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South Pacific

*Women and development in
Papua New Guinea*

Beatrice Avalos

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Beatrice Avalos was Professor of Education at the University of Papua New Guinea. Her research interests include education and development, teachers and teaching, and women and education. She has worked in this area for the International Development Research Centre (Canada), the International Institute of Educational Planning, and the Commonwealth Secretariat. She is currently working at the Ministry of Education in Chile.

*a*bstract

In Papua New Guinea the male/female gap in education, health, employment opportunities and access to decision-making is an urgent problem. Women's health needs to be addressed. Maternal mortality rates are high at 1 in 700 and malnutrition is a serious problem for Papua New Guinea women. In education women lag behind men. For every 100 literate males there are only 67 literate females. Enrolment rates, completion rates and transition rates for females are lower at all levels of schooling, and the gap between females and males increases as students move forward in the education system. By the time students reach the upper secondary level, girls comprise only 29 per cent of total enrolment; at the university, females are only 22 per cent of the student body. Women make a substantial contribution to economic activities, but their needs are often ignored by development programs and projects. In most public spheres of activity women have very little access to top decision-making positions, including in education where about 30 per cent of teachers are women, but very few of those get promoted to high levels in the system. Despite official commitment to women and development, women in Papua New Guinea continue to lag behind men in all areas. This paper provides a comprehensive overview of gender differentials in health, education, employment and participation in decision-making. It discusses current initiatives to improve gender equity and women's participation in and benefit from development, and suggests possibilities for the future.

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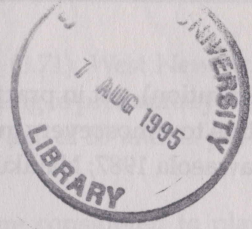
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Abstract

The abstract discusses the gender gap in education, health, and employment opportunities. It highlights the need for research to address these issues, particularly in the context of the United States. The text mentions that while women have made significant gains in education, they still face challenges in the workforce and in accessing certain career paths. It also notes that the gender gap in health and employment remains a significant concern. The abstract concludes by emphasizing the importance of continued research and policy interventions to address these disparities.

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Women and development in Papua New Guinea

Women's health and women's happiness are often taken for granted. Their sweat and their suffering is kept invisible. They are not playing a full or equal part in the development of Papua New Guinea.

Women do a lot of work. They give birth to the family. They feed, nurse, wash and wait on everyone. They work in the home, and out in the bush, gardens, rivers, seas and swamps. They walk to and from distant markets, and hospitals and health centres for the sake of the family.

When new development projects are set up women do even more work. They help with the cash cropping and they care for the whole family when the men leave the village to find paid work. Men leave their wives behind, with all of the children and all of the work, women suffer silently.

Women want to work in groups. They want to learn. They want to take on an active part in development, but too often there simply is not time. Too often men say that forming groups, going to meetings, getting information, attending courses, and planning their own projects is not what women should be doing. Too often men hit or hurt women. But it is women's right to be equal partners, and it is men's obligation to support that role (Cox 1991).

The above statement largely represents the perspective with which the issues of women and development in Papua New Guinea will be considered in this paper. Using the idea of 'human development' as conceptualised in the UNDP Human Development Reports (e.g. 1993), I will examine the situation of women in Papua New Guinea, what they contribute and how much more they could contribute to development if circumstances were to change. The particular perspective taken relies on the concept of participation. Women in Papua New Guinea are seen in the legislation as equal participants in the development of their country (Eight Point Plan and National

Constitution), yet in practice most women are denied the possibility to participate in relation to almost every indicator of human development (Preston and Wormald 1987; Hinawaeola 1987; Nakikus 1985; Gillett 1991).

Development and human resources

Development has long ceased to be narrowly understood as economic growth measured mainly by economic indicators. That the function of development is in the end a better quality of life for people, and that in turn, it is people who make economic development possible is increasingly at the forefront of discussions examining why so many efforts at development have failed. The concept of economic and social development in a particular context needs to be linked to the conditions by which the basic needs of people will be satisfied, and the possibility of developing skills for effective participation and execution of development projects to benefit the people. The wider concept views human resources, as Corner (1993:1) puts it, as 'both inputs into, and the ultimate beneficiaries of the development process'. The development process from this perspective, is not considered a linear one which starts with satisfaction of basic human needs and slowly progresses to the higher levels of social participation and economic production. The process should be regarded as more of a spiral: people always need to survive and will find the means, at least in rudimentary form, to develop skills and survival strategies and to implement the strategies to secure their livelihood. Satisfaction of people's basic needs is more than enabling survival to take place; it implies concomitantly the development of conditions by which people become participants in the development process or in production while at the same time enhancing their own quality of life (UNDP 1991).

In Papua New Guinea the indicators of human development are lower than those of economic development (UNDP 1993). These indicators differ by province with some provinces better off than others (Fernando 1992); they also differ by sex. Within a perspective recognising that economic growth and social development are mutually dependent, the roles of women as producers, consumers and beneficiaries of the development process needs to be examined alongside their roles in social development.

The situation of women in Papua New Guinea

In 1990 women constituted almost half (48 per cent) of the 3.5 million Papua New Guineans (National Statistics Office 1991). Most Papua New Guinean women (86 per cent or 1.5 million approximately) lived in rural areas although there is some drift to the cities and bigger towns. The provinces with highest annual growth rates since the

1980 census are the National Capital District (4.47), Enga (3.71), West New Britain (3.61), East New Britain and Western Province (3.25). According to preliminary figures from the 1990 census, 77 per cent of women are under the age of 35 and 41 per cent under the age of 15.

Women in traditional Papua New Guinea society were considered to play an important role in maintaining the status of men (Gena 1990) and there was a clear division of labour between men and women (Papua New Guinea Government and UNICEF 1987). Women were mostly involved in activities related to the home, food production, and general care of children and household, while men were responsible for protection of the community (Papua New Guinea Government and UNICEF 1987).

Women's power differed in the matrilineal and patrilineal types of societies found in Papua New Guinea. The Highlands provinces are examples of patrilineal societies with strong male dominance, and differ from the islands provinces (e.g. North Solomons, East New Britain) where matrilineal systems exist. The effect of these types of organisation is mostly on the ownership of the land and inheritance, but not (necessarily) on the locus of general decision-making powers.

In some traditional societies women had power although it was not overtly exercised. Tamate (1987:62), for example, notes the following.

Among my own Roro people in coastal Papua women were often the custodians of the knowledge upon which their sons' ability to fulfil socio-political expectations of the clan depended. In some other parts of the country, although women of course did not actively fight in tribal wars, they certainly tried to influence the decisions of their menfolk.

Such power has also existed in certain patrilineal societies such as in Manus (personal communication, G. Kulwaun). With changes in the structure of society, however, women are losing traditional power and failing to secure access to the decision-making structures of the emerging forms of social life.

The social structure of the country in terms of male/female relations is changing, but these changes appear to be more geared towards blurring the responsibilities of women and men, and towards fortifying male dominance. Traditional practices, such as the bride-price which is exacted from the family of the husband in some Papua New Guinea societies, is abused when very high prices are charged (Tamate 1987; Shoeffel-Melissea 1987), resulting in the problem of the status of women being measured more in terms of the money they bring to the union than their worth as persons. Male dominance is also increasingly exercised through wife beating, now considered a serious problem. The *Report on the Situation of Children and Women in Papua New Guinea* refers to a study by the Law Reform Committee estimating that 67 per cent of rural wives, 56 per cent of urban low income wives and 62 per cent of urban élite wives were beaten one or more times a year by their husband. This situation is more common

in the Highlands provinces than in the Papuan region (Gillett 1991). The Papua New Guinea Government and UNICEF Report (1987) indicates that not all women condemn the practice of wife beating; and among the educated urban élite, the acceptance of the practice is high at 36 per cent of women and 41 per cent of men.

Women and health indicators

That health and development are closely linked factors is well recognised. This is so, both in the sense that without a certain level of economic and social development there is little possibility of providing needed health services, and in the sense that without adequate health conditions there is little energy to help build a society (Østergaard 1992). That the health of women is crucial in the process of development is less recognised. Yet women not only bear and feed their children, in many contexts they grow the food and bring the water long distances for the whole community, or support their household through demanding work in terms of hours and physical strength. In this respect attention to women's health indicators is important to assess the potential of their contribution to development. If these indicators are poor this may be evidence not only of the underdeveloped condition of the country in general, but also may point to possible differential treatment of girls and women in relation to food and access to basic health care services (Østergaard 1992).

There is considerable literature on the health situation of Papua New Guinean women. According to the 1980 census, they had a life expectancy of 51 years, which was up 10 years from the 1971 figures. Hopefully, the 1991 census will indicate further improvement, but at the time of writing, these figures had not yet been released. Differences by province show that women in the Southern Highlands and West Sepik provinces have a life expectancy of 47 and 43 years respectively, while in the North Solomons, women could live to age 59 (Appendix Table A1).

According to Gillett (1991), it is difficult to estimate the causes of death of Papua New Guinean women, because deaths in institutions account for only 10 per cent of all deaths. Statistics from the Department of Health show ten leading causes of admission to hospital in 1985 of women aged 15 to 44 years (Table 1).

It is not well received to speak about sexually transmitted diseases; but these are increasing among women in Papua New Guinea, but according to Gillett (1991) the most common diseases are gonorrhoea and syphilis; the incidence of HIV/AIDS beyond the few reported cases is being investigated. The proportion of women suffering from malaria is also probably much higher than the statistics indicate as women tend not to go to health centres due to the many obligations at home and/or distance to these centres.

Table 1 Causes of death for women, aged 15-44, 1985 (per cent)

Obstetric causes	29.0
Diseases of genital organs	6.0
Malaria	4.0
Pneumonia	2.0
Diseases of other parts of the digestive system	2.0
Diseases of the skin and subcutaneous tissue	2.0
Anaemia	1.0
Diseases of muscular/skeletal	1.0
Ill-defined intestinal infections	1.0
Fractures	1.0
All other causes, known and unknown	52.0

Source: Papua New Guinea, Department of Health, in Gillett, Joy. E., 1991. *The Health of Women in Papua New Guinea*, 2nd ed., Papua New Guinea Institute of Medical Research, Goroka.

Maternal health is an important area for consideration in that most Papua New Guinean women will give birth five to six times in their life and the number of women among those of child bearing age (15 to 44 years) who gave birth was high at 17 per cent in 1987 (Gillett 1991), with important differences by province (Appendix Table A2; Gillett 1987:26). While most urban women have supervised deliveries this is not the case for most rural women, although in general the situation has improved greatly. In 1985, 43 per cent of women had supervised deliveries (Appendix Table A2). Although family planning services are available, these are limited, as is the willingness to accept advice. According to Sialis (1993):

There are many reasons for the limited use of family planning. Many village men are opposed to modern family planning. Many couples have little knowledge of the variety of methods available. Some women may experience unpleasant side effects and fear subsequent infertility. Others are shy to approach health workers for information. In many areas the use of contraception was traditionally associated with promiscuity, an attitude which is still common today. Finally, even though couples may wish to practice modern family planning, often contraceptives are difficult to obtain, especially in rural areas (Sialis 1993: 141).

Maternal mortality is estimated to be 7 per 1,000 live births and according to UNICEF (1990), Papua New Guinea, with a GNP per capita at least double that of many African countries, has a maternal mortality ratio higher than many of those countries (Biddulph 1993). Further, 'the life-time risk of maternal death to a Papua New Guinea woman is 1 in 20 compared to 1 in 700 for an Australian or USA woman' (Biddulph 1993: 164, working with UNICEF data).

Malnutrition is a serious problem for Papua New Guinean women. According to Gillett (1991) many women suffer moderate to severe protein energy malnutrition. This, combined with malaria, affects the weight of newly born children. The worst areas of the country for child malnutrition (and by implication for women) are the East Sepik province, parts of the Eastern Highlands, Morobe and Gulf provinces, and four districts in the Milne Bay province. Causes of malnutrition have been identified as long periods of breastfeeding with no added energy and protein, the heavy workload of women in agriculture, and infectious diseases such as malaria. Other important problem areas are anaemia, iodine deficiency and over-nutrition (obesity) among urban women.

In the examination of health indicators, consideration of the social and economic conditions of the everyday lives of Papua New Guinean women is particularly important. Several reports (Gillett 1991; Papua New Guinea Government and UNICEF 1987) focus on the life conditions of women as causes of severe health risks. Gillett points out that 'the way women are treated in their marriages, their workload and their level of education are all important factors which affect their health' (1991:160).

Education and schooling

Almost all the analyses of the situation of women in Papua New Guinea indicate that one of the contributing factors to problems experienced in social and family life and to women's limited participation in public affairs, is their low levels of participation in educational programs and low levels of literacy in comparison to men.

Literacy levels

The 1990 preliminary census figures indicated the level of literacy for the total population, 15 years or older in Papua New Guinea was 53 per cent, with nearly one million illiterate (National Statistics Office 1991; see Appendix Table A3 for provincial figures). Female illiteracy was 55 per cent compared to 41 per cent illiteracy for males (Table 2). If there can be some comfort in the census results it is that they indicate levels of illiteracy below the UNDP (1993) estimate of 62 per cent. Figures for the North Solomons province were not included in the national figures but it is unlikely that they would have worsened the national average.

Two factors stand out in relation to illiteracy rates. First, while the gap between male and female illiteracy rates might be expected to be lower in the younger groups of the population because of the effect of schooling, the male/female gap in respect to illiteracy was higher in the 20-24 age group than in the 15-24 age group and higher than in the total population 15 years of age or older. Using an index which sets male

Table 2 Illiterate population in Papua New Guinea by age group and sex (per cent)

	Male			Female		
	Total	Illiterate Number	%	Total	Illiterate Number	%
20-24	167,389	43,660	26.1	159,792	66,638	41.7
15-24	379,906	106,832	28.1	343,433	134,433	39.1
15+	1,083,133	437,905	40.4	997,211	544,278	54.6

Source: National Statistics Office, 1991, *National Population Census, 1990: preliminary figures*, National Statistics Office, Port Moresby.

indicators of illiteracy equal to 100 (UNDP 1993), in Papua New Guinea for every 100 literate males there were 67 literate women in the 20-24 age group as compared to 77 in the 15-24 or 70 in the whole population 15 years of age or older (Table 3).

The other factor which is of concern is the sheer extent of the problem in the Highlands provinces, the least developed areas of Papua New Guinea. Overall illiteracy rates in the Highlands were 67.3 per cent compared to the national average of 53 per cent; women's illiteracy rate was 75.2 per cent and male illiteracy 60 per cent (National Statistics Office 1991). The younger age groups also had higher illiteracy rates than the national average (Table 4).

Primary school enrolment and retention rates

The average schooling of Papua New Guineans is 1.2 years for males and 0.6 for females (UNDP 1993). Although there has been considerable improvement in primary gross enrolment rates (that is, the proportion of the population 7-12 years old enrolled in schools) from 56.2 per cent at independence in 1975 to 71.3 per cent in 1990, the provision of adequate schooling is still an urgent problem. The rate of increase in enrolment rates was high in the period from 1972 to 1985 at 16 per cent for boys and about 31 per

Table 3 Male/female gap in illiteracy by age group (males = 100)

	15+	15-24	20-24
Papua New Guinea	70	77	67
Highlands provinces	58	68	65

Source: National Statistics Office, 1991, *National Population Census, 1990: preliminary figures*, National Statistics Office, Port Moresby.

Table 4 Illiteracy rates in the Highlands provinces by sex and age group (per cent)

	Total	Male		Total	Female	
		Number	Illiterate %		Number	Illiterate %
20-24	56,066	23,921	42.7	55,935	35,153	62.8
15-24	134,507	59,587	44.3	122,947	71,475	58.1
15+	420,448	256,478	61.0	397,099	298,621	75.2

Source: National Statistics Office, 1991, *National Population Census, 1990: preliminary figures*, National Statistics Office, Port Moresby.

cent for girls. Subsequently, the rate of increase for girls has averaged about 4.5 per cent and for boys around 4.6. In 1990 there were still important differences in enrolment rates by province, ranging from 94 per cent in the National Capital District to 48.1 in the Southern Highlands province.

Between 1985 and 1990 the gross enrolment ratios for girls was lower than those for boys, but the gap narrowed over the period from 72 per cent for boys and 60 per cent for girls to 73 per cent and 69 per cent respectively (Table 5, see Appendix Table A4). Retention rates in primary school in Papua New Guinea (first to sixth grade) have been consistently poor since 1975, and average figures indicate deterioration rather than improvement between 1975 and 1991 (Table 3). The retention rate for girls was slightly higher in the period 1975-85, but in 1991 it was similar to that of boys and worsening.

Table 5 Primary gross enrolment rate by gender (per cent of 7-12 year old population)

	Male	Female
1985	72.1	61.0
1986	74.9	63.5
1987	75.0	64.2
1988	76.7	65.5
1990	73.1	69.2

Source: 1985-88 projections from 1980 Census; 1990 drawn from National Statistics Office, 1991, *National Population Census, 1990: preliminary figures*, National Statistics Office, Port Moresby.

While national figures are useful for a general analysis of the system, they hide considerable variation between the provinces. The Highlands provinces have consistently lagged behind in enrolment and retention rates. In 1985 the Southern Highlands had a male gross enrolment of 55 per cent as opposed to 87 per cent in the North Solomons province. Female enrolment ranged from a low of 42 per cent in the Highlands province of Enga to a high of 85 per cent in the coastal province of New Ireland. The situation was not much different in 1990. The Highlands provinces continued to have lower female gross enrolment rates with the Southern Highlands and Chimbu provinces being the worst off at 47.2 and 55.0 per cent respectively. The provinces with the highest gross enrolment rates for girls are the National Capital District (92 per cent), followed by Manus (90 per cent) and New Ireland (87 per cent) (Appendix Table A4).

Provincial differences emerge more strongly in relation to retention rates. In her study of the participation of girls in primary education, Yeoman (1985) found differences in provinces indicating that

- where there was low enrolment of girls relative to boys retention of girls was higher (Southern Highlands, Western Highlands and Enga provinces)
- where enrolment both of boys and girls was higher, retention was dropping (coastal provinces of Milne Bay, West New Britain and the North Solomons).

This trend, however, does not appear to continue in the period after 1986. Retention for girls deteriorated in the Eastern Highlands province from 53.5 per cent for the 1980–85 cohort, to 34.4 per cent for the 1986–90 cohort and to 43 per cent for the 1987–91 cohort. The situation in Enga deteriorated sharply for both males and females. Girls' retention rate which in 1980–85 was 40.6 per cent and increased to 58 per cent in the 1986–90 cohort dropped dramatically for the next cohort to 29.8 (compared to 31.8 for boys) (Table 6, Appendix Table A5). It is not clear why this is so. It is also possible that the figures returned from schools are inaccurate.

In examining the enrolment and retention rates of females, Yeoman (1985) conducted a survey of 685 people in 16 provinces on their perceptions about causes of school drop-out among girls. Those surveyed included parents, female drop-outs, male drop-outs, teachers, boards of management members, headmasters and administrators. Additional information on 185 male and 115 female 1984 drop-outs was obtained through tracer studies in 17 schools. Yeoman's table of factors most frequently cited as contributing to poor enrolment and retention of girls is reproduced in Table 7. There is much reason to believe that these factors are still at work in the 1990s.

In assessing the importance of these factors, Yeoman indicated that where physical access to school was possible, the most important out of school factor affecting enrolment and retention was the attitude of parents (particularly fathers) to the

Table 6 Retention rates in primary schools, 1975-91

Cohorts	Males	Females
1975-80	67.1	74.6
1976-81	66.4	67.7
1977-82	65.4	67.1
1980-85	61.1	67.7
1986-90	61.2	60.0
1987-91	56.2	56.0

Note: There may be some inaccuracies in the information because school statistics are collected in the middle of the school year and because the data from the North Solomons province has been excluded due to disruptions there since 1990.

Source: Papua New Guinea Department of Education, Education Staffing and Enrolment Statistics.

education of women. Where parental encouragement existed, most other factors could be overcome. Other very important contributing factors, in her view, were the teachers' skills and commitment to creating a suitable learning environment; and the girls' own vision of their role, status and potential as well as their level of motivation to succeed.

The transition from primary to other forms of schooling

The completion rates for primary school students in 1992 were around 65 per cent. The transition rate in 1992 from primary to secondary was around 38 per cent of those

Table 7 In school and out of school factors affecting female enrolment and retention

Out of school factors	In school factors
Cultural/historical factors	Age of entry
Geographical factors	Supply of teaching materials/aids
Attitudes of parents	School fees
Disillusionment with schooling;	Sexual liaison and
restricted high school entry	sexual harassment
limited employment prospects	Quality of the learning
Family labour requirements	environment
Marriage	
Tribal fighting	

Source: Yeoman, Lyn, 1985. *Universal Primary Education Factors Affecting the Enrolment and Retention of Girls in Papua New Guinea Community Schools*, Evaluation Unive, National Department of Education, Port Moresby.

who completed the sixth grade (Papua New Guinea, National Department of Education, staffing and enrolment statistics). The alternatives for those sitting and being successful in the sixth grade examination are: seventh grade in a provincial high school, seventh grade by distance education through the College of Distance Education, or entry into a vocational school.

Girls who reach the sixth grade are less likely than boys to move on to provincial high schools and the transition rates over the period from 1985-92 do not show much change (Table 8).

Provincial high school participation

In general, female high school enrolment has slowly increased since 1981: gross enrolment rates for the female population aged 12 to 16 indicate an increase from 11.0 per cent in 1986 to 12.1 in 1989, but this must be weighted against the male gross enrolment rate of around 18 per cent in 1989.

There are marked differences by province in terms of female enrolment. The provinces with highest rates of female high school enrolment besides the National Capital District are those located in the coastal and islands regions, including those with matrilineal systems (New Ireland, New Britain). However, dramatic changes have taken place in some of the highlands provinces. Chimbu, for example, improved female gross enrolment rates from 7.3 in 1986 to 11.3 per cent in 1989, and Eastern Highlands from 5.8 to 10.5 per cent during the same period.

Although the provincial high school system has a duration of 4 years, not all students are able to progress through these. There are not only drop-outs but also 'push outs', that is, students who are not allowed to continue in the same school because of lack of places. Overall, girls fare worse than boys in terms of retention for the entire four years of provincial high school (see Appendix Table A6). There were three provinces

Table 8 Transition rates from primary to provincial high schools by sex, 1986-91

	Male	Female
1986-87	39.3	29.2
1987-88	40.3	33.5
1988-89	38.1	31.4
1989-90 ^a	37.1	29.9
1990-91 ^a	37.5	33.5
1990-92 ^a	41.2	35.0

^aFigures for this period of transition do not include the North Solomons province.

Source: Papua New Guinea Department of Education, Education Staffing and Enrolment Statistics.

where deteriorating girls' retention rates between 1986 and 1989, compared to those between 1982 and 1985 were of concern: the National Capital District (20.5 per cent deterioration), the East Sepik (17.5 per cent) and to a lesser extent the island province of New Ireland (8.1 per cent).

A recent study of the East Sepik province by Seta (1992) reports on questionnaires to and interviews with school administrators, teachers, girl students, girl drop-outs and community representatives on reasons for low female retention in the high schools of the province. A number of factors, paralleling some of those identified by Yeoman (1985) for community schools, were identified. Among these are the impact of Sepik traditional culture as it affects who, between a boy and girl, will be given preference and support by parents in relation to their schooling opportunities. Cultural attitudes towards women affect the decision to allow a girl to drop out if it is considered that she is in danger of becoming involved with or married to someone outside her village. These attitudes will also affect the decision to choose which child to keep in school if parents are faced, as they are in the Sepik province, with expensive school fees. Unwanted pregnancies and evidence of relationships between sexes in school were also identified as an important cause for poor retention, inasmuch as girls in this situation were asked to leave by the school authorities, or they themselves decided to do so, mostly as a result of anxiety which affected their school performance. Finally, Seta also found that girls may leave school because the curriculum and teaching are not sufficiently challenging nor appropriate to their needs and interests.

Vocational training

Vocational education is the other post-sixth grade alternative. In Papua New Guinea this part of the non-formal education system also has very low rates of female participation. The proportion of women enrolled in vocational schools is less than 30 per cent of the total enrolment of these schools; just over 1,000 girls entered the first year of studies in vocational centres as compared to 3,000 males. Partly, this is due to the restricted number of courses which are appropriate for girls but also due to lack of boarding facilities for girls who have to be away from home. To a large extent, however, vocational education centres suffer from lack of resources, inadequately trained instructors, poor curriculum and generally poor governmental support (Preston 1989; GTZ 1991).

Upper-secondary and tertiary (non degree) education

Students who complete their provincial high school studies have a number of options for continuing studies: moving on to one of the four National High Schools for two years of upper secondary leading to matriculation; teacher, nursing and technical colleges; librarian and art certificates; and other specialised courses such as training for the priesthood. Each year a study is conducted to determine the number of students

who, having completed their lower secondary education, are selected for the above types of further education. The proportion of offers over time has been declining. In 1989, 31.1 per cent of grade ten leavers were offered places, while in 1991 this dropped to 27.2 per cent (Table 9).

The average proportion of girls accepted to further studies after grade 10 is 35 per cent, compared with about 70 per cent of the boys. Only in nursing are women predominantly accepted; other careers such as teaching still take fewer women (46 per cent average) than males. In relation to teaching, there may be a circular effect on the numbers of high school graduates who are interested in teaching as a result of the low number of female models they encounter in school. Flaherty (1992), in a study of Milne Bay and East Sepik high school teachers' perceptions, found that an important influence on girls' choice of teaching as a profession, was the teachers and in particular, female teachers they had encountered. The proportion of girls who enter upper secondary education (National High Schools) is around 29 per cent of the total enrolment.

Table 9 Number of students selected for post-tenth grade studies by sex, 1989-91

	1989		1990		1991	
	Number	%	Number	%	Number	%
Matriculation						
Males	812	70.09	895	69.4	881	68.7
Females	401	30.0	394	30.6	402	31.3
Technical						
Males	879	74.76	798	75.1	719	71.6
Females	298	25.3	265	24.9	285	28.4
Teaching						
Males	547	57.2	336	52.0	319	51.6
Females	409	42.8	314	48.0	299	48.4
Nursing						
Males	130	35.8	77	30.3	107	36.3
Females	233	64.2	177	69.7	188	63.7
Arts/Librarian						
Males	36	80.0	26	86.6	38	67.8
Females	9	20.0	4	13.4	18	32.2
Other						
Males	90	78.9	56	100.0	135	83.8
Females	24	21.1	-	-	26	16.2
Total	3,158	31.1	3,005	29.6	2,939	27.2

Source: Papua New Guinea Department of Education, Guidance Branch 1989, 1990 and 1991 Selection Analysis Reports.

Although there is no clear evidence of why so few tenth grade female graduates move on to upper secondary education (one of the reasons seems to be lack of dormitory space), it would not be too difficult to assume that cultural and social factors are at work. The girls that survive into National High Schools in many respects have to be exceptionally highly motivated and well supported by their parents. But also they must have at least the potential to deal with a school situation that will lead them into a world which may be radically different from the one represented by their family and clan. The characteristics of the female survivors into upper secondary education were studied by Buse (1992) within the school population of an East Sepik National High School. He described them all as belonging to socially open and/or somewhat educated families and as engaged in the task of learning 'to integrate on a personal level the opposing norms of the two cultures'. Among them Buse was able to discern first, the 'woman of two worlds' as engaged in the dual task of separating from her past culture and at the same time integrating the traditional and modern cultures learned in school. Second, he found the 'independent' woman or the woman 'in between' who sees herself as moving away from the traditional concepts of femininity and into the modern world, developing in the process skills of 'aggressive self-assertion' and engaging in 'open-controversy', with both men and women. Finally, Buse found what he calls 'the dependent woman', who, though seeing education as separation from the traditional culture, does not see herself as able to carry out the struggle on her own. Her difficulties lie in having to face the tension between the need to retain the family security and yet be part of the modern world represented by the school.

Distance secondary education

In the distance alternative for secondary education (at the College of Distance Education) there is a similar or even worse situation in relation to female enrolment. According to Martin (1988) the average proportion of female enrolment in relation to total enrolment from the start of the College of External Studies (or College of Distance Education as it is called now) was 31.0 per cent. Martin's assessment of the reason for this low participation rate in an alternative path which should be attractive to women who often need to remain at home, is that social attitudes do not favour higher levels of women's education. Imaroto (1988) suggested that low participation and retention rates of women in distance secondary education courses is related to family and other social pressures. Examining the East Sepik experience, Imaroto (1988) concluded that an important factor is that the local coordinators of distance studies are mostly male and tend to provide more encouragement to the male students than to the females.

Distance Education (eight matriculation level courses offered by the University of Papua New Guinea) is an important alternative for those unable to enter a National High School. Some indication of the entry and survival opportunities in these courses for women is provided by Phillip (1992; 1992a) in a study of distance enrolment of

women within the National Capital District area. Only 22 per cent of students who started the program were female, even fewer continued beyond their first course, and only 14 per cent actually matriculated in the National Capital District. Compared to males, female attrition rates were much higher elsewhere in Papua New Guinea (Phillip 1992; Phillip 1993), though they represent drop-outs between courses rather than within courses. The causes for these attrition rates as perceived by Phillip are similar to the reasons given in general for low participation of women in schooling: social and cultural factors as well as financial constraints.

Universities

Women are poorly represented at university level in Papua New Guinea. The University of Papua New Guinea had in the second semester of 1990 a female student population of 427 students or 22.9 per cent of its total student population, representing a slight increase from 18 per cent in 1987. The University of Technology showed even lower figures with 14.4 per cent female enrolment in 1991, and slightly higher in the first semester of 1992 (16 per cent) with no change from 1987 (14.8 per cent). In order to show the extent of inequity in the use of public resources, Murphy (1985) calculated the proportion of public expenditure at each of the two universities in relation to the number and sex of their output (certificates, diplomas and degrees). She was able to show that for the University of Papua New Guinea in 1983, males received the benefit of almost 10 million kina more public investment than females. From a total of 14,042,803 kina, the net expenditure applicable to female output was a little over 2 million kina. At the University of Technology investment related to female output during the same year was 584,750 kina compared to 9,161,080 kina for males.

As gender differentials in output have not changed much since 1983 (Appendix Table A7), the situation still remains one in which public investment in university studies largely benefits the male population of the country.

Low female enrolment and retention in higher education stems in the first place from the fact that females constitute only 29 per cent of upper secondary total enrolment; but it is also related to the conditions of life at the university: the state of residence halls (now recently improved), threats, harassment and physical assault from male students, and lack of sufficient recreational facilities (Oliver 1985).

Flaherty conducted two surveys in 1987 and 1989 to gauge student teacher opinions at Goroka Teachers' College (in the University of Papua New Guinea) regarding the participation of women. The findings in both surveys point to what may be the case for the rest of the university: that women performed as well or better than their male counterparts, but that their level of participation in class work was lower as was their level of participation in leadership tasks (administration, equality in college situations and presidency of the Student Council). Evidence of performance in science showed

that women (though in a minority) performed as well or better than their male counterparts (Wilson 1988; Flaherty 1988; 1991); and in mathematics matriculation courses by distance mode there were no significant differences in performance between males and females (Kaely 1988).

Unfortunately, in two studies on attrition rates conducted at the University of Papua New Guinea (1987 and 1989) data were not analysed by sex, and so no information exists as to the numbers of women who drop out of university studies.

Professional in-service opportunities

The fact that women have less opportunities to attend courses that will upgrade their professional knowledge or allow them to pursue higher level studies is well illustrated in the situation of teachers.

Gibson (1993) carried out a national survey of teachers to find out whether they had equal chances of training, in-service training and promotion, among other issues. Her findings show that female teachers had more limited opportunities to participate in in-service courses organised at the Port Moresby In-Service College and in the Bachelor of Education (In-Service) degree program offered at the University of Papua New Guinea. In 1990, female teachers enrolled in courses at the In-Service College comprised 19 per cent of the total and female teachers enrolled in degree courses to prepare for lecturing in teachers' colleges (B.Ed. In-Service Tertiary) were only two out of 30 between 1988 and 1991. Amongst the factors limiting women's participation, is the fact that the sponsoring agency, the National Department of Education, requires teachers to hold promotional positions in order to be eligible for in-service courses. Gibson (1993) indicates that nationwide, 3,633 men had been promoted above base level while only 606 women had been promoted at the time of her survey. Furthermore, four of the five in-service courses offered drew their recruits from the ranks of experienced head-teachers of which there are only 109 women compared to 2,247 men. Bureaucratic problems also hinder women from participating in in-service activities: not being asked to take the pre-selection examination, not being notified of their success on time so as to prepare to come to Port Moresby, or not being notified at all as to why their applications were unsuccessful. Women teachers perceived the selection process to be dominated by men and to present obstacles to their selection for in-service courses.

In relation to training for women employed in the public sector, the *Women's Sector Review* (UNDP 1991) noted with dismay that there were practically no strategies 'for targeting public service women to become involved in training...to improve their effectiveness as workers, to increase their promotion possibility and to recruit more women into the service' (UNDP 1991:116). The Administrative College offers courses on general and financial management, communications and training of trainers, as

well as on development policies and programs. However, the College has low female enrolment which is attributed to difficulties women have in receiving approval from senior authorities to attend such courses and the lack of support facilities such as child-care or difficulty of physical access.

Women and productive activities

There is perhaps today a much greater awareness that women contribute to development in a variety of ways, among which, is their own direct participation in productive activities (Østergaard 1992). Nevertheless, such participation in developing country contexts is still largely restricted to unpaid household and agricultural activities; even though, as in Africa, they may contribute substantially to producing food and be involved in the growing of cash and market crops (Whitehead and Bloom 1992). Often little attention is paid to assisting women to raise the quality of their work and insert themselves into the monetary productive sector. In Papua New Guinea, this is also true. The extent to which women engage in productive activities and the type of these is largely determined by the fact that most women in Papua New Guinea live in the rural areas.

Women's total participation in money raising activities of one kind or the other has not seemed to increase since 1980. Participation in the labour force as defined in the 1980 Census slightly diminished (Table 10). In 1990, however, more women were in wage employment, were students, or were seeking employment than in 1980. The 1990 Census separated the categories of 'Business' and 'Self-employment' but this barely affects comparability with the 1980 Census, as less than 1 per cent of women were registered in 1990 as being involved in large-scale business. What can be noticed by aggregating the two categories is that the number of women active in small-scale business or self-employment continues to be low and has decreased since the 1980 Census (Table 11).

Agriculture and fishing

Women not only play an important role in subsistence agriculture but also as labour input for cash crops. Despite this, there is little information at the national level on their role in this sector of the economy. Booth (1991) notes, for example, that a recent report on extension improvement and a review of agricultural manpower, employment demand and training needs make no reference to women. Schoeffel-Melissea's (1987) report on women in development reviewed studies that documented the situation of women in the Highlands, Madang, and East New Britain provinces. At the time of

Table 10 Participation in economic activities by gender and sector, citizens 10 years of age and older, 1980 and 1990

	1980			1990		
	Total (number)	Male (% share)	Female (% share)	Total (number)	Male (% share)	Female (% share)
All activities	2,079,128	52.4	47.6	2,154,856	52.5	47.5
1. Wage job ^a	200,392	87.0	13.0	232,294	82.0	18.0
2. Small/large scale business ^b	57,312	66.6	33.4	80,989	73.3	26.7
3. Farming/fishing for money ^c	475,102	48.1	51.9	666,545	51.6	48.4
4. Farming/fishing for subsistence	551,895	43.9	56.1	599,656	53.0	47.0
5. Student	241,186	61.4	38.6	344,521	57.9	42.1
6. Working in the house	118,064	3.3	96.7	275,127	7.8	92.2
7. Too old, sick, young	172,562	48.2	51.8	63,780	44.5	55.5
8. Unemployed	37,774	72.9	27.1	133,149	68.3	31.7
9. Other activities	217,374	64.1	35.9	106,949	57.7	42.3
10. Handicapped/ disabled ^d	-	-	-	11,846	58.6	41.4
11. Not stated ^d	7,467	51.2	48.8	-	-	-
Money raising activities (1-3)	732,806	60.2	39.8	979,828	60.6	39.4
Labour force (1-5, 8, 9)	1,539,849	55.2	44.8	2,164,103	58.4	41.6

^aIncludes 'on leave' category of 1980 Census.

^bTwo categories in 1990: Business, Self-employment, are combined.

^cIncludes those whose main economic activity was subsistence.

^dNot a category in 1980 Census.

Sources: National Statistics Office, 1991, *National Population Census, 1990: preliminary figures*, National Statistics Office, Port Moresby; Papua New Guinea National Manpower Assessment, 1982-1992.

those studies, women were actively involved in smallholder projects related to weeding, harvesting and other routine or seasonal tasks. In these activities, however, men tended to retain control over resources, though in some circumstances women were challenging this power.

The traditional pattern of male control over resources—and women themselves as a resource—has been carried over into the modern agricultural sector in

Table 11 Women's participation in the informal non-wage sector of the economy by activity, 1980 and 1990

	1980		1990	
	Number	%	Number	%
Business/self-employment	19,165	3.3	21,597	3.4
Farm/fishing for money ^a	14,446	42.8	322,590	51.5
Farming/fishing for subsistence	309,851	53.8	282,051	45.0
Total	575,462	99.9	626,238	99.9

^aIncludes those whose main economic activity was subsistence.

Sources: 1980 National Population Census, Table 12; Pre-release, Summary of Final Figures (February 1985); 1990 Census, Preliminary Figures.

smallholding projects outside the village sector. Men hold the leasehold on blocks, are responsible for repayment of loans and are paid the income from the cash crops. Women's earnings from the sale of vegetable crops are often demanded by their husbands; although, the legitimacy of this varies among ethnic groups and depends upon the determination of the wife to assert her right to keep the income (Schoeffel-Melissea 1987:58).

In the East New Britain province, women were found to be 'major' participants in cash cropping (cocoa and copra), food crops (planting, weeding and harvesting), market produce, in all forms of fishing and the raising of pigs and poultry. At the same time they had 'exclusive' participation in all domestic activities with some assistance from males only in child care (Schoeffel 1983).

The role of women in agriculture suffers from a number of constraints (Schoeffel-Melissea 1987). Among them is the issue of what is a woman's appropriate role. In her study on Tolai women in the East New Britain province, Schoeffel (1983) witnessed the conflict between the traditional 'farmer' role of women and the modern 'Christian' role of woman as homemaker. These roles are quite different and can become contradictory in the Tolai woman's everyday life. 'Homemaking' emphasises the domestic role of consumption and caring for the home, while 'farming' indicates an emphasis on the production of food and its preparation.

A second constraining factor is the lack of technical support and advice on food crop cultivation' including intensive cultivation techniques, marketing and business opportunities. Also important are the social circumstances which force women to spend a lot of time in 'unproductive' tasks such as walking long distances to gardens and to collect fuel and water. The effect of greater involvement of women in cash cropping is an increase in their workload due not only to the use of their labour, but also to 'male

outmigration, longer school attendance of children and larger family size due to reduced infant and child mortality' (Booth 1991:5).

Women's role in fishing is much larger than generally acknowledged. According to the *Women's Sector Review*, studies have shown that women catch at least 25 per cent of the annual catch weight, or more, if the crab catch is added (UNDP 1991). Furthermore, they are dominant in the processing stage of small-scale fisheries and contribute to marketing of fish where the husband is involved in catching.

Self-employment and small-scale business

Women, in the rural areas especially, engage in small business activities as a means of contributing to income for family needs. They do so by producing goods for sale such as handicrafts, food, and *meri* blouses. Compared to the 1980 Census, the 1990 Census figures indicate a smaller proportion of women declaring their involvement in these activities, and this may be due to the difficulties of marketing their products and obtaining credit for their businesses. Booth (1991) indicated that of 2,039 loans by the Agriculture Bank of Papua New Guinea in 1990, smallholder lending comprised 88 per cent of the total number and 40 per cent of the total value of the bank's loans. Of these loans, by January 1991, only 91 were provided to women. These were mostly to women in the Southern and Highlands regions, with an average loan size of 29,000 kina. Their purpose was to assist in activities related to 'poultry, nursery, day-school, truck and small bus hire-purchase, trade store goods, selling food and *bêche-de-mer*, outboard motor, pooling land, cattle, petrol station and fast food' (Booth 1991:5).

A picture of what happens in the area of credit and small business is given by an ILO survey carried out by Gena (1990) among 279 women in nine provinces. Half of the women interviewed for the survey were self-employed at the time of the study and a further 5 per cent had been self-employed previously. Most of the women lived in a male headed household (76 per cent), lived in a household which owned the land on which they lived and had an average of 4 children. A third of the women had not received any education, but 72 per cent of the women perceived themselves to be literate (could read in Pidgin or English) and 92 per cent perceived themselves to be numerate (having learned this by informal means).

The self-employed women in the study indicated their main activities to be: farming, gardening and fishing (32 per cent); food and catering (25 per cent); textiles (23 per cent); shopkeeping/retail (10 per cent); craft (5 per cent) and 'other' such as wholesale and transport (5 per cent). Most of these women earned their money by involving themselves in more than one activity, the second being mostly farming and gardening. In terms of income earned, it was found that the highest source was shopkeeping and the lowest, crafts. In general, women had little income left for spending and only a few (27 per cent) made a profit higher than 50 kina per week. Women who worked

longer hours per week, earned a greater income, but those earning less were working at least 30 hours per week. Those who lived in the coastal provinces earned more than those living in the Highlands. Only six of the 279 self-employed women worked on their own; the others worked in family businesses and very few in connection with a women's group. Two-thirds of the women started their business without any cash assistance and for those who did receive help, it did not exceed 200 kina. Only a third of the women knew about government services for women in business; as a result almost all felt they needed assistance, either technical help and training and/or cash inputs (Gena 1990).

One of the areas in which possibilities of self-employment for women could increase, is where mining projects are located. Booth (1991) refers to a 1987 study of the social impact of the Porgera Gold Mine area indicating that the majority of women in some villages were involved in gold panning, in trade store operations or petty trading (food, betel nut, used clothes, *bilums*). These women were able to keep their income to purchase trade store food, soap and kerosene. There are, however, other aspects of mining developments which have negative effects on women's living conditions; for example, male immigration, village overcrowding, law and order problems and competition for village females on account of high male/female ratios (Booth 1991).

Wage employment

Formal employment still constitutes a very small percentage of the total economic activities of the Papua New Guinean population. Estimates around 1982 indicated a participation of 13 per cent of the labour force in wage employment and preliminary figures from the 1990 Census found this figure to be around 10 per cent. Within this group the participation of women increased from 12.6 per cent in 1980 to 18.0 per cent in 1990. The 1980 census data showed an enormous male/female differential in wage employment, a pattern which has not altered in the 1990s (Tables 12 and 13).

According to the 1980 Census involvement of women in wage employment was related to their regional location and educational level. Most of the women involved in business and wage jobs lived on the Papua Coast compared to most of the women in farming who were in the Highlands provinces (Midire 1983). That women who become more educated move away from farming activities is shown by the fact that most women with education beyond the primary level were in wage employment in 1980 (Midire 1983).

Closer examination of a sector of employment with relatively large female participation, the education sector, indicates that women account for only one-third of education employees in Papua New Guinea (Tables 14 and 15). Further, less women are employed in teaching at the primary level and in primary teacher training in Papua New Guinea than in other developing countries. In Latin America and the Caribbean

Table 12 Citizen population aged 10 years of age and older, earning money in the urban sector, by gender, 1980

	Number		Percentage		Females/ 100 males
	Males	Females	Males	Females	
Professional/technical	8,683	3,889	10	24	45
Executive/management	2,803	246	3	1	9
Clerical	10,412	5,603	12	34	54
Sales	6,200	1,421	7	9	23
Service	14,387	2,462	16	15	17
Agriculture	2,711	1,963	3	12	72
Production/transport/labour	42,803	911	49	6	2
Total	87,999	16,495	100	100	19

Note: Includes those with wage jobs, on leave, in business and earning some cash from agriculture.

Source: National Statistics Office, 1980 Population Census, Port Moresby.

primary women teachers make up two-thirds and three-fourths respectively of the teaching force. In Asia and the Pacific, women primary teachers now make up half of the teachers and in Africa they come close to 40 per cent of the teaching force (United Nations 1991).

In 1987 the involvement of women as staff in other higher education institutions of the country was also low and this included non-citizen staff (Table 16). Women lecturers in Faculty at the University of Papua New Guinea made up 16 per cent of its staff in

Table 13 Citizen population aged 10 years of age and older, earning money in the urban sector, by type of employer and gender, 1980

	Number		Percentage		Females/ 100 males
	Males	Females	Males	Females	
Self-employed and unpaid	3,946	2,373	4	14	60
Government	30,702	6,399	35	38	21
Statutory bodies	7,788	1,498	9	9	19
Local government councils	1,859	99	2	1	19
Missions/churches	1,584	464	2	3	30
Private business	42,610	5,844	48	35	14
Intellectual orgs/agencies	107	24	-	-	22
Total	38,596	16,701	100	100	19

Source: National Statistics Office, 1980 Population Census, Port Moresby.

Table 14 Main areas of wage employment among women, 1982-92

	Number	Per cent
Education	4,492	16.6
Primary production	3,710	13.7
Commerce	3,570	13.2
Health	3,462	12.8
Central government	3,274	12.1
Finance and property	2,806	10.4
Other miscellaneous	5,702	21.1
Total	27,016	99.9

Source: Department of Finance and Planning, 1986. *National Manpower Assessment 1982-1992*, Department of Finance and Planning, Waigani: Table A1.30.

1991, of which the highest proportion were in the Faculty of Education (26.3 per cent), Goroka Teachers' College (22.5 per cent) and the Faculty of Arts (14.5 per cent). The Faculty of Law had no women lecturers and the Faculty of Medicine had only three.

The number of women staff is also very low in the teachers' colleges, though there has been an effort to increase their participation. Reasons behind the situation are partly related to the difficulty of completing the university degree required by almost all the above institutions for appointment other than in acting positions. This difficulty, especially at the in-service level, is due to family commitments of women.

Table 15 Papua New Guinea women teachers by level of occupation, 1980 and 1991

	1980		1991	
	Total staff	Per cent women	Total staff	Percent women
Primary	9,063	27.8	13,047	33.1
Lower secondary	983	29.2	1,839	30.0
Upper secondary	-	-	56	19.6
Vocational	178	33.1	414	35.3
Technical	62	40.0	133	30.0
Teacher training (primary)	51	31.4	105	22.9
Teacher training (secondary)	11	18.2	95	28.4
Total	10,348	28.1	15,689	32.6

Source: Papua New Guinea Department of Education, Education Staffing and Enrolment Statistics.

Table 16 Full-time teaching staff in higher education institutions by gender and citizenship, 1987

Institution	Papua New Guinea citizens				Total staff			
	Males	%	Females	%	Males	%	Females	%
University of Technology	54	98.2	1	1.8	157	91.8	14	8.2
University of Papua New Guinea	57	85.1	10	14.9	197	82.4	42	17.6
Nursing schools	11	19.6	45	80.4	18	18.0	82	82.0
College of Allied Health Science	37	67.3	18	32.7	40	60.0	27	40.0
Agricultural colleges	17	81.0	4	19.0	20	80.0	5	20.0
Fisheries colleges	4	100.0	-	-	7	88.0	1	12.0
Forestry college	8	100.0	-	-	9	90.0	1	10.0
Administrative/ banking/ legal colleges	28	66.7	14	33.3	44	60.3	29	39.7
Theological church colleges	37	88.1	5	11.9	90	82.6	19	17.4
Total	219	69.3	97	30.7	582	72.5	220	27.4

Source: Adapted from Table 16 in Booth, H., 1991. Papua New Guinea: a statistical profile on men and women, The Pacific Mainstreaming Project, University of Papua New Guinea, Port Moresby.

Decision-making in public life

Women almost everywhere have the right to vote, they make up more than half of most electorates and many more women work in the public sector than ever before. Yet women rarely achieve elective office or have equal access to political careers. They are blocked from top positions in trade unions, political parties, government, interest associations and business.

Women have long been leaders in the community and at the grass roots and they are strong advocates for environmental protection and for peace (United Nations 1991:31).

The above description is generally as true of Papua New Guinea as it is of the rest of the world. In most public spheres of activity women have very little access to top decision-making positions, either in the civil service where many of the female

workforce are employed, or at local, provincial and national government levels. Nor do women get elected for public office.

Promotion and leadership in the public service

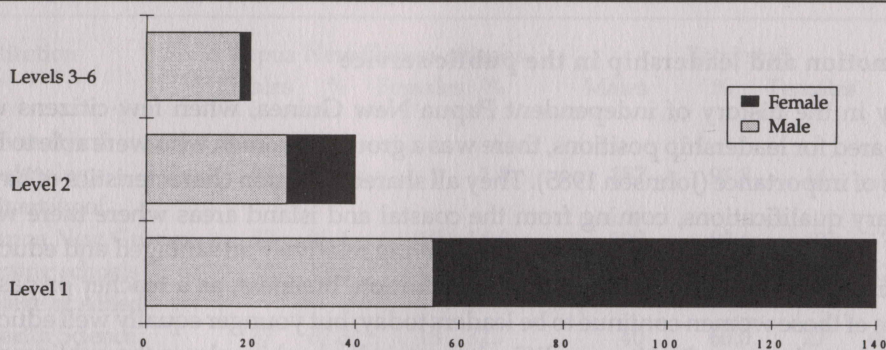
Early in the history of independent Papua New Guinea, when few citizens were prepared for leadership positions, there was a group of women who were able to have roles of importance (Johnson 1985). They all shared common characteristics of having tertiary qualifications, coming from the coastal and island areas where there was a long history of Western schooling, and of having relatively advantaged and educated parents (at least one employed in administration, business, as a teacher or pastor). Some of those women continue to be leaders today; but younger equally well educated and talented women find it more difficult to attain leadership roles in the public service. At the time of writing only two departmental heads were women, and only one woman at the level of First Assistant Secretary.

The usual reasons given for why women do not attain higher positions are that both their family commitments and family problems (such as husband's opposition to their work or domestic violence) make it difficult for them to devote the time and energy and creativity that would make them eligible for promotion. Many women disagree with this view (see Gibson 1992), and also experience shows that most of the women operating below senior officers in the Public Service are in fact carrying the burden of their superior's activities. Observation by those who work in such places indicates that the organisational system itself tends to stifle women's confidence in being able to beat the odds against them: also the opportunity to participate or suggest ways of doing things to those above their rank is often not made easy, especially by males who fear that their own status may be eroded. If there is a nurturing atmosphere and members of a department are encouraged to participate, women are able to assert their view and stand greater chances of influencing decision-making.

A report by the Papua New Guinea government and UNICEF (1990) noted that the public service in Papua New Guinea is a large employer of women, yet few women occupy high level positions. In her statistical profile of men and women in Papua New Guinea, Booth (1991) found that women in the Ministries of Finance and Planning and Education and in the University of Papua New Guinea are located overwhelming at the lower end of the salary scale

The situation of women teachers who are not granted equal opportunities for promotion and headship of schools has been documented by Gibson (1993). Her examination shows that of the two-thirds of all primary level teachers teaching at base level, 85 per cent of women teachers are at this level in contrast to only 55 per cent of male teachers. There was an enormous discrepancy in promotion between male and female teachers, where, for example 4 per cent of those above level 2 in the system are women (Figure 1).

Figure 1 Teachers on payroll by gender and promotion level, 1989



Note: 8,108 teachers are male; 4,064 teachers are female.

Source: Gibson, Margaret, 1993. *Equity for Female Teachers. A National Survey of Employment, Training and Promotional Opportunities for Community School Teachers in Papua New Guinea*, Division of Educational Research, National Research Institute, Port Moresby.

Not only do fewer women get promoted to higher levels in the system, but also fewer women occupy senior positions such as senior teachers, deputy head teachers and head teachers. Gibson's (1993) study found that while 44 per cent of all assistant teachers were women, only 27 per cent were senior teachers, 18 per cent deputy head teachers and 5 per cent were head teachers. In examining the reasons for these disparities, the bureaucrats at the National Department of Education (Assistant Secretaries and Senior Inspectors) indicated that this was due to family problems of women teachers. Women teachers interviewed, while acknowledging such problems, did not think that they affected most women to the extent that they could not work to promotional level. They saw many more hindrances in barriers within the system related to the appointment procedures, criteria for selection, response to personal problems experienced by female teachers (such as domestic violence), and biased perceptions of appointing boards about how female teachers cope with their family problems.

Women in politics

Palamen nogat meri gen [Parliament has no women!] was the headline of the national newsletter for women after the 1992 parliamentary elections (*Nius Blong Meri*, June 1992). For the second time running, no women were elected for parliament from the 17 that were nominated to contest the elections, and only one came close with a second position. In all four parliamentary elections in Papua New Guinea, only three women have ever been elected for parliament.

The reasons women who have the courage to stand for election are not chosen are complex. One answer is that the traditional cultures of the country do not allow for women to participate. Wormald (1989:81) referring to various studies pointed out that

in such a diverse country, it is not possible to speak of one traditional culture but in terms of decision making, though not in some cases of lineage or economic status, the clans were and are male dominated with women excluded from power positions and from religious rituals (Strathern 1972). Nagari (1985) writes: 'In big village meetings [women] are often not allowed to speak. In the past male solidarity was emphasized by the men's house which women were forbidden to enter. The subordinate position of women was reinforced during the period of colonization and Christianization by the superimposition of Western ideas of gender roles (Samana 1985), which are a powerful force in women's own self-perception.

The women themselves have analysed their losses in a manner less related to traditional male dominance and more linked to the expectations and especially the financial commitments that the electorate appears to want from those they elect. As they campaigned around the country they found people asking them for money which they did not have (*Nius Blong Meri*, June 1992); in general they were not able to raise as much campaign funds as men. Many of the women candidates did their campaigning on foot, and only some were able to hire a car for a few hours a day with the support of friends or relatives. One of the women candidates indicated that 'people do not vote for who you are. They vote for what you can give them and how much you can give them' (*Nius Blong Meri*, 1992). Wormald's (1989) analysis of the 1987 elections also indicated that lack of funds and political party support was an important factor in the loss of elections by women candidates.

Women in Papua New Guinea have been concerned about the level of political awareness of the female electorate. In anticipation of the 1987 elections, a political education and awareness workshop was organised by the Women's Division of the Department of Youth and Home Affairs to discuss the need for greater political involvement of women. A review of past election results in relation to women was carried out, the meaning of women's voting rights was discussed and women were urged to involve themselves in the coming campaign. Reflection in the aftermath of the elections indicated that there is need to continue with campaigns to raise the political awareness of the female electorate. Nahau Rooney, a prominent Papua New Guinea woman, said that the total number of votes for women had been higher than in earlier elections and that they should continue to struggle to get elected in the future: 'Many women try for the first time and when they lose they give up altogether. We have to keep trying' (*Nius Blong Meri*, 1992). The only women lecturer in the Politics Department of the University also indicated the need for organisation and forward planning and the need to change the views of some women and men who do not believe that women should gain political power.

Most of the women who participate in organisational decision-making, especially rural and non-educated women, do so at the grass roots organisations level in women's groups of various types often linked to church organisations and/or to the provincial councils of women. Most of the women's groups originated with church initiatives (Schoeffel 1983; UNDP 1991). While many women's groups have concentrated on training in 'female crafts', more and more groups are seeing the need to assist women to become aware of their needs and to engage in activities which will be of benefit to health, economic, educational and political concerns. Considerable training is provided by these groups. The extent of their ability to implement activities they deem beneficial is limited, however, by funding possibilities, negative male attitudes towards women's increased access to resources and information (UNDP 1991), and conflicts among the various national groups dealing with women's affairs.

The example of the East Sepik Women's program is important to note here, as it is a large and well organised consortium of around 400 groups with some 30,000 members (Non-Formal Education Workshop 1991). It includes programs dealing with

- nutrition/agriculture (sustaining traditional and local food production and marketing)
- health (including rural water supply and sanitation, nutrition education, primary health care *marasin meris* and family planning)
- women in business (small credit for the urban informal sector, lobbying on market/taxes legislation, bookkeeping education, formation of an association)
- documentation and communication (radio, songs and drama, newsletter, posters and screen printing, local research, production of training materials, library, videos, life stories, press releases and petitions)
- literacy and awareness (training of trainers, local production of materials)
- political education (local watchdogs, voter education, support for female candidates)
- social action (campaigns against corruption, alcohol, domestic violence and rape, and logging and mining awareness activities) (Non-Formal Education Workshop 1991).

The members of the Council perceive themselves as a close-knit community, not divided or diverted by petty issues or power plays. Their funding comes largely from outside sources, as government support is minimal compared to what other provinces receive (Non-Formal Education Workshop 1991). They represent through their activities a model of the kinds of activities that most other provincial women councils could do or are already doing.

The situation of women as described, leads without doubt, to the conclusion that conditions for women to participate in development in Papua New Guinea are very weak. The fact that most women lack access to satisfactory health care, that so many still die when they give birth and so many lack proper information about fertility, care

during pregnancy and birth of children, that so many are undernourished while being the main food growers, and that so many work so hard in household conditions where they may also be subject to physical violence—points to a paucity of requisite conditions for participation. Education of women, recognised as a major factor in the improvement of health and other social factors, is also a scarce commodity for Papua New Guinean women. Due to many reasons, some related to culture and economics, and some related to the demands of the school system itself, women's opportunities to move through the educational system grow smaller and smaller as they progress through primary school. But even those women who manage to survive and reach the end of secondary school, will find they have a harsh battle to wage if they are to enter and remain in higher education institutions. If they do succeed, they will be found in very few positions of responsibility within the bureaucratic and the production system. Women who wish to take part in decision-making at political and other civil society levels will, almost in all cases, not be successful. Given this situation, a major portion of the female population in Papua New Guinea, though strongly contributing to the livelihood of people through their roles in agriculture and fishing, have little opportunity to say what is needed to improve the quality of their lives and work; receive little attention in relation to their basic health and education needs; and more importantly, have little part in decision-making in regard to the country's development.

Constraints and future directions

As indicated at the beginning of this paper, Papua New Guinea has recognised the importance of women and their equal rights to participate in the development. In 1972, the seventh of the Eight Point Improvement Plan for Papua New Guinea called for 'a rapid increase in the equal and active participation of women in all forms of economic and social activity'. Although important, achievements since independence still fall short of satisfying women's basic needs, securing for women recognition of their role and providing the opportunities they need to make their participation less stressful and more meaningful. Reflecting on the achievement of this goal Fitzpatrick (1985:29) indicated

There has hardly been 'a rapid increase in the active and equal participation of women in all types of economic and social activity' (Seventh aim). It is indicative that, from being an Aim, the advancement of women becomes merely one of over 30 subsidiary principles in the National Goals. It disappears altogether in the next major statement of aims, the bare nine strategic objectives of the National Public Expenditure Plan. In the 1982 election campaign, none of the advertised platforms of the main parties mentioned women.

Both the Wingti Government's Policy Statement to the Fifth National Parliament (August 1992) and Sir Julius Chan's Statement on Economic Development Policies (August 1992) make no mention of the role of women and their already important participation in development, nor given an indication of policies in respect of their participation. Sir Julius Chan has, however, made a public statement on what his government intends to do for women: provide special incentives to encourage women's groups to become involved in the establishment of rural-improvement projects; consult women's groups on the solution of law and order problems, improvement of education policies and wider extension of primary health care, and further 'we will be consulting the women of this nation on the implementation of economic and employment policies' (*Post Courier*, 20 August 1992).

Policy and organisational framework for women in development

Despite the lack of assertiveness in official policy documents, there is a framework in place that offers possibilities for increased programs and change given political will and funding (Nakikus 1985; Tekwie 1992). This framework includes a National Women's Development Programme, a National Women's Policy Paper, women's organisations at national, provincial and local level, and projects and programs embedded in the activities of the Central Government agencies and a number of non-governmental agencies.

The National Women's Development Programme

As a result of its 1982 review of the progress of implementation of the National Goals in relation to women, the Papua New Guinea government entrusted to the Women's Division in the Department of Home and Youth Affairs the preparation of a national women's policy. As a first step in this direction, planning took place for a National Women's Development Programme which has evolved into a comprehensive program emphasising training, income generating activities, family health, network building and educational programs for women (Women's Division 1988-1993). Its aims are to 'increase participation by women as both beneficiaries and agents in the development process and to improve the quality of life of women and their families'. Its main activities are as follows.

- A national training program within a communication and network building project, a women's credit scheme, a community women's organiser scheme and literacy and awareness programs.
- Participation in the UNDP Pacific regional project on Women in Mainstream Development Planning which is aimed at strengthening women's organisations as well as at sensitising government planners 'to achieve gender-sensitive planning'.
- Women and fisheries project jointly carried out with the Department of Fisheries

and marine Resources, which includes training and assistance to provincial women's organisations to enable them to benefit from the project.

In the implementation of the National Women's Development Programme, it is expected that all major women's organisations grouped under the National Women's Council will work with the government and the Women's Affairs Division in

- strengthening women's organisations
- monitoring the impact of programs
- presenting the needs and concerns of women to government
- working towards the coordination of women's programs by government and non-government organisations
- providing advice, briefs, reports and information to the ministers and the Women's Council on progress and status of women in the country
- soliciting funds and assistance needed for the implementation of activities and schemes related to the program.

The Papua New Guinea National Women's Policy Paper

Despite its endorsement by the National Council in 1990, the women's policy paper was only officially launched in 1992. It is considered to be an extension on women's issues of the country's constitution and the product of lengthy consultations between government and non-government women's organisations. Its principles are derived from the Eight Point Plan and the National Constitution as well as from the Commonwealth Plan of Action on Women and Development. The Policy rejects the notion of women's issues being treated as a problem of 'welfare' (the early form of considering women's projects) and advocates the 'integration of women's development concerns into all aspects of government policy programmes' in line with the goals of economic growth and self-reliance of Papua New Guinea.

In a simple and straightforward manner the policy document outlines four main goals for the government, all related to improving the position of women in society and increasing their participation as 'agents and beneficiaries in the development process'. These goals call for government departments and agencies to be responsive to women's issues and consider these in planning the development process; to support national and other women's organisations; to provide opportunities for individual development; and, most importantly, to 'enhance women's critical contributions to development as the primary food producers, processors and distributors, as the mainstay of family and community health and as the principal educators of the future generations'. These goals are expressed in relevant objectives and implementation strategies, that in fact constitute a program for the activities to be coordinated by the Women's Division and the national and provincial councils of women. Amongst these strategies the following are of particular importance.

First, collection of data disaggregated by sex on government programs, their clients and beneficiaries; and in general, improvement of the data base and research on

women's issues. In respect to statistical information, Heather Booth (1991) who carried out a statistical profile on men and women in Papua New Guinea notes important gaps in the information on women. Among these is the lack of data on women in agriculture which might be a reason why women have been omitted from recent studies and reviews concerning agriculture. Data on women in fisheries and forestry are even less readily available. Data on access to credit is also not routinely available as the Agriculture Bank does not record the gender of loans recipients. Although health data are fairly comprehensive, according to Booth, there is under-reporting, especially of sexually transmitted diseases and maternal deaths. The 1990 Census collected data only on female mortality so that it will not be possible to establish gender differentials unless a specific study is carried out, or until the 2000 Census.

Second, a number of strategies call for the Women's Division of the Ministry of Youth and Home Affairs to act also as an agent for gathering information of use to women and to conduct awareness activities of various kinds. The strategies require, however, that stronger support from the government be given to the Women's Division. The unit operates with very reduced office space, insufficient staffing and in 1992 its budget was radically cut. J. Gena, Assistant Secretary indicated that while the Women's Division had requested 1.4 million kina for their operations, they only received 198,000 kina in 1993, which was substantially less than their allocation for 1992 (500,000 kina). The grant to the National Council of Women, however, was left unchanged at 400,000 kina, but this did not allow them to develop new projects (*Post Courier*, 14 January 1992).

Third, to provide support for the productive role of women, the Policy urges the relevant Departments of Agriculture and Trade and Industry to provide rural women with labour saving devices and with training to improve methods of production, processing and marketing. It calls for a review of regulations that discourage women from engaging in 'informal' production and marketing, for the development of credit schemes accessible to women and for tax incentives and government sub-contractors for small businesses run by women.

Fourth, the policy supports efforts by Women's Division and Law Reform Commission to monitor the enforcement of anti-discriminatory employment legislation and provisions governing domestic violence, to examine laws or policies which might be discriminatory against women, and to make sure that government departments consult the Women's Division on representation of women on advisory and decision-making committees.

Women's organisations

A substantial proportion of the task of dealing with the problems faced by women in the area of health, work, education, and general social conditions, has been undertaken

by official and grass-roots women's organisations, as well as non-governmental agencies at national and local levels. For example, collaboration between the National Department of Health and the National Department of Home and Youth Affairs with UNICEF, and the Papua New Guinea Medical Research Institute, among others, enabled the formation of a Steering Committee on Women's Health to be formed. The Committee reported at the 19th Waigani Seminar organised by the University of Papua New Guinea, outlining strategies for improvement of the situation that were gathered from the experience of many groups and organisations (Taufa and Bass 1993).

Papua New Guinea has a fairly well developed structure of women's organisations at national and provincial levels which, to a greater or lesser extent, have been responsible for much of what has been achieved in the recognition of women's needs and roles in development.

We have already discussed the Women's Affairs Division which is the government section concerned with women and which is located in the Ministry of Youth and Home Affairs. An obvious *faux pas* related to the Ministry is the fact that it omits the word 'women' in its designation, and there has been a steady campaign to have this reversed. As outlined in the Women's Policy document, the Division's tasks are to act as an advisory body on women's affairs to all governmental entities, to monitor implementation of women's programs, to have a coordinating role for women's organisations, to disseminate information, to collect data and carry out research and develop programs affecting women.

In assessing the activities of the Women's Affairs Division, the authors of the Sector Review on Women in Development in Papua New Guinea consider that these have been limited mostly to its coordinating and dissemination of information roles, to its role in assisting groups to develop effective policies and programs and to facilitating dialogue and communication among these groups (UNDP 1991). It has been unable to do much with its monitoring to ensure the successful implementation of policies and programs affecting women.

Since the completion of the Women's Policy, the Women's Affairs Division has involved itself in setting up an Interdepartmental Women's Advisory Committee to act as a coordinating committee on women's issues and as an advisory body to the Ministry. Its formation is one of the strategies recommended by the Women's Policy. As indicated earlier, the Women's Division is also principally responsible for the implementation of the National Women's Development Programme.

The National Council of Women is a non-government organisation established in 1975 with its structure and powers defined by an Act of Parliament in 1979. Its role, however, needs revision in the light of the tasks that the Women's Policy has outlined for the Council. The Council will have to broaden its current tasks (which are mostly coordination and support of women's organisations throughout the country and liaison

with international organisations) to a more specific role in relation to women's development issues. The new Policy requires it to work closely with the Women's Affairs Division. The *Women's Sector Review* points out that to date the Council has suffered from 'leadership struggles, poor accountability, institutional constraints, lack of resources, and poor communication links with its members (UNDP 1991:28). There appear to be a number of efforts to improve its role and a three-year planning initiative is under way.

Provincial Councils of Women have been established all over the country, though not all of them function effectively. Their role is similar to the National Council in terms of promoting the interests of women at the provincial level, liaising with women's groups and developing programs of benefit for women. Given the tasks of provincial governments in implementing the Women's Policy, these groups should have a strong advisory role and should be economically supported. At least two of the provincial women's councils (East Sepik and East New Britain) have evolved so strongly, that they have become models for what women's groups can do in Papua New Guinea.

At the district and village levels there are numerous women's groups, many of which are associated with one of the churches; for example the women's clubs of the Catholic Church and the Women's Fellowships of the United Church in the province of East New Britain. The *Women's Sector Review* (1991) indicates that many women's groups organised through the churches around the country are providing effective training and awareness programs for the groups in the districts surrounding Goroka, Lae and Rabaul are an example. The review also indicated that there is room for improvement in the training activities, especially those related to food production, processing and preparation, nutrition, hygiene, reproductive health and family planning. Also supporting women's activities, especially in training, are women's resource centres located in the provinces of Chimbu, East Sepik, Manus and West New Britain.

A number of other non-governmental organisations are active in supporting women and in establishing group projects of various kinds. The work of the YWCA is important in its provision of hostels for girls and women, vocational centres and child care centres (Schoeffel-Melissea 1987) and particularly its female adult literacy program in Goroka. The *Women's Sector Review* notes with approval the activities, for example, of Grass Roots Opportunity for Work (GROW) and Business Enterprise Support Team (BEST) which are run by volunteers with support from national enterprises. GROW aims to train husband and wife teams to improve agriculture production techniques, nutrition and food preparation with appropriate technologies (UNDO 1991). BEST has a project aimed at training women in business skills and project appraisal and management. Finally, there are a number of groups which are active in relation to special areas of

concern as for example the Women and Law Committee and the Women in Politics Group.

Key problem areas

At the beginning of this paper it was argued that the analysis of the roles of women in development points to two main concepts which are related to conditions for participation and to their roles as productive members of society and beneficiaries of the development process. It was also argued that in determining needs and directions for change, the concept of beginning first with satisfaction of basic needs and then proceeding to providing for higher levels of personal development and involvement in social activities, is not only misguided but denies the reality of what women are already doing in Papua New Guinea. In other words, while basic literacy and health care are essential conditions for increased women's participation, concomitant support for higher educational levels and greater involvement of women in public life and decision-making is crucial to the effectiveness of women's participation in development and therefore to a better quality of life for all Papua New Guineans.

With the above perspective in mind, key areas are outlined below which most concerned people agree require more attention if women are to become equal participants in the development of Papua New Guinea.

Literacy awareness and formal education

Almost all the analyses of the issues relating to the health of women in Papua New Guinea, to their work conditions, their levels of participation in social and political affairs, their ability to plan the size of their families and the healthy development of their children point to the need for increased participation of women in education (UNDP 1991; Gillett 1991; Papua New Guinea Government and UNICEF 1990; Wormald and Crossley 1988).

To a large extent, efforts to improve literacy levels in Papua New Guinea have been confined to non-governmental organisation and church initiatives, and as a result, differing philosophies have inspired the programs and their coverage has been scattered. Conservative estimates put the number of these programs at around 79 in 1990, serving some 8,000 people of which 40 per cent were women. But the number of illiterate women according to the 1990 Census was 437,905. The major non-government organisation engaged in literacy programs is the Summer Institute of Linguistics, followed by the churches. Other initiatives have come from the YWCA and the Papua New Guinea-Trust linked to the University of Papua New Guinea (Education Sector

Review 1991). Despite policy statements since the time of independence, only in 1990 did the national government develop a formalised initiative in promoting adult literacy. A National Language and Literacy Policy was approved and a Literacy Awareness Programme and a Literacy Awareness Secretariat were established within the National Department of Education. The most important change taking place with the development of a national policy and a national institutional base for literacy was to recognise the importance (learning from the long experience of the churches) of literacy in vernacular languages, particularly Tok Pisin and Hiri Motu.

After a slow start, the Literacy Awareness Programme is producing resource materials and coordinating training efforts. In fact, one of the most important changes since the establishment of the Programme, has been to recognise that the magnitude of the illiteracy program requires more than the voluntary efforts from the communities—there is a need for a widespread effort to prepare literacy trainers (Education Sector Review 1991). Some of this training is being carried out at the University of Papua New Guinea's *Lahara* [vacation] session with the participation of community members and university students.

As in other countries, literacy efforts are beset by philosophical differences regarding the purpose and strategies for training. In relation to purposes, there are those who emphasise more strongly the 'conscientisation' aim and the integration of literacy training with other areas for the improvement of the quality of life (health, agriculture, environment preservation etc.). Others place more emphasis on the development of specific literacy and numeracy skills. The church groups have purposes related to Christianisation, though to a greater or lesser extent, they may emphasise critical awareness about wider social and political issues.

The *Women's Sector Review* notes that as far as women's literacy is concerned, perhaps the two most important organisations involved in this work are the East Sepik Women's Association and the YWCA Literacy Project in Goroka. The East Sepik's program was established in 1990 'to promote functional and liberating literacy for the whole community through all organised women's groups (UNDP 1991:108). The programs have been integrated into those dealing with education, agriculture and nutrition, business and social justice. The YWCA program is described in the following terms.

The Women's Training Centre has developed and operated the 'Kinim Save Skul Bilong Ol Meri'—basically, reading and writing in tok pisin where they provide a range of educational learning opportunities dependent upon the expressed needs of the learners themselves.

The Centre has about 120 regularly attending students, almost all of whom are 'first chance learners' (i.e. they have never attended school before). Most are mothers in the 25–40 age range, but they also have a number of students on either side of these ages. The women attend the T.C. either one full day per week (Tuesday or

Thursday) or 2 half days per week (Monday and Wednesday afternoons) and pay 50t per full day or 30t per half day. The average length of attendance to achieve a functional level of literacy (i.e. to be able to read a newspaper) will be approximately 12 months.

The major component of the curriculum is literacy and the 'Kisim Save' programme is followed. However, there are areas such as numeracy, health issues, geography, which teachers at the T.C. run or local resource people are invited to attend. The training activities aim to improve women's access to information and skills so that they can participate more actively in forms of economic, social, political and religious life.

The programme conducts non-formal accessible classes for women at the YWCA Women's Resource Centre. The general areas covered in these courses are education, pidgin literacy, basic maths and numeracy skills. It also teaches health, parenting skills and family planning as well as urban life skills, budgeting, banking, legal and many other issues which are useful to women's lives.

The YWCA also has a *rum buk* or a library to encourage the use of newly acquired literacy skills, to maintain levels of functional literacy, to act as an information and resource centre for participants in the programme, and the broader community, to improve accessibility of information, literature and other printed matter in tok pisin and to encourage further development of material in tok pisin (UNDP 1991:109-10).

The work in literacy carried out by the various organisations has been and continues to be extremely important; but the commitment of the national government to a forceful policy for increasing the literacy levels, especially in the most deprived provinces where well established programs are in need of higher level of support, seems lacking. Apelis (1988) for example, documents a successful program sponsored by the churches in the Southern Highlands province among the Huli people, showing achievement and motivation of the women participants. In this respect, the Literacy and Awareness Secretariat and Programme not only should stress their coordinating task but also should take a greater leadership role in developing public awareness and support for literacy and in devising the strategies which will increase the level of women's literacy.

As shown in the first part of this paper, the participation of girls in the primary level of the formal system has been increasing over the years, though it continues to be a problem overall, especially the Southern Highlands and Chimbu provinces. What is, however, of more concern are the deteriorating rates in the retention rates of girls within the primary school, again the situation is worst in the Highlands provinces. To some extent, efforts to raise literacy levels, especially among women, and to stimulate discussions on the benefits of schooling, especially for the situation of women and children, should contribute to greater parental interest in continuing to send their girls to school.

A reform of the education system in Papua New Guinea began in 1993, which will mean a longer primary school cycle (8 years) preceded by a preparatory year to enable children to begin literacy in their vernacular language. The age of entry will be 6 years. Lower and upper secondary education is to be integrated into a 4-year cycle, and vocational and pre-employment technical training will form part of the secondary level. The lowering of the school entry age to six, as proposed in the reform of the system (Education Sector Review 1991), would reduce the problem of overaged girls in schools, and the fears of parents and the real danger of sexual liaisons and sexual harassment which are a contributing factor to girl drop-outs. More single sex schools as suggested by Tawayole and Weeks (1989) might also reduce the problem. The policy of free tuition, introduced in 1993 by the Wingti government, might have an effect on the retention of girls in schools, as it is thought that parents, when faced with difficulties in paying school fees, elect to remove girl rather than boy children from school. Unfortunately, it is being reported that schools charge other fees that are becoming excessively high, thus neutralising the possible effect of the 'free school policy' (J. Kanekane, 'Confusion over school subsidies', *Education Times, Times of Papua New Guinea*, 6 October 1994).

Participation of girls in the higher levels of the system also needs to be substantially improved; and this may require forceful 'affirmative action'. Taiwayole and Weeks (1989:31-2) indicated for example that the high school selection system practised in many provinces favours boys over girls.

Provincial Education Authorities need to look at alternative ways of selection if they are to achieve equality between male and female. One positive way to obtain equality is by keeping the same proportion of girls in Grade 6 or Grade 7. For example if the proportion of students that completed Grade 6 is 55% m and 45% f then 55% m and 45% f should be selected rather than 65% boys and 35% girls. In many provinces this will require the construction of more dormitories.

The current Education Reform proposals include several measures that may help to increase the number of girls going into high schools: a reform of the grade six examination to focus less on the learning of specifics and more on ability, more places in provincial high schools and a lowering of fees that have to be paid by parents. In this last respect, Taiwayole and Weeks (1989) note that the abandonment of the quota system in the selection for high school had adverse effects on transition rates of girls into secondary schools, especially in the Highlands provinces, where girls perform lower than boys and are less prone to go on to high school. The issues of greater attention of teachers to the needs of girls in schools, and the need of more help through counselling were not addressed by the reference proposals, though changes in this direction could be supportive of greater academic achievement by girls and their greater retention within the system.

Until the participation of girls in the lower levels of the education system is improved

there is not much that can be done in terms of their entry to upper secondary and tertiary studies. Affirmative action is needed, therefore, at the level of entry to lower secondary and also more attention needs to be given to the provinces with particularly low levels of female secondary retention such as the East Sepik and the National Capital District.

Participation of women in distance education courses should be, but has not yet been a successful alternative for gaining secondary education for many women. Again, affirmative action is required to enable girls who, at an earlier stage, were rejected by or not allowed to enter the system, to make use of these alternative opportunities. The support of husbands and employers is also crucial.

In relation to tertiary education, presentation of university studies to high school students in order to facilitate their choice of career should not be done only by male lecturers. For example, in 1992, the University of Papua New Guinea did not send any female lecturers to the schools to talk to students; and in 1991 only one woman was part of a team of six and she was not a lecturer. It must be remembered that most upper secondary school teachers are males, and that role models of successful women in education are important for female students.

Collection of data disaggregated by sex on performance in tertiary institutions is also crucial to understanding why some women leave before completing studies. Tertiary institutions need also to address more forcefully the problems of sexual harassment experienced by female students during their time of study and which determine to some extent levels of performance and drop-out.

Training for development

Most women in Papua New Guinea live in rural areas and are heavily involved in productive activities in the field of agriculture and fishing for home consumption and cash. Their workload is often very heavy and as a result their physical condition deteriorates very rapidly.

One of the important need areas, and one that affects women's quality of life and productivity, is health. Women need information and basic training to prevent and deal with health problems that affect their lives, their children and their work. This is particularly true for women in the agricultural sector who, besides the problems of their specific activities, are more prone than others to severe health problems. Gillett's (1991) study of the health of Papua New Guinea women noted that to meet women's health needs there is need for practical action at provincial, district and village level. This is reflected, she says, in

the general lack of knowledge of women's health problems, minimal or no antenatal care offered by many maternal and child health (MCH) teams, very low numbers of new acceptors of family planning, and the fact that about 60 per cent of women deliver their babies without medical supervision in the village or the bush (1991:152).

While education and support of social action programs is recommended, in the area of health services Gillett recommends targeting the rural areas for a number of improvements. Amongst these are adequate finance for maternal and child health care teams and clinics, training and on-going supervision of midwives as well as training of village health aides to deal with mild disease and to recognise signs of severe disease. Gillett also indicates that elderly post orderlies should be replaced by health workers able to provide reproductive health care for women and that female rural health staff should be increased. Obstetric facilities of health centres should be upgraded, at least one specialist obstetrician/gynecologist should be available in every provincial hospital. The attendance of pregnant women to antenatal clinics and treatment for anaemia and malaria should be facilitated and the contact-reaching services and educational component of sexually transmitted disease clinics should be increased. Help for high risk pregnant women by way of their identification and counselling and of the introduction of 'maternity village' accommodation during the final days of pregnancy is further recommended. Recourse to the private sector is suggested for assistance in setting up services such as family planning, day care centres and basic information/treatment to help in the recognition and prevention of problems such as malaria and sexually transmitted diseases; and with the establishment of health care cooperatives in communities with secure resources. Recent graduates of health and education could be encouraged to return to their villages to use their skills to offer assistance in these cooperatives.

It is also possible to incorporate aspects of health training, especially related to nutrition problems, into programs sponsored and developed within the agricultural sector. For example, 'women migrating from villages need to learn how to prepare and cook unfamiliar food crops or distinguish between more and less nutritious purchased foods' or how to insure that men do not have prior access to the most nutritious foods in the areas where they live (UNDP 1991:56).

'Basic Minimum Needs' is an innovative program of the Department of Health which gathers women in a workshop situation to identify their needs (food, water, shelter, environment, health care, education, spiritual development) and discuss with their women's representatives and health staff what to do about the problems (UNDP 1991). In the field of agriculture the most important information needs are related to knowledge about improving quality of life in rural households, intensive cultivation techniques and cash crop management as well as new technology.

In respect to training women for better understanding of their work, either in subsistence or cash cropping, procedures and of how to respond to constraints on their work due to health and other social pressures, there is general agreement that this has to occur at village level but involve extension workers (women) and others who are adequately prepared. To achieve this, a greater intake of women into

agricultural colleges is important, as is more attention on the part of the Department of Agriculture and Livestock to the training of women's groups involved in promoting agricultural production (UNDP 1991). It is also suggested that special woman-to-woman extension components be built into agricultural projects and that smallholder projects receiving external assistance have an element of training of intermediate community level extension workers in

- techniques of intensive intercropped food cultivation
- applied nutrition
- household budgeting and saving
- access to credit facilities
- home improvement
- methods of cooking unfamiliar food plants
- kitchen improvement
- the construction and use of smokeless cooking stoves
- basic health information
- social issues and women's legal rights (Schoeffel-Melissea 1987:47-8).

The Department of Fisheries and Marine Resources has produced policy aimed at enhancing women's participation in the sector and carried out specific activities to assess the role of women in fisheries such as the Needs and Role of Women Survey also involving the Department of Home Affairs. The Department has also produced guidelines to direct project development in fisheries to consider women's issues and has appointed a Project Development Officer for Women in Fisheries. This positive attitude of the Department has resulted in the sponsoring of projects such as the Women in Fisheries Development Component (UNDP 1991), which includes a Women's Division-initiated training program on fish handling.

Though small in number, women in Papua New Guinea are involved in small-scale business and income-earning activities such as marketing products from farming and gardening, running trade stores and food shops, and making handicrafts and textile products for sale (UNDP 1991). But there are many constraints to women's activities in this area, one of which is the lack of information about what is required for a successful business and where to go for assistance. The National Women's Policy and the Women's Affairs Division have highlighted the need for training opportunities so that women may learn about managing business projects and how to take part in credit schemes. In relation to project management, training is required in how to design products, locate customers, arrange transportation, oversee production and look after accounts. Unfortunately, the Department of Trade and Industry which is the relevant department for business training does not target women specifically in its courses. The Division of Home Affairs does more for women in this respect through the courses it organises in the provinces.

The *National Women's Training Package on Women's Health, Changing Family Life and Participation in Development* (Cox 1991) is an impressive text produced by the Women's Affairs Division for non-formal education activities aimed at women. It is intended to be used by mobile trainers who will move around the country discussing with women issues related to their health, participation in development programs and projects and communications and networking. It is well designed and presents issues with sufficient background to allow for comprehension of the problems and directions for change. A second part of the text is the *Research Guide for Organization and Action*, is intended to assist women's trainers, leaders and educators in getting the main messages about development across to women. The Division has been engaged in training the 'mobile trainers' to use this material.

The South Pacific Appropriate Technology foundation, a Papua New Guinea organisation, was set by the government as a self-supporting institution 'to promote simple and appropriate technologies to meet basic development needs of the people' (UNDP 1991:78). One of its units, known as the Community Enterprise Support Unit, operating in Port Moresby, Lae, Mt Hagen and Rabaul, provides training on appropriate technologies and marketing. Another of its training programs concerns rattan handling, basket weaving and cane furniture making at village level for men and women.

At the provincial level, the Women in Business Association of East Sepik, established in 1988, provides workshops in numeracy and basic bookkeeping skills for income generation. A business arm of the Toma Women's Association in East New Britain, Toma Ningit Group, operates a home economics training and grooming course for young women in Rabaul, and the Morobe Women's Association conducts training courses on business management for women members.

Among the non-government organisations, the Business Enterprise Support Team (BEST) has a number of activities destined to assist women in business. The Focus on Women program is one of its projects, consisting of a video, role plays, case studies and small group discussions aimed at raising awareness about the value of women's work and to help rural women to build self-confidence in their abilities (UNDP 1991). BEST also has a business consulting service which offers advice on problem-solving processes, setting realistic expectations, conflicts arising from the encounter between traditional customs and business, and bookkeeping and planning.

For women working in the public sector there are few opportunities, and those that exist are not fully used by women. The Women's Sector Review recommends, therefore, that there be some sort of affirmative action to inform women about available courses, to stimulate them to attend, to take care that selection processes be non-discriminatory, to allocate a certain number of training spaces for women in male-dominated sectors, and to provide support services for women who attend the courses.

Services for the facilitation of productive activities

The role of women in production will not be helped if their needs are ignored in rural development projects. Cox's (1987) study of the Gavien Rubber Settlement Scheme in the East Sepik and its effects on women illustrates the issue. The Scheme was planned and managed in an extremely hierarchical manner and women were expected to be 'silent producers and dependent consumers behind their men' (1987:32). Yet the women were actively participating in economic life through the sale of food and consistent purchase of family provisions. Though they had relative freedom of movement, they lived with considerable fear and insecurity because of the lack of community or social institutions to support them or check on those who harassed or attacked them. Their health needs and information about public issues, as well as about crop requirements were entirely neglected. From this study Cox concluded that a focus on women be part of all national development programs, particularly those in the field of agriculture. Unfortunately, both the White Paper on Agriculture and the Medium Term Development Strategy for the Agricultural Sub-Sector 1990-1994, neglected to address the role of women in agricultural programs (UNDP 1991). The Women's Sector Review therefore recommended, and this is also a recommendation of the Women's Policy paper, that strategies for women and community participation should be part of all Department of Agriculture and Livestock projects as well as of projects related to Development in other national departments.

The other area where there is urgent need for support services is in relation to women in business (Kuman 1987; Brown 1987). Here three needs have been identified: for marketing, appropriate information technology training and for appropriate credit schemes which grant women capital to set up businesses and training to help their management.

In relation to credit, Gena's (1990) study on self-employed women in Papua New Guinea showed that most of the women had received no help in establishing their business either from relatives, banks or other lending institutions. Only one-third of the women were aware of any government services offered. Almost all women wished to receive technical training related to their business and business management skills. On the basis of this study, Gena proposed the Credit Scheme for Women which has become a major income-generating project coordinated by the Department of Home Affairs and Youth. The scheme is aimed at establishing credit facilities for self-employed women and at providing training in business management skills. Two micro-credit schemes have been established in the East Sepik and Simbu provinces. In the long term it is expected that the credit assistance package will 'increase women's access to financial resources by integrating them into the banking system'; and this will be done 'through the cultivation and enhancement of women's capacity to earn income and progressively to handle loans (Gena 1990:38).

Legal and social support institutions and services

Despite legislation that in general protects women's rights and wellbeing, most women in Papua New Guinea are also subject to customary law which settles disputes arising, for example, from marital situations. It appears that aspects of customary family law do not protect women in the same way that they protect men. Research undertaken by Mitchell (1985) in the Southern Highlands and North Solomons province on how Village Courts settled family disputes related to the marriage contract and to problems such as adultery, domestic violence, polygamy and desertion showed the courts not according women full equality with men. Furthermore, almost all of the village magistrates in the study were men and most of the women appearing before the courts found it difficult to present their case because of lack of skills in public speaking. In the light of this situation, which in fact often does not protect women from domestic violence and desertion, the Women's Policy calls for the Women's Division to liaise with the Law Reform Commission on monitoring the enforcement of provisions governing domestic violence.

In order for women to be able to defend themselves against situations of social aggression and discrimination they need to understand the powers of the various types of courts in Papua New Guinea, which court they may use in given circumstances and the court procedures and terminology (Papua New Guinea Government and UNICEF 1990). Also women need to be encouraged to participate more equally in the administration of justice as magistrates and lawyers. All this requires a variety of efforts from a variety of sources: non-formal and formal education activities, awareness campaigns, and monitoring. Women in employment also need to understand their rights and what recourse they have in the case of discrimination over redundancies and promotion and recognition as head of household where applicable (Papua New Guinea Government and UNICEF 1990).

The Women and Law Committee, a voluntary body existing since 1987, is the only group that provides legal information to women and it is important that their information be made available through public sources. It is recommended that this be provided by the Public Solicitors office at national and provincial levels with an officer-in-charge supported by the government (Papua New Guinea Government and UNICEF 1990). There is also need for the production of legal materials to help welfare officers, church workers and others engaged in training and advising women on their legal rights.

Education efforts that involve both men and women need to be developed in order to create a more critical attitude towards the problems of domestic violence and the discriminatory practices observed against women in social and public life. A beginning was made in 1992 with a three-day seminar organised by the Women's Affairs Division and the Law Department of the University of Papua New Guinea on the problem of

domestic violence, which motivated concerned reactions from the public voiced in the daily newspaper *Post Courier*.

The provisions of the Constitution (Special Rights of Citizens, No. 55, sections 1 and 2.1) which call for equal rights and the making of laws 'for the special benefit, welfare, protection or advancement of females, children and young persons...' should, according to Tekwie (1992) be strengthened 'with legislation and acts which will ensure women are incorporated into the development process without discrimination'.

The way ahead

Although women have an important role in the main economic activity of Papua New Guinea, the agriculture sector, in comparison to men the quality of their life is poor in terms of health, social support and protection of their rights, level of participation in decision-making, completing primary education and moving on to other forms of higher education and in employment, promotion and positions of leadership.

The contributing factors are complex as they stem partly from conflicts between traditional culture and modernisation, partly from lack of employment opportunities especially in urban areas (despite the promise of mining resources), and partly from the attitude of those involved in development who assume that women are assistants or supporters but not protagonists in the process.

Inevitably, women will profit from overall improvements in Papua New Guinea which are beginning to take place in the fields of health and education. But given existing inequalities, those improvements may not diminish the gap between males and females unless they are accompanied by forceful action to accelerate women's access to basic services and to formal education provisions. This should be especially so in the least developed areas of the Highlands, the Sepik and Western provinces.

To a large extent the gains for women in Papua New Guinea have resulted from pressure coming from the women themselves: those most educated and those in organised groups. A few male politicians have embraced their cause and others, under the influence of international aid organisations, have conceded the need to hear about women's issues and make some room for these in their policies. The attitude, however, has been to see women's issues as 'welfare' ('poor women, we must do something for them!') rather than a problem of 'inequality' and hence, basically unconstitutional. To date, for example, Papua New Guinea has not signed the Convention on the Elimination of All Forms of Discrimination Against Women which was adopted by the United Nations General Assembly in 1979, although there should be no conflict in doing so because the country's constitution mandates women's equality.

All the evidence presented in this paper points to the important role of women in economic and social development. But it also indicates that most women are performing their roles under extraordinarily difficult conditions. Hence, the need for a much stronger push in the direction of facilitating the role of women by those with responsibility. Having asked a senior administrator in the Department of Agriculture and Livestock whether reports of their neglect of women's role in policy documents was accurate, the response was: 'Yes, it is; and it is probably my fault!' One would wish that those who at least recognise that they could have used their decision-making powers to influence policy in the direction of women's rights, will in the future have the courage to go a step forward and take positive action.

Training of women in the agricultural field, basic health training and services to support their participation without the current level of damage to themselves and their children are among the urgent needs that women working in the Development of Papua New Guinea have. Literacy and basic education up to eighth grade for all women should be a goal to be achieved not too far into the twenty-first century. Promotion of capable women into higher decision-making positions should not continue to be denied on account of petty bureaucratic requirements, because their contribution may be crucial to the entire development of the country. For such changes to take place, there are many avenues at different levels that can be followed, and women's organisations have been setting the example for this for years: community awareness activities, non-formal education groups, and training workshops. But there are also actions needed that cannot be taken by women's groups and voluntary organisations alone; they need to be taken by those who decide fund allocations, those who decide on admissions and exclusions in the education system and those who decide on who gets appointed and for what.

Recognition of the role of women in development in Papua New Guinea needs renewed commitment from intellectuals, politicians, senior public servants—men and women—that actions are going to be taken to remove injustices and provide the support which is owed to them. And all such measures should focus on the overall aim of increasing Papua New Guinea women's participation in development.

References

- Apelis, Ephraim, 1988. 'The participation of women in adult learning programmes: the Huli experience (Southern Highlands)', in E. Wormald and E. Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Avalos, B. and Neuendorf, L. (eds), 1991. *Teaching in Papua New Guinea. a perspective for the nineties*, University of Papua New Guinea Press, Port Moresby.
- Biddulph, John, 1993. 'Priorities for emerging problems in material child health in Papua New Guinea', in Tukutau Taufa and Caroline Bass (eds), *Population, Family Health and Development*, papers from the 19th Waigani Seminar, vol. 2, University of Papua New Guinea, Port Moresby: 164-75.
- Booth, Heather, 1991. *Papua New Guinea: a statistical profile on men and women*, The Pacific Mainstreaming Project, Port Moresby, a joint UNDP/UNIFEM project.
- Bray, Mark and Smith, Peter (eds), 1985. *Education and Social Stratification in Papua New Guinea*, Longman-Cheshire, Melbourne.
- Brown, Bungtabu, 1987. 'Women in business in Papua New Guinea', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Buse, Hans, 1992. *Becoming a Papua New Guinean. Report on a Sociologist's and Group Analyst's Research with Students at Passam National High School*, University of Frankfurt.
- Corner, Lorraine, 1993. *Human resource development: the theoretical issues*, National Centre for Development Studies, The Australian National University, Canberra.
- Cox, Elizabeth, 1987. 'Women in rural settlement schemes. Institutionalised gender bias and informal gender abuses', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- , 1991. *Changes, Challenges and Choices: women in development in Papua New Guinea. Issues and information*, Women's Division, Department of Home Affairs and Youth, Port Moresby.
- Department of Finance and Planning, 1986. *National Manpower Assessment, 1982-1992*, Department of Finance and Planning, Waigani.

- Fernando, Nimal A., 1992. *Provincial Human Development in Papua New Guinea: its level and inequality 1972 and 1980*, National Research Institute, Port Moresby.
- Fitzpatrick, Peter, 1985. 'The making and unmaking of the Eight Aims', in King, Lee and Warakia (eds), *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals after a decade*, papers from the 15th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Flaherty, T., 1988. 'Educational opportunities for female students at Goroka Teachers' College in 1987: students' perceptions', in Wormald and Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- , 1991. 'Academic profile of women students at Goroka Teachers' College', in B. Avalos and L. Neuendorf (eds), *Teaching in Papua New Guinea. A perspective for the nineties*, University of Papua New Guinea Press, Port Moresby.
- , 1992. Educational opportunities for High School girls in Milne Bay and East Sepik provinces: female teachers make a difference. Paper presented at the 13th Extraordinary Faculty of Education Meeting: *Participating in Educational Change*, Waigani, 31 August–4 September.
- Gena, Josephine, 1990. *Credit assistance to self-employed women in Papua New Guinea. Findings of a Feasibility Study*, ILO/Papua New Guinea Government, Port Moresby.
- Gibson, Margaret, 1993. *Equity for Female Teachers. A National Survey of Employment, Training and promotional opportunities for community school teachers in Papua New Guinea*, Educational Research Division, National Research Institute, Port Moresby.
- Gillett, Joy E., 1991. *The Health of Women in Papua New Guinea* (2nd edition), Papua New Guinea Institute of Medical Research, Goroka.
- GTZ, 1991. Sector study on technical and vocational education in Papua New Guinea. Final Report on the Project of Technical Cooperation in the Field of Vocational Training, Vol. 1.
- Guidance Branch, 1989, 1990, 1991. *Analysis of School Leaver Selections*, National Department of Education, Port Moresby.
- Hinawaeola, Marjorie, 1985. 'Reconciling ethical standards with the practical difficulties of power and decision-making: women in development planning', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Imaroto, Josephine, 1988. 'Constraints on women's participation in external studies', in

- Wormald and Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Johnson, Dianne D., 1985. 'Women, education and bureaucratic leadership', in King, Lee and Warakai (eds), *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals after a decade*, papers from the 15th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Kaely, G.S., 1988. 'Enrolment disparities and comparative performance of males and females in matriculation mathematics courses at the University of Papua New Guinea', in Wormald and Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- King, Peter, Lee, Wendy and Warakai, Vincent, 1985. *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals after a decade*, papers from the 15th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Kuman, C.E.P., 1987. 'Women and banking policy', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Martin, Beverley S., 1988. 'Women and distance education in Papua New Guinea', in E. Wormald and E. Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Midire, Miriam, 1983. Women in the Workforce. Unpublished dissertation BA (Honours), University of Papua New Guinea.
- Mitchell, Barba H., 1985. 'Family law in Village Courts: the woman's position', in King, Lee and Warakai (eds), *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals after a decade*, papers from the 15th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Murphy, Penelope, 1985. 'UPapua New Guinea as an agent of social stratification: an analysis of output by sex', in Bray and Smith (eds), *Education and Social Stratification in Papua New Guinea*, Longman-Cheshire, Melbourne.
- Nakikus, Margaret, 1985. 'Planning for women's advancement in Papua New Guinea', in King, Lee and Warakai (eds), *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals after a decade*, papers from the 15th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- National Department of Education, 1991, *Education Sector Review*, Vol. 2; *Deliberations and Findings*, National Department of Education, Port Moresby.
- National Statistics Office, 1980. *1980 Population Census*, Port Moresby.

- _____, 1991. *National Population Census, 1990: preliminary figures: census divisions populations*, National Statistics Office, Port Moresby.
- Non-Formal Education Workshop, 1991. Report, Division of Educational Research, National Research Institute, Port Moresby.
- Oliver, Joan, 1985. 'Women students at the University of Papua New Guinea in 1985. A report to the University Council' in S. Stratigos and P. Hughes, *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Oliver, Michael (ed.), 1989. *Eleksin: the 1987 national election in Papua New Guinea*, University of Papua New Guinea, Port Moresby.
- Østergaard, Lise, 1992. 'Health', in Lise Østergaard (ed.), *Gender and Development*, Routledge, London and New York.
- Phillip, A., 1992. Trying to cope: the struggle of women in Port Moresby to continue their education by distance through the Matriculation Programme offered by the Extension Studies Department at the University of Papua New Guinea. Paper presented at the 13th Extraordinary Faculty of Education Meeting, *Participating in Educational Change*, University of Papua New Guinea, Waigani, 31 August-4 September.
- _____, 1992a. 'Enrolment and performance at Distance Students in Matriculation English Courses at the University of Papua New Guinea: the gender difference', *Distance Education*, 13(2):327-33.
- Papua New Guinea Government and UNICEF, 1987. *An Analysis of the Situation of Children and Women in Papua New Guinea*, Port Moresby.
- _____, 1990. *A Review of the Analysis of the Situation of Children and Women in Papua New Guinea*, Port Moresby.
- Preston, Rosemary, 1989. *Vocational Centre Training in Papua New Guinea. Policy Provisions, Problems and Projections*, Educational Research Division, National Research Institute, Port Moresby.
- _____ and Wormald, Eileen, 1987. 'Culture, ideology and the subordination of women in traditional society', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Schoeffel, P., 1983. *Women's Associations in the Rural Economy of the South Pacific: case studies from Western Samoa and East New Britain Province, Papua New Guinea*, South Pacific Commission, Noumea, New Caledonia.
- Schoeffel-Melissea, Penelope, 1987. *Women in Development: Papua New Guinea*, Asian

- Development Bank, Country Briefing Paper.
- Seta, Thomas, 1992. Why low female retention in secondary schools: A Sepik experience, Policy, Research and Evaluation Unit, National Department of Education (unpublished paper).
- Sialis, Levi, 1993. 'Keynote address', in Tukutau Taufa and Caroline Bass (eds), *Population, Family Health and Development*, papers from the 19th Waigani Seminar, University of Papua New Guinea Press, Vol. 2, Port Moresby:138-44.
- Stratigos, Susan and Hughes, Philip (eds), 1987. *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Street, Margaret R., 1993. 'Promoting safe child birth', in Tukutau Taufa and Caroline Bass (eds), *Population, Family Health and Development*, papers from the 19th Waigani Seminar, University of Papua New Guinea Press, Vol. 2, Port Moresby:205-17.
- Taiwayole, Pani and Weeks, Sheldon, 1989. 'Trends in participation of females in formal education in Papua New Guinea, in Wormald and Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Tamate, Leontine, 1987. 'Women and development', in S. Stratigos and P. Hughes (eds), *The Ethics of Development, Vol. 3: Women as Unequal Partners in Development*, papers from the 17th Waigani Seminar, University of Papua New Guinea, Port Moresby.
- Taufa, Tukutau and Bass, Caroline (eds), 1993. *Population, Family Health and Development*, papers from the 19th Waigani Seminar, University of Papua New Guinea Press, Vol. 2, Port Moresby.
- Tekwie, Dorothy, 1992. 'Development efforts take a rough ride', *Post Courier*, 24 September.
- UNICEF, 1990. *The State of the World's Children*, UNICEF, New York.
- United Nations, 1991. *The World's Women. Trends and Statistics*, United Nations, New York.
- United Nations Development Programme (UNDP), 1991. *Women's Sector Review: Women in development*. Prepared for the UNDP by Margaret Nakikus, Marjorie Andrews, Angela Mandie-Filer and Bungtabu Brown, UNDP, New York.
- _____, 1993. *Human Development Report*, Oxford University Press, Oxford.
- Wilson, A., 1988. 'Women in tertiary science: Papua New Guinea, in E. Wormald and

- E. Crossley (eds), *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Whitehead, Ann and Bloom, Helen, 1992. 'Agriculture', in Lise Østergaard (ed.), *Gender and Development. A Practical Guide*, Routledge, London and New York.
- Women's Division, 1988-1993. *Expansion of Women's Role in Development*, Department of Home Affairs and Youth, Port Moresby.
- Women's Policy*, 1990. Department of Home Affairs and Youth, Port Moresby.
- World Bank, 1991. *Papua New Guinea Structural Adjustment. Growth and Human Resources Development*.
- Wormald, Eileen, 1989. 'Women candidates in the election', in Michael Oliver (ed.), *Eleksin: rhe 1987 national election in Papua New Guinea*, University of Papua New Guinea, Port Moresby.
- _____ and Crossley, E. (eds), 1988. *Women and Education in Papua New Guinea and the South Pacific*, University of Papua New Guinea, Port Moresby.
- Yeoman, Lyn, 1985. *Universal Primary Education. Factors Affecting the Enrolment and Retention of Girls in Papua New Guinea Community Schools*, Evaluation Unit, National Department of Education, Port Moresby.

Appendices

Table A1 Life expectancy at birth by province and sex, 1971 and 1980

Province	Males		Females		Total	
	1971	1980	1971	1980	1971	1980
Western	39	46	38	50	39	48
Gulf	29	48	29	47	29	47
Central	43	51	44	52	44	51
National Capital District ^a	..	56	..	57	..	57
Milne Bay	41	58	45	56	43	57
Oro	40	49	45	50	42	49
Southern Highlands	36	41	38	47	37	44
Enga ^b	..	46	..	49	..	47
Western Highlands	40	51	41	54	41	52
Simbu	44	51	43	50	43	50
Eastern Highlands	43	51	46	56	44	53
Morobe	42	51	44	52	43	51
Madang	40	49	41	52	40	51
East Sepik	33	49	33	49	33	49
West Sepik	36	41	37	43	37	42
Manus	43	51	45	53	44	52
New Ireland	45	52	47	54	46	53
East New Britain	46	53	48	53	47	53
West New Britain	43	51	46	53	44	51
North Solomons	46	60	48	59	47	60
Total	40	49	41	51	40	50

^aIn 1971 National Capital District was part of Central province.

^bIn 1971 Enga was part of Western Highlands province.

Source: Papua New Guinea, Department of Health 1986: Table A.8.

Table A2 Maternal health statistics, 1987

Province ^f	Total women ^a (number)	Estimated pregnancies ^b (number)	(%)	New antenatal attenders ^c (%)	Super-vised deliveries ^d (%)	Tetanus toxoid (%)
Western	20,232	3,576	18	73	37	10
Gulf	16,571	2,628	16	65	38	36
Central	29,061	4,889	17	43 ^e	(e)	20
National Capital District.	28,636	5,844	20	135 ^e	(e)	85
Milne Bay	32,487	5,569	17	58	22	11
Oro	18,725	3,430	18	50	36	4
Southern Highlands	60,697	9,236	15	88	37	1
Enga	40,204	5,433	14	58	34	31
Western Highlands	64,058	9,808	15	64	34	-
Simbu	39,814	4,695	12	86	52	-
Eastern Highlands	69,888	9,672	14	64	45	54
Morobe	78,776	13,557	17	53	29	46
Madang	53,278	9,848	18	44	36	16
East Sepik	56,222	9,937	18	64	25	36
West Sepik	28,776	4,970	17	52	22	35
Manus	6,938	1,105	16	69	55	5
New Ireland	14,908	2,934	20	66	76	28
East New Britain	32,692	5,713	17	104 ^e	100	9
West New Britain	21,017	4,559	22	73	52	29
North Solomons	30,080	6,400	21	69	30	4
Papua New Guinea	743,060	123,803	17	68	43	25

^aWomen of child bearing age, 15 to 44 years. Published census data used throughout this book are not adjusted for under-enumeration. Thus, these figures may be low which results in overestimates of statistics in some provinces.

^bApproximately equivalent to the estimated number of live births.

^cPer cent of births preceded by at least one visit to an antenatal clinic, 1988 data. Accurate data unavailable for 1987.

^d1986 data. Accurate data unavailable for 1987.

^eSome figures are distorted by mobility between provinces, such as the large numbers from Central Province who use Port Moresby General Hospital.

^fProvincial figures hide large differences between districts within a province.

Sources: Department of Health, 1988; Department of Health 1989 (New Antenatal Attenders); Department of Health 1987a (Supervised Deliveries).

Table A3 Illiteracy rates by province, and gender, population 15 years of age and older

	Males		Females	
	Population	% illiterate	Population	% illiterate
Western	28,856	27.0	28,158	39.8
Gulf	18,561	29.0	18,643	42.9
National Capital District	66,196	8.3	49,064	15.2
Central	40,871	27.7	38,695	38.2
Milne Bay	47,197	18.4	44,364	24.1
Oro	27,981	26.0	25,185	38.1
Southern Highlands	87,550	63.7	89,174	75.1
Eastern Highlands	88,450	60.6	85,364	76.9
Chimbu	60,995	60.8	58,752	76.2
Western Highlands	107,121	60.9	95,384	74.8
Enga	76,332	58.5	68,425	72.8
Morobe	113,575	27.4	105,515	43.8
Madang	73,910	38.3	66,975	52.7
West Sepik	40,382	50.4	37,529	69.9
East Sepik	69,478	43.2	73,895	60.6
Manus	9,629	12.2	9,389	20.4
New Ireland	27,512	28.0	22,393	34.0
West New Britain	40,653	26.2	32,582	35.9
East New Britain	57,884	19.3	47,725	21.3
Total	1,083,133	40.4	997,211	54.6

Note: North Solomons province was not counted.

Source: National Statistics Office, 1991, National Population Census 1990, *Preliminary Figures: Census Divisions Populations*, National Statistics Office, Port Moresby.

Table A4 Primary gross enrolment ratios (GER) by province, and gender, population 7-12 years of age, 1990

	Males		Females	
	Population	GER	Population	GER
Western	8,742	89.6	7,811	84.5
Gulf	6,122	84.2	5,199	71.2
Central	12,977	87.1	11,079	82.2
National Capital District	14,125	95.0	12,572	92.7
Milne Bay	13,544	74.5	12,027	76.3
Oro	8,718	75.5	7,570	70.9
Southern Highlands	31,590	48.8	26,520	47.2
Enga	20,770	65.2	17,122	63.8
Eastern Highlands	27,110	66.7	20,767	70.4
Chimbu	14,771	69.5	12,424	55.0
Western Highlands	29,558	70.4	22,863	67.6
Morobe	31,515	82.1	27,846	71.6
Madang	24,273	70.2	19,307	65.6
West Sepik	12,705	75.3	9,848	66.3
East Sepik	21,575	74.4	19,452	69.8
Manus	2,631	91.0	2,453	90.3
New Ireland	7,183	85.9	6,372	86.5
East New Britain	15,350	79.2	13,765	75.8
West New Britain	11,232	71.8	64.4	
Total	314,480	73.1	264,828	69.2

Note: North Solomons province was not counted.

Source: National Statistics Office, 1991, National Population Census 1990, *Preliminary Figures: Census Divisions Populations*, National Statistics Office, Port Moresby.

Table A5 Primary school retention rates by province and gender, 1980-91 (per cent)

	Grade 1, 1980			Grade 1, 1983			Grade 1, 1986			Grade 1, 1987		
	Grade 6, 1985			Grade 6, 1988			Grade 6, 1990			Grade 6, 1991		
	M	F	T	M	F	T	M	F	T	M	F	T
Western	77	83	79	75	68	72	84	86	85	69	72	70
Gulf	64	60	62	69	62	66	46	48	47	69	69	69
National Capital District	87	87	87	91	87	89	82	82	82	88	81	85
Central	69	66	68	74	68	72	81	75	78	57	54	55
Milne Bay	71	78	74	67	72	69	60	69	64	80	89	84
Oro	76	71	74	59	62	60	71	68	69	56	49	53
Southern Highlands	52	63	57	45	49	47	47	49	48	42	44	43
Eastern Highlands	54	53	54	58	53	56	35	34	35	45	43	44
Chimbu	40	43	42	55	45	51	30	28	29	58	47	53
Western Highlands	54	59	56	46	48	47	52	44	48	47	47	47
Enga	41	41	41	39	38	39	63	58	61	32	30	31
Morobe	72	71	71	64	62	63	95	91	93	47	44	46
Madang	71	80	74	66	70	67	67	62	65	57	59	57
West Sepik	64	61	63	62	66	63	47	47	47	56	60	58
East Sepik	75	76	76	73	82	77	71	70	71	82	82	82
Manus	103	93	101	94	86	90	77	69	73	130	117	124
East New Britain	74	76	75	73	69	71	73	70	71	74	71	73
West New Britain	68	67	68	69	64	67	72	65	69	54	56	55
North Solomons	80	80	80	71	71	71	-	-	-	27	30	28

Note: North Solomons has an irregular situation because of warfare in the region.

Source: NDOE, Education Staffing and Enrolment Statistics.

Table A6 Female high school completion rates by province, 1982-85 and 1986-89 cohorts

	1982-85	1986-89
Western/Kiunga L.	61.6	59.4
Murray		
Gulf	46.0	54.8
National Capital District	88.0	67.5
Central	64.0	75.6
Milne Bay	73.7	86.0
Oro	73.3	82.5
South Highlands	73.9	69.1
East Highlands	56.6	66.3
West Highlands	54.6	62.9
Simbu	57.2	58.6
Enga	53.8	66.4
Morobe	63.7	68.0
Madang	58.8	58.2
West Sepik	43.7	57.9
East Sepik	64.1	46.6
Manus	51.1	55.0
New Ireland	74.9	66.8
East New Britain	60.2	75.4
West New Britain	46.4	63.4
North Solomons	69.6	65.9
Papua New Guinea	67.8	69.5

Source: Papua New Guinea, Department of Education, Planning Division.

Table A7 Female university graduates and graduates of programs of one or more years duration, 1988-90

	1988			1989			1990	
	Total	Female		Total	Female		Total	Female
	N	N	%	N	N	%	N	N %
University of Technology								
Sub degrees	97	16 (17)		150	21 (14)		126	26 (21)
Bachelor degrees	136	27 (20)		100	13 (13)		101	165 (16)
Post-grad diploma	3	1 (33)		3	-		3	-
Total	236	44 (19)		253	34 (13)		230	42 (18)
University Papua New Guinea								
Sub degrees	90	8 (9)		69	15 (22)		73	8 (11)
Bachelor degrees	258	41 (16)		255	51 (20)		254	53 (21)
Bachelor degrees (Hons)	22	3 (14)		23	2 (9)		15	3 (20)
P. graduate diploma	12	3 (25)		27	2 (7)		14	1 (7)
D. sec teaching	81	31 (38)		104	45 (43)		69	20 (29)
Higher degrees	9	-		8	1 (13)		10	5 (50)

Source: National Statistics Office, 1991, National Population Census 1990, Preliminary Figures: Census Divisions Populations, National Statistics Office, Port Moresby.

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