Abstract

It is now an accepted fact, in gender and development writing at least, that women in many Third World societies play a vital role in the management of natural resources. Because their activities are often supported by a deep knowledge of resource management issues, women should play an integral role in every environmental project. Nevertheless, many environmental projects have emerged--such as the Solomon Western Islands Fair Trade (SWIFT) eco-timber initiative--in which women play no more than a sideline role in project management or operations. In support of the views expressed by women, as well as some men in the study area, this paper advocates an engendered approach to environmental projects in general, and eco-timber production in particular. In order to attune the eco-timber project to include the interests of women, a number of practical recommendations are presented.

About the Author

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SUSTAINING WOMEN WHILST SUSTAINING THE LAND? ENGENDERING ECO-TIMBER PRODUCTION IN THE SOLOMON ISLANDS

by

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Introduction

Literature on gender and development is paying increasing attention to the impacts of environmental degradation on women and the potential for women's involvement in environmental management (Sarin 1995; Shiva 1989; Sontheimer 1991). This trend in thinking, however, is somewhat limited to the 'gender' niche of the development studies field, and many environmental projects are still undertaken with scant regard for gender roles and relations. Because such projects overlook pressing gender equity concerns, their likelihood of success is impaired.

This paper discusses the rationale for targeting women's involvement in environmental projects in general, and forestry projects in particular, before progressing to evaluate the operations of a fledgling eco-timber project in the Solomon Islands.

The Research Site

The Solomon Islands, located in the north-west Pacific Ocean (Figure One), consists of a scattered archipelago of over 300 resource-rich islands. They are home to around 350,000 people, the majority of whom live in highly dispersed rural settlements. Independence from Britain in 1978 has allowed subsequent governments to determine their own development priorities and interests. To date, however, most government policies have placed great emphasis on natural resource extraction, which, while earning foreign exchange to fund much needed infrastructural and social development, jeopardizes future development options for the island state.

Unsustainable Logging Practices

The rate of large-scale logging[1] in the Melanesian countries, especially the Solomon Islands and Papua New Guinea, has started to cause widespread concern at both local and international levels. With a virtual doubling in the price of tropical timbers in 1993, the temptation for Melanesian governments to enhance their foreign exchange earnings from the timber industry proved too difficult to resist. Figure Two suggests that the resulting environmental degradation is particularly severe in the Solomon Islands, where logging has been occurring at several times the sustainable rate. At this level, the commercial resource could be exhausted in 10-15 years. The withdrawal of SBD$2.2 million[2] in Australian government aid to the Solomon Islands forestry sector in early 1996 is evidence of the growing international concern over the non-sustainability of present logging practices.

It has been difficult for the Solomon Islands government to put a stop to large scale logging, however, when timber accounted for nearly 60 percent of total merchandise exports in 1993 (AIDAB 1994:6). Yet it is vital that alternative ways of earning foreign exchange are found, both for the sustainability of the natural resource base and to diversify an economy which is treacherously dependent on timber and fish exports. As one newspaper reporter noted, "The economy is riding on the back of an industry which has a very short time horizon" (cited in Central Bank of the Solomon Islands 1994:4).

The Meaning of Sustainability

The term sustainability refers to the "...ability of a process to leave natural resources undamaged and the environment in good order for future generations" (Collin 1992:212). However, when people refer to a sustainable yield in terms of timber production, they are only concerned with the quantity of wood fiber that can be produced continuously given a specified management regime. It is important to remember that wood fibre is just one output from the tropical forest and that maximizing this output may diminish other outputs that may be of equal or greater value to a society (Dunster and Dunster 1996:309). For example, in the Solomon Islands the forests provide people with food, traditional medicines, and materials for handicrafts and construction, products which do not all have a commercial value. Although most people living in rural areas have a very low monetary income, they are able to eat well and live fairly comfortably compared to those in other developing countries; 87 percent of the land is still in the hands of customary owners and people are able to meet their basic needs from the land (AIDAB 1994:13).[3] It is crucial, therefore, that so-called sustainable forestry initiatives attempt to sustain the total forest ecosystem, rather than just the trees (Steen 1995:616).

The Lure of Logging to Local Communities

In addition to subsistence production, most households also engage in some monetary activities. People of the Solomon Islands value the opportunity to earn cash because this allows them to enhance their lives and future prospects by sending their children to school, buying certain foods and clothing, paying for western medicines and, if enough cash can be harnessed, purchasing a major item such as an outboard motor or fibreglass canoe. It is very difficult to find lucrative cash earning opportunities in rural areas, however. Many people struggle to bring in cash by selling surplus vegetables, fruit, or fish, laboring on a plantation, making copra, or breeding chickens or pigs. Thus, despite people's need and desire to earn money, Figure Three reveals that 'Village work only', which equates to subsistence production, is still the major occupation of both men and women in rural areas.

The lack of cash earning opportunities, combined with the disappointment people feel about the failure of governments to successfully promote economic development in rural areas, makes offers by logging companies seem irresistible. The appeal of logging takes the form of both royalty payments and promises to develop local infrastructure:

> An absolutely crucial point in understanding the attitudes of landowners to logging operations is that companies commonly offer as inducements to landowners the kind of infrastructure which would normally be provided by the state. As the state's performance in supplying basic infrastructure and services declined after independence, people were made increasingly vulnerable to the inducements of logging companies...provision of schools, health clinics, airstrips, wharves, townships, housing and so on.... (Fingleton 1994:21).

Many of these promised developments never come to fruition, however, and people have found that destruction of the natural environment means they lose the ability to meet their subsistence needs. Meanwhile, logging often leads to social decay, as Fingelton (1994:20) observes: "...logging operations damage the very fabric of village society, leaving behind divided and demoralized communities."

While the other attraction of logging companies--royalty payments--increases the cash flow into the village economy, this cannot compensate for the depletion of the forest resource. A 1991 study revealed that the average household of seven members in a Choiseul village in the Solomon Islands gained the monetary equivalent of SBD$10,512.15 each year from the rainforest, including food, medicine, and house and canoe building materials (Cassells 1992:iii). In another Choiseul village comprising 21 households, a once-only royalty payment of SBD$18,162 had been received by the village (Cassells 1992:174).

The need to find alternative ways for people to earn cash without destroying their natural environment has received greater attention from development agencies, church groups, and aid donors in recent years. Suggestions for sustainable development initiatives include eco-tourism, butterfly farming, handicraft production, marketing sustainably produced timber, and harvesting non-timber forest products (NTFPs), including nuts, aromatic oils, rattan, and orchids.

Relationship Between Gender and Sustainable Development

There are good reasons why women in the Solomon Islands, and women in many Third World countries, should have some control over, and receive benefits from, the kinds of sustainable development initiatives mentioned above. Efforts to involve women in environmental projects have increased over the last fifteen years in recognition of three factors: women's roles, women's knowledge, and women's interests (Institute of Development Studies 1995).

Women's Roles

While claims by writers such as Vandana Shiva (1989) that women are inherently closer to nature than men have been widely criticized (Jackson 1994), there are parts of the world where women's roles place them in close connection with the physical environment. In the Solomon Islands, women have major responsibilities for food production, water and firewood collection, and, in many cases, fishing. With specific regard to forestry, women in many countries are collectors of forest products, repositories of knowledge regarding forest product use and growing patterns, producers of sale items manufactured from forest products, decision makers regarding the management of forest resources, and farmers whose agriculture and livestock production systems depend on the availability of forest products (Molnar 1991:81).

These factors have direct applicability in the Solomon Islands context where food production relies on clearing forested land (through slash and burn techniques), and where women collect foodstuffs, materials for making mats and baskets, medicinal plants, and house-building materials from the forests. It is precisely because of these roles that women's voices should be heard when any project focusing on the natural environment is devised.

Women's Knowledge and Skills

A second reason why attention has been directed at increasing women's involvement in environmental projects is that, where communities still rely on the natural resource base for their

livelihoods, women often have a detailed knowledge of the natural environment. This knowledge can be very valuable to projects (Molnar 1991).

Jane Mogina (1996), Professor of Biology at the University of Papua New Guinea, argues that women are often custodians of traditional forest knowledge. While women's knowledge varies considerably from one Melanesian society to the next, their specialist knowledge may include: how, where, and when to grow starch crops; where to find wild foods which supplement the local diet by providing essential vitamins; and what plants are associated with fertility and childbirth--33 such species have been identified in Papua New Guinea. Thus the specialist knowledge and skills of women is another reason why it is so important to involve women in projects which address the use of natural resources and management of the natural environment.

Women's Interests

One further reason for involving women in environmental projects is that of equity: women's interests are often not identical to men=s, thus women must be consulted to ensure that they benefit from environmental projects (Institute of Development Studies 1995). Men's and women's different interests are likely to reflect their gender roles. For example, in reforestation schemes men may be interested in planting fast-growing species with straight trunks that are useful for house construction, while women may want to plant species with dense foliage that can be used as fodder for livestock.

In places where women's roles mean they rely more heavily on the natural environment than men, women also tend to have a greater interest in the long term sustainability of the environment. While this generalization can be contested, both men and women in the Solomon Islands who were questioned on who they felt was most interested in environmental sustainability claimed that it was women. Their reasons varied from women having a greater concern for the future of the children they bore, to women being 'less greedy' than men, to the way that women had to rely on natural resources to fulfill their roles. Whatever the reasons, because women sometimes do have a greater concern for environmental sustainability than men it would seem logical that those managing environmental projects should actively seek out women's involvement.

Despite the roles, knowledge, and interests of women concerning the natural environment women in the Solomon Islands have had little participation in environmental projects to date. They have been particularly absent from forestry projects. Reasons for this absence stem from women's position in society.

Women and Forestry in the Solomon Islands

As part of this study, both men and women with whom I spoke continually expressed the belief that, "*Forestry no fitim woman*" (forestry is not an appropriate activity for women).[4] There appear to be several reasons behind this attitude. First, while forest areas can be managed to provide both commercial and non-commercial services and benefits (Gilpin 1996), many of which do not focus on wood production, people in the Solomon Islands generally think of 'forestry' as the work involved in felling large trees, a task which was traditionally men's responsibility. Second, forestry activities

introduced by the colonizers recruited men's labor. Third, despite any environmental labels which may be tagged onto them, forestry projects are perceived as cash-earning opportunities or *bisnis* (business) which, in rural areas at least, is a domain almost always occupied by men.[5] Finally, there have been limited attempts to harvest NTFPs for sale overseas. This activity accounted for three quarters of net export earnings from forest products in India in 1986 (Sarin 1995). In the Solomons, as in India, it is largely women who collect and process NTFPs.

Another reason for the lack of women's involvement in forestry activities is that they have not been made aware of the broad range of development options open to them and the benefits which could come from participation therein. Very few government or non-government agencies reach down to women in rural areas and those that do typically focus on home economics activities. Thus despite their poor literacy rates, their lack of understanding of the legal system, and inadequate water supplies, many Solomon Islands women feel that the only development options available to them are sewing and cooking classes (Scheyvens 1995). Since they also lack the confidence to pursue other development options, a reflection of their low self-esteem, women's participation in forestry projects is further restrained. As one overseas-educated woman living at a mission station confided:

> Women just block a lot of things out of their minds so they don't know what is going on. If women try to get men to listen to their ideas men often say you just stay home and look after my children and cook for me. Women don't have the confidence to stand up against this.

Because of the perception by villagers and project staff alike, that "*Forestry no fitim woman*," women have been largely excluded from forestry projects in the Solomons. As a result, they are missing out on an opportunity to earn money, gain new skills and knowledge, and apply their existing knowledge in the utilization and management of the forests to forestry projects. Moreover, this exclusion is contributing to women=s loss of influence in decisions regarding the use of communally held resources. In negotiations with either logging companies or development agencies, men tend to take charge.

Methodology

It is within this context that I set out, in March-April 1996, to examine women's participation in sustainable development initiatives in the Solomon Islands. I focused my research on the activities of an eco-timber project initiated by SWIFT (Solomon Western Islands Fair Trade), examining whether SWIFT offered a viable development alternative, both in terms of environmental sustainability and in terms of gender equity, to existing commercial logging practices. The main research techniques employed were participant observation and interviews. These techniques were applied in several different villages and field locations in Western and Choiseul Provinces.

Participant observation, which included attending community events, staying with families, and chatting informally with villagers during the few days I spent in each village, provided insights into women's lives and gender relations.[6] Semi-structured interviews were used to discuss key issues with individuals from SWIFT (both management and field staff, including two foresters), the United Church, government officers and other people promoting women's development in the area, and individual

producers at work on the land they had set aside for eco-timber production. In addition, I interviewed people in groups. On three occasions I interviewed groups of women who had come together to attend workshops or meetings that focused on issues not directly related to my research topic. This gave me access to the opinions of around 100 women who lived in the provinces affected by the SWIFT project. Other group interviews were carried out with one of the producer groups (all men) and with a family who lived in an area where extensive logging had taken place 15 years previously. Most interviews in rural areas were carried out in the *lingua franca,* Pijin, while those at the mission station where SWIFT is based were typically done in English.

In order to understand differences in men's and women's roles and workloads, so as to ascertain whether women had any time to join in development activities and training offered by SWIFT, I also encouraged women to fill in an activity profile (Rao, Anderson, and Overholt 1991). This exercise identified which roles men and women undertook in the community and who had the most leisure time. One further research tool that was used was drawing. Women were asked to draw a picture showing what changes they would like to see in their villages so that I could learn more about women's development priorities in the study area.

The context in which this research was carried out and my methodology have now been discussed; the remainder of this paper will explore the activities of SWIFT and, particularly, women's involvement in the eco-timber project.

Solomon Western Islands Fair Trade (SWIFT)

Eco-timber production

SWIFT was established in late 1994 as part of the Integrated Human Development Programme (IHDP) of the United Church (the arm of the church concerned with social and economic development).[7] The United Church is inherently concerned with issues of justice, peace, and development and it has been foremost among churches in the Solomons in appointing women clergy. This Church wanted to curb large-scale logging which was destroying forests and igniting social problems in Choiseul and Western Provinces--76 percent of the country's revenue from round log exports comes from these two provinces alone (SWIFT Netherlands Foundation 1996:1). Moreover, while only eleven percent of Solomon Islanders are members of the United Church, they are concentrated in Choiseul and Western Provinces.

While church leaders held village conferences to discuss problems with large-scale logging, they were often greeted with the response, "That's only talk: we need money." Meanwhile the United Church had received requests from a number of village communities for assistance with the marketing and transportation of sawn timber. It was therefore decided that small-scale timber milling, carried out on limited areas of land at a sustainable rate, could be undertaken with a profitable return to landowners. Thus 'eco-timber' production was born. It was hoped that the option of producing eco-timber would discourage villagers from opting for a short term solution to their economic problems, that is, signing with logging companies who offer them a small financial return and devastate local environments.

Eco-timber is a relatively new word which has yet to be clearly defined. As seen with terms such as "eco-tourism," the "eco" label is now being applied to a range of products and services. To date, supplies of tropical timbers going by the name of "eco-timber"--or "good wood" or "smart wood" (the name depending sometimes on the certification scheme used)--have been produced in Brazil, Papua New Guinea, Malaysia, Mexico, Indonesia, Honduras, and Guyana. Eco-timber appears to have emerged as a marketable label which, it is hoped, will give exporters of sustainably produced timber preferential entry into lucrative markets (Gilpin 1996) and earn them premium prices. Already some European countries have considered introducing a labeling system into their markets to indicate timber that comes from sustainably managed forests (Wijewardana 1995:45). As Don Wijewardana (1995:45) notes, "Market opportunities for the future will increasingly be for sustainably managed wood."[8] Similarly, Grant Rosoman (1995:9) argues that, "Environmentally conscious consumers the world over are now demanding credible 'green' products and a greater level of information and certainty with these products" (Rosoman 1995:11).

But what are sustainably produced tropical timbers? As noted by Rosoman (1995:9), while it is not difficult to prove unsustainability, it can be very difficult to prove sustainability. In response to the need to provide proof that timber has been harvested using high standards of forest management, a certification system has been introduced into the forestry sector by the Forest Stewardship Council (FSC), an organization based in Mexico. The FSC is a non-governmental trade organization founded by representatives from environmental groups, the timber trade, community forest groups, and the forestry profession. The mission of FSC is to "...promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests" (The Independent 1996:16). The FSC's certification system aims to strengthen community control over resources and to bring direct financial benefits to the resource owners, in addition to improving forest management and protecting the environment (The Independent 1996:16).

People in the Melanesian countries are uniquely positioned to benefit from the eco-timber label because, in these countries, the majority of the land is still in the hands of local landowners. Furthermore, most of these landowners still use the resources of the tropical forests to meet at least some of their subsistence needs; thus they are willing to support alternatives to the widescale destruction of the land and its resources which occurs when logging companies clear fell trees. While the increasing emphasis on certification and labelling of tropical timbers worldwide offers these countries significant opportunities, it is also essential that organizations such as SWIFT are organized effectively if they are to be successful.

Organization of SWIFT

SWIFT aims "to promote sustainable timber production for community needs and to facilitate earning a good cash income by selling these sawn timbers to the local and export market" (SWIFT Netherlands Foundation 1996:1). Its key players in achieving this aim are producer groups, the 250 family, clan, or tribal groups which have signed up to produce eco-timber to sell to SWIFT. Each producer group, which may have control over twenty to two hundred hectares of land, decides to put a small portion of their land aside for the production of eco-timber. SWIFT foresters help the producers decide which land to allocate to the project and together they draw up forest management plans (FMPs)

for the pegged-off blocks. The FMP includes an inventory documenting the land and its resources, noting dominant tree species, and calculating how many trees may be cut in a one hectare block over a five year period.[9] It also lists forest regrowth monitoring details, silviculture measures for producers, and areas which the producers are supposed to look after, including sacred sites and buffer zones around water ways. Any timber cut and sold to SWIFT has a number on it to identify the producer and the particular tree it came from; this number can be verified by consulting copies of the FMP kept at SWIFT's timber yard.

SWIFT provides specific services to assist producer groups, including loans for basic tools such as chainsaws, transport facilities for those in the widely dispersed islands who would not be able to bring their timber to the central yard, and training courses in forest management, timber grading, and chainsaw maintenance. Perhaps the major service SWIFT provides is access to markets. By establishing an effective marketing structure and setting up a subsidiary company in the Netherlands to buy all exported timber, SWIFT has developed an excellent bargaining tool: a high price for the timber it buys. SWIFT offers up to SBD$1200 per cubic meter for sawn timber, compared to only SBD$35 per cubic meter which the logging companies pay for round logs. This price allows SWIFT to demand sustainable production techniques from its producer groups.

In order to be able to call their product "eco-timber," SWIFT hired SGS (*Societe Generale de Surveillance*) to set up a timber certification system based on the standards set by the FSC. In addition to establishing and implementing a comprehensive FMP, SWIFT is required to monitor regularly the activities of its producers. The producers must sign an Environmental Pledge and a Mutual Trust Agreement on which the traditional leaders or recognized representatives of a tribe or village are listed as trustees. Trustees commit themselves to developing their land and sea resources in a sustainable manner, while in return, SWIFT agrees to provide services to enable that tribe or village to develop its resources over a 25 year period.

SWIFT's Achievements and Limitations Regarding Sustainable Production of Timber

SWIFT is an organization based on sound principles that aims to enhance people's livelihoods. SWIFT gives people the option of earning money from timber extraction from their own land without having to sign with logging companies whose activities devastate the natural resource base and repatriate most of the profits. With SWIFT, profits are in the hands of people in local communities. Through SWIFT a producer can, for example, earn SBD$5000 a year by felling only two trees. To achieve the same income from logging royalties, 70-100 trees would need to be felled and the producer would have to wait around 200 years for the forest to regenerate (SWIFT Netherlands Foundation 1996:3). By controlling the rate of harvesting, SWIFT is simultaneously aiming to ensure environmental sustainability. Thus SWIFT provides people with the means to continue meeting their basic subsistence needs, unlike other development projects which rely on unsustainable practices of natural resource extraction or exploitation and undermine people's ability to meet their basic living requirements.

Despite these achievements, there are a number of concerns which could threaten the environmental sustainability of the project. It has been suggested that land owners may be more concerned with immediate financial rewards than with forest preservation, an overseas ideal that is being imposed upon them. Evidence of this can be found in the SWIFT project: some producers are felling trees which have not been marked out by the SWIFT foresters, they are cutting out the best timber and leaving other parts of felled trees to rot, and they are failing to disperse sawdust, which can prevent regrowth. These actions may be a reflection of the preoccupation of some producers with short term economic gains rather than long term sustainability.

A related concern is that, armed with the knowledge of timber-felling techniques and tools, some producers may part from SWIFT and cut large amounts of timber to sell to other buyers with little regard for principles of sustainability. While SWIFT is presently an attractive option for producer groups because of the high prices and the services they offer, there are no guarantees that this favorable situation will continue into the future.

Below, women's involvement in SWIFT is discussed and a gender analysis of SWIFT is carried out in an attempt to show how, by engendering the project, SWIFT could potentially solve some of the concerns outlined above and achieve gender equity in the project.

Critique of Women's Involvement in Swift

Carol Drijver (1992:133) argues that an important aspect of participation that should be considered in environmental projects is social reach: "A wide social reach means that numerous sections of the local community actually participate in the project." This section explores the social reach of SWIFT specifically with regard to women's involvement. When considering the extent to which women are involved in SWIFT, it is necessary to look at two projects within SWIFT: the eco-timber project, which has absorbed the vast majority of project resources to date; and the WID (Women in Development) project, which has been tagged on to the eco-timber project.

Eco-Timber Project

When people heard I was interested in women's involvement in SWIFT, they told me that, except for two women who attended a timber milling and forest management course in 1995, women were not involved at all.[10] These comments concealed more than they revealed. Although only a few women are directly involved in SWIFT in terms of being producers or trustees,[1] many are involved indirectly. A number of women support their husbands or other male relatives who work for SWIFT by bringing them lunch or helping them carry the sawn timber from the forests to the sea shore when the SWIFT boat is due. Others periodically take on their husband's work around the village when he is working at a distant forest block. Many others are involved because of the way in which their husbands choose to handle the money they earn from SWIFT, a point that will be discussed below.

Despite their knowledge of forest management and their roles in subsistence production, women are not involved in drawing up forest inventories, in selecting land to be set aside for the project, or in choosing trees to be felled. Neither have women been consulted by SWIFT's managers regarding their

opinions of the project or how it should be run. Thus women's involvement in the eco-timber project is primarily as the providers of free labor. Due to their general lack of control over project activities, they have little access to the benefits which derive from the project. Rather than suggesting that women are not involved with SWIFT, however, it is more accurate to state that many women are involved and are affected by SWIFT's activities, but that they have been largely marginalized from roles of power and influence associated with the project. Instead, a sideline WID project has been set up for women.

WID Project

SWIFT's efforts to enhance women's development center on the WID project. The first initiative to emerge from the WID project was the production of vegetables for sale by a small group of women near Munda. This project was started by a WID officer, a trained agriculturalist and agro-forester, after spending time with women and discussing their needs. Under this scheme, women have experimented with new crops to see which grow and sell well; the goal is to use the knowledge they gain in their own gardens. Other options that the WID adviser is considering include: starting up nurseries for tropical trees; helping women to intensify their gardening techniques, both to alleviate the burden of women's work and to make better use of existing land; carrying out research on alternative uses for old coconut plantations; agro-forestry; and ngali nut harvesting. Clearly the WID officer has concentrated on establishing separate projects for women rather than on considering how women could participate in eco-timber production, or resource management and monitoring.

While the WID project may assist some women of the western Solomons, it is the eco-timber project, which is oriented toward global markets, that is likely to have a greater impact on women's lives than the separate, small scale initiatives set up to help women gain some cash.

SWIFT's Impacts On Women's Autonomy

To fully appreciate the impact of SWIFT's activities on gender equity, the following analysis employs Joke Schrijvers' (1991) model of four levels of women's autonomy: physical, economic, political, and ideological. By exploring whether women's autonomy in these four areas has been enhanced or undermined by a project, such as SWIFT's eco-timber project, we can gain a fuller appreciation of the project's impact on gender equity. Economic autonomy rests on women's access to and control over resources, including cash and land, while physical autonomy refers to women's ability to meet their physical needs, such as clothes, food, and shelter. Political autonomy suggests that women are working collectively to gain more power over policy making or development practice, and ideological autonomy concerns the fostering of a positive self-image, which is a pre-requisite for women to stand up and defend their interests and rights.

In the eco-timber project, an important consideration regarding women's economic autonomy is the manner in which the money earned by sales to SWIFT is utilized. While a minority of women said that they decided together with their husbands how to spend their earnings, the majority of women had little control over proceeds from the relatively lucrative eco-timber sales. One woman commented that her husband's logic was that his body needed to feel good before he started sawing trees, so he bought beer and cigarettes to help him achieve this effect. Another woman from the Vona Vona lagoon noted

that, although she knew that many local men were producing timber for SWIFT, she had seen no material improvements in people's houses since they had started selling the timber. All she saw was that the day men took their timber to the SWIFT yard,[12] that night they could be heard all over the lagoon singing and shouting on their way home. In fact, there was a general consensus that if one had a husband who came home with the money he earned, rather than spending large amounts on beer, and he used it to purchase household goods and things for the children, and he also gave a little to his wife to buy food, she was rather lucky. While money spent on household goods such as certain foods or aluminum pots could ease women's burdens to some extent, the main concern is the fact that, overall, women have very little control over how the money is spent.

In addition, women's position in society restricts them from enhancing their economic autonomy by forming their own producer groups. To start with, they have poor access to information about the project because the foresters are all men and the meetings regarding the project have been dominated by men, leaving little room for women's voices to be heard. Furthermore, with the responsibility they have for domestic tasks and childcare, women find it difficult to leave the village to gain training of any sort. They would also need to find money for transport and training costs--SBD$150 per course--because household income is usually controlled by men in the family.

Despite these constraints to women's economic autonomy, one example has emerged of how women's groups can gain economic benefits from SWIFT. In Vella Lavella, a large producer group allows any community group, for example, the United Church Women's Fellowship (UCWF), to cut some trees according to their forest management plan as long as the group provides food for the workers and fuel for the chainsaw. The earnings then accrue to the community group to support their work. This still does not solve the issue of economic autonomy for women as individuals, however.

In relation to political autonomy, SWIFT has included two UCWF representatives on the Board of the IHDP--the program within the United Church that governs the activities of SWIFT--and women make up around 25 percent of the members of the United Church Synod to which SWIFT must report and have their workplan approved each year. However, there are no women in senior positions in the management of SWIFT itself, apart from the Dutch WID adviser. While representation at these high levels is important for women, equally important is that the voices of village women be heard by both men and women managing the project. SWIFT has not made any attempts to specifically consult women, neither when the eco-timber project was first considered nor more recently. By only consulting men, SWIFT foresters have inadvertently reinforced a trend set by foreign logging companies which deal exclusively with men, consequently undermining women's influence over the use of the natural resources upon which their families are heavily dependent.

Although project managers may feel that it is not their place to encourage communities to involve more women in environmental decision making, by failing to do so they could jeopardize the long term sustainability of the project and the economic autonomy of villagers. For example, some land well suited to food crop production could be allocated to the SWIFT project without women's consent, meaning women have to establish gardens at sites further from the village and produce crops on less fertile soils.

Any control women had over land in the past, whether direct or indirect, has been considerably eroded by increasing monetisation of the economy. Women's lack of control over land was demonstrated to me when several women complained that trees on small parcels of tribal land, which had been allocated to them individually,[13] were being cut down by male relatives without their permission and then sold to SWIFT. It is apparent that the complex land tenure system is open to abuse by unscrupulous tribal or clan members.

Neither has SWIFT fostered the growth of ideological autonomy in most women. It will be difficult for women to have a greater say in the direction that SWIFT takes as long as they feel that *"Man nao hem I boss"* (men are in charge). Encouraging women's participation in the management of the project, thus showing that their knowledge and ideas are considered valuable, could be one way of improving their ideological autonomy. The main opportunity that SWIFT provides at present for the enhancement of women's ideological autonomy is training in forest management and milling skills. Training in such skills can enhance women's self-esteem. It is revealing, however, that out of the members of over 250 producer groups, only two women have taken part in these training programmes.

Despite SWIFT's failure to improve women's autonomy in the ways demonstrated above, the eco-timber project does enhance women's and men's physical autonomy. In an attempt to protect the forests from logging companies, the IHDP has come up with an eco-timber project which allows rural people to earn money while still enabling them to meet their needs for food, water, shelter, and other physical needs from the forests. By contrast, an activity like logging jeopardizes physical autonomy by, for example, polluting water sources, thus forcing women to walk further to find clean water or making them more prone to sexually transmitted diseases or malaria, which often have a high prevalence around logging camps (Asian and Pacific Development Centre 1992).

Table One presents both the positive and negative effects that SWIFT has had on women in the Solomon Islands. Suggested improvements, which are included in Table One, are discussed more fully below.

Why This Project has Potential for Improvement

Despite SWIFT's present weaknesses in terms of gender equity, there is good reason to hope that SWIFT could become more gender sensitive in the future. First, SWIFT is associated with an institution, the United Church, which is inherently concerned with issues of justice, peace, and development. This Church has also been foremost among churches in the Solomon Islands in appointing women clergy and promoting an active role for women members. Furthermore, SWIFT gained much support in its early stages of operation because of its association with the United Church--ministers raised awareness about SWIFT from the pulpit. This association could be used to encourage more women to be involved in SWIFT and more men to accept the expanding roles of women.

Another key reason why SWIFT has potential for improvement stems from the attitudes of both SWIFT staff and male producers--they are generally open to women playing a more active role in the project. While at the start of my research, as mentioned earlier, project staff and villagers alike were adamant that "*Forestry no fitim woman*," when they realized that the SWIFT project held numerous

possibilities for women's involvement beyond the limits of handling a chainsaw, they were interested in the possibilities. For example, when I asked project staff if they could see the potential benefits of involving women in monitoring, they said that they could, elaborating that they felt that women in general seemed to have a greater concern for environmental sustainability than men. Similarly, SWIFT foresters with whom I spoke in the field acknowledged that women had good technical ability when it came to recognizing trees and NTFPs and knowing their uses and value.

One forester, on hearing that women in his area wanted to know more about SWIFT and how they could be involved, said he would be very happy to speak at their group meetings. But perhaps the most inspiring response came from some of the producers themselves who were very open to the possibility of involving more women in eco-timber production and management and who often indicated great respect for their female relatives. One producer, for example, acknowledged that women could be good at drawing up inventories and undertaking forest management because "*Women garem gud hed*" (women are intelligent).

Another positive factor is that the project is in its early stages and those managing it recognize the need to look back and learn from "teething problems." They are already doing this by refusing to take any more specific orders--a large order for timber for a boardwalk in Rotterdam placed considerable strain on staff, producers, and the sustainability of timber extraction. Instead, project managers are now concentrating their efforts on certifying producers. In this way, there is hope that managers will be responsive to redirecting their activities so that women are targeted and are more likely to benefit from the project than in the past.

Potential for change also comes from women themselves. While many women lack confidence and are reluctant to speak out and assert themselves in public forums, when they are consulted in the appropriate manner they are willing to air their views. Women made many of the suggestions detailed below for ways to engender SWIFT. Furthermore, many women belong to UCWF groups and gain confidence from taking on leadership roles therein (Dureau 1993; Scheyvens 1995).

Engendering Swift to Better Reflect the Needs of Women

Without specifying how women would like their involvement in SWIFT to be enhanced, it would be dangerous to ask project managers and field staff to encourage more involvement. They may simply ask women to contribute more of their time, knowledge, and manual labor to the project, purely for the purpose of meeting SWIFT's goals of efficiency, rather than to improve gender equity. This section focuses on strategies to engender SWIFT and is based on suggestions from women interviewed as well as on my own analysis of the project.

The WID Project

SWIFT staff have defended their organization from a gender equity perspective by arguing that their WID project is directly aimed at assisting women of the western Solomons. In past decades, many separate projects for women have had disappointing results because they fail to deal with crucial gender

issues, including women's marginalization from power structures and their lack of access to resources. Similar criticisms can be made of the WID project at SWIFT.

While a separate women's project could have some advantages, including enabling women to earn money, improving their skill levels and confidence, and building solidarity among women, sideline projects tend to be under-resourced and, on their own, have the effect of isolating women. There may still be a place for a separate women's programme to run alongside a restructured SWIFT project, but not as an alternative to a more gender sensitive mainstream project. The WID project could be particularly useful if attempts were made to facilitate the development of women's political and ideological autonomy and to prepare them to join in the main project. One way of doing this would be for the WID officer to set up "watchdog groups" using the UCWF structure (which reaches down into nearly every village in the western Solomons), through which women could express their views about SWIFT and seek improvements, where necessary.

Enhancing Women's Access to Information About SWIFT and Training Courses

The women who were interviewed about SWIFT often had little knowledge of SWIFT, its operations, or how it could be of benefit to them. On such occasions they stated clearly that they wanted more information about the eco-timber project. In the beginning, SWIFT's managers did not spend a great deal of time on awareness raising at the grassroots level; they were conscious of the need to start selling timber quickly so that producers would see the monetary benefits of the scheme at an early stage. Community meetings were thus dominated by men. Yet even the information that I shared with women about SWIFT during my meetings with them was enough to encourage women to take more of an active role in eco-timber production. Some women, for example, said that they would now go with their husbands to check their management blocks because they wanted to see what the men were doing, and they would listen the next time a SWIFT forester came to talk to producers in their area. Clearly, information is the gateway to women's active involvement and enhanced control of projects, such as SWIFT's eco-timber production.

While SWIFT has not excluded women from training courses and awareness raising sessions, there are cultural and economic constraints on women's participation. For example, there are cultural taboos on women being alone with strangers; these taboos prevent women from going alone to the bush with a SWIFT forester. Concerns for women's safety, or jealousy, could also prevent women from being allowed to attend residential training courses--women generally need their husband's or father's permission to attend courses and workshops. This requirement constrains women from participating in SWIFT as producers. Meanwhile, women's child care and other domestic roles restrict women's opportunity to participate in training courses or eco-timber production. Women cannot expect men to "fill in" for them the same way that women are expected to take on men's work in their absence. In light of these constraints, it is evident that specific targeting will be necessary if women are ever to play a more powerful role within SWIFT.

Many women desired involvement in the forest management aspects of SWIFT, from drawing up forest inventories, to learning silviculture techniques and carrying out monitoring work. Their logic was that women have good knowledge of how to manage the environment sustainably, and a deep interest in sustainability because they are concerned for the future of their children. Considering that SWIFT

foresters are presently overworked with the training and advisory roles they fulfill, it would be sensible for SWIFT to consider training and employing women to carry out the monitoring of eco-timber production practices, work which will no doubt be expected by the FSC as part of certification requirements. Before forest management training is possible, however, some women will need basic training in literacy and numeracy if they are to learn how to draw up forest inventories and to measure the number of cubic meters in a tree in order to judge its market value. While such training would take time and resources, it could be very empowering for women, giving them new knowledge and greater confidence in their own abilities.

To increase women's participation in forest management and related training, specific invitations to women would be worthwhile, including asking foresters to arrange special meetings with women in their area and sending letters about training opportunities to all UCWF groups. It is likely that more women would attend training if there were some women-only courses in which they felt safe, both physically and ideologically. Recognizing that many women cannot afford the fees and traveling expenses to attend training courses, provision must also be made to subsidize women's costs and to provide child-care where necessary. Furthermore, courses would need to be held at times and in places which suited women.

Women who are interested in becoming producers are also constrained by the costs involved, including labor (unless they are able to operate a chainsaw themselves) and fuel to run the chainsaws. Thus there is a need for accurate information on what credit facilities are available to them and advice on how they can manage their finances to become successful producers.

Changing Men's Attitudes

A more problematic area which concerned almost every woman with whom I spoke was the lack of influence they had over decisions about spending the proceeds from selling timber to SWIFT. With regard to this issue, and others decisions concerning how much land and which land is set aside for the project, women said that they would simply like to sit down with men (a customary practice in some areas) to discuss these matters. Women throughout developing countries are stressing their desire to work together with men, as the following quote from a group of Zimbabwean women shows: "It is no good separating us out, we have to work with them, we have to deal with them" (Patel 1995:30). In the Solomon Islands, women also said that they would like to make decisions together with their husbands and foresters about which trees to set aside for the project and which ones to leave.

At the same time, there needs to be awareness raising for men about the benefits of accepting, respecting, and supporting women's roles in the project. This could involve separate meetings for men to discuss the prospect of involving women in the management and monitoring of the project. It could be particularly useful to encourage men to consider naming more women as trustees on the Mutual Trust Agreement and Environmental Pledge, as trustees have a very important role to play in ensuring that individual and communal land rights are respected and that the land is used in a sustainable manner. Those involved in conducting awareness raising activities with men also need to note likely points of

resistance from men and consider steps to overcome them. To support awareness raising, clergy of the United Church could be encouraged to preach on issues of gender equity and to urge parishioners to build better family relationships that emphasize sharing of decision-making and responsibilities.

Likewise, awareness raising among SWIFT staff is necessary if they are to appreciate the importance of increasing women's involvement in the project. Education on the United Church's teachings on justice and equity, and on the statement in the Forest Management Plan which reads that, "The land is owned by the family group or community and benefits will be equally distributed among all family groups and community projects," could be emphasized to both SWIFT producers and staff. In particular, there is a need to stress to men the need to share economic gains and decision-making with women in their families.

Consulting Women

In line with the United Church's concern for social justice, women should be regularly consulted about how the project is affecting their lives. There should also be representation by village women, not just leaders of women's groups, in the management of SWIFT.

By encouraging the development of lobby groups to represent women's interests in the project, SWIFT would be showing that it is willing to listen to ideas from women and to consider any concerns they have about the project, as well as providing an indicator to in rural communities that women's voices should be heard. This emphasis could, in turn, encourage women to speak up about which parts of their family or tribal land should be dedicated to the SWIFT project, rather than leaving men to make all of the decisions. At present, many women are unhappy about the practices that some producers are using when cutting timber. A major concern is wastage--in a number of cases men felled trees and produced timber for sale to SWIFT out of the heart of the tree only, leaving a substantial amount of the tree on the forest floor to rot. This practice primarily reflects an unwillingness by men to process any timber that cannot be sold to SWIFT for premium prices. As specified earlier, the second aim of SWIFT is that timber production should meet community needs as well as bring in a cash income. In this case, as women pointed out, the second grade timber could have been sold locally, or used by their own families for furniture, fences, and house construction.

The Relationship Between an Engendered Project and Environmental Sustainability

Those managing SWIFT should realize that encouraging women to play a stronger role in the project in the ways suggested above could improve its prospects of long term sustainability. Jackson (1994) suggests that, if women are not benefiting economically from a project, they have no incentive to act in environmentally sustainable ways. By involving women in monitoring, women could gain knowledge about, and control over, resource management associated with the project while at the same time ensuring that environmental practices are followed. They could also introduce more sustainable management techniques and enhance the economic returns from forestry by encouraging men not to waste any parts of the trees they fell. Also, by ensuring that equity concerns are addressed, project managers would help to decrease the likelihood that future conflicts will occur concerning who is benefiting from the project.

With excellent knowledge about the project and its aims, and good access to skills training, women could be fully involved at all levels of the project, including management at local and higher levels. Figure Four shows how this combination of women's conscientization about the project, affirmation of women's talents, and awareness-raising among men about the need to support women's expanding roles, followed by skills training for women, can result in women gaining some control within the project and a greater share of project benefits. A stronger role in the project could also give women more status within their communities.

The aim, therefore, is not to force women to join SWIFT, but to respond to the interests women have expressed in SWIFT by raising their awareness and informing them of their options. Thereafter it would be up to women themselves to decide whether or not to participate in SWIFT, or how to negotiate with men for a better share of the benefits which they know the project brings.

Conclusions

Women's roles, knowledge, skills, and interests in Melanesian societies are to some degree unique. To foster both a sustainable development process and greater gender equity, issues pertaining to women need to be given greater consideration than most development models allow.

This study has examined the management, operations, and impact of an eco-timber project established as an alternative to the devastating logging operations of the Solomon Islands. In many respects, the eco-timber project has been remarkably successful. Through an internationally recognized accreditation system, the extension of chainsaw loans, the ability to offer a very competitive price for timber, and the provision of a transportation service, SWIFT has presented a sustainable development alternative that also meets the desire of villagers for greater cash earning opportunities. Nonetheless, aspects of SWIFT's management and operations have potential for improvement. Of these areas, this paper has focused on SWIFT's failure to promote gender equity.

SWIFT chose to address gender interests by establishing a separate WID project. While SWIFT staff have not intentionally marginalized women from the eco-timber project, by failing to acknowledge the disadvantages facing women who wish to participate, women have effectively been marginalized. SWIFT's managers have simply tagged on a WID dimension to the environmental project, thus taking the easy option; they do not have to challenge gender relations and roles, property rights, or access to productive resources. Meanwhile the work women do to support men's eco-timber production is invisible, and few women share directly in the economic benefits of the project. This situation seems incompatible with the justice and equity concerns of the United Church, from which SWIFT emerged.

To engender SWIFT, efforts need to be made to target women's involvement and to enhance women's economic, political, and ideological autonomy. Based on suggestions from women as to how to improve their involvement in the project, a process of awareness raising for both men and women, including project staff and members of rural communities, should be implemented. Project staff have so far deprived themselves of the benefits which come from incorporating women's traditional knowledge and experience as major users and managers of the Solomon Islands forests.[14] They need to be made aware of the ways in which women's involvement could benefit the project, including enhancing its

effectiveness and the likelihood of it being environmentally sustainable. Men in rural communities need to understand that women are entitled to benefit from the project equally with men. For this to occur, however, women will need to be specifically by training and support services. There is a strong likelihood that SWIFT could be engendered in such a manner given the strength and leadership of the United Church, women's desire for a more active role in the project, the appreciation shown by men for women's knowledge and skills, and the introspective nature of SWIFT management.

It is hoped that other agencies seeking to support community-based sustainable development initiatives in the Melanesian countries will realize that their projects have a greater likelihood of success if women's involvement is targeted from the outset, based on the understanding that gender equity and environmental sustainability can be complementary goals.

Acknowledgements and Notes

My sincere gratitude goes to all of the women and men from SWIFT and from the villages of Western and Choiseul provinces for the assistance and friendship they extended to me and for offering me their time, wisdom, and hospitality. I hope that I have drawn your ideas together accurately. Thanks also to Foluke Quist-Wessel, Helen Ritchie, Henry Scheyvens, and an anonymous reviewer for their insightful comments on an earlier draft of this paper. Finally, thank you to the Massey University Research Fund without whose support I would not have been able to undertake the required fieldwork.

1. Logging simply refers to the "cutting and removal of trees from a forested area" (Dunster and Dunster 1996:197). When people in the Solomons use the term "logging," they are referring to large scale clear felling of forests, rather than selective cutting. Logging is distinct from forestry which can be defined as "...the business of managing forests commercial wood production and other forest products" (Gilpin 1996).

2. SBD$ = Solomon Islands dollars. In March 1996, SBD$1 = New Zealand $0.42.

3. This is unlike other colonies where "...the state apparatuses...have had, as central functions, the managements, obfuscation and obliteration of traditional tenure" (Ingram 1994:34).

4. For the purpose of this study, I conducted most interviews in Solomon Islands pidgin (*pinjin*). Pidgin is the most universally spoken language in the Solomons, where there are over sixty indigenous languages and many dialects as well.

5. When I asked a group of women in the western Solomons to fill in an activity profile, which involved listing tasks/activities engaged in by any or all of the following categories--men, women, boys, girls--in their village, the only activities in which men's participation rated higher than women's were business (where women's presence was not even noted) and leisure time.

6. I already had quite a detailed understanding of women's situation in the Solomon Islands from three months fieldwork in 1992 when I studied the effects of development initiatives and women's organizations on women's empowerment (Scheyvens 1995).

7. Christianity is very strong in the Solomon Islands, gaining support from 95 percent of the population. In rural areas the churches often focus on community life, attempting to meet both the spiritual and physical needs of their members.

8. A company called "Ecotimber International," based in San Francisco, purchases wood from certified community forestry programs in Papua New Guinea and elsewhere. They have supplied wood for high profile projects including Jay Leno's Tonight Show desk and chairs (Anon 1995). Publicity from such contracts is likely to ensure a growing interest in the use of eco-timber from a variety of sources for the sustainable architecture community.

9. This is usually a maximum of four trees.

10. In fact, six women attended a forest management course organized by SWIFT when the organization was newly formed. Most people I spoke to were unaware of this, however, or of other involvement women had in SWIFT.

11. Of the nine certified producer groups in 1996, two of them had women as trustees.

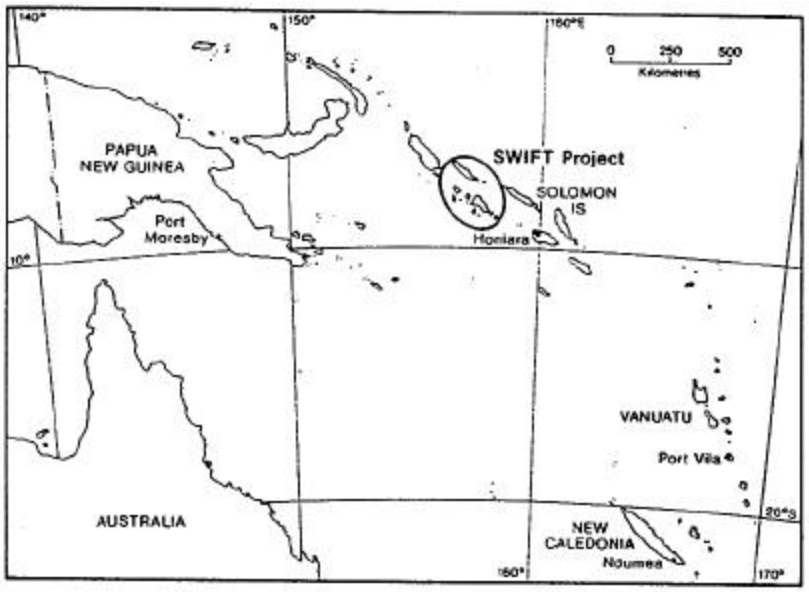
12. It was women living near to the Munda area--where the SWIFT yard is situated and where there is also a small township where beer may be purchased--who complained of this problem rather than women in more isolated places, such as Choiseul, where SWIFT boats come to them to pick up the timber.

13. While most land is still held communally, members of a tribe may be granted small individual plots of tribal land to use: usually the woman or man seeking an individual plot will prepare a feast or give gifts to the bigman/bigmen of their tribe to seal the deal, but if later they choose to move away and/or abandon this land, it reverts to the jurisdiction of the tribe.

14. Sarin (1995) makes a similar observation about the need for women's involvement in forest management in India.

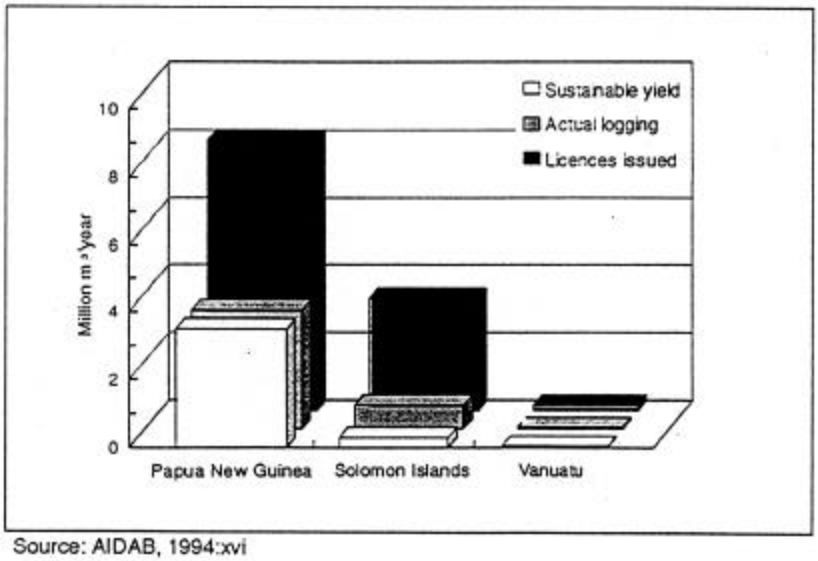
TABLES AND FIGURES

FIGURE ONE:
Location of the Solomon Islands



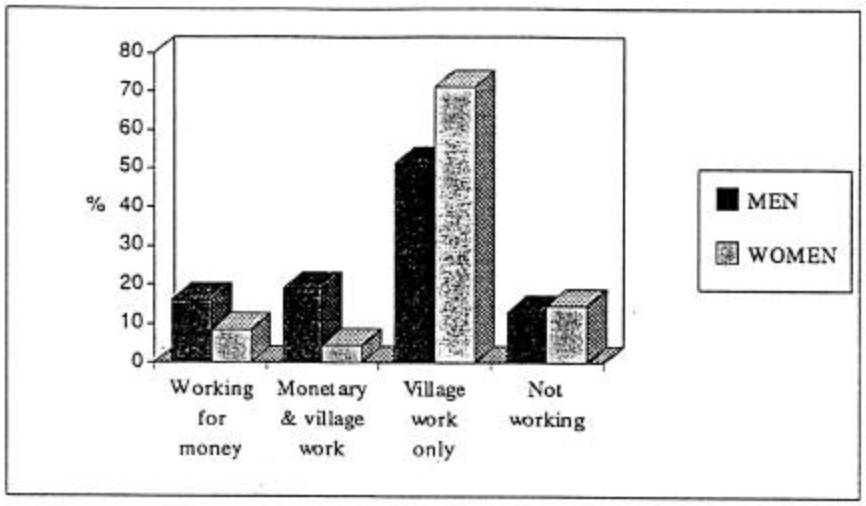
Source: Derived from AIDAB, 1994:iv

FIGURE TWO:
Melanesian forestry sector, logging volumes



Source: AIDAB, 1994:xvi

FIGURE THREE:
Percentages of men and women involved in paid and unpaid work



Source: Census of Population (Solomon Islands Government, 1986:194).

FIGURE FOUR:
How to transform a non gender-sensitive project

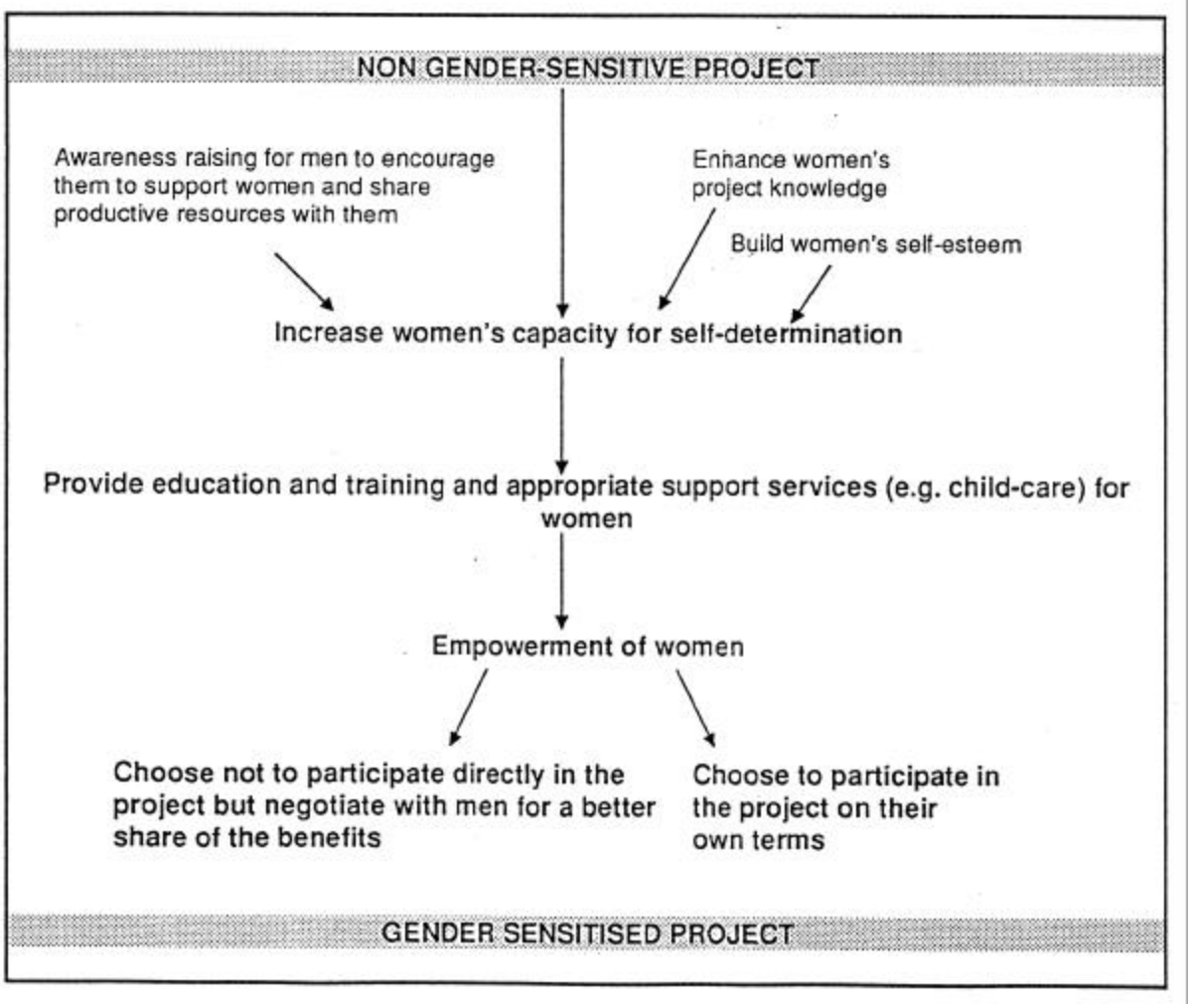


TABLE ONE:
Effects of SWIFT on women's autonomy

	POSITIVE EFFECTS	NEGATIVE EFFECTS	SUGGESTED IMPROVEMENTS
ECONOMIC AUTONOMY	A small minority of women are deciding jointly with their husbands how to spend or invest money earned through SWIFT. In one area, women's groups can ask that eco-timber be produced for their benefit, even though they are not the producers.	Most women have poor control over money earned through the project. Women have little say over which land and how much land is allocated to the project. Women lack access to project information, technology and skills, thus their ability to become producers is curbed.	Include education on the equity and justice goals of SWIFT in every training session, specifying the FMP clause that all family members should benefit. Foresters to speak with producers and their families when making such decisions, specifically seeking out the views of women. Targeting of training and awareness raising sessions for women.
POLITICAL AUTONOMY	Two UCWF representatives on the board of the IHDP. The Synod, to which SWIFT has to report every year to have their workplan approved, consists of about 25% women.	Lack of consultation with women's groups about the project and its impacts on village life. Poor representation of women as trustees.	UCWF groups could be encouraged to play a watchdog role, with representatives reporting to SWIFT personnel at regular meetings and being consulted on changes to SWIFT's policy or objectives. Conscientisation of all producers emphasising why they should consider involving more women as trustees.
IDEOLOGICAL AUTONOMY	Six women undertook forest management training, which is likely to have increased their skills and their self-esteem.	Most women abide with the unwritten custom that 'Man nao hem i bos', that men are in charge, because they do not wish to risk aggravating their husbands. This leads to an overall attitude of powerless among women.	Awareness raising among women on SWIFT as an organisation and what opportunities it offers them. Conscientisation of men on how they should see their wives as partners and support them in whatever development options they wish to pursue. The United Church clergy could help with such education work.
PHYSICAL AUTONOMY	Provides an alternative to logging thus affirming people's ability to meet their physical needs for clean water, food etc. from the natural environment.		

References

AIDAB (Australian Development Assistance Bureau)
1994 Melanesian Forestry Sector Study. International Development Issues No.36, Canberra.

Anon
1995 "Niche Marketing On a Shoestring." *Business* 17(4):33.

Asian and Pacific Development Center
1992 Asian and Pacific Women's Resource and Action Series. Environment Asian and Pacific Development Center, Kuala Lumpur.

Cassells, Ross
1992 The Valuation of Subsistence Use of Tropical Rainforest on the Island of Choiseul, Solomon Islands. M.Phil. Thesis, Massey University, Palmerston North.

Central Bank of the Solomon Islands
1994 Governor's speech on the occasion of the launching of the CBSI Annual Report, Honiara (unpublished).

Collin, P H
1992 *Dictionary of Ecology and the Environment.* Teddington, UK: Peter Collin Publishing.

Drijver, Carol A.
1992 "people's Participation in Environmental Projects." In: *Bush Base, Forest Farm*, edited by E. Croll and D. Parkin. Pp. 131-145. London: Routledge.

Dunster, J. and K. Dunster
1996 *Dictionary of Natural Resource Management*. Vancouver: UBC Press

Dureau, Christine
1993 "Nobody Asked the Mother: Women and Maternity on Simbo, Western Solomon Islands." *Oceania* 64:18-35

Fingleton, J
1994 "Forest Resource Management in the South Pacific: Logging Your Way to Development?" *Development Bulletin* 31:19-22.

Gilpin, Alan
1996 *Dictionary of Environment and Sustainable Development* . Chichester: Wiley.

The Independent
1996 "Timber Certification Means Improved Export Market Access: FSC." *The Independent* April 5:16-17.

Ingram, G.B.
1994 "Institutional Obstacles to Conservation: Fegusson Island, Papua New Guinea." *Pacific Affairs* 67(1):28-45.

Institute of Development Studies
1995 *New Thinking on Gender and the Environment*. Policy Briefing Issue 5: August.

Jackson, C.
1994 "Gender Analysis and Environmentalism." In: *Social Theory and the Global Environment*, edited by M. Redclift and T. Benton. Pp.113-149. London: Routledge.

1993 "Environmentalism and Gender Interests in the Third World." *Development and Change* 24:649-77.

Mogina, Jane
1996 "Wisdom for Sustainable Development: Women's Knowledge of Forest Resource Use in Papua New Guinea." Keynote speech at the 6th International Interdisciplinary Congress on Women, Adelaide, 21-26 April.

Molnar, A.
1991 "Women and International Forestry Development." *Society and Natural Resources* 4:81-90.

Patel, Diana
1995 "Zimbabwean Strategies for Gender and Development." In: *Gender and Development: The Cutting Edge* . Australian Development Studies Network, Canberra.

Rao, A., M. Anderson, and C. Overholt (eds.)
1991 *Gender Analysis in Development Planning*. West Hartford: Kumarian Press.

Rosoman, Grant
1995 "Ecoforestry: Towards a Responsible Plantation Industry." *New Zealand Forestry* 19(4):8-12.

Sarin, M.
1995 "Regenerating India's Forests: Reconciling Gender Equity with Joint Forest Management." *IDS Bulletin* 26(1).

Scheyvens, Regina
1995 *A Quiet Revolution: Strategies for the Empowerment and Development of Rural Women in the Solomon Islands*. PhD Thesis, Massey University, Palmerston North.

Schrijvers, Joke
1991 "Autonomy As Policy: A Matter of Boundaries?" In: *Across the Boundaries: Women's Perspective*, edited by Wim van Zanten. Women's Perspectives Papers read in honor of Els Postel-Coster, Department of Cultural and Social Studies, University of Leiden, 10-11 January.

Shiva, Vandana
1989 *Staying Alive: Women, Ecology and Development*. Atlantic Highlands: Zed Books.

Sontheimer, S.
1991 *Women and the Environment*. London: Earthscan.

Steen, Harold
1995 "Sustained Yield Forestry." In: *Conservation and Environmentalism: An Encyclopedia*, edited by R. Paehlke. Pp. 616-618. London: Fitzroy Dearborn.

SWIFT Netherlands Foundation
1996 *Solomon Western Islands Fair Trade Newsletter* No.1, June.

Wijewardana, Don
1995 "Sustainable Management of Forests: Current International Debate." *New Zealand Forestry* 39(4):45.