

# MIMAP Project Philippines

Micro Impacts of  
Macroeconomic Adjustment  
Policies Project

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MIMAP Research Paper No. 37

## Indicators for Monitoring Poverty

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**February 1998**

Paper Presented During the Consultative Meeting on the Formulation of the Enhanced Community Based Poverty Indicator Monitoring Systems held on December 16, 1997 in Mandaluyong City, Philippines.

This work was carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada.

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# *INDICATORS FOR MONITORING POVERTY*

## **Introduction:**

The major task of the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP) Project is to highlight the impact of macroeconomic adjustment policies on vulnerable groups. As such, poverty impact assessment is one of its key concerns. The success of any poverty-related initiative, however, would obviously and critically -- depend on how poverty is defined or measured in the first place.

Traditional measures of poverty incidence have mainly been based on income. Official estimate of the poverty threshold has been measured solely on the basis of income. Of late, though there is a growing consensus that deprivation cannot be measured by income alone. The most popular is to supplement income with other family outcome indicators, e.g. health, nutrition, and education, among others in measuring poverty incidence. This view is supported by the changing way by which development workers look at development. Based on this view, development indicators should not be limited to measures of income but should also include indicators of human development. Income, it is argued, cannot fully capture the extent of human development even if it is a "fundamental means or even a requisite".

Consequently, there has been a recent trend towards the use of the Minimum Basic Needs (MBN) approach for measuring or monitoring poverty. One such set of indicators is presented (Table 1) and corresponds to the indicators contained in the Presidential Commission to Fight Poverty's (PCFP) Strategy to Fight Poverty. The MBN indicators are grouped into three, namely, *survival, security, and enabling needs*. Income is but one indicator of enabling needs.

## **Adequacy of income as a poverty indicator**

With the growing acceptance of the MBN indicators, one begins to wonder - *Is income really a deficient an indicator of poverty as it has been portrayed? And if so, to what extent?*

## **Uses of MBN**

Presently, the local government units in selected barangays are collecting data on 33 indicators to identify unmet needs of the people in these areas. Although we recognize the multidimensional nature of poverty, it is not clear whether these indicators will be used to identify the poor and if so, how this will be done.

Based on the experiences of those involved in the community-based information systems, they found that it is difficult to collect data on family income in a community-based monitoring system, especially with volunteer enumerators. More often than not, the information obtained were either not reliable or that a series of questions were necessary to derive accurate responses.

The objectives of this paper are the following:

1. to find a core set of indicators relating to minimum basic needs
2. to find proxy measures for income
3. to determine how to use this multiple indicator system - to determine who the poor are or just to provide additional information regarding the income-deficient poor.

Using MBN indicators in identifying the poor is quite tricky. Do we want to identify the poor through the MBN approach because: (1) these indicators are related to, but more easily observable than, income; or (2) these indicators represent achievements (shortcomings) that are desirable (undesirable) by themselves.

In other words, the MBN indicators could be used as a proxy for income-based poverty, or as an alternative definition of poverty altogether.

Let us examine these questions one at a time.

### **Adequacy of income as a poverty indicator: the test**

A simple way of checking whether income is efficient as a measure of poverty or not is to compare the MBN indicators across income groups. If income is indeed a poor measure of deprivation, then the comparisons will show weak relationships between income groupings and family poverty indicators.

### **Results from the 1992 Socio-Economic survey of Special Groups of Families (belonging to the bottom 30 percent)**

#### **Survival Needs**

- There is no significant difference among the lowest 3 deciles in the number of child deaths.
- Higher income is associated with better toilet facilities.
- The proportion of families using safe water increases as one goes up the income ladder.

## Security Needs

- The proportion of families using strong materials increases as income rises.

## Enabling Needs

- The average employment ratio rises with income.
- There is an inverse relationship between income and literacy rate.
- The relationship between income and school attendance of family members 7-24 years old is not clear.
- The relationship between income and membership in cooperatives is not clear.

## Finding

Except for enabling needs, income is a good indicator of deprivation for families belonging to the bottom 30 percent.

## Results from the 1994 Family Income and Expenditures Survey

### Survival Needs

- The proportion of families with access to potable water supply rises steadily as one moves from the low income families to the higher income families (TABLE 1).
- The proportion of families with own use of potable water facility increases with income.
- The access to sanitary toilet facilities continuously improves with income. The proportion of families without toilet facilities drops significantly after the 5<sup>th</sup> decile (TABLE 2).

### Security Needs

- The proportion of families using strong materials in their house increases as income rises (TABLE 3).
- The proportion of families owning their dwelling units increases as one goes up the income ladder (TABLE 4.1).
- The prevalence of ownership of house and lot does not differ much across income deciles for the indicator to be useful in distinguishing between the different income groups.
- Income appears to be closely related with access to electricity (TABLE 5.1).

## Enabling Needs

- The proportion of families with employed head drops monotonically as we move up the income deciles (TABLE 6.1).
- The educational attainment of the head of the family improves as income goes up. Moreover, the collegiate education of the head of the family may be proxied by income and may be used to distinguish the bottom 30 percent (TABLE 7).

## Other Indicators

- The probability of ownership of consumer durables increases as income rises (TABLE 8).
- The ownership of refrigerators may be useful in identifying the non-poor

## Summary

- Income can proxy for the probability of meeting survival needs such as access to potable water supply and sanitary toilet facility.
- Income can proxy for the strength of housing materials used for access to electricity, but not for house tenure status.
- Income can track the educational attainment of family heads but not their employment rate.
- Income is able to capture many but not all of the aspects of deprivation.

## Use of some indicators as proxy for income

To determine whether MBN indicators can indeed proxy for income, we examine whether there are significant relationships between these indicators and the level of income.

Dataset: 1994 FIES

## Results: Profile of the Poor using FIES

Note: The families have been ordered by total family income. Decile refers to one-tenth of the families. The first decile refers to that tenth of the total number of families with the lowest family income.

### Potable water

- There is a positive correlation between access to potable water and income. 77 percent of the families have access to potable water (TABLE 1). Access to potable

water increases with income. The poorest decile has an access of only 62 percent, much lower than the 92 percent access of the richest decile.

- Only 38 percent have access to own use potable water facility. Again, access increases with income. The poorest decile has an access of only 17 percent while the richest decile has an access of 73 percent.
- In particular, since 74 percent of those whose main source of water is from springs and rivers belong to the poorer half of families, this would be a relatively good proxy for income.

### **Sanitary toilet facility**

- Seventy-five (75) percent of families have sanitary toilet facilities (TABLE 2). Fifty-two (52) percent of families in the poorest decile have access while 96 percent in the richest decile have access to sanitary toilet facilities.
- Twelve (12) percent of families have no toilet facility. The proportion decreases with income. Twenty-six (26) percent of the poorest decile have no toilet facility while 1 percent of the richest decile have no toilet facility.
- Access to sanitary toilet facilities continuously improves with income. In fact, since 70 percent of those who use open pit toilets and 76 percent of those who have no toilet facilities at all, belong to the bottom 50 percent of Families, these are relatively good ways of identifying the poor.

### **Durability of the house**

- Fifty-two (52) percent of families have houses made of strong materials (TABLE 3). The proportion increases with income. Twenty-two (22) percent of the poorest decile has houses built with strong materials while 88 percent of the richest decile have houses of strong materials.
- Only 3 percent of families live in makeshift houses, with the poorest decile having only 6 percent families living in makeshift houses.
- The durability of houses tends to improve with income. The strength of construction materials can identify the nonpoor well since 83 percent of those with strong houses belong to the upper 7 deciles. Meanwhile, use of light and makeshift materials may be an indication of poverty since 67 percent of those living in lightly constructed houses and 76 percent of those living in makeshift houses belong to the five poorest deciles.

### **Tenure status of the house**

- In terms of the tenure status of the house, 65 percent of families own both house and lot (TABLE 4.1). Although, the proportion increases with income, the proportion for poorest decile is 59 percent as compared to 79 percent for the richest decile.
- Ten percent of families are renting either the house and lot, or just the lot. The proportion monotonically increases with income. The proportion of the poorest decile is 8 percent, while for the richest decile is 10 percent.
- Twenty-two (22) percent of the families are occupying their houses and/or lots rent-free. Proportion decreases with income.
- Three percent of families live in house and/or lot without the consent of the owner. The proportion for the poorest decile is 4 percent while it is 1 percent for the richest decile.
- Squatting in the urban areas is higher than in the rural areas (3.2 percent vs. 2.2 percent) (TABLE 4.2 and 4.3).
- The proportion of families who own their dwelling units is higher in the rural areas (69 percent) than in the urban areas (62 percent).
- In rural areas, 70 percent of squatters belong to the bottom 50 percent of families and can therefore be possibly used in identifying the poor in such areas. On the other hand, squatting is not a good proxy for income in urban areas since it is almost equally distributed across deciles.

### **Access to Electricity**

- Sixty-six (66) percent of the families have access to electricity. Access increases with income (TABLE 5.1). Only 34 percent of families in the poorest decile have electricity, while 96 percent of families in the richest decile have access.
- There is a wide disparity in the access to electricity across regions. NCR has the highest access at 98 percent, while ARMM has the lowest at 21 percent (TABLE 5.2).
- The percentage of families with (without) access to electricity rises (falls) steeply with income. Also, since 74 percent of those without electricity belong to the poorest half of the family population, it is a relatively good indicator of poverty.

### **Status of Employment of Family Head**

- Eighty-five (85) percent of the family heads are employed (TABLE 6.1). The proportion of families with employed family heads decreases with income. The proportion for the poorest decile is 91 percent, while it is 78 percent for the richest decile.
- The major source of income for the first two decile comes from entrepreneurial activities (about 26 percent) (TABLE 6.2A). For the top six decile, the major source of income comes from wages and salary.
- The contribution of other sources of income increases with income. Its share is 14 percent for the poorest decile and 29 percent for the richest decile.
- For those families whose main source of income comes from cash receipts, assistance from abroad, the proportion is 21 percent for the poorest decile and 50 percent for the richest decile (TABLE 6.2B).
- These numbers indicate that the employment state of the family heads is not a good indicator of the income-based measure of poverty. The proportion of employed family heads declines as one move up the income deciles. A possible reason for this is that the rich rely on income from wages, salaries and entrepreneurial activities, and more on remittances and transfers. Consequently, identifying Families as poor because the head is unemployed is not a good idea since 72 percent of unemployed family heads belong to the upper 6 deciles.
- The proportion of the families with no employed members is 29 percent. There seems to be no clear pattern between this proportion and income deciles (TABLE 6.3A/3B).
- The average age of the family head is directly related to income (TABLE 6.4A).

### **Ownership of Consumer Durables**

- Ownership of consumer durables increases as income increases (TABLE 8). In particular, 78 percent of television set owners, 94 percent of VTR owners, 88 percent of stereo owners, 88 percent of refrigerator owners, 95 percent of freezer owners, 96 percent of airconditioner owners, and 91 percent of vehicle owners belong to the upper 60 percent of the family population. Ownership of these durables goods is thus an easy way of identifying the nonpoor.

## **Redefining Poverty**

The MBN Approach could also serve as an alternative definition of poverty. But how exactly can it be used to define poverty?

One possible approach is to set a definite norm, classification or criterion for determining poor Families based on their MBN characteristics. The present study makes use of 6 indicators found in the 1994 FIES. These were:

1. Access to potable water supply
2. Access to sanitary toilet facility
3. Non-makeshift house
4. Non-squatting tenure status
5. Above basic educational attainment of the family head
6. Per capita income at least equal to the poverty threshold.

Table 9 shows the different criteria that were tested with the resulting poverty incidence results. If we define being poor as not satisfying all of the 6 needs listed above, then not one would be classified as poor. However, if we relax the criterion and define the poor as those who do not satisfy at least 5 out of the 6 needs, then the proportion of families would be 0.01 percent. If we consider the poor as those who do not satisfy at least 2 out of the 6 needs, then the proportion of families who are poor rises to 20.6 percent. At the extreme, if we define the poor as those who do not satisfy at least 1 out of the 6 needs, then more than half of the families are then classified as poor!

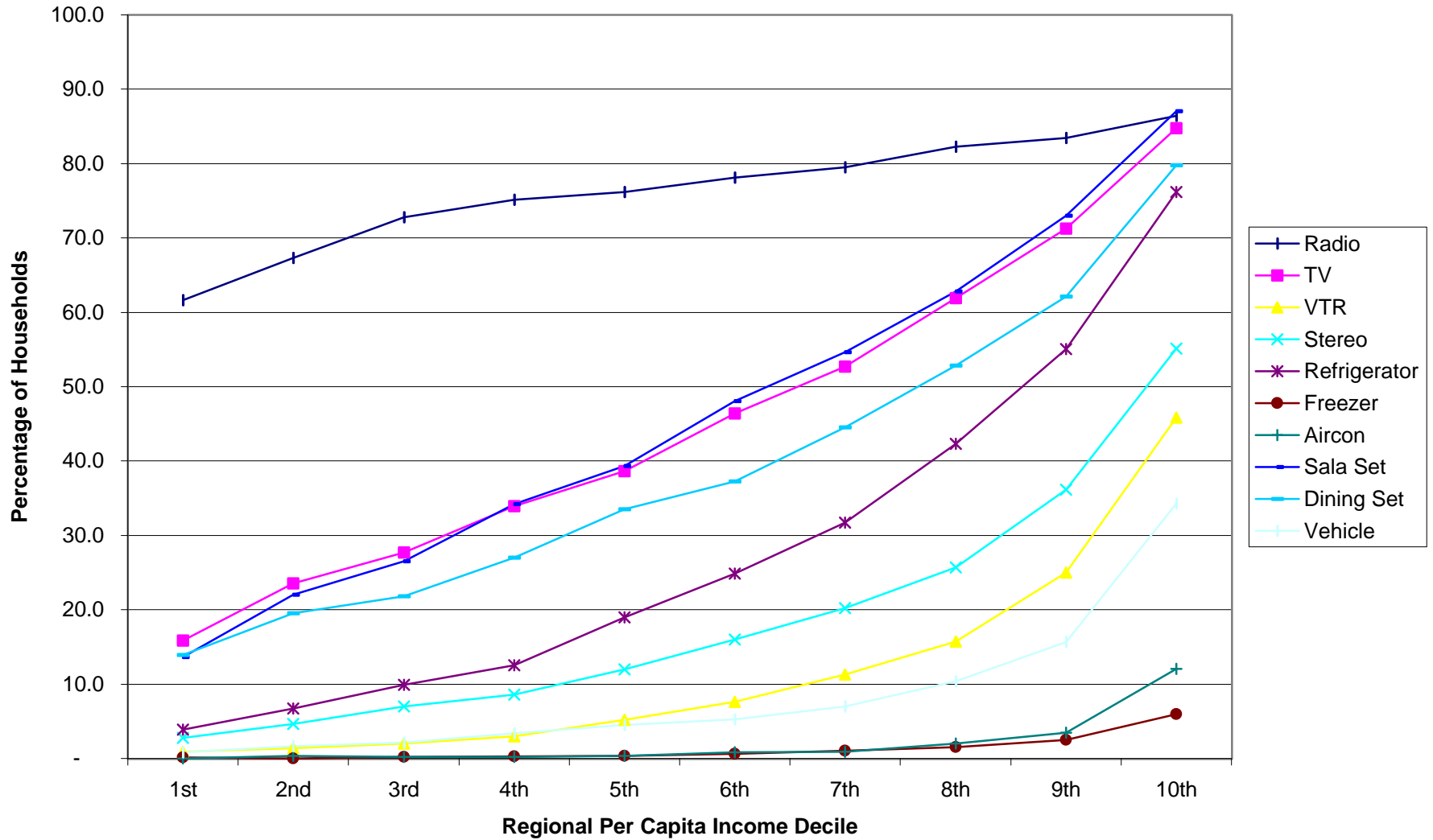
## **Concluding Remarks**

Income is able to capture many but not all of the aspects of deprivation. Income can proxy for the probability of meeting survival needs such as access to potable water supply and sanitary toilet facility. Income can proxy for the strength of housing materials used for access to electricity, but not for house tenure status. Income can track the educational attainment of family heads but not their employment rate.

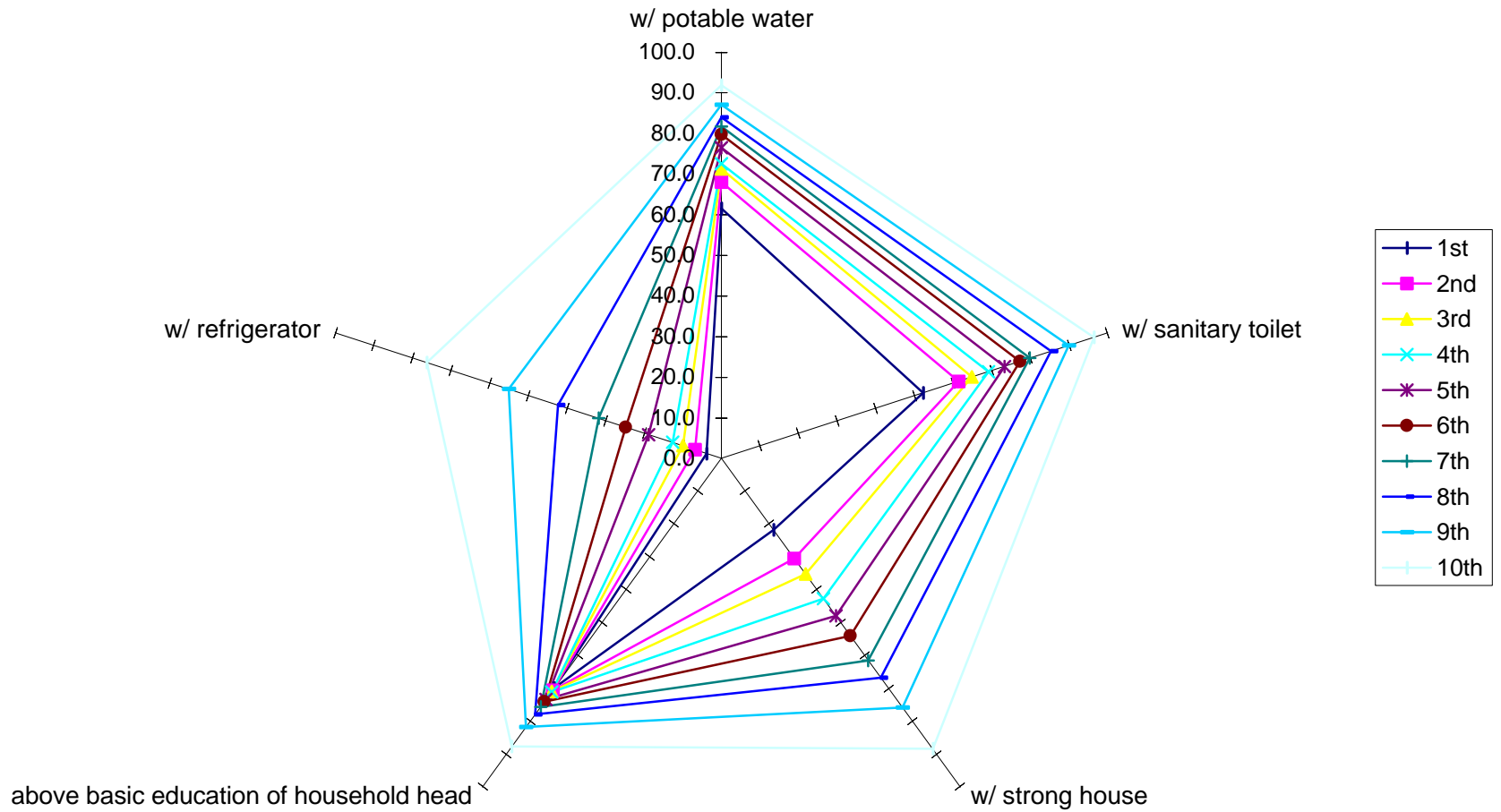
Family income data are difficult to obtain from community-based monitoring systems, especially if volunteer enumerators are used. Thus, it might be worth considering using proxy measures of income particularly if the intention is not really to come up with an estimate of the actual level of income but just to classify the families into broad groupings, e.g. poor and non-poor.

One can get a wide range of estimates of poverty incidence depending on which norm is used. One should therefore be careful in determining how exactly the multiple criteria will be used to define the poor. This is one area where further research needs to be done.

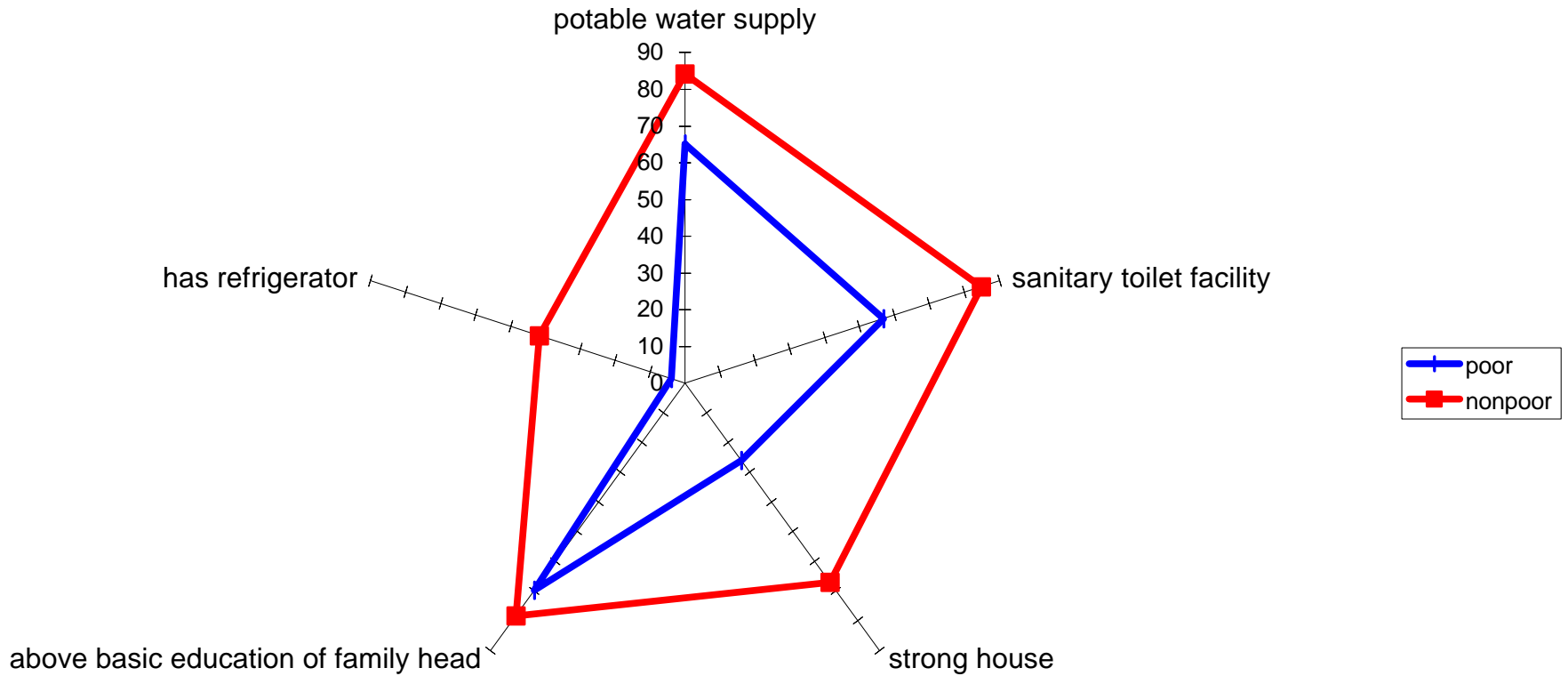
**FIGURE 1**  
Ownership of Durables



**FIGURE 2:**  
**Percentage of Families with Access**  
**by Regional Per Capita Income Decile**



**FIGURE 3:**  
**Proportion of Families with Access to Selected Needs**



**TABLE 1**  
**SOURCE OF WATER SUPPLY**  
**By Regional Per Capita Income Decile**  
**(In Number and Percent of Households)**

Source of Water Supply	Decile										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
	Frequency										
	Column Percent										
<b>POTABLE</b>	784,769 61.5	866,769 68.0	907,882 71.2	926,133 72.5	974,204 76.4	1,016,537 79.7	1,041,984 81.7	1,070,663 84.0	1,110,463 87.1	1,170,757 91.8	9,870,161 77.4
<b>Own Use</b>	222,554 17.4	272,277 21.4	317,067 24.9	354,448 27.8	430,220 33.7	489,862 38.4	542,711 42.6	634,818 49.8	721,065 56.5	929,998 72.9	4,915,020 38.5
Faucet	104,313 8.2	130,103 10.2	142,417 11.2	182,101 14.3	235,094 18.4	278,455 21.8	329,415 25.8	390,160 30.6	470,450 36.9	638,738 50.1	2,901,246 22.7
Tubed Well	118,241 9.3	142,174 11.2	174,650 13.7	172,347 13.5	195,126 15.3	211,407 16.6	213,296 16.7	244,658 19.2	250,615 19.7	291,260 22.8	2,013,774 15.8
<b>Shared</b>	562,215 44.1	594,492 46.6	590,815 46.3	571,685 44.8	543,984 42.7	526,675 41.3	499,273 39.2	435,845 34.2	389,398 30.5	240,759 18.9	4,955,141 38.8
Faucet	269,116 21.1	285,868 22.4	315,233 24.7	293,960 23.0	288,244 22.6	278,527 21.8	268,799 21.1	239,347 18.8	215,907 16.9	160,819 12.6	2,615,820 20.5
Tubed Well	293,099 23.0	308,624 24.2	275,582 21.6	277,725 21.8	255,740 20.1	248,148 19.4	230,474 18.1	196,498 15.4	173,491 13.6	79,940 6.3	2,339,321 18.3
<b>UNPOTABLE</b>	490,953 38.5	408,044 32.0	367,766 28.8	350,573 27.5	300,561 23.6	259,473 20.3	233,115 18.3	204,278 16.0	164,763 12.9	105,256 8.2	2,884,783 22.6
Dug Well	248,750 19.5	217,690 17.1	198,943 15.6	187,356 14.7	168,861 13.2	144,550 11.3	135,389 10.6	108,490 8.5	94,887 7.4	62,369 4.9	1,567,285 12.3
Spring,	204,059 16.0	147,574 11.6	131,651 10.3	121,538 9.5	90,992 7.1	79,451 6.2	58,092 4.6	57,398 4.5	33,264 2.6	21,014 1.6	945,033 7.4
Rain	6,293 0.5	8,376 0.7	4,999 0.4	10,592 0.8	9,453 0.7	7,591 0.6	10,619 0.8	8,102 0.6	10,118 0.8	5,359 0.4	81,503 0.6
Peddler	31,851 2.5	34,404 2.7	32,173 2.5	31,087 2.4	31,255 2.5	27,881 2.2	29,015 2.3	30,288 2.4	26,494 2.1	16,514 1.3	290,962 2.3
<b>TOTAL</b>	<b>1,275,722</b>	<b>1,274,813</b>	<b>1,275,648</b>	<b>1,276,706</b>	<b>1,274,765</b>	<b>1,276,010</b>	<b>1,275,099</b>	<b>1,274,941</b>	<b>1,275,226</b>	<b>1,276,013</b>	<b>12,754,944</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

sws.xls

**TABLE 2**  
**TYPE OF TOILET FACILITY USED**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Type of Toilet Facility	Decile										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
<b>SANITARY</b>	665,814 52.2	782,479 61.4	825,937 64.7	881,770 69.1	933,872 73.3	985,660 77.2	1,018,798 79.9	1,087,857 85.3	1,146,536 89.9	1,229,428 96.3	9,558,151 74.9
water sealed	405,738 31.8	537,483 42.2	599,582 47.0	670,846 52.5	745,090 58.4	833,925 65.4	878,679 68.9	962,151 75.5	1,069,706 83.9	1,177,972 92.3	7,881,172 61.8
closed pit	260,076 20.4	244,996 19.2	226,355 17.7	210,924 16.5	188,782 14.8	151,735 11.9	140,119 11.0	125,706 9.9	76,830 6.0	51,456 4.0	1,676,979 13.1
<b>UNSANITARY</b>	280,122 22.0	236,254 18.5	222,512 17.4	213,046 16.7	175,489 13.8	157,313 12.3	154,338 12.1	110,072 8.6	80,913 6.3	35,050 2.7	1,665,109 13.1
open pit	223,648 17.5	195,471 15.3	183,932 14.4	178,787 14.0	145,160 11.4	126,024 9.9	121,872 9.6	78,301 6.1	54,477 4.3	22,397 1.8	1,330,069 10.4
others	56,474 4.4	40,783 3.2	38,580 3.0	34,259 2.7	30,329 2.4	31,289 2.5	32,466 2.5	31,771 2.5	26,436 2.1	12,653 1.0	335,040 2.6
<b>NONE</b>	329,787 25.9	256,082 20.1	227,199 17.8	181,892 14.2	165,404 13.0	133,037 10.4	101,964 8.0	77,012 6.0	47,776 3.7	11,535 0.9	1,531,688 12.0
<b>TOTAL</b>	1,275,723	1,274,815	1,275,648	1,276,708	1,274,765	1,276,010	1,275,100	1,274,941	1,275,225	1,276,013	12,754,948

Source: 1994 Family Income and Expenditure Survey (FIES)

stf.xls

**TABLE 3**  
**TYPE OF CONSTRUCTION MATERIALS USED IN HOUSE**  
**By Regional Capita Income Decile**  
**(In Number and Percentage of Households)**

Type of Construction Materials	Decile										Total	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
Frequency												
Column Percent												
<b>STRONG *</b>	278,160 21.8	388,149 30.4	450,639 35.3	546,277 42.8	611,338 48.0	688,608 54.0	783,257 61.4	850,470 66.7	967,619 75.9	1,128,562 88.4	6,693,079 52.5	
<b>LIGHT **</b>	917,450 71.9	830,091 65.1	756,087 59.3	686,238 53.8	623,344 48.9	561,193 44.0	468,998 36.8	402,323 31.6	291,521 22.9	142,640 11.2	5,679,885 44.5	
<b>MAKESHIFT ***</b>	80,112.0 6.3	56,575.0 4.4	68,921.0 5.4	44,191.0 3.5	40,084.0 3.1	26,209.0 2.1	22,844.0 1.8	22,147.0 1.7	16,086.0 1.3	4,810.7 0.4	381,980 3.0	
<b>TOTAL</b>	1,275,722	1,274,815	1,275,647	1,276,706	1,274,766	1,276,010	1,275,099	1,274,940	1,275,226	1,276,013	12,754,944	

\* houses with strong or predominantly strong roof and walls

\*\* houses with light and predominantly light roof and/or walls

\*\*\* houses with makeshift or predominantly makeshift roof and/or walls

Source: 1994 Family Income and Expenditures Survey (FIES)

cmh.xls

**TABLE 4.1**  
**TENURE STATUS OF DWELLING**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Tenure Status of Dwelling	Decile										Total	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
	Frequency											
	Column Percent											
<b>OWN BOTH</b>	746,685	768,917	785,394	800,052	799,754	839,480	834,232	844,723	909,739	1,011,041	8,340,017	
House and Lot	58.5	60.3	61.6	62.7	62.7	65.8	65.4	66.3	71.3	79.2	65.4	
<b>RENTING</b>	96,706	106,499	120,872	116,815	127,917	143,665	153,604	164,589	157,040	123,129	1,310,836	
	7.6	8.4	9.5	9.1	10.0	11.3	12.0	12.9	12.3	9.6	10.3	
House and Lot	56,718	57,823	70,204	59,176	70,562	87,442	87,915	97,496	98,870	85,411	771,617	
	4.4	4.5	5.5	4.6	5.5	6.9	6.9	7.6	7.8	6.7	6.0	
Lot	39,988	48,676	50,668	57,639	57,355	56,223	65,689	67,093	58,170	37,718	539,219	
	3.1	3.8	4.0	4.5	4.5	4.4	5.2	5.3	4.6	3.0	4.2	
<b>RENT-FREE</b>	383,820	358,874	319,414	312,968	313,383	258,702	256,130	238,493	187,302	130,884	2,759,970	
	30.1	28.2	25.0	24.5	24.6	20.3	20.1	18.7	14.7	10.3	21.6	
Lot	332,412	296,690	260,091	255,701	254,264	195,856	199,424	174,793	132,022	73,158	2,174,411	
	26.1	23.3	20.4	20.0	19.9	15.3	15.6	13.7	10.4	5.7	17.0	
House and Lot	51,408	62,184	59,323	57,267	59,119	62,846	56,706	63,700	55,280	57,726	585,559	
	4.0	4.9	4.7	4.5	4.6	4.9	4.4	5.0	4.3	4.5	4.6	
<b>SQUATTING</b>	48,512	40,525	49,968	46,872	33,712	34,163	31,132	27,135	21,145	10,958	344,122	
	3.8	3.2	3.9	3.7	2.6	2.7	2.4	2.1	1.7	0.9	2.7	
On Lot	47,149	37,549	48,673	44,540	30,711	33,279	28,669	25,747	20,049	9,551	325,917	
	3.7	2.9	3.8	3.5	2.4	2.6	2.2	2.0	1.6	0.7	2.6	
On House and Lot	1,363	2,976	1,295	2,332	3,001	884	2,463	1,388	1,096	1,408	18,206	
	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	
<b>TOTAL</b>	1,275,723	1,274,815	1,275,648	1,276,707	1,274,766	1,276,010	1,275,098	1,274,940	1,275,226	1,276,012	12,754,945	

Source: 1994 Family Income and Expenditures Survey (FIES)

tenstat.xls

**TABLE 4.2**  
**TENURE STATUS OF DWELLING:RURAL**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Tenure Status of Dwelling	Decile										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
<b>OWN BOTH</b>	530,228	513,495	522,796	471,546	464,737	453,794	407,510	380,719	367,703	315,585	4,428,113
House and Lot	62.9	65.1	65.9	65.4	67.2	72.1	70.3	73.6	78.4	85.3	69.2
<b>RENTING</b>	23,881	29,672	28,131	29,517	25,975	29,541	25,511	24,438	16,141	12,643	245,449
	2.8	3.8	3.5	4.1	3.8	4.7	4.4	4.7	3.4	3.4	3.8
House and Lot	2,715	641	3,239	2,639	4,040	6,351	9,166	7,084	666	6,509	43,048
	0.3	0.1	0.4	0.4	0.6	1.0	1.6	1.4	0.1	1.8	0.7
Lot	21,166	29,031	24,892	26,878	21,935	23,190	16,345	17,354	15,475	6,134	202,400
	2.5	3.7	3.1	3.7	3.2	3.7	2.8	3.4	3.3	1.7	3.2
<b>RENT-FREE</b>	263,955	229,704	216,614	201,433	185,019	134,691	134,585	101,776	78,364	39,731	1,585,872
	31.3	29.1	27.3	27.9	26.8	21.4	23.2	19.7	16.7	10.7	24.8
Lot	244,893	202,143	191,493	182,129	160,506	113,369	112,111	82,513	63,583	25,840	1,378,580
	29.1	25.6	24.2	25.3	23.2	18.0	19.3	16.0	13.6	7.0	21.5
House and Lot	19,062	27,561	25,121	19,304	24,513	21,322	22,474	19,263	14,781	13,891	207,292
	2.3	3.5	3.2	2.7	3.5	3.4	3.9	3.7	3.2	3.8	3.2
<b>SQUATTING</b>	24,666	15,820	25,349	18,510	15,492	11,157	12,421	10,060	6,838	1,907	142,220
	2.9	2.0	3.2	2.6	2.2	1.8	2.1	1.9	1.5	0.5	2.2
On Lot	24,666	15,151	24,054	17,430	14,654	11,157	12,421	9,406	6,182	1,907	137,027
	2.9	1.9	3.0	2.4	2.1	1.8	2.1	1.8	1.3	0.5	2.1
On House and Lot	0	669	1295	1,080	838	0	0	654	657	0	5,193
	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1
<b>TOTAL</b>	842,730	788,691	792,891	721,005	691,223	629,183	580,027	516,993	469,046	369,866	6,401,654

Source: 1994 Family Income and Expenditures Survey (FIES)

tenstatr.xls

**TABLE 4.3**  
**TENURE STATUS OF DWELLING:URBAN**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Tenure Status of Dwelling	Decile										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
<b>OWN BOTH</b>	216,456	255,422	262,597	328,507	335,017	385,685	426,722	464,004	542,036	695,456	3,911,902
House and Lot	50.0	52.5	54.4	59.1	57.4	59.6	61.4	61.2	67.7	76.7	61.6
<b>RENTING</b>	72,825	76,827	92,742	87,298	101,942	114,124	128,093	140,152	134,899	110,486	1,059,388
	16.8	15.8	19.2	15.7	17.5	17.6	18.4	18.5	16.9	12.2	16.7
House and Lot	54,003	57,182	66,965	56,537	66,522	81,091	78,749	90,412	92,205	78,902	722,568
	12.5	11.8	13.9	10.2	11.4	12.5	11.3	11.9	11.5	8.7	11.4
Lot	18,822	19,645	25,777	30,761	35,420	33,033	49,344	49,740	42,694	31,584	336,820
	4.3	4.0	5.3	5.5	6.1	5.1	7.1	6.6	5.3	3.5	5.3
<b>RENT-FREE</b>	119,865	129,170	102,800	111,535	128,364	124,011	121,545	136,718	108,939	91,154	1,174,101
	27.7	26.6	21.3	20.1	22.0	19.2	17.5	18.0	13.6	10.1	18.5
Lot	87,519	94,547	68,598	73,572	93,758	82,487	87,313	92,281	68,439	47,318	795,832
	20.2	19.4	14.2	13.2	16.1	12.8	12.6	12.2	8.6	5.2	12.5
House and Lot	32,346	34,623	34,202	37,963	34,606	41,524	34,232	44,437	40,500	43,836	378,269
	7.5	7.1	7.1	6.8	5.9	6.4	4.9	5.9	5.1	4.8	6.0
<b>SQUATTING</b>	23,846	24,705	24,618	28,362	18,220	23,007	18,711	17,076	14,306	9,052	201,902
	5.5	5.1	5.1	5.1	3.1	3.6	2.7	2.3	1.8	1.0	3.2
On Lot	22,483	22,398	24,618	27,110	16,057	22,123	16,248	16,341	13,867	7,644	188,889
	5.2	4.6	5.1	4.9	2.8	3.4	2.3	2.2	1.7	0.8	3.0
On House and Lot	1,363	2307	0	1,252	2,163	884	2,463	735	439	1,408	13,013
	0.3	0.5	0.0	0.2	0.4	0.1	0.4	0.1	0.1	0.2	0.2
<b>TOTAL</b>	432,992	486,124	482,757	555,702	583,543	646,827	695,071	757,950	800,180	906,148	6,347,293

Source: 1994 Family Income and Expenditures Survey (FIES)

tenstatu.xls

**TABLE 5.1**  
**HOUSEHOLD WITH ELECTRICITY**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentage of Households)**

Frequency Column Percent	Decile										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
<b>WITH ELECTRICITY</b>	436,394 34.2	564,973 44.3	642,915 50.4	735,303 57.6	793,838 62.2	907,510 71.2	967,901 75.9	1,040,916 81.6	1,115,764 87.5	1,218,399 95.5	8,423,913 66.1
<b>WITHOUT ELECTRICITY</b>	839,328 65.80	709,842 55.65	632,732 49.61	541,404 42.44	480,928 37.70	368,499 28.89	307,199 24.08	234,025 18.35	159,461 12.50	57,614 4.52	4,331,032 33.97
<b>Total</b>	1,275,490	1,275,446	1,275,400	1,275,614	1,275,794	1,275,391	1,275,567	1,275,287	1,275,592	1,275,362	12,750,000

Source: 1994 Family Income and Expenditures Survey (FIES)

elect.xls

**TABLE 5.2**  
**HOUSEHOLDS WITH ELECTRICITY**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentage of Households)**

Region	Frequency	With Electricity		Without Electricity		Total
	Row Percent		%		%	
PHILIPPINES		8,423,912	66.0	4,331,031	34.0	12,754,943
National Capital Region (NCR)		1,737,408	98.4	28,236	1.6	1,765,644
Region I (Ilocos Region)		522,278	73.9	183,984	26.1	706,262
Region II (Cagayan Valley)		322,286	61.6	200,812	38.4	523,098
Region III (Central Luzon)		1,102,126	86.5	172,521	13.5	1,274,647
Region IV (Southern Tagalog)		1,312,018	75.8	419,379	24.2	1,731,397
Region V (Bicol)		448,979	51.1	428,916	48.9	877,895
Region VI (Western Visayas)		606,650	53.5	526,749	46.5	1,133,399
Region VII (Central Visayas)		517,261	54.3	435,092	45.7	952,353
Region VIII (Eastern Visayas)		296,277	42.7	397,401	57.3	693,678
Region IX (Western Mindanao)		234,923	46.2	273,845	53.8	508,768
Region X (Northern Mindanao)		427,390	58.2	306,805	41.8	734,195
Region XI (Southern Mindanao)		491,560	55.4	395,585	44.6	887,145
Region XII (Central Mindanao)		201,051	50.9	194,192	49.1	395,243
Cordillera Administrative Region (CAR)		134,985	56.0	106,218	44.0	241,203
Autonomous Region of Muslim Mindanao (ARMM)		68,720	20.8	261,296	79.2	330,016

Source: 1994 Family Income and Expenditures Survey (FIES)

electr.xls

**TABLE 6.1**  
**EMPLOYMENT STATUS OF HOUSEHOLD HEAD**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentages of Households)**

Decile	Employment Status		Unemployed	%	Total
	Employed	%			
1st	1,166,262	91.4	109,460	8.58	1,275,722
2nd	1,154,755	90.6	120,059	9.42	1,274,814
3rd	1,133,746	88.9	141,901	11.12	1,275,647
4th	1,117,131	87.5	159,576	12.50	1,276,707
5th	1,103,283	86.5	171,483	13.45	1,274,766
6th	1,088,774	85.3	187,235	14.67	1,276,009
7th	1,073,990	84.2	201,109	15.77	1,275,099
8th	1,035,708	81.2	239,232	18.76	1,274,940
9th	1,007,740	79.0	267,486	20.98	1,275,226
10th	988,487	77.5	287,525	22.53	1,276,012
<b>Total</b>	<b>10,869,876</b>	<b>85.2</b>	<b>1,885,066</b>	<b>14.78</b>	<b>12,754,942</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

hhead.xls

**TABLE 6.2A**  
**MAJOR SOURCE OF INCOME**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Decile	Source of Income				Total
	Wages/Salary	Entrepreneurial	Other Sources	Cash Receipts, Assistance from Abroad	
<b>1st</b>	485,071 38.02	610,473 47.85	180,177 14.12	21,180 1.66	1,275,721
<b>2nd</b>	526,257 41.28	586,896 46.04	161,662 12.68	32,554 2.55	1,274,815
<b>3rd</b>	560,378 43.93	550,894 43.19	164,375 12.89	39,513 3.10	1,275,647
<b>4th</b>	578,855 45.34	511,108 40.03	186,744 14.63	44,032 3.45	1,276,707
<b>5th</b>	565,371 44.35	516,736 40.54	192,659 15.11	65,153 5.11	1,274,766
<b>6th</b>	597,685 46.84	468,265 36.70	210,060 16.46	80,201 6.29	1,276,010
<b>7th</b>	608,466 47.72	420,785 33.00	245,848 19.28	100,370 7.87	1,275,099
<b>8th</b>	634,623 49.78	378,487 29.69	261,830 20.54	116,617 9.15	1,274,940
<b>9th</b>	633,364 49.67	340,448 26.70	301,414 23.64	158,023 12.39	1,275,226
<b>10th</b>	606,604 47.54	298,709 23.41	370,700 29.05	203,883 15.98	1,276,013
<b>Total</b>	5,796,674 45.45	4,682,801 36.71	2,275,469 17.84	861,525 6.75	12,754,944

Source: 1994 Family Income and Expenditure Survey (FIES)

income.xls

**TABLE 6.2B**  
**EMPLOYMENT STATUS OF HEADS OF HOUSEHOLDS WHOSE**  
**MAIN SOURCE OF INCOME COMES FROM CASH RECEIPTS,**  
**ASSISTANCE FROM ABROAD**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage)**

Decile	Employment Status		Total
	Employed	Unemployed	
1st	16,772 79.19	4,408 20.81	21,180
2nd	19,392 59.57	13,161 40.43	32,553
3rd	24,783 62.72	14,730 37.28	39,513
4th	20,880 47.42	23,152 52.58	44,032
5th	33,142 50.87	32,012 49.13	65,154
6th	42,956 53.56	37,245 46.44	80,201
7th	53,049 52.85	47,321 47.15	100,370
8th	57,827 49.59	58,791 50.41	116,618
9th	85,315 53.99	72,708 46.01	158,023
10th	102,560 50.30	101,323 49.70	203,883
<b>Total</b>	<b>456,675</b> <b>53.01</b>	<b>404,851</b> <b>46.99</b>	<b>861,526</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

income2.xls

**TABLE 6.3A**  
**NUMBER OF EMPLOYED MEMBERS FOR HOUSEHOLDS w/**  
**UNEMPLOYED HEAD**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentages of Households)**

Decile	Number of Household Members					Total
	zero	one	two	three	four or more	
1st	30,153 27.55	51,543 47.09	16,211 14.81	6,982 6.38	4,571 4.18	109,460
2nd	29,820 24.84	46,023 38.33	26,523 22.09	11,368 9.47	6,325 5.27	120,059
3rd	39,542 27.87	58,385 41.14	24,324 17.14	11,913 8.40	7,738 5.45	141,902
4th	38,094 23.87	60,123 37.68	38,830 24.33	17,795 11.15	4,734 2.97	159,576
5th	43,915 25.61	72,358 42.20	34,415 20.07	13,713 8.00	7,083 4.13	171,484
6th	50,550 27.00	76,759 41.00	37,459 20.01	12,263 6.55	10,203 5.45	187,234
7th	64,340 31.99	71,769 35.69	36,096 17.95	17,697 8.80	11,208 5.57	201,110
8th	68,400 28.59	89,358 37.35	49,410 20.65	21,461 8.97	10,603 4.43	239,232
9th	76,806 28.71	96,479 36.07	58,368 21.82	22,223 8.31	13,611 5.09	267,487
10th	107,666 37.45	100,569 34.98	51,938 18.06	18,495 6.43	8,858 3.08	287,526
<b>Total</b>	<b>549,286</b> <b>29.14</b>	<b>723,366</b> <b>38.37</b>	<b>373,574</b> <b>19.82</b>	<b>153,910</b> <b>8.16</b>	<b>84,934</b> <b>4.51</b>	<b>1,885,070</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

emp.xls

**TABLE 6.3B**  
**NUMBER OF EMPLOYED MEMBERS FOR HOUSEHOLDS w/**  
**EMPLOYED HEAD**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentages of Households)**

Decile Frequency Row Pct	Number of Household Members					Total
	zero	one	two	three	four or more	
1st	3,250 0.28	720,171 61.75	300,255 25.75	87,897 7.54	54,690 4.69	1,166,263
2nd	2,418 0.21	672,453 58.23	325,171 28.16	94,966 8.22	59,748 5.17	1,154,756
3rd	3,962 0.35	614,628 54.21	338,340 29.84	113,319 10.00	63,497 5.60	1,133,746
4th	4,006 0.36	580,522 51.97	336,943 30.16	120,733 10.81	74,927 6.71	1,117,131
5th	6,696 0.61	559,231 50.69	348,772 31.61	112,907 10.23	75,677 6.86	1,103,283
6th	3,378 0.31	524,597 48.18	364,622 33.49	123,370 11.33	72,807 6.69	1,088,774
7th	2,879 0.27	500,763 46.63	376,755 35.08	122,018 11.36	71,575 6.66	1,073,990
8th	3,180 0.31	452,840 43.72	392,526 37.90	115,169 11.12	71,993 6.95	1,035,708
9th	1,663 0.17	404,180 40.11	415,485 41.23	111,791 11.09	74,621 7.40	1,007,740
10th	2,802 0.28	375,387 37.98	429,654 43.47	110,708 11.20	69,937 7.08	988,488
<b>Total</b>	<b>34,235 0.31</b>	<b>5,404,772 49.72</b>	<b>3,628,523 33.38</b>	<b>1,112,878 10.24</b>	<b>689,472 6.34</b>	<b>10,869,880</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

emp2.xls

**TABLE 6.4A**  
**AGE OF HOUSEHOLD HEAD**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Decile	Age					Total
	0-17	18-24	25-44	45-64	65 and over	
1st	625 0.05	10,674 0.84	781,289 61.24	369,944 29.00	113,190 8.87	1,275,722
2nd	641 -	17,374 1.36	684,777 53.72	450,939 35.37	121,084 9.50	1,274,815
3rd	616 0.05	14,413 1.13	633,882 49.69	469,598 36.81	157,139 12.32	1,275,648
4th	445 0.03	23,506 1.84	584,474 45.78	507,218 39.73	161,064 12.62	1,276,707
5th	1826 0.14	20,668 1.62	570,758 44.77	497,854 39.05	183,659 14.41	1,274,765
6th	428 0.03	11,789 0.92	537,552 42.13	544,407 42.66	181,834 14.25	1,276,010
7th	0 -	19,292 1.51	495,265 38.84	560,494 43.96	200,049 15.69	1,275,100
8th	408 0.03	16,315 1.28	493,918 38.74	573,170 44.96	191,129 14.99	1,274,940
9th	396 0.03	13,910 1.09	470,615 36.90	564,401 44.26	225,904 17.71	1,275,226
10th	0 -	15,717 1.23	447,052 35.04	585,710 45.90	227,533 17.83	1,276,012
<b>Total</b>	<b>5,386</b> <b>0.04</b>	<b>163,658</b> <b>1.28</b>	<b>5,699,582</b> <b>44.69</b>	<b>5,123,735</b> <b>40.17</b>	<b>1,762,585</b> <b>13.82</b>	<b>12,754,946</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

agehh.xls

**TABLE 7**  
**EDUCATION ATTAINMENT OF HOUSEHOLD HEAD**  
**By Regional Per Capita Income Decile**  
**(In Numbers and Percentage of Households)**

Educational Attainment	Decile									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
<b>NO GRADE</b>	102,632 8.05	82,024 6.43	79,403 6.22	72,510 5.68	75,472 5.92	65,100 5.10	62,162 4.88	52,934 4.15	45,593 3.58	24,873 1.95
<b>ELEMENTARY</b>	843,701 66.14	807,310 63.33	790,523 61.97	747,103 58.52	695,243 54.54	652,070 51.10	603,013 47.29	518,404 40.66	405,159 31.77	257,598 20.19
grade 1 to 3	201,309 15.78	201,679 15.82	186,925 14.65	160,633 12.58	162,617 12.76	134,172 10.51	124,581 9.77	94,386 7.40	70,276 5.51	43,324 3.40
grade 4	152,396 11.95	139,118 10.91	139,516 10.94	130,532 10.22	109,762 8.61	110,944 8.69	97,548 7.65	86,829 6.81	53,753 4.22	29,421 2.31
grade 5	106,752 8.37	91,078 7.14	93,151 7.30	87,642 6.86	82,218 6.45	75,755 5.94	69,614 5.46	56,250 4.41	49,612 3.89	28,156 2.21
elem grad	383,244 30.04	375,435 29.45	370,931 29.08	368,296 28.85	340,646 26.72	331,199 25.96	311,270 24.41	280,939 22.04	231,518 18.16	156,697 12.28
<b>HIGH SCHOOL</b>	285,920 22.41	320,262 25.12	331,288 25.97	358,019 28.04	382,358 29.99	405,969 31.82	393,619 30.87	416,855 32.70	404,340 31.71	304,064 23.83
1st to 3rd year high school	133,394 10.46	144,860 11.36	140,309 11.00	147,201 11.53	144,653 11.35	161,916 12.69	135,490 10.63	139,284 10.92	131,000 10.27	90,499 7.09
hs grad	152,526 11.96	175,402 13.76	190,979 14.97	210,818 16.51	237,705 18.65	244,053 19.13	258,129 20.24	277,571 21.77	273,340 21.43	213,565 16.74
<b>COLLEGE</b>	43,470 3.41	65,220 5.12	74,432 5.83	99,076 7.76	121,693 9.55	152,870 11.98	216,304 16.96	286,748 22.49	420,134 32.95	689,478 54.03
col. under	35,979 2.82	56,317 4.42	54,895 4.30	72,199 5.66	81,221 6.37	103,700 8.13	143,414 11.25	164,299 12.89	208,394 16.34	225,729 17.69
col. grad	7,491 0.59	8,903 0.70	19,537 1.53	26,877 2.11	40,472 3.17	49,170 3.85	72,890 5.72	122,449 9.60	211,740 16.60	463,749 36.34
<b>Total</b>	<b>1,275,723</b>	<b>1,274,816</b>	<b>1,275,646</b>	<b>1,276,708</b>	<b>1,274,766</b>	<b>1,276,009</b>	<b>1,275,098</b>	<b>1,274,941</b>	<b>1,275,226</b>	<b>1,276,013</b>

Source: 1994 Family Income and Expenditures Survey (FIES)

**TABLE 8**  
**OWNERSHIP OF DURABLES**  
**By Regional Per Capita Income Decile**  
**(In Number and Percentage of Households)**

Durables	Decile 1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Total
<b>Radio</b>	785,843 61.6	857,829 67.3	928,070 72.8	959,666 75.2	971,207 76.2	996,413 78.1	1,013,493 79.5	1,049,241 82.3	1,064,526 83.5	1,102,465 86.4	9,728,753
<b>TV</b>	202,571 15.9	300,087 23.5	352,979 27.7	432,882 33.9	492,731 38.7	592,310 46.4	672,263 52.7	789,679 61.9	909,110 71.3	1,081,774 84.8	5,826,386
<b>VTR</b>	11,736 0.9	17,575 1.4	25,658 2.0	38,125 3.0	65,850 5.2	97,209 7.6	144,057 11.3	200,788 15.8	319,249 25.0	584,903 45.8	1,505,150
<b>Stereo</b>	35,669 2.8	58,834 4.6	89,120 7.0	109,845 8.6	152,683 12.0	204,423 16.0	257,642 20.2	327,112 25.7	461,144 36.2	703,779 55.2	2,400,251
<b>Refrigerator</b>	49,247 3.9	85,595 6.7	126,362 9.9	160,057 12.5	241,725 19.0	316,825 24.8	404,572 31.7	539,555 42.3	702,167 55.1	972,397 76.2	3,598,502
<b>Freezer</b>	1,423 0.1	433 0.0	2,819 0.2	3,231 0.3	4,545 0.4	7,737 0.6	13,593 1.1	19,759 1.6	31,376 2.5	75,624 5.9	160,539
<b>Aircon</b>	0 -	4,226 0.3	2,449 0.2	2,603 0.2	4,757 0.4	10,919 0.9	11,260 0.9	25,967 2.0	44,036 3.5	153,450 12.0	259,668
<b>Sala Set</b>	173,711 13.6	280,546 22.0	337,927 26.5	437,180 34.2	501,360 39.3	613,443 48.1	696,405 54.6	800,961 62.8	931,131 73.0	1,110,836 87.1	5,883,500
<b>Dining Set</b>	177,518 13.9	248,795 19.5	278,344 21.8	344,565 27.0	427,142 33.5	475,735 37.3	567,550 44.5	673,872 52.9	792,184 62.1	1,018,002 79.8	5,003,707
<b>Vehicle</b>	10,172 0.8	20,939 1.6	27,373 2.2	43,200 3.4	57,002 4.5	67,161 5.3	88,842 7.0	132,619 10.4	199,940 15.7	437,227 34.3	1,084,475

Source: 1994 Family Income and Expenditure Survey (FIES)

durables.xls

**TABLE 9**  
**ESTIMATES OF POVERTY INCIDENCE**  
**(Number and Percentage of Households)**

Criteria	1994	
	Number	Percent
Does not satisfy:		
all six needs	0	0.000
at least 5 out of 6 needs	1,227	0.010
at least 4 out of 6 needs	36,092	0.283
at least 3 out of 6 needs	533,634	4.184
at least 2 out of 6 needs	2,632,905	20.642
at least 1 out of 6 needs	6,753,996	52.952

\* Criteria refers to combinations of these characteristics:  
1) access to potable water, 2) access to sanitary toilet facility, 3) living in non makeshift housing, 4) non squatter  
5) educational attainment of household head is at least elementary and, 6) per capita income of household above the regional poverty thresholds.

Source: Family Income and Expenditures Survey, 1991 and 1994

pov94.xls