Quality of Life in Fiji[1]

Jagjit Singh

Abstract

Amartya Sen in his writings on the capability and functioning's approach to studies on the quality-of-life noted that his theorisations are flexible enough to be applicable to many diverse societies. In the context of Sen's capability and functioning concepts, this study explores the socio-economic conditions in Fiji that contribute to quality of life. The variables are dichotomized into two: the capability variables include income levels while functioning variables include aspects of housing conditions, literacy levels, food quality and health of individuals. Household data collected by the Fiji Islands Bureau of Statistics is used in this research to explore the relevant structural dimensions. The results show that different ethnic groups have different quality-of-life in Fiji.

Introduction

Most quality-of-life studies have used nations as the unit of analysis while only a few studies have explored quality-of-life among the diverse communities within a nation state. The aim of this study is to compare quality-of-life of major communities in a plural society. More specifically, quality-of-life of three major communities in Fiji is examined using socio-economic data collected by the Fiji Islands Bureau of Statistics (FIBOS).

Quality-of-life in countries cannot be merely explained by GDP per capita. There are a number of other non-market factors that must be taken into account to explain wellbeing. Many studies have been undertaken to

[1] An earlier version of this article was presented at the XV1 World Congress of Sociology held in Durban, South Africa, 23-29 July 2006.

construct social and economic indices but these studies have attempted to combine aspects of wellbeing into a single index. Such notions of expressing quality-of-life using a single index have a number of problems and limitations. The main problem is the manner in which variables are selected and the relative weights assigned to them.

Literature Review

Diener and Suh (1997) in defining and measuring quality-of-life, note that social indicators such as health and levels of crime reflect on alternative indicators that assess three philosophical approaches to wellbeing - normative ideals, subjective experiences and command on commodities that one desires. It is argued that social indicators and subjective wellbeing measures are necessary to evaluate the collective welfare of a society. This approach adds substantially to economic indicators that are currently favoured by policy-makers.

In the selection of factors to express quality-of-life, Amartya Sen has suggested the idea of capabilities and functioning. In this context, Sen has argued that governments should be measured against the concrete capabilities of their citizens. He explained this by using the hypothetical right to vote. In this case he questions whether all requisite conditions are met to ensure the capability to vote. These conditions could range from availability of education for the individuals to transportation to the poll booths. It is only when these barriers (e.g. education and transportation) are removed that the citizens could be said to have a personal choice. He has further noted that societies should make a list of minimum capabilities that it could guarantee to its citizens.

Sen favours raising the question of value against purely economic considerations in discussion of wellbeing. In functioning democracies, Sen believes leaders should be responsive to citizens. With respect to economic growth, social reforms such as improvements in education and public health should precede economic reform.

Recently, however, there has been some criticism of Sen's *Development and Freedom*, where he argues for incorporating non-economic considerations in welfare analysis. Navarro (2000) has argued that explanation provided for the relationship between freedom and development is inadequate. In his opinion, the absence of any analysis of the power relations (that cause and reproduce underdevelopment through national and international political institutions) makes Sen's work somewhat incomplete.

Literature on quality-of-life (using objective and subjective data) is replete with comparisons of wellbeing among nations. An interesting study, different from most others, was done by the Economist Intelligence Unit (EIU) in 2005. It developed a new 'quality-of-life' index by linking the results of subjective life-satisfaction surveys to objective determinants of quality-of-life across countries. In this study, inter-country variation in weights derived from life-satisfaction surveys were explained by objective factors. It was found that 80 per cent of the variations across countries were explained by factors such as health, material wellbeing, political stability and security. These factors were followed by family relations and community life. Other factors examined were: climate, job security, political freedom and gender equality. Additionally, it was found that education levels, the rate of real GDP growth and income inequality had little impact on life satisfaction. It was further reported that GDP per capita explained more than 50% of the inter-country variation in life satisfaction. This finding reinforces results of many surveys in rich countries where people with higher incomes are more satisfied with life than those with lower incomes. Similar results reported by Euro barometer showed that in 24 out of 28 European countries, material wellbeing is identified as the most important criterion for life satisfaction.

Additionally, the Economist Intelligence Unit explained that differences in quality-of-life measured through life satisfaction between countries were a result of the interplay of modernity and tradition. Countries such as Ireland had the relatively high quality-of-life score. This is because they had successfully combined good elements of the traditional times (e.g. stable family life) with the desirable elements (e.g. low unemployment rates and political liberties) of material wellbeing. Despite the advantages of combining subjective and objective measures, researchers need to deal with questions of ecological fallacy. Ecological fallacy is concerned with the credibility of generalisations on individual behaviour based on aggregate data.

Quality-of-life Issues in the Pacific

The issues regarding quality-of-life in the Pacific are often discussed in the context of poverty by donor nations. With respect to poverty, NZAID (2003) has identified three aspects of poverty. Absolute poverty, it argues, is a failure to meet basic needs. Poverty of opportunity, on the other hand, is where poverty limits people's opportunities to attain certain

goals in life, for example, lack of opportunities to attain education or professional skills for personal development or meaningful employment. Such poverty of opportunity can be caused by circumstances including economic shocks and environmental disasters.

The Australian Agency of International Development (AusAID) perceives poverty and wellbeing as multidimensional. The definition of poverty for example, is not based on $1 per day consumption but on issues ranging from environment to questions of accountability and vulnerability. Critical aspects of wellbeing include:

- adequate resources for attaining the basic necessities of food, water, shelter and clothing;
- access to adequate levels of health and education;
- accountability from state institutions and civil society;
- freedom from excessive vulnerability to adverse shocks.

There are three principal causes of vulnerability to poverty and wellbeing in the Pacific region; these are: natural disasters, economic shocks and political conflicts (Good, 2003). ACP-EU Partnership Agreement (2000) has defined poverty and wellbeing as not simply a lack of income and financial resources, but also as encompassing the notion of vulnerability and such factors as no access to adequate food supplies, education and health, natural resources and drinking water, land, employment and credit facilities, information and political involvement, services and infrastructure'. Hence the main purpose of aid to the Pacific Island Countries is to promote economic growth and social development. But the capability of aid to affect growth depends on its form and utilisation. It is highlighted that the Pacific states receive high levels of aid per capita but counterproductive policies have led to stagnation and recession, where Fiji currently is a typical case. It is revealed that developing countries and societies that espouse 'Asian values' are the most successful. It is argued that holding public office has developed into an attractive way for personal and narrow communal gains in many Pacific societies (Thodock, 2005). Kinship often plays a considerable role at all levels of society, and there is a tendency for public servants to exercise their official powers for personal or familial gains.

Current Situation in Fiji

The UNDP Human Development Report noted that of the 173 nations surveyed, Fiji was ranked 72nd on Human Development Index

(HDI). This ranking showed a significant decline from its 61st rank held in 1999. The Fiji Poverty Report (FPR) 1997 based on 1990-91 Household Income and Expenditure Survey (HIES), revealed that 25% of households were below the poverty line, with average incomes of $FJ5,500 for a family of five. The report highlighted that the bottom half of the population received only 20% of the total income while the top 10% received 35%.

Good (2003) explains that indications are that poverty has increased significantly since the coup of May 2000. With reduced incomes, households are experiencing difficulties paying for basic commodities and services such as food and education. The number of families receiving assistance from government and non-government organisations has also increased. In 1999, there were 8,122 persons receiving assistance compared to 22,391 after the coup in 2000. Good (2003) further argues that two-thirds of Fiji's poor are in rural areas where there are few sources of regular employment. The poorest are amongst the landless Indo-Fijian labourers with no reliable source of income. The indigenous Fijians in the villages, while also needing cash for expenditures on services such as education and health have better chance of survival on subsistence as most of them have access to natural resources such as coastal fishing and land for food.

While many communities faced poverty, the Fiji Government's Affirmative Action programs were overwhelmingly aimed at assisting the indigenous Fijians. Disadvantaged groups, however, included substantial proportions of Indo-Fijians and other minorities who often were ignored. These groups were excluded from government affirmative action programs such as public housing, low interest loan facilities and other types of assistances given to indigenous Fijians, which according to the Fiji Human Rights Commission are unconstitutional since they discriminate against non-indigenous communities even when they are equally disadvantaged (Ali, 2006: 2). A recent report of the Fiji Human Rights Commission has also criticised the Government's affirmative action program for repurchase of lands in favour of indigenous Fijians. The report observed that there was a potential danger for the Government to come under pressure to pay higher prices for such land in 'buying back' particularly freehold lands alienated a long time ago. It concluded that with 90% of the land now owned by indigenous Fijians, land ownership cannot be cited as a cause for communal distress (Yavusa, mataqali…, 2006: 2).

In view of the foregoing, the objective of this study is to explore differences in the wellbeing by ethnicity. The research would be guided by

the following hypotheses, where the criteria of rejection are set at 0.01:

1) There is no significant difference in material wellbeing across ethnic groups;
2) There is no significant difference in health and ethnicity by household;
3) There is no significant difference in job security and ethnicity per household;
4) There is no significant difference in family life and ethnicity by household;
5) There is no significant difference in food quality and ethnicity by household;
6) There is no significant difference in housing quality and ethnicity by household;
7) There is no significant difference in residential location and ethnicity by household;
8) There is no significant difference in mobility and ethnicity by household;
9) There is no significant difference in communications and ethnicity by household;
10) There is no significant difference in leisure and ethnicity by household;
11) There is no significant difference in entertainment and ethnicity by household.

Methodology

Determinants of quality-of-life used in this research are listed below. Some of the determinants are similar to those used by the Economist Intelligence Unit while others are based on quality-of-life literature or those that the researcher intuitively felt as contributing to good life. The emphasis in this study is not on inter-country variations of quality-of-life but rather on quality-of-life based on objective indicators across ethnic groups within a nation state. The wellbeing concepts and some possible indicators are noted below:

Concept	**Indicator**
1) Material well-being	Household Income
2) Health	Expenditure on medicines
3) Job security	Number of salary earners per household

4) Family life	Number of divorcees per household
5) Food quality	Number of households with a refrigerator
6) Housing	Construction of outer walls by household
7) Residential Location	Household location (rural/urban) by household
7) Mobility	Number of households with a car
8) Communications	Number of households with telephone
9) Leisure	Number of households with washing machine
10) Entertainment	Number of households with a Video/TV

The health factor was operationalized by medical expenditures on medical consultation. In this case, medical expenditures were considered more appropriate because it is more comprehensive measure of health need.

Material wellbeing is measured by household income although household expenditures or savings could have been equally valid indicators. Job security could be measured by unemployment rate but as this data was not available at the household level, the number of male salary earners per household was used. Family life is operationalizsed by the number of divorcees per household while food quality was measured by the presence or absence of a refrigerator. The value of housing (quality) is considered an important contributor to wellbeing. Thus, the housing quality is operationalised by the type of outer walls of dwellings. Subsequently, the location of the household is considered important on quality-of-life issues. A household in urban area is closer to many basic needs and considered to contribute more to wellbeing than a household located in a rural setting. Mobility is operationalised on the basis of ownership of transport vehicle while communications was measured by the absence or possession of a telephone in a household. Leisure is operationalised by the absence or presence of a washing machine in a household. In a like manner, entertainment is measured by the existence of a video/TV in a household.

There was no data on political stability and security at the household level. A statement on the current political situation on issues relating to multi-party cabinet and affirmative action programs in Fiji is taken to indicate political stability. In the absence of data on church attendance or trade union membership, community life is operationalised by the number of individuals in a household. Climate and geography is not applicable at the household unit of analysis. Gender inequality in the EIU quality-of-life index is a ratio of average male and female earnings.

This research design would fall in the category of a comparison study. The main question is to determine whether there is difference in the quality-of-life indicators for different ethnic groups in Fiji.

Data Sources

This study is based on a national socio-economic survey conducted by the Fiji Islands Bureau of Statistic in 2003 (FIBOS 2003). The sample consisted of 5,245 head of households, representing the three major communities living in Fiji. It comprised 2,505 Indo-Fijians, 2,472 Indigenous Fijians and 268 others (a composite ethnic group of small minorities). These minorities are mostly Europeans and Chinese. This was a comprehensive survey in which a number of socio-economic variables were collected for households, including those that are commonly used in quality-of-life studies. Unfortunately, there is no subjective life-satisfaction information of the type used in EU Euro barometer survey.

Data Analysis

Cross tabulations and chi-square tests are used to verify the difference in the nominal variables for the ethnic groups. Interval scaled independent variables such as household incomes, expenditure on medicines, number of self-employed males and number of divorcees per household was subjected to Analysis of Variance tests and subsequently stepwise discriminant analysis. Finer differences in the analysis of variance were examined by post hoc tests (Tukey's test). The discriminant analysis was a useful method for grouping quality-of-life factors on the basis of ethnicity. Interpretation was made possible through either examining the standardized coefficient or variable correlations with the discriminant functions. The discriminant functions by definition refer to linear combination of independent variables that show large differences in group means. Good features of discriminant analysis include parsimony of description and clarity of interpretation. As the ratio of the sample size to the number of variables is better than 20 to 1, the results were considered quite reliable (Stevens 1996).

There is a significant difference between income and ethnicity where the chi-square test rejects the null hypothesis at α=0.01 level of significance. It was found that 76.4 percent of the Indo-Fijians were in the low income category while 18.2 per cent were in middle income groups

and only 5.5 per cent were in high income category. On the other hand, 68.9% of indigenous Fijians were in low income category while 24.1% were in middle income group and 7% were in high income group.

Table 1: Material well-being by Ethnicity

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Low	68.9	76.4	52.2
Middle	24.1	18.2	31.0
High	7.0	5.5	16.8
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

The mean household income of Fiji as a whole is $13,553. The household survey revealed that the average household income of the 'other' ethnic group is the highest, at $20,049.70, while the average household income of indigenous Fijians and Indo-Fijians are $13,543.48 and $12,308.15 respectively. However, it is found that mean household expenditure of the other communities is $16,731.21 compared to $11,429.23 for Fijian and $10,543.30 Indo-Fijians. It is found that there is a significant difference in the average household savings by ethnicity, where the Chi-square test is rejected at 1% level of significance. Post hoc test reveals that there is a significant difference (Chi-square test at α=0.01 level of significance) between the average savings of Indo-Fijian households and those of 'other' ethnic group (see Stevens 1996 for Chi-square test). But there is no significant difference in the mean savings of Indo-Fijians and Indigenous Fijian.

Health could be operationalised either by expenditure on health services or purchases of medicines. Since there is higher correlation (of -0.127) between medical expenditures and ethnicity than expenditure on doctor's fee and ethnicity (of -0.081), the latter variable is used to operationalise the household health. Thus, expenditure on doctor's fee is placed in three categories: low ($1-$60), medium ($61-$120) and high ($121 and over). It is found that there is a significant difference between doctor's fee and ethnicity (Table 2).

Additionally, it is found that Indo-Fijian households have the highest annual medical expenditures - of $123.5 on average - while the same expenditure for 'other' communities was $103.49 on average, and $44.14 on average for the Indigenous Fijian community (Table 3). Job security indicators are shown in Table 4. The relationship between male salary

earners and ethnicity is significant at 0.01 levels.

Family life using divorce rates shows no significant difference. There is only 1 percent divorce per household on a national level. It is found that 1.6% of indigenous Fijians, and 2.2% of Indo-Fijians have one divorce per household (Table 5).

Table 2: Health Expenditure (Doctor's fee) and Ethnicity

	Indigenous Fijians	Indo-Fijians	Others
Low	82.4	57.4	76.9
Medium	6.3	10.7	4.5
High	11.2	31.9	18.7

Source: FIBOS (2003)

Table 3: Mean Health Expenditure by Ethnicity

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Mean	$44.1(16%)	$123.5(46%)	$103.4(38%)

Source: FIBOS (2003)

Table 4: Job Security by Ethnicity

No. of Male Salary Earners per HH	Indigenous Fijians	Indo-Fijians	Others
0	34.9	47.5	37.3
1	52.4	44.1	53.4
2	9.9	7.0	7.1
3	2.3	1.1	1.5
4	0.5	0.3	0.7
Total	100	100	100
Base	2,472	2,505	268

Source: FIBOS (2003)

Table 5: Family Life (No. of divorces per household) and Ethnicity

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
None	98.3	97.8	97.8
One per HH	1.6	2.2	2.2
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

Communal living is operationalised on the basis of the number of persons in the household. The difference is found to be significant amongst the three communities. The mean number of persons in indigenous Fijian households is found to be 5.37 compared to 4.36 for Indo-Fijian and 4.81 for 'other' communities. The overall mean household size is 4.86. The post hoc tests reveal significant difference in the levels of communal living amongst ethnic groups.

The study of food quality is assumed to be reflected by food preservation. An important indicator of food freshness is, therefore, the use of refrigerator in the households. The Chi-square test shows significant difference (with $p<0.01$) amongst ethnic groups' ownership of refrigerator for preservation of food. It is noted that 70 per cent of Indo-Fijians and 45 per cent of Indigenous Fijian households have refrigerators. In contrast 77 per cent of the households in 'other' category have refrigerators, which is slightly higher than for Indo-Fijians (see Table 6).

Table 6: Food Quality by Ethnic Group (Ownership of Refrigerators)

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Yes	57.2	44.9	76.9
No	29.9	55.1	23.1
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

The result on housing types is reflected by the type of house and materials used to construct them for different ethnic groups. It is found that there is a significant difference in housing by ethnic group. Most Indo-Fijians (40%) and Indigenous Fijian (37%) and other (52%) live in tin/corrugated iron structures. Only a small percentage of people, mostly Indigenous Fijians live in makeshift homes and bures. Table 7 shows housing types by ethnicity.

It is found that there is a significant difference in land tenure for the ethnic groups. Over 70 per cent of Indo-Fijians and indigenous Fijians live in their own quarters, while 16 per cent of Indo-Fijian and 8 per cent of the indigenous Fijians live in rented premises. Nine percent of indigenous Fijians and 1 per cent Indo-Fijian households live in Government housing.

Table 7: Housing Type by Ethnicity

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Concrete/brick	36.6	39.6	52.2
Wooden	27.2	19.6	28.7
Tin/corrugated	29.9	40.5	15.7
Bure material	3.2	0 .1	1.9
Makeshift	1.4	0 .1	0.4
Other material	1.7	0 .1	1.1
Total	100%	100%	100%
Base	2472	250	268

Source: FIBOS (2003)

About 3% of the households surveyed were squatters, of which 65% were Indo-Fijians, 33% indigenous Fijians and the remaining 2% were from 'other' ethnic groups. Tenure is operationalised on the basis of number of households that are rented by each of the three ethnic groups. The results show that 16% of the Indo-Fijian households, and 8% of indigenous Fijian households are rented. Chi-square tests reveal a significant relationship between type of tenure and ethnicity. Approximately 3% of Indo-Fijian households were squatters compared to one per cent each for indigenous Fijians and 'other' communities.

Residential location is an important contributing factor to quality-of-life. Obviously, residences in urban areas benefit from proximity to a wide range of amenities such as schools, hospitals, shopping outlets including infrastructure e.g. tar-sealed roads and electricity.

The difference between residential location and ethnicity is statistically significant (where Chi-square statistic p-value is <0.01). 54% of indigenous Fijian households are located in village settlements in rural areas, whereas 34% of Indo-Fijians and 19% of 'other' communities live in rural settings (Table 8).

Table 8: Degree of Urbanisation by Ethnicity

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Urban	46.0	66.2	81.3
Rural	54.0	33.8	18.7
Total	100.0	100.0	100.0
Base	2472	2505	268

Source: FIBOS (2003)

Households having cars have greater degree of mobility compared to those without. It is found that there is a significant relationship (Chi-

square test at p=0.01) between vehicle ownership and ethnicity, where 68% of Indo-Fijians and 92% of indigenous Fijian households did not own transport vehicles. Similarly, high percentages (71%) of other ethnic groups also do not own cars (see Table 9)

Table 9: Mobility by Ethnicity (Ownership of cars)

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Yes	8.5	31.9	29.5
No	91.5	68.1	70.5
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

Communications is operationalised by telephone ownership by ethnic groups. The cross tabulation between communications and ethnicity is significant. It is found that 61% of Indo-Fijian households had telephone landlines while only 30% of the Indigenous Fijians had the service at home. 69% of other communities had the service (see Table 10)

Leisure is operationalised by the ownership of washing machines. This method is based on the fact that women in households spend considerable amount of time washing clothes. It is argued that use of washing machine adds more hours of free time for leisure. According to the data, it is found that there is a significant relationship (with Chi-square test at p=0.01 level of significance) between ethnicity and ownership of washing machines. It is found that 61% of Indo-Fijians and 72% of indigenous Fijians households do not own washing machines. In contrast, only 36% of households of 'other' ethnic communities do not own washing machines (see Table 11).

Table 10: Communication Services by Ethnicity (Ownership of telephone)

Ethnicity	Indigenous Fijians	Indo-Fijians	Others
Yes	29.5	60.9	69.0
No	70.5	39.1	31.0
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

A significant relationship exists between electric/gas stove ownership and ethnicity of households. As in the case of Indo-Fijians, 79% of households own electric/gas stove, while only 45% of indigenous Fijian households own electric/gas stove. However, the survey shows that 83% of other communities own electric/gas stove.

Table 11: Leisure Time (Ownership of washing machine) by Ethnicity

Ethnicity	Indigenous-Fijians	Indo Fijians	Others
Yes	28.1	38.6	62.3
No	71.9	61.4	37.7
Total	100%	100%	100%
Base	2,505	2,472	268

Source: FIBOS (2003)

The Chi-square test confirms that there is significant difference in the ownership of video/TV and ethnicity. Household entertainment is operationalised on the basis of Video/TV ownership. It is found (Table 12) that about 78% of Indo-Fijian and only 50% of indigenous Fijians own video/TV. Similarly, 78% of households amongst other communities own video/TV.

Table 12: Entertainment (Ownership of Video/TV) by Ethnicity

Ethnicity	Indigenous Fijians	Indo Fijians	Others
Yes	49.6	77.5	78.0
No	50.4	22.5	22.0
Total	100%	100%	100%
Base	2472	2505	268

Source: FIBOS (2003)

Stepwise Discriminant Analysis

The stepwise discriminant analysis produces two mutually exclusive discriminant functions. The coefficients show that a number of quality-of-life factors are in fact redundant. Some of these are the number of female salary earners, household savings and the number of divorces per household. However, as variable expenditure on medicine is highly correlated with the first discriminant function, which explains 82.2 per cent of the overall variance, the first discriminant function is therefore named as the

health discriminant factor. This factor is significant at α=0.003 and furthermore, as the variable 'number of males self-employed' is moderately correlated (at correlation coefficient r=0.657) with discriminant function 2, it is appropriate to label this function as 'male self-employment' discriminant factor.

Discussion

It is found that ten of the factors relating to the quality-of-life differed significantly amongst ethnic groups. These factors are health, material wellbeing, job security, house type, family life, food quality, housing, residential location, mobility, communications, leisure and entertainment. The only factor that is not found to be significant is the divorce rate amongst the two major ethnic groups. For this factor, the null hypothesis that there is no difference between the ethnic groups is not rejected at 1% level of significance. In the discriminant analysis, it is found that the best discriminator of wellbeing by ethnicity is the variable 'expenditure on medicines'. In the second discriminant function, the number of self-employed males per household has a relatively high correlation coefficient (r=0.657), thus is appropriately named 'self employed males' factor.

Household variations in medical expenditures by ethnicity may be explained by cultural variations. The low household expenditures for indigenous Fijians may be due to widespread usage of traditional medicines. In contrast, Indo-Fijians and people of other ethnic groups rely on modern medicines and hence incur greater expenditures on health. Evidence for this generalisation is supported by relatively higher expenses on medical consultations. Household differences in material wellbeing by ethnicity may be due to various reasons. The indigenous Fijian households are better-off than Indo-Fijian households because the former has greater access to land and sea resources and the Indo-Fijians are the poorest due to their dependence on low-paid employment. As there are declining job opportunities in Fiji, the Indo-Fijians are much worse-off in this regard. Household variations in job security by ethnicity may also be explained through socio-economic reasons. Differences in job security may be due to Government policies such as the affirmative action programs in favour of indigenous Fijians. However, variations in housing conditions by ethnicity may be due to historical factors. Indigenous Fijian households in rural areas still continue to live in traditional houses in their villages. The Indo-Fijians and people of other ethnic groups, on the other hand, find it relatively cheaper to construct corrugated iron structures. In-

terestingly, there is no significant difference in family life by ethnicity. While divorce rates are not able to capture differences in family life, there are obvious differences in family life by ethnicity. Indigenous Fijians still continue to maintain a communal lifestyle while the Indo-Fijians and other communities can be described as leading a 'nuclear family' life style. Most Indigenous Fijian households still do not have telephones. In the rural outlying areas of Fiji the availability of this service is generally quite low. Differences in ethnicity and entertainment by household may be due to cultural reasons. Indo-Fijians who are very dependent on Indian movies prefer to watch video/TV at homes while indigenous Fijians prefer sports and western modes of entertainment such as visits to night clubs and pubs. Variations in food quality may also be explained by cultural differences. Indo-Fijians tend to preserve their food in traditional ways and also through storage in refrigerators. The indigenous Fijian households with fewer refrigerators rely more on fresh or canned foods. Household variations on time not used for gainful employment and entertainment are significantly different for the ethnic groups. It seems that indigenous Fijian households spend more hours washing clothes while Indo-Fijian households with higher ownership of washing machines have more spare time for leisure. Household variations in mobility could be explained on the basis of accessibility to modes of transport. Higher percentage of indigenous Fijian households does not own transport vehicles compared to Indo-Fijian and other ethnic groups. Cultural and historical reasons could explain part of the variation in household residential location. Most indigenous Fijian households are located on communal lands in rural areas while Indo-Fijians and other ethnic groups are located in urban or semi-urban areas.

The Colonial Government in Fiji had used the policy of 'divide and rule' which caused wide differences in the socio-economic conditions of ethnic communities. The indigenous Fijian culture was sustained by the policy of 'indirect rule' where the existing chiefly hierarchy was held sacrosanct and vigorously upheld with dual administration systems. These divisions still continue to play a part in living styles and perceptions of each other. In order to understand the under development and quality-of-life issues, one has to explore the role of political institutions along the lines observed by Navarro (2000). In light of all these findings, Sen's notion of freedom and development may be inadequate to explain the root causes of poverty in Fiji. The list of minimum capabilities to be drawn up by the state would lead to further discrimination towards some communities with such manipulations as 'affirmative action policies and commu-

nal voting systems. While the rights and access to vote exist in Fiji, the parliamentary representation system is weak due to coups that followed the 1987 parliamentary elections. In short, the political problems in Fiji are not related to the voting process but rather with the adversarial political culture and ethnic politics that has evolved with colonialism.

To sustain the quality-of-life in Fiji, it requires an improved understanding of the symbiotic relationship among all Fiji citizens, regardless of ethnicity. Currently, Fiji has numerous governance problems, including ethno-nationalistic political sentiments that have remained a dominant force on the political scene. There is economic as well as social discord that affects the quality-of-life of all citizens in Fiji.

Conclusion

In this study, quality-of-life in Fiji was examined on the basis of objective indicators. It is concluded that factors affecting the quality-of-life in Fiji have tended to vary with ethnicity. It is found that in terms of key factors such as health and material wellbeing, members of other communities collectively (Europeans and Chinese) enjoy a relatively better quality-of-life than indigenous Fijians and Indo-Fijians. It is found that the rural Indo-Fijians are the most vulnerable to poverty and low levels of material wellbeing. Many from this group are landless and have no fixed jobs. In contrast, while many rural indigenous Fijians are also poor, they have inalienable access to land and sea resources for subsistence farming and fishing to maintain a modest quality-of-life.

One of the limitations of this research is the absence of subjective data on quality-of-life. Future research in this area would require the collection of primary socio–economic data with subjective self-assessments on the quality-of-life for households and individuals. Such data would substantially improve the quality of research in this area of social welfare and poverty.

References

'Yavusa, Mataqali Owe $1m'. *Fiji Times* (2006), June 26, pp. 2.

Ali, I. (2006) 'Rural Indo-Fijians among the Poorest', *Fiji Times*, June 26: 2, Suva.

Diener, E. and Suh**,** E. (1997) Measuring Quality-of-life: Economic, Social and Subjective Indicators, http://www.springerlink.com.

Economic Intelligence Unit (2005) 'Quality-of-life Index 2005 http://www. economist.com/media/pdf/quality_of_life.pdf.

FIBOS (2003) *Household Income and Expenditure Survey*, Fiji Islands Bureau of Statistics, Government Printer, Suva.

FIBOS (2006) *Current Economic Statistics*, Fiji Islands Bureau of Statistics, Government Building, Suva.

Good, L. (2003) 'Poverty in the Pacific: An Analysis', Pacific Issues, Paper No. 6, European Commission, Brussels.

ILO (2003) 'Fiji Country Profile-2003, www.ilo.org/public/ english/region/asro/ bangkok/ability/promoemploy.htm.

Navarro, V. (2000) 'Development and Quality-of-life: A critique of Amartya Sen's Development as Freedom, *www. pubmed.gov*.

Sen, A.K. (1999) Development of Freedom, The Standard of Life, New York: Knopf, and Oxford University Press, 1999. www.brc21.org/docs/amartya_sen.doc.

Singh, J. (2007) 'Fuel sources and well-being in the Marshall Islands', in R. J. Estes (ed.), *Advancing Quality of Life in a Turbulent World*, pp. 103-115, Springer, Netherlands.

Stevens, J. (1996) *Applied Multivariate Statistics for the Social Sciences* (Fourth Edition). Lawrence Erlbaum Associates, Inc, Mahwah, NJ.

Thodock, C. (2005) 'Aid, Remittances and the Informal Economy of Pacific Islands: A Development Governance Perspective', Faculty of Humanities and Social Sciences, Bond University, Brisbane.

Verkerk, M.A. et al 2001 Health-related quality-of-life research and the capability approach of Amartya Sen www.hqlo.com/refister.

Jagjit Singh, Senior Lecturer in Social Science, University of the South Pacific, Suva. Email: singh_j@usp.ac.fj