Emanti Esive has provided safe drinking water to approximately 18000 people in 23 communities in rural Swaziland (Emanti Esive : 2). Within their rural vegetable scheme, Emanti Esive seeks to reintroduce less extensive agricultural methods. Specifically, some are encouraged to use compost and kraal manure as fertilizer and to rely less on chemical fertilizer which is not only expensive but also has a cumulative exhausting effect on the soil.

Another organization, the Council of Swaziland Churches (CSC), founded in 1976 is actively engaged in a micro-water project in which the majority of participants are women, mainly mobilized through various church groups. Similarly, CSC aims at involving the community in the planning and implementation of the water projects. Some of the projects successfully undertaken under this scheme include rainwater catchment facilitated by the provision of tanks to selected communities, spring protection, and

borehole and pump installation. The CSC also undertakes workshops and seminars aimed at educating the people on the importance of maintaining sustainable water resources (The Council of Swaziland Churches, 1993:38). As part of their environmental awareness campaign, the CSC encourages women to re-introduce cropping practices which ensure restoration of essential nutrients to exhausted soils. To this end, women are encouraged to cultivate legumes to reap the benefits of their proven high nutrient value for the improvement of soil fertility.

The Swaziland Farmer Development Foundation (SFDF), founded in 1986, is another organization seeking to address farmers' concerns especially in rural areas. It provides financial as well as technical assistance to set up irrigation dams and assist women's groups in their vegetable garden projects. A number of spring protection activities have also been undertaken under this scheme.

For the attainment of best yields in the vegetable gardens, the women are encouraged to practice backslope farming as well as the digging of basins around each crop to avoid soil erosion and to ensure maximum water retention. Further, efforts at integrating environmental conservation practices include the initiation and promotion of an income-generation tree-planting project in which there is currently 99% women participation. Most of the women so far have been growing bananas which they sell at the local market. Currently, plans to diversify into other similar activities are underway.

For most of the women involved in the vegetable garden projects discussed above, these serve two important functions; meeting their families' subsistence needs as well as income generation, thus giving them an important source of independent income. But, even more importantly, the land-use rights granted to them by the local chiefs on acquiring the common garden sites give them much better control over the land and its use, as opposed to their counterparts seeking the same outside the scope of these projects.

In Swaziland, women historically have been exposed to a wide variety of natural resources which they have exploited to bring in much-needed income. Over the years, the women have developed extensive skills in making beautiful handicrafts such as sleeping mats, grass baskets, table mats, floor mats, straw hats, etc, which they sell to the local people but especially to the tourists.

Swazi women possessed the knowledge of how to cut the grass during the right season to allow it to regenerate, and also used the method of rotating the grass fields to let grass grow undisturbed for a year or two, all of which promoted a sustainable use of this natural resource.

However, due to the high commercialization of the handicraft business, as more women were seeking ways of generating income in the face of increasing marginalization in the agricultural sector, the grass itself became scarcer, thus making it increasingly difficult to effectively practice some of these conservation strategies.

In recent decades, certain organizations have emerged which seek to find ways to create viable alternative for women involved in utilizing natural resources for income-generating activities. The thrust of their mission is to create awareness and, where possible, through training bring back important aspects of the 'lost knowledge' and offer alternative methods aimed at better resource utilization. This is because of the increasing realization that "training, as a dynamic and adaptable tool of interaction can revive and strengthen traditional skills and build upon women's enormous fund of indigenous knowledge, so transforming it into the capacity for action".

In trying to ensure more effective results some of these organizations are seeking to work with already existing women's groups, thus reaping the benefits of existing organizational capacity. Where none previously existed, new groups have also been formed for this purpose.

Some of the women's groups which have been mobilized for this environmental awareness campaign include women's self-help groups, women's church groups, burial societies, rural health motivators who are in touch with local communities country-wide, and other women's grassroots organizations. Many of them have been mobilized through workshops and seminars. The local environmental action groups are invited to sensitize the women on a wide variety of environmental issues. Some of the groups which have made considerable contributions in this exercise include the Clean and Beautiful Swaziland Campaign Forum and. lately. Yonge environmental action group. A mobilizing and educational campaign on environmental protection undertaken by the Manzini City Council has also been very instrumental in reaching out to women residing in the townships and slum areas

The Zenzele (self-help) groups using sisal for their handicrafts, have taught the women the skills of how to actually cultivate sisal. In fact their sisal has turned out to be of better quality than the one which had been regrowing after each harvest over many years. Other targeted areas for the sisal-growing projects are the dongas, gullies, and other soil-erosion victim areas. They have actually been found to be most suitable for sisal growing and at the same time prevent further soil degradation. The sisal-growing project has been successfully undertaken in many rural communities to date.

Providing women with viable alternatives in the pursuit of their incomegenerating activities has also been an effective strategy in making their activities environmentally friendly and even cost-effective. In this regard, there is a vigorous education campaign on recycling of waste paper and plastic. In particular, this has created opportunities for women residing in conditions of poverty and landlessness in the cities where there is relative abundance of such waste material. Swaziland Paper Mills, a paper recycling company, has had an overwhelming response as individual women as well as women's groups collect waste paper for recycling. Many rural women who previously relied on using grass for their handicrafts are now increasingly adopting the plastic alternative. Some of the attractive and durable plastic products on the local market include hats, floor mats, fruit baskets, and others.

The campaign for the recycling of tins and bottles has also received an encouraging response. The existence of companies already in tin and bottle recycling has made this effort a great deal less difficult. The SABIL foundation is ready to pay individuals as well as groups who bring tin and bottles for recycling. Ngwenya glass factory is another company which is ready to receive broken glass and broken bottles for recycling. A number of women's groups in various parts of the country have been mobilized to take up this income-earning exercise which at the same time is working for the good of the environment.

Here it is interesting to note that some of the knowledge women have gained on environmental protection is already being passed on to their children. A certain group of women at St. Phillips area who are involved in collecting tins and bottles for recycling were found to be encouraging their children to pick up all the bottle lids and showing them how to make all sorts of children's games with them.

Similarly, the Clean and Beautiful Swaziland Campaign forum (1994) is currently engaged in a campaign to get as many young school children as possible to utilize bottle lids and other types of non-recyclable material in making different kinds of games. This would keep such undesirable non-organic matter away from the soil. Surely, there can be no better contribution in tackling the environmental problem than seeking to actively change the attitudes of the young while they still have a great potential to adopt new environmentally friendly practices.

As part of intensifying the campaign, the Manzini City Council is currently lobbying for the introduction of separate garbage bins in town and other areas for the separation of recyclable and non-recyclable rubbish in order to combat health problems and other dangers of scavenging from common garbage bins. This would be accompanied by a vigorous education campaign aimed at raising awareness among the public on the importance of separating garbage both in public and private disposal areas.

Women within these organizations are also being made aware of how they can re-use rubbish not only to promote environmental conservation but also to cultivate for themselves more efficient and time-saving methods of carrying out their daily activities. One of the most successful attempts so far in this regard is the re-using of waste paper to make a paper brick which could be used for cooking, baking, and heating the house. This fuel-efficient method has received such an overwhelming response that most of the women are very eager to pass the knowledge to others. On average, three bricks would be sufficient for cooking a meal.

All the different stages of making the paper brick are geared towards the optimum use of resources. For example, the water used for soaking the paper is carefully drained and used for soaking the next load. A small portable inexpensive paper-compressing piece of equipment is utilized for this purpose.

Some women who are enterprising enough are now making the paper bricks and selling them for an income.

Conclusion

First, this paper set out to inquire into the factors which have forced Swazi women to undertake activities which result in environmental degradation. Secondly, it sought to demonstrate the significant role women have played in promoting environmental conservation.

Due to poverty and marginalization, in carrying out their productive and reproductive roles, women have inevitably engaged in activities that might have contributed to environmental degradation. Lack of property rights limits women's access to credit and reduces their economic power, thus considerably reducing their opportunities to establish environmentally friendly incomegenerating projects. Women's efforts at practising environmentally sensitive agricultural techniques have been hampered by lack of control over natural resources, particularly land. At community level, success of environmental education is severely limited by the inferior status that their communities accord them. The formal education system itself has, so far, failed to adequately address itself directly to issues of environmental degradation and conservation

While efforts have been made towards better environment management by government ministries and non-governmental organizations, much still remains to be done. There is need to foster even closer co-operation and to create awareness, to network activities, and to promote educational, financial, technical and other kinds of support needed for the realization of the goals of sustainable development.

It has been noted that one of the most serious problems of locating markets for their products could be addressed by the more active involvement of already existing women's organizations such as the Women's Resource Centre which was established in 1992 for the purpose of assisting women in running profitable business. But even more fundamentally, there is an urgent need for the active involvement of the relevant legislative bodies to effect positive changes which would bring about meaningful improvement in women's status and access to productive resources such as land. In this regard, such government bodies as the land allocation committee could be very instrumental in spearheading land reforms necessary to bring about this change. In essence, women should be given primary land rights and their secondary rights should not be conditional upon marriage.

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