



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# **SOCIAL ECONOMICS, POLICY AND DEVELOPMENT**

**Working Paper No. 35**

**Gender Inequality, Poverty and Human  
Development in Kenya:  
Main Indicators, Trends and Limitations**

**by**

**Tabitha Kiriti  
and  
Clem Tisdell**

**June 2003**



**THE UNIVERSITY OF QUEENSLAND**

**Working Paper No. 35**

**Gender Inequality, Poverty and Human Development in  
Kenya: Main Indicators, Trends and Limitations \***

**by**

**Tabitha Kiriti<sup>†</sup> and Clem Tisdell<sup>‡</sup>**

© All rights reserved

---

\* The authors would like to thank the Directorate of Personnel Management (DPM) in Kenya and the African Economic Research Consortium (AERC) for financial support. As usual the opinions do not necessarily reflect those of the DPM or AERC and any errors are the responsibility of the authors.

† Tabitha Kiriti is a lecturer in Economics on study leave from the University of Nairobi. Email: [s805985@student.uq.edu.au](mailto:s805985@student.uq.edu.au)

‡ School of Economics, The University of Queensland, Brisbane QLD 4072, Australia  
Email: [c.tisdell@economics.uq.edu.au](mailto:c.tisdell@economics.uq.edu.au)

WORKING PAPERS IN THE SERIES, *Social Economics, Policy and Development* are published by School of Economics, University of Queensland, 4072, Australia. They are designed to provide an initial outlet for papers resulting from research funded by the Australian Research Council in relation to the project 'Asset Poor Women in Development',

Chief Investigator: C.A. Tisdell and Partner Investigators: Associate Professor K.C. Roy and Associate Professor S. Harrison. However this series will also provide an outlet for papers on related topics. Views expressed in these working papers are those of their authors and not necessarily of any of the organisations associated with the Project. They should not be reproduced in whole or in part without the written permission of the Project Leader. It is planned to publish contributions to this series over the next few years.

For more information write to Professor Clem Tisdell, School of Economics, University of Queensland, Brisbane 4072, Australia. (e-mail: [c.tisdell@economics.uq.edu.au](mailto:c.tisdell@economics.uq.edu.au))

# **Gender Inequality, Poverty and Human Development in Kenya: Main Indicators, Trends and Limitations**

## **ABSTRACT**

Indicators of gender inequality, poverty and human development in Kenya are examined. Significant and rising incidence of absolute poverty occurs in Kenya and women are more likely to be in poverty than men. Female/male ratios in Kenyan decision-making institutions are highly skewed against women and they experience unfavourable enrolment ratios in primary, secondary and tertiary institutions. The share of income earned by women is much lower than men's share.

General Kenyan indicators highlight declining GDP per capita, increased poverty rates especially for women, reduced life expectancy, a narrowing of the difference in female/male life expectancy rates, increased child mortality rates and an increase in the female child mortality rates. This deterioration results in an increased socio-economic burden on women, not adequately captured in the HPI, HDI, GDI and GEM. This paper advocates the use of household level gender disaggregated data because much gender inequality occurs in and emanates from the household level where culture plays a very important role in allocation of resources and decision-making. Because most human development indicators are aggregates or averages, they can be misleading. They need to be supplemented by distributional and disaggregated data as demonstrated in the Kenyan case. The importance is emphasised of studying coping mechanisms of household/families for dealing with economic hardship and other misfortunes, such AIDS.

**Keywords:** AIDS, Africa, Kenya, gender, inequality, human development, poverty

# **Gender Inequality, Poverty and Human Development in Kenya: Main Indicators, Trends and Limitations**

## **1. Introduction**

The basic objective of human development is enlarging people's choices. It should be to create an enabling environment for people to enjoy long, healthy and creative lives, to be educated, and to enjoy a decent standard of living, political freedom, guaranteed human rights and self respect (UNDP, 1995). For this to be achieved, UNDP (1995) claims that there must be equality of opportunity for all people in society. Such opportunities must be sustainable from one generation to the next and people must be empowered to be able to participate in and benefit from the development process (UNDP, 1995).

In many developing countries, especially the patriarchal societies, men and women do not enjoy equal rights. Enjoyment of opportunities and allocation of resources are based on gender. Gender inequality involves the denial of opportunities and denial of equal rights on the basis of gender. Gender inequality is generally manifested in unequal rights for women of access to basic social services such as education and health; unequal opportunities for participation in political and economic decision-making, nationally and at the household level; unequal rights for equal work; unequal protection under the law; preference for male children; higher poverty rates for female-headed households; violence against women and so on.

This article examines various indicators of gender inequality, poverty and human development in Kenya, their trends and limitations. Some of the indicators, especially the human poverty index (HPI), human development index (HDI), gender-related development index (GDI) and the gender empowerment measure (GEM), were introduced by the UNDP in its 1995 and 1997 Human Development Reports.

## **2. Poverty Rates**

Income poverty means the lack of material well-being; lack of income to meet basic needs like food, shelter and clothing. Food poverty is measured by the per capita consumption of the required daily intake of the basic recommended calories per adult equivalent (2250 calories). Several international bodies consider persons to live in absolute poverty when their

income is a dollar a day or less to meet food, shelter and other basic needs (FAO, 1984, UNDP, 1995). Fifty four per cent of the people in sub-Saharan Africa live in absolute income poverty on this basis.

Poverty rates in Kenya are substantially lower in urban areas than in rural areas (Republic of Kenya, 1998). In 1992, the absolute urban poverty rate in Kenya was 29.3 percent compared with 46.4 percent in rural areas. In 2000, national incidence of absolute income poverty in Kenya rose to 50 percent but the data are not disaggregated between urban and rural areas. Nevertheless, the incidence remains highest in rural areas.

Of 1.3 billion people in absolute poverty globally, the majority are women who are mainly found in rural areas. Poverty among women has been linked to their unequal situation in the labor market, their poor treatment under social welfare systems and their inferior status and power in the family (UNDP, 1995).

Women bear a significant responsibility for the family's subsistence. In virtually all societies, women are the main carers in a family and they are often willing to sacrifice their own welfare for the benefit of other family members, especially their children (Tisdell, 1999). In many countries, women are also important economic providers for the family giving considerable economic support to their children. But their capacity in some developing countries to fulfil this responsibility has been significantly affected by such factors as unequal sharing of household resources, unequal access to earning opportunities, to agricultural land and by the decline in common property resources and forests (Roy and Tisdell, 1993).

Women and men experience poverty differently, and different aspects of poverty (deprivation, powerlessness, vulnerability, its seasonality) have gender dimensions (World Bank, 1996). Vulnerability reflects the dynamic nature of poverty such as defencelessness, insecurity and exposure to risk. Vulnerability is a function of assets. The more assets people have, the less vulnerable they are. Assets include stores, concrete productive investments, human investments, collective assets and claims on others for assistance. Both absolute and food poverty are associated with lack of physical and human assets (World Bank, 1997). Women and children are more vulnerable because tradition usually gives them less decision-making power over assets than men, while at the same time their opportunities to engage in remunerated activities, and therefore to acquire their own assets, are more limited (World

Bank, 1995, 1996; Blackden and Bhanu, 1998). Greer and Thorbecke (1986a, 1986b), Collier and Lal (1980) and Republic of Kenya (1991, 1998) show that food poverty and absolute poverty occur mainly among female-headed households.

Tisdell (2000) found that there is gender imbalance in the formation of Human Resource Capital (HRC) in India and other less developed countries. In many developing countries, females are deprived of HRC compared to men. They have less access to education, and often have less availability of food and medical services. This often results in higher fertility rates and higher population growth rates reinforcing higher poverty rates.

However, Lipton (1995), Ravallion and Lanjouw (1995) argue that women are not generally over-represented in poor households. Their findings and those of Appleton's (1996) are at odds with the findings by other authors, for example, World Bank (1993); Quisumbing, Haddad and Pena (2001) who found that women are disproportionately represented among the poor. The World Bank's Participatory Poverty Assessment (1995) for Kenya shows that while 25 percent of the study population was categorised as very poor, there were nearly twice as many female-headed households (44 percent) as male-headed households (21 percent) in that category. The remaining 35 percent represented male-headed households with no wife present. Greer and Thorbecke (1986a, 1986b); Collier and Lal (1980); and Republic of Kenya (1991, 1998) also find that female-headed households account for the high proportion of the poor in Kenya. Mwabu, et al. (2000) using the cost of basic needs (CBN) and food energy intake (FEI) approaches in computing poverty rates for Kenya, found that poverty rates were marginally higher in female-headed households (41 percent) than in male-headed households (38 percent) where husband and wife live together.

The World Bank's Participatory Poverty Assessment (1995) for Kenya found that to cope with increased levels of poverty, female heads of households in Kenya consistently limit the number of meals eaten. They found that one third of the female-headed households had only one meal per day while the rest had two meals. Some women resort to begging for food, others rely on brewing alcohol despite being harassed by police.

Apart from lack of physical and human assets, women are generally immobile because of greater responsibilities for childcare, household provisioning, doing household chores and home-based agricultural activities. The cultural norms are such that women find it hard to



venture out to look for work or, in certain traditions to mix with men. This prevents them from gathering information on job opportunities. They are cut off from channels of communication, or the information they receive is filtered through the (male) head of household or community leaders.

Poverty rates generally decline as the level of education increases (Mwabu, et al, 2000; Schultz, 1960). Education and training reduce the chances of falling back into poverty. Females in Kenya generally have lower levels of education compared to males. A long-term remedy to alleviate poverty would be to invest in poor people, especially women, particularly in their education and training, and to bring them into the mainstream of development.

Women not only suffer from income poverty but also human poverty. Human poverty means that opportunities and choices most basic to human development are denied. Human poverty is more than income poverty. It involves the denial of choices and opportunities most basic to human development to lead a long, healthy, creative life, acquire knowledge, and enjoy a decent standard of living, freedom, dignity, self-esteem and the respect of others (UNDP, 1998a; 1998b).

One way of measuring human poverty, although it is far from adequate, is by using the human poverty index (HPI) introduced by UNDP in the Human Development Report of 1997. The HPI is a composite index of different features of deprivation in the quality of life that helps to judge the extent of poverty in a community. HPI-1 measures human poverty in developing countries. The variables used are: (1) The percentage of people expected to die before age 40; (2) the percentage of adults who are illiterate; and (3) deprivation in overall economic provisioning measured by: (a) the percentage of people without access to health services and safe water and (b) the percentage of underweight children under five. The HPI is constructed by taking a simple average of the three variables.

The trend in the HPI for Kenya between 1997 and 2000 is evident from Table 1. This table shows that the value of the HPI for Kenya has been rising and the poverty ranking of Kenya rose compared to other developing nations. Table 1 also shows that the percentage of people living below the poverty line rose from 42 percent in 1992 to 50 percent in 2000 implying that half the population in Kenya was living below the poverty line in 2000.

**Table 1**  
**Human Poverty Index for Kenya: 1997-2000**

Year	Human poverty index		Population below absolute national poverty line
	Rank among developing countries	Value (%)	
1992	Na	Na	42.0
1997	35	27.1	Na
1998	49	28.2	47.0
1999	51	29.5	Na
2000	49	31.9	50.0

Source: UNDP: Human Development Reports (various issues)

However, it is difficult to reflect all dimensions of human poverty in a single quantifiable composite indicator. Lack of political freedom, lack of personal security, inability to participate in the life of a community and threats to sustainability cannot be measured and quantified in a simple aggregate. Also, the HPI does not reflect gender inequality. It also does not show how the increased poverty burden is shared between men and women. It does not reveal who among those who suffer from human poverty are females. It also does not show the disparities in poverty between rural and urban areas or among different ethnic communities.

### **3. Education and Literacy Levels**

Beginning in the early 1990s in Kenya, government expenditure on education, health and other social services decreased due to rising pressure from the World Bank and the IMF to reduce government expenditure. Extremely low per capita incomes limited the ability of many communities and households to contribute more private funds to the education of their children. The additional burden on low-income households had a negative effect on school enrolment, especially enrolment of girls, as the demand for education is price sensitive in low-income households (Kabubo and Kiriti, 2001).

As can be seen from Table 2 gross enrolment ratios in primary education fell in comparison to 1990. They reached a low of 84.9 per cent in 1995. While the downward trend was reversed as indicated by the 1998 figure, primary school enrolment ratios were still lower in 1998 than in 1991. It is also probable that the quality of education of those in school declined

while secondary school ratios also show a decline. This decline halted in the mid-1990s and in fact in 1998 the secondary education enrolment ratio was higher in 1998 than in 1991.

**Table 2**  
**Gross Enrolment Ratios for Primary and Secondary Levels of Education**  
**for Kenya by Gender: 1991-1998**

Year	Primary enrolment				Secondary enrolment			
	Total	Male	Female	Gap	Total	Male	Female	Gap
1991	93.0	94.5	91.5	3.0	27.9	31.5	24.4	7.1
1992	91.7	92.9	90.5	2.4	27.3	30.7	23.9	6.8
1993	90.5	91.1	89.8	1.3	25.7	28.5	22.8	5.7
1994	86.9	87.1	86.6	0.5	24.8	27.0	22.6	4.4
1995	84.9	84.9	83.2	1.7	24.8	26.4	22.4	4.0
1998	90.7	91.4	90.0	1.4	29.9	31.5	28.2	3.3

Source: UNESCO Datasets

However, there is no doubt than an increasing number of the poor are missing out on education in Kenya or receiving little education. The distribution of educational opportunity cannot be deciphered from these aggregate statistics. But they influence UNDP's indices of development such as its Human Development Index (HDI) and its Gender Development Index (GDI). The fact that the secondary enrolment ratio was higher in 1998 than in 1991 but the primary school enrolment ratio lower in Kenya, suggests that in the 1990s inequality of income has exerted a rising influence on access to education.

The gender gap in primary school enrolments is measured as the ratio of female to male enrolment at this level times 100. The gender gap in secondary school enrolment is measured as the ratio of female to male enrolment at this level times 100. These two are measures of women's status as far as education in early years is concerned.

Where places in school are limited and resources are scarce, girls are at a particular disadvantage. Parents may prefer to educate sons, both because expected benefits are higher due to better job prospects for sons and dependence on sons in old life (Kiriti and Tisdell, 2003), and costs are lower because of the low opportunity cost of their time in terms of help in the household (Mincer and Polachek, 1974).

Table 2 shows that the enrolment ratios of females in both primary and secondary schools are lower than that of males. However, the gender gap, though exhibiting a declining trend in both primary and secondary school levels, is much wider in secondary schools. The data indicate that while enrolment levels are high for both girls and boys in primary schools (although enrolment ratios for females are lower than those of males), there is a higher dropout of female students than of male students and enrolment ratios are much higher for males than for females in secondary school.

The gender gap in adult illiteracy is measured as the percentage of illiterate females in the 25 years and above age group minus the percentage of illiterate males in the same age group. Adult illiteracy rates are largely a reflection of historical trends in primary school enrolment. A higher gender gap is a reflection of women's lower status since literacy is the forerunner to a host of expanded opportunities for women including earning power, control over health and child-bearing, political and legal rights and so on.

**Table 3**  
**Adult Illiteracy Rates for Kenya by Gender**

Year	Adult Illiteracy			
	Total	Male	Female	Gap
1970	na	44.0	74.0	30.0
1980	na	30.0	57.3	27.3
1990	29.2	19.1	39.2	20.1
1995	23.0	14.7	31.1	16.4
1999	17.6	11.1	24.0	12.9

Source: UNESCO Datasets

As seen from Table 3, in 1970, 74 percent of the adult female population was illiterate compared to 44 percent of adult males. By 1999, 24 percent of the adult female population remained illiterate compared to 11.1 percent of the adult male population. Table 3 demonstrates that there exists a gender gap in adult illiteracy in Kenya although it seems to be declining but at a slow pace between 1990 and 1999. Low enrolment ratios for females in institutions of higher learning and high illiteracy rates means that women cannot participate effectively in decision-making institutions.

Although the data indicate increased access to education for women and a decrease in the gender differences between men and women, it does not take into account the availability of

facilities, the quality of education, for example, size of classes and so on. Furthermore, the fact that women in Kenya have access to education does not necessarily lead to their empowerment. Kiriti, et al. (2003a) found that in patriarchal societies, customary conventions play a major role in determining the socio-economic status for women.

#### **4. Female/Male Ratios in Decision-making Institutions**

The effectiveness of Kenya's development efforts and the ability to sustain them are dependent on the full utilisation of all human resources (both men and women). But socio-economic indicators show that Kenyan women are disadvantaged compared to men in respect of their participation in decision-making. The vast majority of Africa's women find their total livelihood within agriculture and the informal sector.

Most women in formal sector employment are concentrated in low-paying semi-skilled and non-skilled jobs. Women's representation in technical and professional fields is still limited. Their representation in major decision-making positions is also extremely limited. There are various reasons accounting for this. First, early socialisation practices emphasise the primary role of women as mothers and wives and influence girls' total expectations for future participation in the labour force and the choice of career paths. Second, women's overall limited educational attainments as well as the types of curricula used in schools, emphasising stereotypic role for women, create further barriers. Career guidance and counselling likewise tends to channel girls into traditional female fields such as nursing and home economics. Third, women's multiple responsibilities as mothers, wives, employees and employers create role conflicts that at times could result in compromises in careers. Women's careers tend to be interrupted during their childbearing years, resulting in loss of seniority. In addition, as women are usually expected to move with their husbands, the interrupted career syndrome further compromises their career progression. Fourth, organisational policies and procedures are often influenced by cultural perceptions of women's roles and capabilities. This leads to women being discriminated against in recruitment, and in promotion to senior positions as it is assumed that women lack the qualities essential for successful managerial careers (Mincer and Polachek, 1974).

African culture is a barrier to development because it perpetuates culturally sanctioned biases against women and provides excuses for men. Cultural biases operate at all levels ranging from national institutional level, government policy, community level, household and

individual levels (Kiriti, et al, 2003b). In Africa, women's participation at all levels of decision-making is low. In Parliament, the highest level of decision-making, women are under represented. In 1995, at the time of the Beijing Platform for Action, only 10 percent of the members of legislative bodies were women. In 1998, this had increased to 12 percent, still a very low percentage. The UNDP in its Human Development Report of 1995 states that there should be a target of 30 percent of women in all spheres of political and social life for an impact to be felt.

The Beijing Platform for Action (1995) states that women's equal participation in political life plays a pivotal role in the general process of the advancement of women. Without the active participation of women and the incorporation of women's perspectives at all levels of decision-making, the goals of equality, development and peace cannot be achieved. Incorporation would ensure women's equal access to and full participation in power structures and decision-making. It would also increase women's capacity to participate in decision-making and leadership. However, eight years later many of the injunctions in the Beijing Platform for Action still remain agendas for the future and there are even some issues that some governments, for example Kenya, have refused outright to take into account saying that they go against their cultures.

In Kenya, most women in high government positions are in such ministries as education, culture, social welfare, women's affairs and so on. Women in Kenya rarely achieve elective office, and are severely under-represented at top positions in political parties. Out of a total of 202 seats in parliament women occupied only 6 seats after the 1992 first multi-party elections. These increased to 17 in the 2002 elections out of 210 seats. In Kenya women are under represented in the judiciary, in local authorities and even in government administration. Female lecturers in universities and institutions of higher learning represent only 10 percent of the total teaching staff.

The above statistics show that despite the fact that many governments have adopted and adapted affirmative action measures and the rhetoric of gender equality, women constitute nowhere near half of the personnel in decision-making structures although women are around half of the global population. The threshold of 30 percent advocated by the UNDP Human Development Report (1995), as a prelude to the 50 percent is still a dream for most women.

## **5. Life Expectancy**

Life expectancy is an important human development indicator. Pierre-Yves, et al. (1999) found a strong relationship between national health-care spending and life expectancy. Considering that most African governments have reduced their expenditures on almost all the sectors, due to structural adjustment pressure from the World Bank and the IMF, this suggests that life expectancy in most African countries is going to decline.

Sala-I-Martin and Barro (1995) found a strong and positive relationship between life expectancy and economic growth; a 13-year increase in life expectancy is estimated to raise the annual growth by 1.4 percentage points. Croix and Licandro (1999) argue that there are several channels through which life expectancy affects economic growth directly, for instance, when the probability of dying young is high, the shortened time horizon makes it optimal for people to start working early in their life and not to stay at school for too long. Moreover, when life expectancy is short, the depreciation rate of human capital is high, making its accumulation more difficult. Since the human capital accumulated in school is an important engine of growth, we should thus expect a country's growth rate to depend upon life expectancy.

Development economics literature shows that an increase in economic growth leads to a higher life expectancy due to better nutrition, reduced infant mortality rates and improved medical care. Life expectancy for both men and women in the world's richest countries is about 80 years, which is almost twice that in the world's poorest countries - 45 years (UNDP, 1998). The problem here however, is of deciding what is the causal and what is the dependent factor; a kind of mutual causation problem or "chicken and egg problem" exists.

The average life expectancy for sub-Saharan Africa is 51.1 years, the lowest for all regions in the world. Table 4 shows life expectancy in Kenya for selected years.

**Table 4**  
**Life Expectancy in Kenya in Years: 1963-2001**

<b>Year</b>	<b>Life expectancy at birth</b>	<b>Female</b>	<b>Male</b>	<b>Female less male</b>
1963	44.7	na	na	Na
1970	50.5	52	48	6
1980	54.9	57	53	4
1990	58.3	59	55	4
1994	53.6	na	na	na
1995	53.8	53	52	1
1996	49	na	na	na
1997	52	53.0	51.1	1.9
1998	51.3	52.2	50.5	1.7
1999	50.8	48	47	1
2000	47	47	47	0
2001	47	47	46	1

Source: UNDP: Human Development Reports (various issues)

It can be seen that when Kenya attained independence in 1963, life expectancy was only 44.7 years. It rose to 50.5 years in 1970, increasing life expectancy coinciding with a growth in GDP of 6.5 percent between 1963-1974 (Republic of Kenya, 1991), and subsequently to 58.3 years in 1990. However, this fell to 47 years in 2001. Kenya started implementing structural adjustments programs in 1994. These reduced government expenditure in such sectors as health, education, transport, social services and so on. This has meant shifting the cost of consultation and drugs to households. Considering their already low per capita incomes, most sick people avoid medical facilities thereby raising morbidity rates and the mortality rate. This has contributed to the decline in the life expectancy for both male and females to less than 50 years. The female life expectancy in 1980 was 57 years compared to 53 years for males. In 2000, it was 47 years for both females and males.

A further reason for declining life expectancy is that Kenya had been relying on donor aid to fund various programs in its health sector. For the last eight years, Kenya has been cut off as a donor aid recipient due to its non-compliance with conditions given by the World Bank, IMF and various bilateral aid agencies. This has resulted in some doctors moving to Southern Africa and to other more developed countries worsening the situation in Kenya.

As mentioned earlier, life expectancy for both men and women in the world's richest countries is almost twice that in the world's poorest. Much of this differential is due to very high infant mortality rates in low-income countries, which is in turn due to the gap in living



standards, particularly nutritional status and medical care. In most of the world, women have a longer life expectancy than men, but differentials are narrower in developing than in developed countries, and in some cases reversed from the norm. In the developed countries, women's life expectancy is on average six to seven years longer than men's. But in most developing countries the gap narrows to three years or less (UNDP, 1995). For example, in Kenya the differential was only four years in 1980 and it fell to one year in 2001. On the whole, the trend in the differential has been downward since 1970 reflecting retrogression in socio-economic conditions in Kenya. The life expectancy gap reflects patterns of discrimination, which give preference to male over female infants and children early in life in nutrition, in medical care, in the mother's scarce time, and so on; discrimination that often continues into adulthood.

Table 5 shows that the child mortality rates for Kenya have been rising since the country started implementing structural adjustment programmes in 1994. In addition, it is found that the child mortality rates for female children rose by 15.2 percent between 1997 and 2000 compared to 9.1 percent for male children. Consequently, in 2000 female mortality rate of children under 5 years exceeded that of males. Furthermore, AIDS-related illnesses in Kenya have taken their toll and contributed to a reduction in life expectancy and an increase in infant and child mortality. The HIV prevalence rate in Kenya for adults aged between 15 and 49 years in 2001 was 15 percent (World Bank, 2002). According to UNAIDS (2002), the majority of those suffering the impact of the epidemic live in the rural areas and are mainly the poor. In 2000, only 20 percent of the HIV-positive population in Kenya lived in the urban areas.

**Table 5**  
**Child Mortality rates per 1000 live births for Kenya: 1970-2000**

Year	Infants 0-1 years	Children under 5 years	Mortality rate (children under 5 years)	
			Male	Female
1970	102	156	na	na
1990	63	97	na	na
1991	62	96	na	na
1995	73	111	na	na
1997	74	112	33	33
1998	76	124	na	na
1999	76	118	na	na
2000	77	120	36	38

Source: World Bank: World Development Indicators, (various issues)

Table 6 provides estimates of people living with HIV/AIDS in Kenya and sub-Saharan Africa between 1999 and 2001. By the end of 2001, 2.5 million people in Kenya were estimated to be living with HIV/AIDS.

**Table 6**

**People Living with HIV/AIDS in Kenya and sub-Saharan Africa: 1999-2001**

<b>Region</b>	<b>Year</b>	<b>Total Adults and Children</b>	<b>Adults (15-49 years)</b>	<b>Women (15-49 years)</b>	<b>Men (15-49 years)</b>	<b>Children (0-14 years)</b>
Sub-Saharan Africa (Millions)	End 1999	24.4	23.4	12.0	11.4	1.0
	End 2001	28.5	25.9	na	na	2.6
Kenya (Millions)	End 1999	2.1	2.0	1.1	0.9	0.078
	End 2001	2.5	2.3	1.4	0.9	0.22

Source: Reports of the Global HIV/AIDS Epidemic and UNAIDS Assessment of the Epidemiological Situation in Kenya, 2002

In Kenya 1.4 million women in the age bracket 15-49 years were HIV-positive compared to 0.9 million men in the same category by the end of 2001. Women and girls are more vulnerable to HIV because of their limited access to economic and educational opportunities, and the multiple household and community roles they are responsible for. Also women and girls are subject to social norms that deny them sexual health knowledge and practices that prevent them from controlling their bodies. The gender division of labour and male urban migration keeps men away from their wives for long periods leading to promiscuity and the spread of HIV. Women in the rural areas may also find themselves discriminated against when trying to access care and support when they are HIV-positive. UNAIDS (2002) reports that in Kenya, women who are HIV-infected are divorced even when their husbands have infected them. Family resources are more likely to be devoted to buying medication and arranging care for ill males than females. Because of lack of hospital facilities in rural areas and lack of income, those in rural areas affected by AIDS may find it difficult if not impossible, to obtain hospital care. Therefore, they mostly have to be cared for at home. Generally this is the burden of females.

As the country loses young productive people to AIDS, the effects have an influence on all sectors of the economy. The loss of income of the breadwinner, increased medical expenses and increased time taking care of the sick persons may lead to reduced agricultural output. Households fall into deeper poverty and women are left bearing even larger burdens as

workers, educators, mothers and, ultimately as caregivers, as the burden of caring for the ill family members rests mostly with women and girls.

Of HIV-positive pregnant women in Kenya, 30 percent give birth to HIV-positive babies who are likely to die before 5 years of age increasing the child mortality rate. UNAIDS (2002) projects that between 2000 and 2020, 55 million Africans will die earlier than they would have in the absence of AIDS.

The decrease in adult life expectancy, increase in child mortality rates, the narrowing of the difference between female and male life expectancy and the increase in the child mortality rates for female children presents a worrying trend for Kenya.

## **6. GDP Per Capita Levels**

GDP is a measure of the value of all the final goods and services newly produced in a country during some period of time. Changes in GDP, after correcting for changes in prices, show the growth of the economy. Real GDP per capita is the real GDP divided by the total population. GDP per capita based on purchasing power parity (PPP US\$) accounts for price differences between countries and therefore better reflects people's standard of living. In theory, at the PPP rate, 1 PPP dollar has the same purchasing power in the domestic economy as 1 US dollar in the US economy.

Table 7 lists the real GDP per capita for Kenya for a selected number of years, but the data are not disaggregated between men and women. However taking the share of income earned for females in 1995 (the only available data), women earned only 41.79 percent of total earnings compared to men's 58.22 percent. Yet, this was only in formal paid employment and it does not reflect availability of income to the females in the family.

**Table 7**  
**Kenya's GDP per Capita: 1985-2000**

Year	GDP per capita (USPPP\$)
1985-88	1010
1990	1058
1991	1350
1992	1400
1993	1400
1994	1404
1995	1438
1996	na
1997	1190
1998	980
1999	1022
2000	1000

Source: UNDP: Human Development Reports (various issues)

From Table 7, it is seen that Kenya's GDP per capita peaked in 1995 and thereafter started declining during the implementation of structural adjustments programmes and the withdrawal of donor aid to Kenya. This pattern of decline mirrors the increase in the incidence of poverty and a decline in life expectancy in Kenya during this period. According to the World Bank (1999), Kenya recorded negative real GDP growth rates in 1999. During this time the percentage of the population living on less than a dollar a day was 50.2, implying that they were living in absolute poverty. The World Bank stresses the importance of increased income as a major determinant of wellbeing and poverty reduction. To help raise incomes, the World Bank and other donor agencies have recommended commercialization of agriculture. However, Kiriti and Tisdell (2004) found that commercialization of agriculture has led to gender inequality in families in Kenya. Even when household income goes up, food availability goes down due to male control of household income.

However, GDP per capita only reflects average national income. It does not reveal income distribution. GDP per capita is an aggregate at the national level and so it does not uncover inequalities of access to income within households, for example, the availability of that income to wives. Per capita GDP may show an increasing trend but only benefit the male population who are the main beneficiaries of income-earning assets in Kenya.

## 7. Human Development Index

The UNDP (1998) defines human development as a process of enlarging people's choices. It tries to measure it by the Human Development Index (HDI). HDI measures the overall achievements in a country in three basic dimensions of human development; longevity, knowledge and a decent standard of living. It is measured by life expectancy, educational attainment (adult literacy and combined primary, secondary and tertiary enrolment) and adjusted per capita income in US\$ purchasing power parity (PPP).

The HDI offers an alternative to GNP and GDP for measuring the relative socio-economic progress at national and local levels. Comparing HDI and per capita income ranks of countries, regions or ethnic groups within countries highlights the relationship between their material wealth and income on the one hand and their human development on the other. A negative gap implies the potential of redirecting resources to human development.

Table 8 shows the Human Development Indices for Kenya and Kenya's HDI rank compared to other UN member countries. Compared to other nations, Kenya failed to improve its human development ranking – it was in 134<sup>th</sup> position in 1975 and remained there in 2000.

**Table 8**  
**Human Development Indices for Kenya: 1994 - 2000**

<b>Year</b>	<b>HDI Rank (among UN member countries)</b>	<b>HDI Value</b>
<b>1975</b>	134	0.443
<b>1980</b>	134	0.489
<b>1985</b>	134	0.512
<b>1990</b>	113	0.533
<b>1994</b>	134	0.463
<b>1995</b>	137	0.523
<b>1997</b>	136	0.519*
<b>1998</b>	138	0.506*
<b>1999</b>	134	0.513*
<b>2000</b>	134	0.513*

Source: UNDP: Human Development Reports (various issues)

\* Not comparable with other figures

It should be noted that the treatment of the income variable used to calculate HDI from 1997 onwards is different to its treatment in 1994 and 1995. In the two years mentioned, income above the cut-off point of world average per capita income was discounted using a drastic discounting formula. In 1997, the discounting was made more gradual by taking the logarithm of income throughout, as recommended by Kelley (1991). The improvement in methodology and data affect the HDI ranks of almost all countries. Thus although the HDI of Kenya in 2000 is higher than in 1994, this does not mean that its state of human development has improved. In fact, when individual variables are taken into account, it can be seen that there was a fall in the life expectancy and a fall in the real GDP per capita.

However, the HDI has been criticized for some of its choices of components, weights, implicit trade-offs, and aggregation rules (Ravallion, 1997; Kelley, 1991; Srinivasan, 1994; Tisdell, 1999; Tisdell, et al, 2001; Bardhan and Klasen, 1999). The authors argue that the fixed weights used in the calculation of HDI involve value judgements. The variables used may not be independent of each other and the linearity of HDI implies a constant rate of substitution between these variables. They also argue that the HDI is too restrictive in the attributes it takes into account in assessing welfare. For example, it does not take into account such factors as security of income, employment and psychological well-being. It also fails to consider the distributional aspect of its variables. The process of averaging ignores the differences between men and women, rural and urban poor, different ethnic and racial groups and so on.

A country's overall HDI can conceal the fact that different groups within the country have very different levels of human development. This can be improved through disaggregation. Using the data for the HDI components pertaining to each of the groups into which the HDI is disaggregated, treating each group as if it were a separate country arrives at disaggregated Human Development Indices. Such groups may be defined relative to geographical or administrative regions, urban-rural residence, gender and ethnicity.

Using disaggregated Human Development Indices at the national and local levels helps highlight the significant disparities and gaps: among regions, between the sexes, between urban and rural areas and among ethnic groups. This can help guide policy and action to address gaps and inequalities. It can also enable community groups to press for more resources, making the HDI a tool for participatory development.

## **8. Gender Related Development Index (GDI)**

The GDI involves a variation on HDI. It uses the same variables as the HDI but the GDI adjusts the average achievement of each country in life expectancy, educational attainment and income in accordance with the disparity in achievement between women and men. It incorporates a measure of gender equity into a measure of absolute levels of human development.

However, the GDI has been criticized by Tisdell, et al. (2001); Bardhan, and Klasen (1999) for: (1) pre-assigning of a notional value to the sensitive indicator; (2) it is not clear why the same weighting parameter, should be applied to the three gaps, particularly since the nature, size, and significance of the gaps differ greatly; (3) allowing the weighting parameter, to vary among countries allows for an elastic ruler, which makes the GDI ineffective in international comparisons; (4) GDI may conceal significant gender inequalities since its components are aggregate measures. Thus for Kenya, female inequality regionally between its tribes, between urban and rural areas, between races and so on may rise considerably without this being reflected in any change in the GDI; Furthermore, (5) GDI ignores the impact of past (and present) pre-natal discrimination in mortality; (6) by concentrating on the life expectancy measure, the overall assessment ends up neglecting the life expectancy measure completely and the education measure largely by giving too small penalties for gaps in these achievements; (7) use of gender disaggregated per capita GDP is a weak indicator of gender inequality because most countries do not report their per capita GDP in terms of men and women. Hence using GDP per capita disaggregated by gender is unsatisfactory and renders GDI internationally incomparable; (8) because gender-specific attributions of income per head cannot be readily linked to the aggregate GDP per capita in the calculation of GDI, inequalities within the household are difficult to characterise and assess (Anand and Sen, 1995, pp. 12); and (9) using female income shares to calculate GDI does not take into consideration the increased burden of work that women face as their work for paid employment is added onto their other responsibilities of looking after the family and subsistence farming. Also, Kiriti, et al. (2003a) found that access to paid employment is not a sufficient condition for the improvement of the status of women especially at the household level.

Table 9 seems to demonstrate an improvement in the status of women in Kenya in the period 1995-2000, as the GDI rose from 0.459 to 0.512 between 1995 and 2000. However, it fell

slightly to 0.512 in 2000 compared with 1997 indicating a small deterioration in the status of women. There has been virtually no change in GDI in Kenya since 1997. However, the methodology used in 1995 is different from the 1997 and therefore the two GDI coefficients may not be comparable.

**Table 9**  
**Kenya's Gender Related Development Index: 1995-2000**

Year	GDI
1995	0.459*
1997	0.517
1998	0.508
1999	0.511
2000	0.512

Source: UNDP: Human Development Reports (various issues)

\* Not comparable with other GDI values

It is possible for gross inequality between females and males to increase and for GDI to remain constant other things being equal. GDI may conceal significant gender inequalities since its components are aggregate measures (Tisdell, et al, 2001). This is because gender inequality only relates to the average situation of males compared to the average for females.

### **9. Gender Empowerment Measure (GEM)**

The Gender Empowerment Measure (GEM) measures the extent of gender equity in economic and political power. The GEM uses variables constructed explicitly to measure the relative empowerment of women and men in political and economic spheres of activity. It thus attempts to measure gender equity in participation in governmental and managerial decision-making, professional roles, and economic activities generally.

This is important for several reasons. First, gender equity in access to economic and political opportunities is of intrinsic importance as it determines the status of women in society. Second, it may be that women (and men) are more effective promoters of their own cause. If this is the case, then gender equity in economic and political power may be an effective way to reduce other gender inequalities in society. Third, a society that neglects the economic and political potential of half of its population is likely to perform worse than a society using its talent regardless of gender (Bardhan and Klasen, 1999).



The UNDP does not have a GEM value for Kenya due to non-availability of data and therefore Kenya is not ranked. However as mentioned earlier, women held only six (3.6 percent) seats out of 202 seats in parliament in 1997 and 17 seats (8.1 percent) in 2002. This was a huge improvement since before the first multi-party elections of 1992 there were no elected women in parliament. There is also an insignificant number of women professionals and technical workers, very few female administrators and managers.

However the GEM has been criticized (Tisdell, et al, 2001) for: (1) its focus on the sources of income but not the users of income since a female may earn cash income but it may be mainly controlled and utilised by her husband. In most African societies Kenya included, women may earn income but the man controls it or it may be used for the sustenance of the whole family, not solely for the well being of the woman (Kiriti, et al, 2003a); (2) it is questionable how well GEM fully captures economic and political power held by women and their roles in the development process; (3) GEM does not reliably allow for inter-country comparison due to the flexibility of the earnings gap indicator and the weighting and averaging procedures; (4) the choice of representation in parliament ignores the fact that there are some parliaments that do not have any power thereby making it difficult to interpret the share of female political representation. A country may have very high female participation in parliament and hence a high GEM ranking but this does not reflect the actual political power of women; (5) the GEM focuses too much on representation at the national level and in the formal sectors of the economy; (6) the GEM neglects many important aspects of women's economic and political roles that exist outside of national politics and the formal economy, as is the case in many developing countries; and (7) in most developing countries, for example Kenya, where poverty levels are high, most women may not be interested in being members of parliament or even local authorities, leave alone being managers. Their interest is in basic survival.

## **10. Conclusion**

This article finds that a significant and rising incidence of absolute poverty exists in Kenya and women suffer from poverty more often than men. This is more pronounced in female-headed households. The high poverty rates among women can be linked to their unequal situation in the labor market, their lack of voice and participation in decision-making in the family/household and other institutions and because gender disparities persist in access and control of human, economic and social assets. Women normally receive a much lower

average wage than men because they hold low paying jobs, or work in the informal sector and agriculture and because they are sometimes paid less than men for equal work. Women's labor force participation rates are also low in the formal sector but in the informal sector they are often found either as employees or self employed.

The female/male ratios in Kenyan decision-making institutions are highly skewed against women and they experience unfavourable enrolment ratios in primary, secondary and tertiary institutions. The share of income earned by women is much lower than men's share. The GDI and GEM, their weaknesses notwithstanding, also show that gender inequality exists in Kenya.

Socio-economic retrogression is evident in Kenya just as in most of sub Saharan Africa. General indicators have shown declining GDP per capita, increased poverty rates especially for women, reduced life expectancy, a narrowing of the difference in female/male life expectancy rates, increased child mortality rates and an increase in the female child mortality rates. This deterioration results in an increased burden on women who are carers of the family and indicates a deterioration of the status of women. For example, reduced life expectancy of women, and a reduction in the life expectancy gap, partly due to AIDS, means an increased burden on women. Structural adjustment programmes and the inevitable retrenchment of previously working males also means an increased burden on women who have to take care of their returning unemployed husbands or other male family members. This extra burden and the degree of suffering are not captured in the HPI, HDI, GDI and GEM.

Socio-economic conditions in Kenya are deteriorating, and poverty rates are on the rise. Surprisingly, the GDI for Kenya shows virtually no change in the status of women between 1997 and 2000. Nevertheless, during the same period, the comparative female incidence of poverty, life expectancy and female child mortality rates deteriorated. Even if GDI indicates that the status of the Kenyan women remains unchanged, the increased burden of poverty and of AIDS-related illness raises their burden. This is suggested by the falling gap between the life expectancy of females and males, which, is not fully accounted for by the rise in Kenyan child mortality since 1991. Women who now survive childhood, have a reduced life expectancy compared to the period 1970-1990.

Consequently, there is need to learn how women and families are coping with growing poverty and the high incidence of AIDS and whether this has led to an increase in gender inequality. For example, when poverty increases, how is the burden shared between men and women at the household level? The macro-indicators need to be supplemented by household studies and by disaggregation of data. It is important to study methods for coping with economic and other misfortunes at the family level because these problems mostly have to be addressed at this level. The type of socio-economic indicators used by UNDP and similar bodies are inadequate indicators of the socio-economic situation within families and households in countries such as Kenya. This paper advocates the use of household level gender disaggregated data because gender inequality manifests itself not just at the national level but has its roots at the household level where culture plays a very important role in allocation of resources and decision-making.

## References

- Anand, S. and Sen, A. 1995. "Gender Inequality in Human Development: Theories and Measurement", *HDR Office Occasional Paper No. 19*, New York: UNDP.
- Appleton, S. 1996. "Women-headed Households and Poverty: An Empirical Decomposition for Uganda", *Centre for the Study of African Economies Working Paper No. WPS/95-14*. Oxford University.
- Blackden, C. and Bhanu, C. 1998, *Gender, Growth and Poverty Reduction: Special Program of Assistance for Africa, 1998 Status Report on Poverty in sub-Saharan Africa*, World Bank Technical Paper No. 428, Washington, D.C.: World Bank.
- Collier, P. and Lal, D. 1980. *Poverty and Growth in Kenya*, Washington D. C.: World Bank Staff Working Paper.
- Croix, D. and Licandro, O. 1999. "Life Expectancy and Endogenous Growth", *Economics Letters*, Vol. **65** (2): 255-263.
- FAO. 1984. "Integrating Nutrition into Agricultural and Rural Development Projects: Six Case Studies", *Nutrition in Agriculture*, No. 2, Rome: FAO.
- Greer, J. and Thorbecke, E. 1986a. "Food Poverty Profile Applied to Kenyan Smallholders", *Economic Development and Cultural Change*, Vol. **35** (1): 115-141.
- Greer, J. and Thorbecke, E. 1986b. "A Methodology for Measuring Food Poverty Applied to Kenya", *Journal of Development Economics*, Vol. **24**: 59-74.
- Kabubo, J. and Kiriti, T. 2001. "Macroeconomic Adjustment, Poverty and Economic Growth: An Analysis for Kenya", *African Journal of Economic Policy*, Vol. **8** (1): 42-58.

- Kelley, A. 1991. "The Human Development Index: Handle with Care", *Population and Development Review*, Vol. **17** (2): 315-324.
- Kiriti, T. and Tisdell, C. 2003. "Family Size, Economics and Child Gender Preference: A Case Study in the Nyeri District of Kenya", *International Journal of Social Economics* [Forthcoming].
- Kiriti, T. and Tisdell, C. 2004. "Commercialization of Agriculture in Kenya: Case Study of Policy Bias and Food Purchases by Farm Households", *Quarterly Journal of International Agriculture* [Forthcoming].
- Kiriti, T. Tisdell, C. and Roy, K. 2003a. "Female Participation in Decision-making in Agricultural Households in Kenya: Empirical Findings", *International Journal of Agricultural Resources, Governance and Ecology*, Vol. **2** (2): 103-124.
- Kiriti, T. Tisdell, C. and Roy, K. 2003b, "Institutional Deterrents to the Empowerment of Women: Kenya's Experience", In K. C. Roy (ed), *Twentieth Century Development: Some Relevant Issues*, New York: Nova Science [Forthcoming].
- Lipton, M. 1995. "Market, Redistributive and Proto-reform: Can Liberalisation Help the Poor?" *Asian Development Review*, Vol. **13** (1): 1-35.
- Mincer, J. and Polachek, S. 1974. "Family Investment in Human Capital: Earnings of Women", *Journal of Political Economy*, Vol. **82** (2): S76-S108.
- Mwabu, G. Masai, W. Gesami, R. Kirimi, J. Ndenge, G. Kiriti, T. Munene, F. Chemengich, M. and Mariara, J. 2000. *Poverty in Kenya: Profiles and Determinants*, A Joint Research Project by the Department of Economics, University of Nairobi and the Ministry of Planning and National Development, Nairobi: African Economic Research Consortium (AERC).
- Pierre-Yves, C. Pierre, Q. and Caroline, P. 1999. "Health Care Spending as Determinants of Health Outcomes", *Health Economics*, Vol. **8** (7): 627-639.
- Quisumbing, A. Haddad, L. and Pena, C. 2001. "Are Women Over represented among the Poor? Analysis of Poverty in 10 Developing Countries", *Journal of Development Economics*, Vol. **66** (1): 225-269.
- Ravallion, M. and Lanjouw, P. 1995. "Poverty and Household Size", *Economic Journal*, Vol. **105** (433): 1415-1434.
- Republic of Kenya 1991. *Economic Survey*, Nairobi: Government Printer.
- Republic of Kenya 1998. *National Poverty Eradication Plan; 1999-2015*, Nairobi: Government Printer.

- Republic of Kenya 2002. *Mainstreaming Gender into the Kenya National HIV/AIDS Strategic Plan: 2000-2005*. Nairobi: The Gender and HIV/AIDS Technical sub-Committee of the National AIDS Control Council, November 2002.
- Roy, K. C. and Tisdell, C. A. 1993. "Technological Change, Environment and Poor Women, Especially Tribal Women in India", *Savings and Development, Quarterly Review*, Vol. **17** (4): 423-439.
- Sala-i-Martin, X and Barro, R. J. 1995. *Economic Growth*, New York: McGraw Hill.
- Schultz, T. W. 1960. "Human Capital Formation by Education", *Journal of Political Economy*, Vol. **68** (6): 571-583.
- Sivard, R. L. 1995. *Women: a World Survey* (2<sup>nd</sup> Ed.). Washington D.C.: World Priorities.
- Srinivasan, T. 1994. "Human Development: A New Paradigm or Reinvention of the Wheel?" *The American Economic Review*, Vol. **84** (2): 238-243.
- Tisdell, C. A. 1999. "Sen's Theory of Entitlement and Deprivation of Females: An Assessment with Indian Illustrations", *Social Economics, Policy and Development*, Working Paper No. 2, University of Queensland.
- Tisdell, C. A. 2000. "Asset-Poor Women in India and the Relevance of Amartya Sen's Analysis", *Artha Beekshan: Journal of the Bengal Economic Association*, Vol. **9** (2): 9-19.
- Tisdell, C. A. Roy, K. and Ghose, A. 2001. "A Critical Note on UNDP's Gender Inequality Indices", *Journal of Contemporary Asia*, Vol. 31 (3): 385-399.
- United Nations 1995. *Beijing Declaration and Platform for Action: Fourth World Conference on Women*, 15<sup>th</sup> September 1995.
- United Nations Development Programme 1995. *Human Development Report*, New York: Oxford University Press.
- United Nations Development Programme 1996. *Human Development Report*, New York: Oxford University Press.
- United Nations Development Programme 1997. *Human Development Report*, New York: Oxford University Press.
- United Nations Development Programme 1998a. *Human Development Report*, New York: Oxford University Press.
- United Nations Development Programme 1998b. *Overcoming Human Poverty*, New York: Oxford University Press.
- United Nations Development Programme 2000. *Human Development Report*, New York: Oxford University Press.

- United Nations Division for the Advancement of Women 1996. *Women and Decision-making: Percentage of Women in Government 1996*, Bethesda: United Nations Secretariat.
- United Nations Economic Commission for Africa 1998. *African Women and Economic Development*, Addis Ababa: African Centre for Women.
- United Nations Program on AIDS. 2002. *Report on the Global HIV/AIDS Epidemic and UNAIDS Assessment of the Epidemiological Situation in Kenya, 2002*. United Nations Secretariat.
- Women Fighting AIDS in Kenya, The Communication Initiative Website, 2001.
- World Bank 1993. *Kenya: Country Gender Profile*, World Bank, Gender Unit.
- World Bank 1995. *Participatory Poverty Assessment in Kenya*, The World Bank Participation Sourcebook, Washington, D. C.: The World Bank Group.
- World Bank 1996. *The World Bank Annual Report*. Washington, D. C.: The World Bank.
- World Bank 2002. *World Development Indicators*. Washington, D.C.: The World Bank.

PREVIOUS WORKING PAPERS IN THE SERIES  
***SOCIAL ECONOMICS, POLICY AND DEVELOPMENT***

1. Poverty and Economically Deprived Women and Children: Theories, Emerging Policy Issues and Development”, Clem Tisdell, September 1999.
2. Sen’s Theory of Entitlement and the Deprivation of Females: An assessment with Indian Illustrations by Clem Tisdell, Kartik Roy and Ananda Ghose, September 1999.
3. Gender Inequality, Development and UNDP’s Social Valuation Indices: HDI, GDI and GEM with Particular Reference to India by Clem Tisdell, Kartik Roy and Anand Ghose, September 1999.
4. Asset-Poor Women in India and the Relevance of Amartya Sen’s Analysis by Clem Tisdell, February 2000.
5. Institutional Impediments, Entitlement Exchange and Women’s Empowerment in Rural India: The Case of Access to Education by K. C. Roy, Clem Tisdell and A. Ghose, February 2000.
6. The Socio-Economics of Gender Issues in Rural India: Results of Interviews in Three Villages and a Forest Meeting in Eastern India by Clem Tisdell and Kartik C. Roy, May 2000.
7. The Development of Kiribati: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
8. The Development of Samoa: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
9. The Development of the Solomon Islands: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
10. The Development of Tuvalu: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
11. The Development of Vanuatu: An Analysis of Trends, Issues and Policies by Clem Tisdell, May 2000.
12. Sustainable Development and Human Resource Capital by Clem Tisdell, May 2000.
13. Gender Inequality in India: Evidence from a Rural Survey in West Bengal by Clem Tisdell, July 2000.
14. Property Rights in Women’s Empowerment in Rural India: A Review by K. C. Roy and C. A. Tisdell, July 2000.
15. Push-and-Pull Migration and Satisficing versus Optimising Migratory Behaviour: A Review and Nepalese Evidence by Clem Tisdell and Gopal Regmi, October 2000.
16. Socioeconomic Determinants of the Intra-family Status of Wives in Rural India: Analysis and Empirical Evidence by Clem Tisdell, Kartik Roy and Gopal Regmi, December 2000.
17. Villagers and the Use and Conservation of Indian Forests: The Role of Joint Forest Management by Clem Tisdell, Kartik Roy and Ananda Ghose, May 2001.
18. Globalisation, Development and Poverty in the Pacific Islands: The Situation of the Least Developed Pacific Island Nations by Clem Tisdell, June 2001.
19. Globalisation, Institutions and Empowerment of Women in Africa: Kenya’s Experience by Tabitha Kiriti, Clem Tisdell and Kartik Roy, June 2001.
20. Female Participation in Decision-Making in Agricultural Households in Kenya: Empirical Findings by Tabitha Kiriti, Clem Tisdell and Kartik Roy, September 2001.
21. Migration of Husbands, Remittances and Agricultural Production: Impacts when Wives Head Households in Rural Kenya by Tabitha Kiriti and Clem Tisdell, November 2001.
22. Summaries of Survey Responses of Household Heads in Three Forest Villages in the Midnapore District of West Bengal, India: Use of Forest Resources by Villagers, Forest Sustainability and Management by Clem Tisdell, Kartik Roy and Ananda Ghose, November 2001.
23. A Report on Socioeconomic Attributes and Gender Inequality in Kondh-Dominated Villages: A Comparative Analysis of Tribals and Non-Tribals in the Phulbani District, Orissa, India, by Clem Tisdell, Kartik Roy and Ananda Ghose, March 2002.
24. Economic Theories of the Family and Discrimination in a Social Context: Entitlements of Kondh Tribal Females in India by Clem Tisdell, Kartik Roy and Ananda Ghose, March 2002.
25. Children and Economic Development: Family Size, Gender Preferences and Human Capital

- Formation – Theory and Indian Cases by Clem Tisdell, May 2002.
26. Gender, Marital Status, Farm Size and other Factors Influencing the Extent of Cash Cropping in Kenya: A Case Study by Tabitha Kiriti and Clem Tisdell, May 2002.
  27. Commercialisation of Agriculture in Kenya: Case Study of Urban Bias on Food Availability in Farm Households by Tabitha Kiriti and Clem Tisdell, June 2002.
  28. Prejudice against Female Children: Economics and Cultural Explanations, and India Evidence by Clem Tisdell and Gopal Regmi, September 2002.
  29. Economic Globalisation, Liberalisation and Bangladesh: Poverty, Labour Norms and the Environment by Clem Tisdell, November 2002.
  30. Rural Poverty and China's Entry to the WTO: Present Knowledge, Unresolved Issues and China's Policy Options by Clem Tisdell, November 2002.
  31. Family Size, Economics and Child Gender Preference: A Case Study in the Nyeri District of Kenya by Tabitha Kiriti and Clem Tisdell, June 2003.
  32. Commercialisation of Agriculture in Kenya: Case Study of Policy Bias and Food Purchases by Farm Households by Tabitha Kiriti and Clem Tisdell, June 2003.
  33. The Relationship Between Commercial Agriculture and Food Availability to Kenyan Farm Families: A Case Study by Tabitha Kiriti and Clem Tisdell, June 2003.
  34. Marital Status, Farm Size and other Influences on the Extent of Cash Cropping in Kenya: A Household Case Study by Tabitha Kiriti and Clem Tisdell, June 2003.