



Preliminary Report

Poverty and Household Incomes in Fiji in 2008-09

(based on the 2008-09 Household Income and Expenditure Survey)

Professor Wadan Narsey

Toga Raikoti

Epeli Waqavonovono

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Abbreviations

BNPL	Basic Needs Poverty Line: the cost of foods which are part of the Food Poverty Line Basket, plus a value that represents essential non-food costs.
AE	Size of a household expressed in Adult Equivalents where a child 0 to 14 is counted as half an adult, and all others as 1.
CPI	Consumer Prices Index
EA	Enumeration Area
FIBoS	Fiji Islands Bureau of Statistics
FPL	Food Poverty Line
Gini Coefficient:	a statistic that represents the degree of income inequality, ranging from zero (perfect equality) to 1 (perfect inequality) in income distribution.
hh	Household
HIES	Household Income and Expenditure Survey
Incidence of Poverty	: The percentage of the population estimated to live in households earning less than the Basic Needs Poverty Line.
Incidence of Food Poverty	: The percentage of the population estimated to live in households earning less than the cost of the Food Poverty Line basket.
NFPL	Non-Food Poverty Line
Others	Ethnic groups in Fiji, other than indigenous Fijians or Indo-Fijians. In urban areas, Others largely represent mixed race and Chinese, while in rural areas they largely represent Fiji citizens from other Pacific Islands.
pa	per annum
pc	per capita
pAE	per Adult Equivalent
Poverty Gap	The financial resources required to move each “Poor” household to the Basic Needs Poverty Line. This can be estimated at the household level, and aggregated to the national level.
pw	per week
Real % Change	Percentage Change in monetary values, adjusted for the recorded CPI inflation of 24.2% between 2002-03 and 2008-09.

Preface (by Government Statistician, FIBoS)

This Report presents the preliminary findings on poverty and income distribution in Fiji in 2008-09, based on the national 2008-09 Household Income and Expenditure Survey conducted by the Fiji Islands Bureau of Statistics (FIBoS).

While more substantial publications will follow in due course, FIBoS is bringing out this early publication on key poverty and income distribution findings, to ensure that the stakeholders interested in poverty in Fiji- including Government ministries, the NGOs/NSAs, donor communities and international organisations- are quickly able to use these most recent results to inform their policy formulation, poverty alleviation and social protection work. This Report has also been kept brief to ensure that stakeholders do not have to wade through pages of detailed statistics, in order to understand the key findings. Other more detailed publications will follow, targeted towards the middle of 2011.

The last HIES was conducted by FIBoS in 2002-03 with similar sampling methodology to that used for the 2008-09 survey. One important advantage of this Report therefore is that the results from the 2008-09 HIES can be consistently compared with the results of the 2002-03 HIES. Those who wish to understand the methodology behind the analysis in this publication may refer to the earlier publication (*The Quantitative Analysis of Poverty in Fiji*) by the Bureau and the School of Economics (USP), also prepared by Professor Wadan Narsey.

To make sensible comparisons between 2002-03 and 2008-09, it is important to understand fully the complex macro-economic changes which were taking place during this period, as is outlined briefly in this report.

The timeliness of this publication reflects a marked improvement on the data processing and analysis which had been conducted by the FIBoS since the previous 2002-03 HIES. All credit is due to the FIBoS Household Survey Unit under the management of Mr Epeli Waqavonovono (Chief Statistician), which conducted the survey. Senior FIBoS staff Mr Toga Raikoti (Principal Statistician) and Mr Serevi Baledrokadroka (Senior Statistician) were responsible for the processing and initial editing of the data. The timeliness of this analysis would not have been possible had it not been for the dedication and prompt work by a large number of staff responsible for data entry and processing at FIBoS head-quarters and the regional offices. I thank them most sincerely.

Professor Wadan Narsey, Toga Raikoti, and Epeli Waqavonovono were jointly responsible for cleaning and analyzing the data, and preparing this Report for publication.

I am grateful to AusAID for their technical assistance through the services of Professor Wadan Narsey.

FIBoS is pleased to continue our collaboration with the University of the South Pacific which is adding value to the extremely costly but important survey and census work of the FIBoS, thus ensuring that end users get maximum benefit out of the use of our scarce tax-payers' funds.



Timoci Bainimarama
Government Statistician
September 2010.

Executive Summary

- 1) The macroeconomic data indicates that there was a general aggregate improvement of economic conditions between 2002 and 2005/2006, following which a deterioration set in. By 2008-09 conditions appear to be worse than in 2005-06, but probably still better than 2002-03.
- 2) The rural population continued to decline between the two HIESs, while the urban population continued to rise. There continued to be a major decline in Indo-Fijian populations in both rural and urban Fiji, while the indigenous Fijian population saw an apparently large increase in urban areas.
- 3) Adjusted for the change in the CPI between 2002-03 and 2008-09, recorded Total Household Incomes increased for Fiji in aggregate by 28%. There was a large decline of 11% in rural areas, which was counterbalanced by an increase in urban areas of 59%.
- 4) Adjusted for the change in the CPI between 2002-03 and 2008-09, Average Household Income for Fiji in aggregate increased in real terms by 12%. The increase was driven by the 26% increase in Average Household Income in urban areas, while Rural households faced a decline of 14%.
- 5) The indigenous Fijian share of recorded Total Household income increased from 51% to 53% while that for Indo-Fijians declined from 43% to 36%, continuing the recent trends of increasing indigenous Fijian share. Other ethnic groups increased their share from 6% to 11%.
- 6) Fijian households maintained their 9% advantage in Average Household Income, compared to Indo-Fijians households, with both averages rising by an increase of 7% in real terms. But the largest increase of 79% was recorded by “Other” (European, Chinese and others) households.
- 7) When account is taken of household size (Household Income per Adult Equivalent), the relativities between Fijians and Indo-Fijians is reversed and widened from -5% in 2002-03 to -8% in 2008-09. This increasing gap may be partly attributed to the much larger decline in average household size for Indo-Fijians, with the gap with Fijian households being one full person by 2008-09.
- 8) For all ethnic groups, Incomes per Adult Equivalent declined in rural areas between the two periods, while for all, they increased in urban areas.
- 9) For Fiji in aggregate, the Incidence of Poverty (percentage of population below the Basic Needs Poverty Lines) was 35% in 2002-03 and 31% in 2008-09 – an overall decline in the incidence of poverty by 10% between the two HIESs.

- 10) It is unclear what would have been the incidence of poverty in between these two HIESs, although the macroeconomic picture suggests that both the rural and urban incidence of poverty may have been less around 2005-06, than in 2008-09.
- 11) The incidence of poverty in Urban areas declined from 28% to 19% - a decline of 34%. In rural areas, the incidence of poverty increased from 40% to 43% during the two periods.
- 12) In aggregate for both major ethnic groups, the incidence of poverty has declined from around 35% to 31%. However, rural poverty has increased for all ethnic groups, the highest incidence of poverty being 50% for Others, 45% for Indo-Fijians and 42% for indigenous Fijians.
- 13) Urban poverty has decreased for all ethnic groups, with the largest decline of -40% taking place for urban Fijians. Urban Indo-Fijians had the highest incidence of poverty at 21%, compared to 17% for Fijians and 16% for Others.
- 14) The Poverty Gap rose from around \$120 million in 2002-03 to about \$152 million in 2008-09, an increase of 26%, just above the increase in CPI.
- 15) With both GDP (current prices) and Government Expenditure increasing by around 40%, the Poverty Gap (a) as a percentage of GDP declined from 3.5% to 3.1% and (b) as a percentage of Government Expenditure, declined from 11.3% to 10.2%.
- 16) With poverty increasing more in rural areas, the rural share of the Poverty Gap (or the appropriate share of the national allocation of poverty alleviation resources) increased from 61% in 2002-03 to 71% in 2008-09.
- 17) Western Division was indicated to have the largest share of poverty alleviation resources (42%) followed by Northern Division (28%) and Central Division (24%).
- 18) Ethnically, the indigenous Fijian poor are indicated to deserve some 57% of all poverty alleviation resources, with Indo-Fijians some 37%. These are close to the ethnic proportions of population at the 2007 Census, indicating that there is no need for ethnic biases in Poverty Alleviation policies.
- 19) While the overall incidence of poverty has declined between 2002-03 and 2008-09, income distribution has worsened. The ratio of the share of the Top 20% to the Bottom 20% increased from 8.2 to 9.3, while the population Gini coefficient increased from 0.416 to 0.439 (a deterioration of 6%).
- 20) While income distribution in 2002-03 was considerably worse amongst Indo-Fijians (Gini: 0.427) compared to Fijians (Gini of 0.394), the Gini coefficients for Fijians worsened by 2.3% compared to a very slight deterioration of 0.4% for Indo-Fijians. Thus the ethnic gap in inequality declined from 9% in 2002-03 to 7% in 2008-09: the two ethnic groups are converging in their patterns of distribution of income.

A The macroeconomic background: 2002-03 to 2008-09

1. This preliminary report examines the changes in household incomes and poverty that have taken place between 2002-03 and 2008-09 as indicated by the data from the respective HIES. Before the poverty results are presented, it is important to understand the major macro-economic changes occurring over this period.

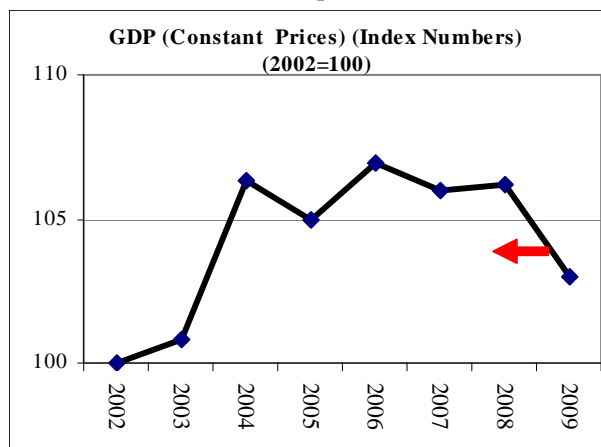
2. Gross Domestic Product gives a fairly good indication of the health of the economy over this period. While FIBoS has changed its GDP series from 1995 prices to 2005 prices, with the change occurring in the middle of the period under study, the data series on growth rates using 1995 prices can be spliced with that using 2005 prices to give the graph above.

3. GDP was generally increasing from 2002 to 2006, following which it declined somewhat, to 2009 (Graph 1).

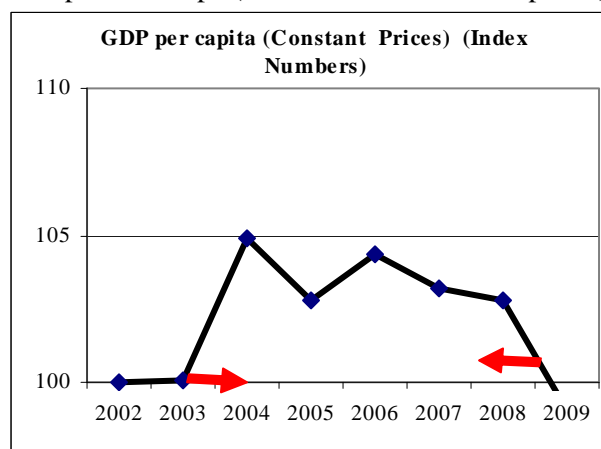
4. With a growing population, the GDP per capita indicates a much large decline after 2006, reverting to just below the 2002 level by 2009 (Graph 2).

5. Nevertheless, the situation during the 2008-09 HIES would have been slightly better than at the time of the 2002-03 HIES. It is important to note also that GDP does not fully capture the well-being of the

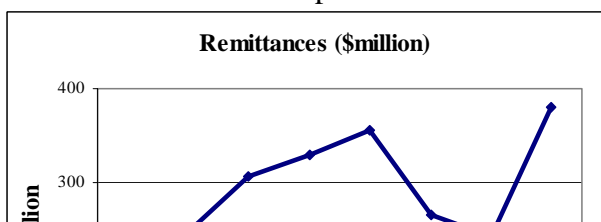
Table 1 GDP (constant prices) (index numbers)



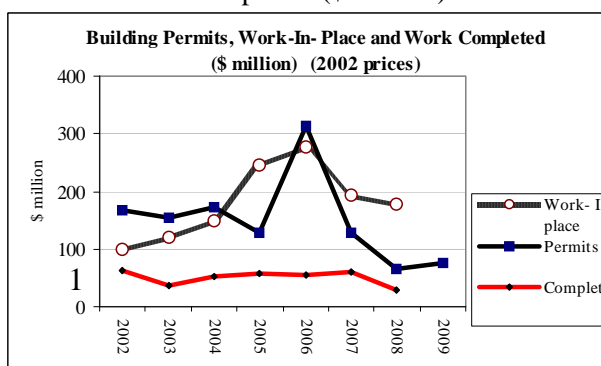
Graph 2 GDP pc (constant 1995 and 2005 prices)



Graph3



Graph 4 Building Permits, Work In Place and Work Completed (\$ million)



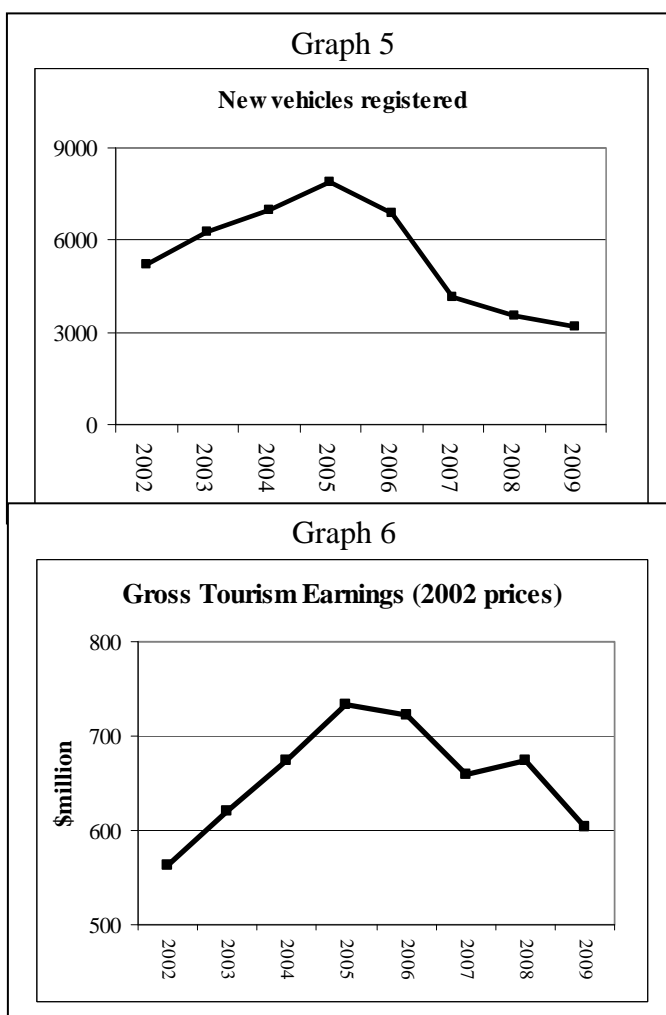
nation, as inward Remittances have been very large, and would be reflected in National Income for which there are unfortunately no data series. Remittances, growing strongly from 2002 to 2006, declined slightly to 2007 and 2008 before picking up again for 2009 (Graph 3).

6. A good indication of the investment climate in Fiji during this period may be had from the series on the value of Building Permits Issued, Work in Place, and Value of Completion Certificates (Graph 4). The graph indicates that there was some buoyancy leading up to 2006, but a general decline thereafter. It is expected that the values for Completion Certificates and Work in Place, will be lower for 2009.

7. One indicator of the investment climate is the numbers of new vehicles registered (Graph 5). This again shows a general rise up to 2005, a small decline in 2006, and a very large decline for 2007. This pattern was replicated for the new goods vehicles registered, which would be a good reflection of the commercial sector's investment activity.

8. The overall trends indicated by these graphs are mirrored by the trends in the two major industries in Fiji- tourism and sugar. Gross tourism earnings (2002 prices) were generally increasing from 2002 to 2005, but declined significantly in 2007 and 2009 (Graph 6).

9. Sugar industry earnings however, have shown a steady decline from 2002-03 to 2009, suggesting that in the cane belt areas at least, there has been considerable worsening of conditions (Graph 7).

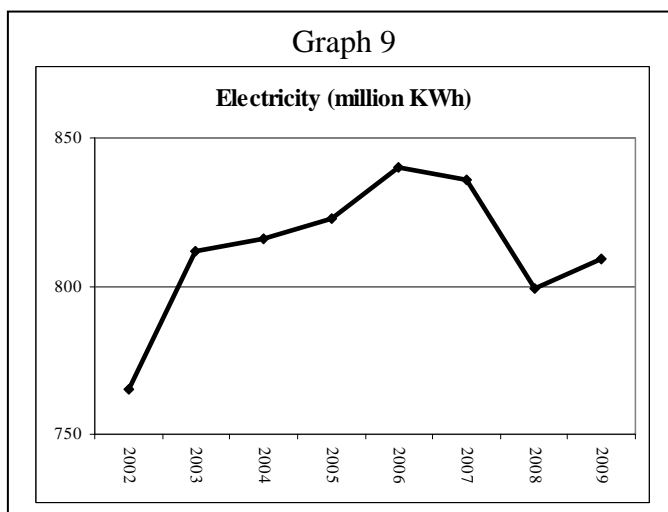
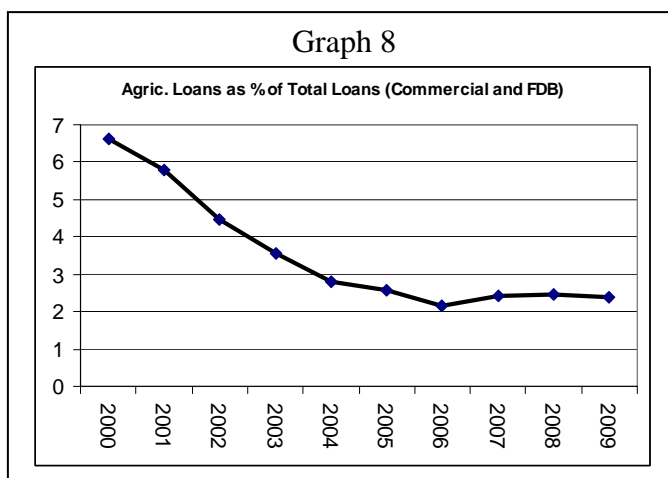
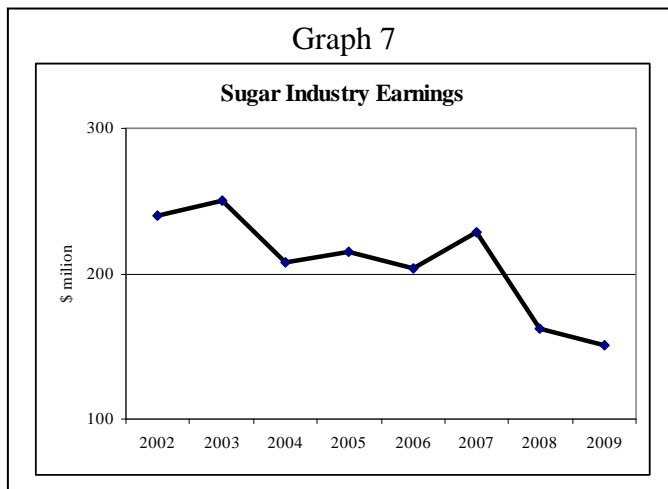


10. This is also reinforced by the data on Loans to Agriculture as a proportion of Total Loans by the Commercial Banks and the Fiji Development Bank (Graph 8).

11. From 7 percent in 2000, the proportion steadily declined to about 2% in 2006. Loans to Sugar Cane farming have virtually disappeared, falling from 47% of all agricultural loans in 2000 to just around 5% in 2009. The bulk of the current loans to agriculture are to Forestry and Logging, non-sugar cane activities.

12. These two graphs would suggest that economic activities in the rural areas have worsened between 2002-03 and 2008-09.

13. One last graph, Electricity consumption in millions of KWH (Graph 9), suggests that even urban areas, which saw increasing consumption gradually from 2002 to 2006, saw significant declines from 2006 to 2008. While electricity consumption increased slightly in 2009, the level was around that of 2003, but still significantly higher than that in 2002.



B Demographic changes from sample estimates

14. While the 2008-09 HIES had a lower sample (2.0%) compared to that for the 2002-03 HIES (3.3%), the results seem to be robust.

15. Comparisons of the two HIES data sets suggests that the process of urbanization has continued quite rapidly even over this short five year period. While the total number of households increased by 12%, that for rural areas only increased by 3% while that for urban areas increased by 22% (Table 1). The share of urban households has therefore reversed from 47% to 51%.

Table 1 Numbers of Households

Area	2002	2008	% Change
Rural	83680	86523	3
Urban	73001	88724	22
All	156681	175246	12
% Urban	47	51	

16. The numbers of occupants as estimated from the HIES suggests that the rural population has declined over the period by 2% while the urban population increased by 16% (Table 2). The overall numbers of occupants increased by 6%.¹

Table 2 Estim. Occupants of Households

Area	2002	2008	% Change
Rural	421980	412368	-2
Urban	346662	403039	16
All	768643	815408	6
% Urban	45	49	

17. The average household size is therefore continuing its long term decline, falling in rural areas by some 5.5% and in urban areas by 4.3% (Table 3). Overall household size has declined by 5.2% from 4.9 to 4.7.

Table 3 Average Household Size

Area	2002	2008	% Change
Rural	5.0	4.8	-5.5
Urban	4.7	4.5	-4.3
All	4.9	4.7	-5.2
%(R-U)/U	6.2	4.9	

18. This continued reduction in household size is largely to be attributed to the much larger reduction in the numbers of children (0 to 14) per household (Table 4). The reduction in the rural areas has been 12% while that in the urban areas has been 10%. The overall number of children per household has declined from 1.6 to 1.4.

Table 4 Av. Number of Children per HH

Area	2002	2008	% Change
Rural	1.7	1.5	-12.3
Urban	1.4	1.2	-10.2
All	1.6	1.4	-12.1
%(R-U)/U	24	21	

¹ It should be noted that FIBoS believes that the population estimates from the 2002-03 HIES were on the low side, hence the changes indicated in Tables 1 and 2 may be higher than the actual.

19. It should also be noted that the trend of higher emigration and lower fertility of Indo-Fijians continued to have their effects on ethnic shares of total population, compounded by the rural:urban drift for both ethnic communities. The 2008-09 HIES recorded a 10% reduction of Indo-Fijians but a 15% increase of indigenous Fijians (Table 5). There was a reduction of Indo-Fijians in both rural and urban areas (data not included here).

Table 5 Population changes (ethnicity)			
Ethnicity	2002	2008	% Ch.
Fijian	420182	484754	15
Indo-F	314899	283437	-10
Other	33561	47217	41
All	768643	815408	6
Percent shares			
Fijian	55	59	
Indo-F	41	35	
Other	4	6	
All	100	100	

20. Indigenous Fijians have therefore increased their share of the household populations from 55% in 2002-03 to 59% in 2008-09. This will have a corresponding impact on their share of total household income (shown in sections below). The Others have also increased their share from 4% to 6%.

21. Table 6 reveals that both ethnic groups have continued their decline in average household size, with the Indo-Fijian decline of 9% much larger than the 5% decline for Fijians. The average Fijian household therefore was 27% larger in 2008-09 compared to 2002-03. This will have a bearing on the relative living standards of the two ethnic groups.

Table 6 Av. Household Sizes (ethnicity)			
Ethnicity	2002	2008	% Ch.
Fijian	5.4	5.1	-5
Indo-F	4.4	4.0	-9
Other	4.9	4.7	-4
All	4.9	4.7	-5
% (F-I)/I	21	27	

22. While Urban Fijian households are larger on average than rural Fijian households, the opposite is true for Indo-Fijian households (table not included here).

C Household Incomes

23. Estimated Total Household Income increased in the period by some 53% in nominal terms, and by 28% in real terms, adjusting for CPI-measured inflation of about 24% during this period (Table 7). The Total Income in the Rural households declined in real terms by 11%, while that in the Urban households indicated a significant increase of 59%. The rural share of Total Household Income, declined quite significantly from 44% in 2002-03 to 33% in 2008-09.

Table 7 Recorded Total HH Incomes (\$m, % Ch)

Area	2002	2008	% Ch.	Real % Ch.
Rural	884	1004	14	-11
Urban	1115	2044	83	59
All	1998	3048	53	28
% Rural	44	33		

24. Average Household Incomes increased by 36% in nominal terms but 12% in real terms.

Table 8a Average Household Incomes (\$)

Area	2002	2008	% Ch.	Real % Ch.
Rural	10559	11608	10	-14
Urban	15267	23036	51	27
All	12753	17394	36	12
%(R-U)/U	-31	-50		

The average Rural Household Income declined in real terms by 14%, while Urban

Average Household Income increased by 27%. Not only have standards of living significantly deteriorated in the rural areas, but the gap between Rural and Urban households has increased significantly from -31% to -50%.

Table 8b Median Household Income pAE pw

	2002	2008	% Ch.	Real % Ch.
Rural	40.56	50.33	24	0
Urban	58.06	87.14	50	26
All	49.98	63.67	27	3
%(R-U)/U	-30	-42		

25. Average Household Incomes tend to be affected by the highest or the lowest incomes. Table 8b shows that Median Household Income pAE increased only slightly by 3% over the period. The rural median remained stagnant, while the Urban median Income pAE pw rose by 26%. This would suggest that incomes at the top have increased more than proportionately, while incomes at the bottom have decreased more than proportionately.

Table 9 Aver. HH Income per Adult Equivalent

Area	2002	2008	% Ch.	Real % Ch.
Rural	2526	2895	15	-10
Urban	3766	5879	56	32
All	3094	4389	42	18
%(R-U)/U	-33	-51		

Table 10 Divisional Share of Total HH Income

Division	2002	2008	% Change
Central	47.8	50.8	6
Eastern	5.8	4.0	-30
Northern	11.8	12.1	2
Western	34.6	33.1	-4
All	100	100	0

This will be reinforced by the results on income distribution given below.

26. Adjusting for Household Size, Table 9 indicates that standards of living in Rural areas as indicated by Income per Adult Equivalent have declined by 10%, while that in Urban areas has improved by 32%.

27. These three tables are all indicators of the continuing decline in the well-being of the rural sector. These changes are reflected in the estimates of the incidence of poverty for 2002-03 and 2008-09, presented below.

28. Table 10 indicates that there also have been changes taking place in the divisional shares of Total Household Incomes. Central Division increased its share from around 48% to just over a half- 51%. Eastern Division saw a major decline of 30% in its share- from an already low 5.8% to 4%, while the Western Division saw a decline from 34.6% to 33.1%. This last decline is of serious concern since the Western

Division is the locus of all the major industries in Fiji- tourism, sugar, mining, water bottling, and a large part of the pine industry.

29. To be clearer about the nature of changes by Division, it is crucial to differentiate by rural and urban areas. Table 11

Table 11 HH Income per Adult Equivalent (\$)					
Area	Division	2002	2008	% Change	Real % Change
Rural	Central	2952	3085	5	-20
	Eastern	3175	3275	3	-21
	Northern	1898	2631	39	14
	Western	2484	2876	16	-8
Rural All		2526	2895	15	-10
Urban	Central	3961	6543	65	41
	Eastern	4309	3749	-13	-37
	Northern	3035	4385	45	20
	Western	3580	5246	47	22
Urban All		3766	5879	56	32
All		3094	4389	42	18

indicates that the major declines in Household Incomes per Adult Equivalent, have occurred in rural areas of the Central, Eastern and Western Divisions. By and large, the Urban areas have seen their real standards of living improve quite significantly.

An unusual development which needs to be explained is the apparent improvement in Rural Northern Division, which is something of an anomaly.

Table 12 Changes in Numbers of Households			
Ethnicity	2002	2008	% Ch.
Fijian	78456	94827	21
Indo-F	71377	70386	-1
Other	6849	10033	46
All	156681	175246	12

30. The distribution of income amongst ethnic groups has always been of interest politically. The 2008-09 HIES indicates a continuation of the trends indicated by the 2002-03 HIES and the 2007 Census data. While indigenous

Fijian households have increased by 21% between the HIES, that for Indo-Fijians declined by 1% (Table 12).

31. The change in the number of occupants was more pronounced for Indo-Fijians (-10%), suggesting that Indo-Fijians households have continued their long trends of declining household size, a reflection of continuing declining fertility (Table 13).

Table 13 Changes in Numbers of Occupant

Ethnicity	2002	2008	% Ch.
Fijian	420182	484754	15
Indo-F	314899	283437	-10
Other	33561	47217	41
All	768643	815408	6

32. The data indicates while the shares of Indo-Fijians declined by 7 percentage points from 43% to 36%, of these only 2 percentage points accrued to indigenous Fijians (whose share increased from 51% to 53%, while Others increased their share by 4 percentage points (from 7% to 11% (Table 14). It should be noted, however, that both the Indo-Fijian and Others' share of Total Household Income is likely to be under-estimated because of the well-known under-reporting of incomes of high income households in all HIESs. However, if the degree of under-reporting is roughly the same for both the HIES, then the trend is definitely one of increasing share of Others and indigenous Fijians, and reducing share of Indo-Fijians in Total Household Income.

Table 14 Ethnic shares of Total HH Inc. (%)

Ethnicity	2002	2008	% Ch.
Fijian	51	53	4
Indo-F	43	36	-16
Other	7	11	72
All	100	100	

Table 15 Average Household Incomes (\$)

Ethnicity	2002	2008	% Change	Real % Ch.
Fijian	12972	16994	31	7
Indo-F	11902	15537	31	7
Other	19105	34197	79	55
All	12753	17394	36	12
%(F-I)/I	9	9		

33. Table 15 indicates that indigenous Fijian households, on average maintained their 9% advantage between the

Table 16 HH Income per Adult Equivalent

Ethnicity	2002	2008	% Change	% Real Change
Fijian	2958	3995	35	11
Indo-F	3108	4341	40	15
Other	4628	8747	89	65
All	3094	4389	42	18
%(F-I)/I	-5	-8		

two HIES, with both increasing their Average Household Incomes by 31% in nominal terms. This advantage is however eroded when one takes into account the different average sizes of the households.

34. Table 16 suggests that by the Household Income per Adult Equivalent measure, the percentage change in standards of living (as indicated by the last column which adjusts for CPI inflation) would seem to be positive for both ethnic groups, but the improvement for Indo-Fijians (15%) was larger than that for indigenous Fijians (11%). The Fijian households not only had a negative 5% gap with Indo-Fijians in 2002-03, but the gap increased to 8% by 2008-09.

Table 17 HH Income per Adult Equivalent (ethnicity, area)

Area	Ethnicity	2002	2008	% Ch.	% Real Change
Rural	Fijian	2599	2954	14	-11
	Indo-F	2401	2762	15	-9
	Other	2456	2998	22	-2
Rural	All	2526	2895	15	-10
Urban	Fijian	3585	5349	49	25
	Indo-F	3687	5543	50	26
	Other	5472	10697	95	71
Urban	All	3766	5879	56	32
All		3094	4389	42	18

35. Disaggregating by urban and rural areas indicates that all ethnic groups in the rural areas witnessed a real deterioration of standards of living on average, with indigenous

Fijians seeing a large decline in real terms (-11%) followed closely by Rural Indo-Fijians (-9%). In contrast, all Urban sub-groups saw an improvement in Average Household Incomes per Adult Equivalent with the Others indicating the largest gain of 71% in real terms.

36. These tables suggest clearly that poverty in the rural areas has worsened, for most divisions and for all ethnic groups.

D Incidence of Poverty

37. To be consistent with the most recent quantitative analyses of poverty in Fiji, the “incidence of poverty” is defined as the “Percentage of the Population Below the Basic Needs Poverty Line” (BNPL).
38. The BNPL has two components: Food Poverty Line (FPL) and Non-Food Poverty Line (NFPL).
39. The FPL consists of basket of foods, which for the 2002-03 analysis was derived from expenditure patterns of the middle quintile (20%) of the Rural and Urban groups of Fijians and Indo-Fijians. The actual quantities of basic food items were according to food plans that the Fiji Food and Nutrition Centre estimated to give minimal levels of the energy and essential nutrients. These four groups were differentiated because the data indicated substantial differences in food consumption patterns, especially between Rural Fijians and Urban Fijians. The details of the methodology and FPL baskets may be obtained from Chapter 3 of *The Quantitative Analysis of Poverty in Fiji*.
40. To maintain consistency between the poverty analysis using the 2002-03 HIES and the 2008-09 HIES and to have an accurate estimate of the changes in poverty between the two periods, the Bureau’s Poverty Analysis Team² decided that the 2008-09 BNPL would comprise the same FPL baskets used in 2002-03, valued at the prices prevailing in 2008-09. It was decided that the Non-Food Poverty Line values of 2002-03 would be adjusted to 2008-09 values by the change in the Consumer Prices Index (24.2%). It so turns out that, between the two HIESs, the total costs of the FPL baskets rose by around 38% compared to the 24% change in the CPI over the same period.

Table 18 Basic Needs Poverty Lines (\$)				
	Per Adult Equivalent pw		Per Household of 4 Adult Equivalents pw	
	Rural	Urban	Rural	Urban
2002-03	31.30	36.02	125.18	144.09
2008-09	41.15	46.54	164.60	186.15
% Ch.	31	29	31	29

41. It was also decided that for the sake of overall consistency in poverty alleviation policies, that the FPL and BNPL values for the different ethnic groups would be aggregated- to derive one composite one for Rural Fiji and one composite one for Urban Fiji, by using the population weighted values for the different ethnic groups (Table 18). This would also enable a more consistent and “ethnically neutral” estimation of poverty gaps for rural and urban areas. For those who may need to make international comparisons, a population weighted BNPL for all of Fiji is estimated to be about \$175 per week in 2008-09 for a household of 4 Adult Equivalents. It should be noted that the figure that would be more appropriate for use

² Epeli Waqavonovono, Toga Raikoti and Wadan Narsey.

by the Wages Councils, would be the urban BNPL, which is around \$186 per week for a household of 4 Adult Equivalents.³

42. Any assessment of the trend in poverty between the 2002-03 HIES and the 2008-09 HIES needs to keep in mind that there was political instability at the end of 2006, and that the global financial crisis also began to make itself felt, especially on tourism and remittance incomes. The indicators in Section A suggest that between these two HIES, there has generally been an earlier period of improvement followed by a deterioration.

Table 19 Percent. of Households in Poverty

Status	2002	2008	% Change
Not Poor	109805	129242	18
Poor	46876	46004	-2
All	156681	175246	12
Perc.Poor	30	26	

Table 20 Percent. of Occupants in Poverty

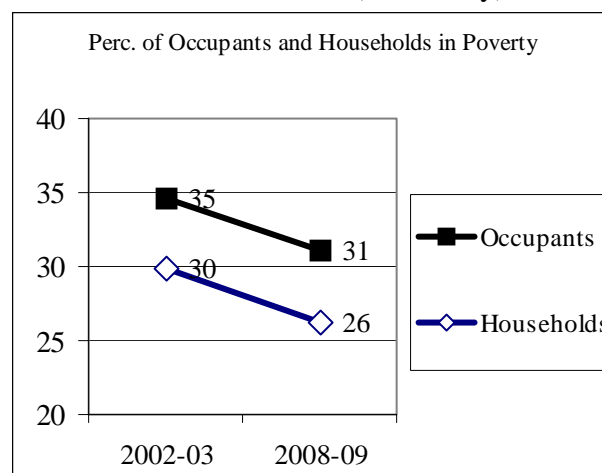
Status	2002	2008	% Change
Not Poor	502527	562233	12
Poor	266116	253175	-5
All	768643	815408	6
Perc.Poor	35	31	-10

43. Between the two HIESs, the percentage of households in poverty declined from 30% to 26% (Table 19). The number of Not Poor households increased by 18% while those defined as Poor declined by 2%.

44. Table 20 indicates that the Incidence of Poverty in Fiji declined from 35% in 2002-03 to 31% in 2008-09, a significant change of -10%. The numbers of people “Not Poor” increased by 12%, while the absolute numbers of “Poor” people decreased by 5%.⁴

45. The percentage of population in poverty is usually higher than the percentage of households in poverty because poor households are usually larger on average than non-poor households.

Graph 10 Perc. of Occupants and Households Below the BNPL (in Poverty)

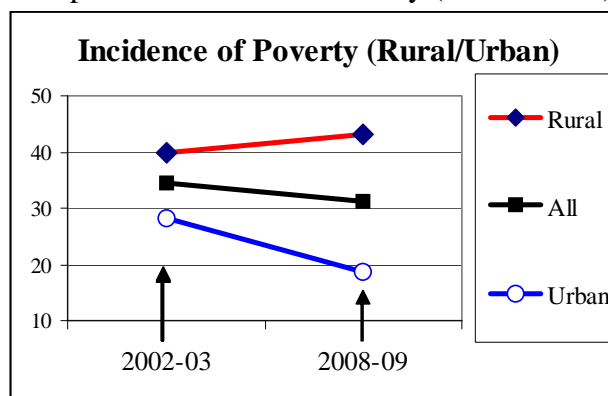


³ Most employees covered by Wages Councils are in the urban areas.

⁴ While the proportions estimated to be “Poor” in 2002-03 are believed to be reasonably accurate, the absolute numbers of occupants need to be treated with some caution as FIBoS believes that the weighted numbers for the 2002-03 HIES may have been under-estimated.

46. Given the trends indicated in Section A, and the changes in the incidence of poverty in between the different rounds⁵ of the HIES, it may be confidently concluded that the incidence of poverty was declining in 2002-03, and rising slightly in 2008-09. The incidence of poverty in 2005-06 was probably lower than that in 2008-09, for both rural and urban areas.

Graph 11 Incidence of Poverty (Rural/Urban)



47. All the divisions saw some reduction of poverty except the Eastern Division, where the incidence of poverty increased from 35% to 38% (Table 22). The Northern Division, however, remained the most poor of all the divisions, with some 48% of the occupants below the BNPL.

Table 22 Incidence of Poverty (by Division)

Division	2002	2008	% Ch.
Central	26	21	-16
Eastern	35	38	7
Northern	53	48	-9
Western	36	33	-10
All	35	31	-10

48. Table 23 and Graph 11 indicate that the reduction in poverty was not uniform throughout the country. While Urban areas saw a dramatic reduction in poverty from 28% to 19% (a reduction of 34%), Rural poverty increased from 40% to 43%. This is in keeping with the indicators presented in Section A, on the decline in the sugar industry, and declining proportions and amounts of loans to agriculture.

Table 23 Incidence of Poverty (by Division/area)

Area	Division	2002	2008	% Ch.
Rural	Central	29	36	25
	Eastern	35	40	15
	Northern	57	51	-9
	Western	38	43	12
Rural All		40	43	8
Urban	Central	24	16	-34
	Eastern	42	30	-28
	Northern	39	38	-2
	Western	33	17	-47
Urban All		28	19	-34
FIJI		35	31	-10

49. Disaggregation of the divisions by rural and urban areas reveals the complexity of the changes in the incidence of poverty. The urban areas in all the divisions have seen decreases in the incidence of poverty- most of all in Western Division where the

⁵ Each HIES is conducted in successive "rounds" each of which are independent sub-samples of the total sample. The 2002-03 HIES had 4 rounds of 3 months each, for each of urban and rural, while the 2008-09 HIES had 6 sub-rounds of 2 months each.

incidence has been halved from 33% to 17%- a decline of -47%. This is no doubt a reflection of the growth in the tourism industry.

50. The rural parts of all the divisions have seen increases in the incidence of poverty except for Rural Northern Division, where the incidence appears to have declined, but was still the highest at 51% in 2008-09. With the overall estimated rural Northern population remaining the same, while the number of Poor seems to have declined, one possible explanation may be that the poorest in the rural Northern division have migrated out to urban areas, both in Vanua Levu and Viti Levu. It is also a possibility that the remaining Indo-Fijians have better access to resources as well as marketing opportunities through networking with Northern migrants to Viti Levu.⁶

Table 24 Incidence of Poverty (ethnicity)

Ethnicity	2002	2008	% Ch.
Fijian	35	31	-10
Indo-F	36	32	-11
Other	24	25	4
All	35	31	-10

Table 25 The Percentage of the Poor (ethnicity)

Ethnicity	2002	2008	% Ch.
Fijian	55	60	9
Indo-F	42	35	-16
Other	3	5	53
All	100	100	

51. Table 24 indicates that the two major ethnic groups have seen significant decreases in the incidence of poverty to around 32% and 31% in 2008. The Others group saw a slight increase in poverty.

52. No doubt a reflection of the continuing decline through emigration and lower fertility rates of the Indo-Fijian population, indigenous Fijians increased their share of the Poor from 55% to 60% while Indo-Fijians reduced theirs from 42% to 35%. This will have a direct bearing on the prescribed ethnic shares of poverty alleviation resources (see below).

Table 26 Incidence of Poverty (ethnicity and rural/urban)

Area	Ethnicity	2002	2008	% Ch.
Rural	Fijian	38	42	10
	Indo-F	43	45	4
	Other	41	50	22
Rural All		40	43	8
Urban	Fijian	28	17	-40
	Indo-F	29	21	-28
	Other	18	16	-8
Urban All		28	19	-34
All		35	31	-10

53. As previously, it is important to disaggregate by rural and urban areas. All ethnic groups saw increases in the incidence of poverty with rural Fijians increasing by 10% from 38% to 42%. While the increase in poverty for rural Indo-Fijians was slightly

⁶ Personal communication from Mr Baljeet Singh (Lecturer in Economics, USP)

lower (by 4%) they had the higher incidence of poverty (45%) although the Other group, had the highest of 50%.

54. In the urban areas, all groups reduced their incidence of poverty with urban Fijians indicating the largest decline (of -40%). Nevertheless, urban Indo-Fijians had the higher incidence of poverty with 21%.

55. The tables above all point to the most significant deterioration of poverty in the rural areas. Containing 63% of all the Poor in 2002-03, the proportion of the Poor in rural areas had increased to 70% by 2008-09 (Table 26b).

Table 26b Perc. of the Poor			
	2002	2008	% Ch
Rural	63	70	11
Urban	37	30	-19
All	100	100	

56. The current trends indicate that with higher and improving income opportunities in urban areas, the rural:urban drift has continued its inexorable advance. Failure to improve the living standards and household incomes in rural areas, together with a continuation of poverty alleviation measures in the highly visible and easily accessible urban areas, will only serve to accelerate the rural:urban drift, increase pressures for basic services in urban areas, while further worsening rural poverty.

57. It is of the utmost importance that development strategies for Fiji and public sector infrastructure investment programmes must focus on rural development, including the appropriate support for cash income generating agriculture.

E Poverty Gaps and Required Poverty Alleviation Resources

58. Of interest to poverty stakeholders is the amount of poverty alleviation resources that would be needed to lift each Poor household to just above the Basic Needs Poverty Line. This depends on two variables: how far below the BNPL each household hold is; and how many poor households there are with their different poverty gaps. Thus if the BNPL is \$41.15 per Adult Equivalent per week, and a particular household has an Income pAE pw of say \$40, then the poverty gap is \$1.15 per Adult Equivalent per week. The total resources required to shift this household up to the BNPL would be:

$$(\$1.15) * (\text{the size of household in AEs}) * 52.$$

59. Aggregating these amounts for all the poor households (using the HIES weights for each household) in the country then gives a rough estimate of the total amount of poverty alleviation resources that the country would theoretically required, if all the poor households were to be given a cash transfer to lift them to the BNPL. If necessary, these aggregates may be compared with what Government actually spends on the Poor households for poverty alleviation.

60. Table 27 presents the good news that the value of the Poverty Gap rose by 26% from \$120 million to \$152 million. This increase was more than compensated by the 40% increase in GDP (current prices) and Government Expenditure (current prices).

Table 27 Poverty Gaps (\$m) and Percentages			
	2002-03	2008-09	% Ch.
	\$ million		
Poverty Gap	120	152	26
GDP (<i>cur.pr.</i>)	3465	4861	40
Govt.Expend.	1065	1499	41
	Poverty Gap as Percent of		
GDP	3.5	3.1	-10
Govt. Expend.	11.3	10.2	-10

61. The Poverty Gap as a percentage of GDP therefore fell by 10% from 3.5% to 3.1%. In normal times, this amount would represent the annual growth rate of Fiji's GDP in a good year. However, Fiji's average real growth rate of GDP over the last ten years has been much less than that.

62. The Poverty Gap as a percentage of Government Expenditure also fell by 10% from 11.3% to 10.2%. While not a large percentage in normal times when Government Revenues are buoyant, this percentages poses a serious challenge when the economy is not performing

Table 28 Poverty Gaps (\$m) and shares (%)				
	2002	2008	% Ch.	% Real Ch.
Rural (\$m)	74	108	46	22
Urban (\$m)	47	44	-5	-29
All (\$m)	120	152	26	2
Rural Share (%)	61	71		

well, and Government revenues are stagnant or declining in real terms.

63. With the incidence of poverty increasing relatively more in rural areas, it is not surprising that the rural areas also deserve a much larger share of poverty alleviation resources, increasing from 61% in 2002-03 to 71% in 2008-09 (Table 28). While the total amount of poverty alleviation resources required for all Fiji increased by only 2% (allowing for inflation), that required for Rural Fiji increased by 22% while that required for Urban Fiji decreased by 29%.

64. It is a tautology that urban poverty is extremely visible to stakeholders, being concentrated, in contrast to rural poverty which is dispersed widely. Nevertheless, the statistics in Table 28 must drive home the message that poverty alleviation measures by Government, NSA/NGOs, donor agencies and international organisations, must focus on rural areas far more than on urban areas.

65. If poverty alleviation measures and resources continue to be focused on urban areas, all the indications are that rural:urban migration will be exacerbated even more than indicated by the current trends.

66. Table 29 indicates that for 2008-09, the Western Division would have required some 42% of all the poverty alleviation resources, with 33% due to Rural Western households. This is a considerable worsening from the situation in 2002-03, and is no doubt a reflection of the severe decline in the sugar industry.

Table 29 Indicated Share of Poverty Alleviation Resources (division/area) (2008-09)

Division	Rural	Urban	All
Central	10	14	24
Eastern	4	1	6
Northern	23	6	28
Western	33	8	42
All	71	29	100

67. It should be noted that the Northern Division is deserving to a higher percentage of total poverty alleviation resources (28%) than the Central Division (24%). In the Northern Division as well, of the 28% of total resources, 23% would need to be devoted to rural households.

68. Table 30 gives the indicated ethnic shares with some 57% “owing” to indigenous Fijians and 38% to Indo-Fijians. This is virtually the population relativities at the time of the 2007 Census. Again, not a surprise, the largest share should accrue to Rural Fijians (44%) and Rural Indo-Fijians (24%).

Table 30 Indicated Ethnic shares of Poverty Alleviation Resources

Ethnicity	Rural	Urban	All
Fijian	44	13	57
Indo-F	24	14	38
Other	2	2	5
All	71	29	100

F Income Distribution Issues⁷

69. Table 31 indicates that despite the reduction in the national incidence of poverty, the distribution of Total Household Income has worsened.

70. The Bottom 10% of the population reduced their share by 13% while the Top 10% increased their share by 7%. The second to the eighth deciles all saw moderate reductions in their share of total income.

71. Overall the ratio of the incomes in households containing the Top 20% of the population to that accruing to the Bottom 20%, increased from 8.2 to 9.3.

Table 31 Decile Shares of Total Inc.

PDec	2002	2008	% Ch
PD 1	2.3	2.0	-13
PD 2	3.6	3.4	-3
PD 3	4.5	4.4	-4
PD 4	5.5	5.4	-2
PD 5	6.8	6.4	-5
PD 6	7.9	7.6	-4
PD 7	9.6	9.2	-4
PD 8	11.9	11.4	-4
PD 9	15.4	15.5	1
PD top	32.5	34.7	7
All	100.0	100.0	
T20: B20	8.2	9.3	

72. The internationally used measure of Income Distribution is the Gini Coefficient which can range from 0 (completely equal distribution) to 1 (perfectly unequal distribution).

73. The Gini may be calculated for shares of households in the total income, or the shares of population in total income.

Table 32 Gini Coefficients

	2002-03	2008-09	% Ch.
Population Gini	0.416	0.439	5.5
Household Gini	0.341	0.359	5.3

74. The population Gini deteriorated by 5.5% from 0.416 to 0.439 a worsening of 5.5%.

75. The Household Gini deteriorated from 0.341 to 0.359, a worsening of 5.3%.

76. Income distribution has clearly worsened between 2002-03 and 2008-09 for Fiji in aggregate.

77. A large factor in the uneven distribution of incomes at the national level, is the gap

Table 33 Gini Coefficients (Rural/Urban)

	2002-03	2008-09	% Ch.
Households			
Rural	0.126	0.115	-9
Urban	0.138	0.149	8
%(U-R)/R	10	30	
Population			
Rural	0.197	0.194	-2
Urban	0.222	0.245	11
%(U-R)/R	13	27	

⁷ In this section, all households in Fiji are treated as part of one distribution, ranked by Income per Adult Equivalent. This mixes up the rural and urban households, for whom we have earlier used slightly different values for the Basic Needs Poverty Line. It would be technically more correct to examine the rural and urban distributions separately, as we do below.

between the urban households as a group, and rural households as a group. Within each area (rural and urban on their own) the distributions are far more even.

78. Thus Table 33 indicates that income distribution was much more equal both within rural households and within urban areas, than in the national distributions, with much lower Ginis than indicated for the national Ginis.

79. For Rural areas, the Ginis were not only quite low but declined from 2002-03 to 2008-09- by 9% for Household Ginis, and -2% for Population Ginis. Paradoxically, while the incidence of poverty was increasing in rural areas, the income distribution was improving slightly.

80. For Urban areas, the Ginis were higher than for Rural areas and also indicated a significant worsening of income distribution between 2002-03 and 2008-09: by 8% for Household Ginis, and 11% for Population Ginis.

81. For Fijians, income distribution has worsened in this inter-HIES period- by 6.5% according to the Household Ginis, and 2.3% by population Ginis (Table 34).

82. Indo-Fijians on the other hand have seen a small improvement in income distribution- of some 4.3% by the Household Gini and a small worsening (of 0.4%) by the Population Gini.

Table 34 Gini Coefficients (ethnicity)			
	2002-03	2008-09	% Ch.
Households			
Fijians	0.311	0.331	6.5
Indo-F	0.360	0.345	-4.3
Diff.(I-F)/F	16	4	
Population			
Fijians	0.394	0.403	2.3
Indo-F	0.427	0.429	0.4
Diff.(I-F)/F	9	7	

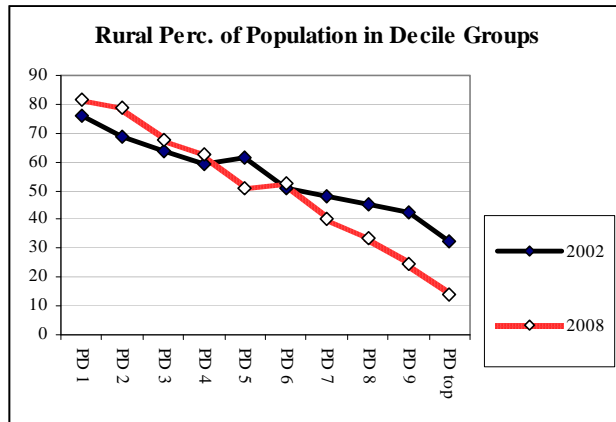
83. Comparing the two major ethnic groups, therefore, the Indo-Fijian population generally had a more unequal distribution of incomes than indigenous Fijians, although the difference has reduced between 2002-03 and 2008-09: by Household Ginis, from a 16% difference in 2002-03 to a mere 4% in 2008-09. By Population Ginis, the difference was a reduction from 9% to 7%. In other words, the indigenous Fijian and Indo-Fijian income distribution patterns are converging.

84. One perspective on the changing nature of income distribution and the deterioration in rural areas may be had from Graph 12 which gives for each decile level, the percentage of the occupants who were living in the Rural areas, in 2002-03 and 2008-09.

85. Clearly, the rural shares at the bottom deciles are all high, steadily reducing towards the upper deciles, for both 2002-03 and 2008-09.

86. However, the rural proportions of the bottom deciles have increased between 2002-03, while those at the top have fallen, as indicated by a clockwise rotation of the 2008-09 line around the middle.

Graph 12 Rural Share of Population at Decile Levels (2002-03 and 2008-09)



87. The rural share of the Bottom 3 deciles rose from 70% in 2002-03 to 76% in 2008-09, while the rural share of the Top 3 deciles declined from 40% to 24% (table not given here).

88. This graph is a clear indication of the pervasive impoverishment of the rural population between the two HIESs.

G Incidence of Food Poverty (in relation to Food Poverty Lines)

89. One important indicator of poverty is the “Incidence of Food Poverty”: the percentage of the population whose income is not sufficient to purchase the Food Poverty Line basket of goods.

90. It should be clarified that this does not reflect how much households are actually spending on food. One of the findings of the previous 2002-03 HIES was that Fiji households spent relatively little on food- even if they were in deciles above the poverty line. This result will no doubt also hold for the 2008-09 HIES.

Table 35 Food Poverty Lines (2002-03 and 2008-09)

	Food Poverty Line per AE		Food Poverty Line per HH of 4 AE	
	Rural	Urban	Rural	Urban
2002	15.99	15.84	63.97	63.34
2008	22.18	21.83	88.71	87.30
% Ch.	39	38	39	38

91. For a household of 4 Adult Equivalents, the FPL values were around \$63 in 2002-03, rising by about 38% to around \$87 by 2008-09.⁸

92. Table 36 indicates that the percentage of the population who were in households earning less than the Food Poverty Line, rose from 6.8 percent to 7.5 percent.

Table 36 Numbers and Percentage Food Poor

Poor FPL	2002	2008
Not Poor	716158	753884
Poor	52485	61524
All	768643	815408
Perc. Food Poor	6.8	7.5

93. While this might seem an anomaly given that the incidence of poverty according to the BNPL fell during this period, we have seen earlier from the income distribution section, that the poorest two deciles (the lowest 20% of the population) seem to have become poorer.

94. Table 37 indicates that the worsening at the lowest income levels is largely in rural areas, where the percentage of people below the FPL increased from 9.7% to 12.2%, while that in the urban areas fell from 3.3 to 2.8%.

Table 37 Percentage Below FPL

FPL Poor	2002	2008
Rural	9.7	12.2
Urban	3.3	2.8
Perc. Food Poor	6.8	7.5

To be emphasized again, this is an income measure of food poverty- not actual amounts of food consumed. Rural households are likely to have better access to food (especially from subsistence agriculture) compared to urban households who, of necessity, usually need cash income to purchase food.

⁸ Note that the cost of the FPL basket of foods rose by 38%, much more than the 24% increase in the CPI over the same period.

95. Table 38 indicates that the deterioration in the incidence of Food Poverty affected Indo-Fijians relatively more than Fijians.

96. For Rural Fijians the Incidence of Food Poverty deteriorated by 14% from 9.6% to 11.0%, while that for Rural Indo-Fijians deteriorated by 50% from 9.7% to 14.5%.

97. For Urban Fijians there was an improvement of 18% while urban Indo-Fijians remained the same at 3.6%.

98. The highest incidence of Food Poverty was for Rural Others- of whom some 16% were in households earning incomes below the Food Poverty Line.

Table 38 Incidence of Food Poverty (ethnicity)

Ethnicity	Area	2002	2008	% Ch.
Fijian	Rural	9.6	11.0	14
	Urban	3.0	2.5	-18
Fijian all		7.2	7.3	1
Indo-F	Rural	9.7	14.5	50
	Urban	3.6	3.6	0
Indo-F All		6.3	8.3	31
Other	Rural	13.8	16.1	17
	Urban	3.1	1.1	-66
Other All		6.2	5.1	-18
All		6.8	7.5	10

Annex A Notes on the 2008-09 survey methodology and processes

The 2002-03 HIES was planned and conducted by the Household Survey Unit of the FIBoS.⁹

A two-stage sampling strategy was used. In the first stage, the frame was divided into 7 strata (Table A2) and representative samples of Urban and Rural Enumeration Areas were then selected from these strata.

Within each stratum Enumeration Areas (EAs) or Primary Sampling Unit (PSU) from the frame were selected with probability proportional to size, measured in terms of the total households in the frame. Within each EA a fixed number of households (hh) were then selected by systematic random sampling. The final HIES sample then selected 10 households from each selected EA (example of selection process given in Table A3).

Because of budgetary constraints, FIBoS targeted a sample size of 2.0% in aggregate, with a higher 2.2% in rural areas compared to 1.9% in urban areas. These are somewhat lower than in 2002-03 (Table A1)

A pilot survey tested the questionnaire and the administrative arrangements in place, leading to improvements in questionnaire and fieldwork arrangements.

The Bureau conducted training programmes for enumerators and supervisors at its four centres, followed by examinations to select those qualified. The training covered conduct of interviews, as well as the content of the questionnaires.¹⁰

Data collection was continuous over a 1-year period. For each survey, a sixth of the sample households was covered in a 2-month sub-round. In effect, there were six independent sub-samples for each survey. Each sub-round sample was distributed into lots to ensure data was collected continuously for the whole 1-year period.

Table A1 Sample Sizes (2002-03, 2008-09)

Area	2002-03	2008-09
	Households count	
Rural	2230	1911
Urban	3015	1662
FIJI	5245	3573
	Estim. Total Households	
Rural	83680	86523
Urban	73001	88724
FIJI	156681	175246
	Sampling Rate (%)	
Rural	2.7	2.2
Urban	4.1	1.9
FIJI	3.3	2.0

Table A2 The Sample Strata

1	Central/Eastern Urban
2	Central Rural
3	Eastern Rural
4	Northern Urban
5	Northern Rural
6	Western Urban
7	Western Rural

⁹ The unit was headed by Mr Epeli Waqavonovono (Chief Statistician), Mr Toga Raikoti (Principal Statistician) and Mr Serevi Baledrokadroka (Senior Statistician, Household Surveys).

¹⁰ A total of 36 Enumerators, 12 Supervisors, 4 Coders and 3 Data Entry Operators and 4 drivers were distributed into our 4 regional offices, which are headed by a Field Superintendent.

The **household weight** for all the households in each selected EA was calculated as:

$$\frac{(\text{Population of Stratum } i) * (\text{Listing number of households in EA})}{(\text{Frame population of EA}) * (\text{No of hh in sample}) * (\text{Number of EAs selected in stratum})}$$

Examples of the estimation of household weights for each EA are given in Table A4.

Publicity

The Bureau undertook considerable publicity through the media, including radio and the Ministry of Information's television programme Dateline. Publicity fliers' containing some background information on the survey and its importance were circulated to householders in the selected areas. Posters were also posted at public places such as hospitals, district offices, shops and schools. In Fijian rural areas, proper protocol was followed with the Turaga-ni-Koro and church leaders, to ensure full cooperation from the community.

Field work arrangement

Fieldwork arrangements were delegated to 4 field superintendents who put together their work plans, assigned the supervisors and enumerators, and ensured the regular accountable financing of their required activities, including travel, subsistence and fees.

The arrangements for the interview depended on the availability of the householder. For the diary the enumerators were required to visit the household daily for two weeks, to try to minimise omissions due to weaknesses in the recall.

The Enumerators were instructed to complete work in a selected EA within a time frame of 3 weeks. The first week was spent on listing all households in the EA and the following two weeks for gathering information on Schedule 2 (recurrent expenditure) Schedule 3 (2 week expenditure diary) and Schedule 4 (income).

While supervisors are normally required to check on enumerators on a daily basis by selecting households at random to confirm that the data recorded was actually reported by

Table A3 Selection of EAs and Households in Stratum i

	Frame		Listing		Selected
	Hh	Popn	hh	Popn	
EA 1*	120	600	128	625	10
EA 2	110	550			
EA 3	130	650			
EA 4	90	450			
EA 5*	125	625	130	650	10
EA 6	89	445			
EA 7	80	400			
EA 8	135	675			
EA 9	128	640			
EA 10*	78	400	70	350	10
Popn	1085	5435	328	1625	30

Table A4 Calculation of household weights

EA	Calculation of hh weight	HH weight	Est. No of Hh
EA1	$\frac{(5435 * 128)}{(600 * 10 * 3)}$	38.65	386
EA2	$\frac{(5435 * 130)}{(625 * 10 * 3)}$	37.68	377
EA3	$\frac{(5435 * 70)}{(400 * 10 * 3)}$	31.70	317
		Total	1080

the householder, this was not generally possible for the 2008-09 survey, because of budgetary constraints. It should be emphasised for future surveys that such checks improve the data collection practice of the enumerators, and of the quality of the survey results in general.

With expenditure usually being better reported than incomes, where the former exceeded the latter, enumerators were required to re-question the relevant households for possible omissions of incomes. Enumerators were also trained to probe further where they observed that households had income-earning assets but were not reporting any related incomes. Enumerators and Supervisors were also required to check the validity of any large incomes and expenditures reported.

Table A5 Final Selection of EAs and households (2008-09)

	Central	Eastern	Northern	Western	Total
Number of Households					
Urban	982	40	160	480	1662
Rural	481	290	440	700	1911
Total	1463	330	600	1180	3573
Number of EAs					
Urban	98	4	16	48	166
Rural	48	29	44	70	191
Total	146	33	60	118	357

Coding and data entry work was centralised to the 4 regional offices. Data was captured using CSPro and processed using SAS. Manually calculated subtotals and totals were used as control totals to check against data entry errors and consistency of the computer programmes.

Data Adjustments: Imputed Rents

In keeping with internationally accepted HIES methodology, the 2008-09 HIES estimated “imputed rents” – the estimated net value of owner-occupied dwellings which need to be added to the incomes (and expenditures) of all households which do not pay rents on the dwellings occupied.

$$\text{Net Imputed Rent} = \text{Gross Imputed Values (estimated from the regressions)} \text{ less the Imputed Cost of Owned Houses.}$$

The “Imputed Cost of Owned Houses” was estimated as an aggregate percentage (21.9%)¹¹ of Gross Imputed Values, representing Actual Repairs and Maintenance plus Interest Component of Installment payments plus Property Rates on owner-occupied houses.¹²

Concepts and Basic Definitions

The following International Labour Organisation definitions related to Household Income and Expenditure were used, as for the 2002-03 HIES:

¹¹ This percentage was used to maintain consistency with the 2002-03 HIES estimates of Imputed Rent.

¹² Net IR was estimated to = Gross IR – (0.219* Gross IR).

- (1) Household Income- consists of all receipts in cash, in kind or in services that are received by the household or by individual members of the household at annual or more frequent intervals, but excludes windfall gains and other such irregular and typically one-time receipts. Household income receipts are available for current consumption and except for certain current transfers do not reduce the net worth of the household through a reduction of its cash, the disposal of its other financial or non-financial assets or an increase in its liabilities. Operationally it maybe defined as in terms of; i) income from employment (both paid and self-employment); ii) property income; iii) income from the production of household services for own consumption; iv) transfers received. Household income **excludes** holding gains, lottery prizes, gambling winnings, non-life insurance claims, inheritances, lump sum retirement benefits, life insurance claims (except annuities), windfall gains, legal/injury compensation (except those in lieu of foregone earnings) and loan repayments. Also excluded are other receipts that result in a reduction of net worth. These include sale of assets, withdrawals from savings and loans obtained.
- (2) Household Expenditure- is defined as the sum of household consumption expenditure and the non-consumption expenditures of the household. Non-consumption expenditures incurred by a household that relate to compulsory and quasi-compulsory transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its “legal” commitments. Consumer goods and services are those used by a household to directly satisfy the personal needs and wants of its members. Household consumption expenditure is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income-in-kind for the satisfaction of the needs and wants of its members.

Individual items

- (a) Consumption of Home Produced Commodities were treated as both income and equivalent expenditure
- (b) Imputed Rent is treated as both income and expenditure
- (c) Gifts Given is treated as non-consumption expenditure
- (d) Gifts Received are treated as income, with non-monetary ones also treated as Household Consumption Expenditure.

Household Survey Unit
Fiji Islands Bureau of Statistics
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