Table 4.1. Mean Income and Income Inequality in Several National Household Surveys, 1961-1975

Survey	Mean Income per household, current prices	Gini Coefficient
1961 FIES	1804	.50
1965 FIES	2541	.50
1968 NDS	not available	.64
1971 FIES	37 36	.48
1974 PSSC	8901	.62
1975 PREPF-GINA	5731	.51
1975 FIES	5840	.44

is a minor criticism. A more serious issue is the consistency of the FIES with the National Income Accounts (the latter, obviously, has been regularly recording per capita income growth every year).

Table 4.2 contains comparisons made by Lim (1978), showing that the FIES of 1957-1971 managed to capture nearly two-thirds of Personal Income; however, there was a tremendous under-coverage in 1975 when less than half of Personal Income was captured. Barros (1978) has shown in Table 4.3, following, that the FIES of 1971 and earlier would be somewhat worse in coverage than comparable surveys in neighboring countries. Obviously, the 1975 survey would be very poor in comparison.

The under-coverage problem has been worsening. The Ranis Employment Mission of 1973, commenting on the FIES available at the time, stated that "there is good reason to suspect that under-reporting of income was higher in 1971 than before. For instance, for the top ten percent (10%) of urban families, the data imply a fall of almost one-third in real income from 1965 to 1971, which surely is implausible." Later, in 1977, the PREPF research project had to reject the 1975 FIES, on the ground that it would have real per capita income declining over 1971-1975, a clear contradiction with the 'facts' given by the National Accounts (Mangahas, Quizon and Lim, 1977). It suggested that the reason for the undercoverage

¹⁸ International Labour Organization (1974) p. 9.

Table 4.2. Comparison of the Personal Income and the FIES Income Estimates: 1957, 1961, 1965, 1971 and 1975

Year	FIES Aggregated Household Income (million pesos) (1)	Aggregate Personal Income (million pesos) (2)	(1) : (2)
1957	5824	9,057 ^{b/}	64.3%
1961	7982	13,053	61.2%
1965	13024	19,869	65.6%
1971	23714	36,196 ^{b/}	65.5%
1975	40059 ^a /	88,955	44.0%

a/Estimate based on preliminary hand tally.

Source: Lim (1978) Table VIII, p. 90.

 $[\]frac{b}{Adjusted}$ to have similar reference period as FIES estimates by using monthly averages.

Table 4.3. Comparative Degree of Coverage of Income by Household Surveys in Selected Asian Countries 2/

		Survey Income Relative to National Accounts Income
	Philippines (1971)	58%b/
	Malaysia (1967-68)	60%
	Thailand (1968-69)	69%
~~~	South Korea (1966)	73%
	Japan (1968)	73%

Source: Barros (1978), Table 3.3.

Estimates of the household surveys and the National Accounts do not necessarily have the same reference periods. Differences vary for each country.

 $[\]frac{b}{}$ Unadjusted for the reference period.

could be the failure to draw a meaningful number of survey respondents from the residential enclaves of the rich.

### 4.2. The National Demographic Surveys

In the 1968 NDS, annual income (in cash and in kind) of each family member was surveyed and included salaries, wages, profits, value of production, income from property and other non-work income. The 1973 NDS survey questions on income included only two: the respondent's estimation of (1) cash income and (2) non-cash income.

The 1968 NDS has the advantage of matching individual characteristics (such as employment status, educational level, occupation etc.) with income but is generally considered to have underestimated income in kind, especially in the rural area (Encarnación et al., 1974). Income underreporting in the 1973 NDS may have been due to the lack of detail and emphasis on earnings in the survey questionnaires (Lim, 1978).

Both NDS drew rather a large number of households nation—wide, 7237 in 1968 and 8,434 in 1973. However, they concentrated on demographic rather than economic variables and appear to be even more over-representative of the lower income groups than the Family Income and Expenditure Surveys of that time. In Manila, for example, the 1968 NDS mean household head's income was #3235, while the mean

family income in the 1965 FTES was \$6590 and in the 1971 FIES was \$77785. The NDS level seems lower, even after allowing for multiple earners in the family. Nevertheless, the income inequality displayed in the NDS is still substantial, with the standard deviation of the natural log of income ranging from .74 in Manila to 1.03 in Mindanao, roughly the equivalent of a Gini ratio range of .40 to .53.

# 4.3. The Population, Resources, Environment and the Philippine Future (PREPF) Surveys

To collect household data on a host of economic variables, including income (cash and non-cash) and wealth, the PREPF project launched three surveys in 1975.

Its national socio-economic survey, code-named GINA, carried out 2920 household interviews in 60 provinces. As in the FIES, respondents were aided in recalling income receipts by grouping these receipts into several categories: from household production activity (e.g. farming, cottage industry etc.), wages/salaries, rents from various sources and other non-work income

Under exact lognormality of distribution of income, the Gini ratio L may be computed from the log standard deviation 5 by

L = .4018 + 0.4675 (S - 0.75).

This is a highly accurate approximation for S ranging from .40 to .60; see appendix to Mangahas, Quizon and Lim, (1977).

including inheritances. Imputation of rent from owner occupied houses and of home consumed production was done by respondents.

In order to obtain information specifically on upper income receivers, PREPF did two additional surveys, using self-accomplished questionnaires. One set of respondents consisted of the parents of students in Metro Manila exclusive schools, while the other included members of special elite groups, including those in government, the U.P. Alumni Council, Rotarians and top income taxpayers. Of the nearly 4,000 questionnaires mailed to the first group, 2,296 were completed and returned. 470 were returned in the second group. Response rates for Rotarians and top taxpayers were 30 per cent and 23 per cent respectively.

The PREPF surveys are especially interesting for two other reasons. Firstly, they were conducted in the same year, 1975, as the latest NCSO-FIES, so their results can be compared. Secondly, special efforts were made to identify both sampling and non-sampling errors that are probably not particular to PREPF and are, in all likelihood, experienced in similar attempts at collecting distributional data.

With the cooperation of the elementary and high school departments of De La Salle, St. Theresa's, Lourdes, San Beda, Ateneo de Manila, San Agustin, Jose Rizal College, Philippine Christian College, St. Joseph's, Maryknoll, St. Paul's, and the University of the Philippines. The credit for this idea goes to the late Frank Lynch, S.J., Ateneo de Manila University.

Participants in the DAP Career Executive Service Development Program, Sessions VII, VIII, IX; U.P. Alumni Homecoming participants, April 1976; taxpayers drawn at random from the Bureau of Internal Revenue's list of 1000 top individual income taxpayers.

In the course of the GINA Survey, enumerators were required to make a daily report on how they judged the credibility of each respondent as to doubtfulness of response and as to difficulty with which questions were answered. Table 4.4 shows the results of these reports. On the whole, about a fourth of the interviews yielded doubtful or difficult-to-obtain responses on one or more of the questionnaire items. It is true that these proportions seem to be on the high side. However, their magnitudes depend very much on area, and vary widely from place to place. This could indicate that reliability depends, to a large extent, on such things as the quality of the interviewer, local political conditions etc. and not on the questionnaire itself.

It is also interesting to note that respondents may be hesitant to speak about their income, but relatively open with respect to their attitudes and perceptions. This suggests promise for further surveys that are carefully designed to submit perception-type indicators for variables (such as poverty).

Another important result of PREPF documentation of sampling errors is that the present procedure of simple random techniques, with political subdivisions such as barangays as preliminary sampling units, inevitably results in too few upper income families being reached. For instance, it was discovered (too late unfortunately) that, within PREPF's sampling framework, Sikatuna Village (which is obviously only middle-income) emerged as the "upper strata" neighborhood of Metro Manila. Other surveys

Table 4.4. PREPF-Gina Survey: Doubtful Responses and Difficulty in Answering Questionnaire Items on Income and Other Variables (1975)

1			The state of the s	A CONTRACTOR OF THE PARTY OF TH	Co-manufacture of the Control of the	THE COURT OF STREET STREET, ST	The development Office sugments of the state						
							Surv	Survey Location	n				
												Agusan	Davao
				Metro	Nueva							del	del
			Total	Manila	Vizcaya	Pampanga	Laguna	Sorsogon	E. Samar	Leyte	Cebu	Norte	Sur
		TOTAL SAMPLE =	2920	297	298	736	294	292	291	271	288	293	300
Š		Percentage of respondents with doubtful respon	with do	oubtful r	esponses,	p	questionnaire	item					
	4-4	Education	20.0	6.1	76.5	7.1	3.4	2.4	3.8	10.7	22.9	# #	0.09
	2	Desired Education	23.4	13.1	75.5	9.1	2.0	13.4	80.00	17.3	20.1	16.7	60.7
	က		28.0	19.5	74.2	12.8	20.1	10.3	12.0	27.7	33,3	8.8	65.0
	#				,								
		(Part I)	28.0	ω° σ	77.2	9.1	3.7	6.6	9.6	23.6	16.7	6.5	62,3
	ູນ	Inheritance	16.9	4.8	69.1	2.4	.7	7.5	3.4	8,5	11.8	5.8	0.64
	ô	Equity attitudes											
		(Part II)	22.1	10.8	76.2	4.9	2.7	8.2	8.9	20.7	16.0	8.4	0.49
	7.	Others	0.	ı	ღ.	က့	ı	ı	ł	ı	ı	ı	1
	Charlest Control												
ρ		Demonstrate menoral parts and and an alterior	omen	soofee At	£ # 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	par paoaooa a	ing but	ber and the state of the	fre item				
å		Trem tage of respondents	CADOL'TO	ancing at	TTTCATCA		146° 179	drescromia	- 1				
	+	Education	22.2	10.1	76.5	17.9	6.1	6.2	5.2	13,3	20.5	6.5	57.7
	2	Desired Education	28.2	18.5	75.8	23.0	8.5	21.9	8°3	23.2	24.3	15.0	60.3
	က်	Income	28.1	17.5	73.2	21.3	14.3	13.7	11.7	33.9	27.8	5.1	61.3
	*	Eq											
		(Part I)	28.8	13.5	76.2	35.1	12.9	19.5	11.3	31.4	14.9	o°6	62.0
	Ŋ	Inheritance	17.1	4.9	69.1	4.4	1.4	5.1	4.5	12.5	11.8	5.8	6.84
	9	Eq											
		(Part II)	25.3	13.5	76.8	32.4	13.9	17.1	11.3	29.2	12.6	7.8	61.7
	7.	Others	ť.	1	e,	e,	ຕູ	ı	ı	ı	1	ı	1
										Section of the sectio	With the the second to the second		

Source: Ochoa (1977), Appendix II, Table 1.

exhibit similarities: the PSSC survey (discussed below) had

Cubao as its high income area of Metro Manila while the 1975

NCSO-FIES also failed to capture a sufficient number of households
in "better off" vicinities or did not acquire usable questionnaires
when these were sampled. A casual stroll through the "exclusive"
residential villages of Makati is enough to demonstrate that these
surveys have completely ignored the obvious high-income enclaves.

This apparent failure to draw a representative number of upper income families into the sample was certainly one the reasons why the 1975 NCSO-FIES average annual household income estimate of P6,000 fell far below the National Accounts estimate of Personal Income divided by the number of households (P13,000).

The PREPF GINA (national) survey also resulted in an exceedingly low figure for average income. Fortunately the GINA results could be spliced with results from the survey covering parent of students in exclusive schools in Metro Manila. The adjustment resulted in an average income figure more consistent with that of the National Income Accounts.

After applying so many rough, yet necessary, adjustment techniques, PREPF researchers deemed it specious to offer any

²² Mangahas, Quizon and Lim (1977) and private conversations with NCSO staff members.

distribution with many, finely delineated income classes. Limiting itself to just five income classes, the PREPF adjusted distribution, which yields a Gini coefficient of 0.56, is shown in Table 4.5.

PREPF analysis has shown that interview procedures have to be improved in order to minimize the problem of understatement among those in the sample. The revisions will have to go much further than more redefinition of terms. For example, present definitional differences between the NCSO-FIES and the National Income Accounts cannot account for the large discrepancy between the two. Neither is there a problem of insufficient sample size per se; it is possible that the sample size could even be reduced, provided that improvements are made in accuracy of both respondent selection and the responses themselves.

## 4.4. The Philippine Social Science Council (PSSC) National Survey, 1974 (Parel and Caldito, n.d.)

This was a medium-sized survey (1770 households), apparently intended to be as nationally-representative as the Philippine Social Science Council's resources and institutional network would permit.

The sample areas were limited to those in the vicinity of PSSC-affiliated research centers, 23 thus covering most, though not all,

Luzon: Greater Manila, Ilagan (Isabela), Naga City, Tuguegarao (Cagayan), San Jose (Mindoro Occ.), Legaspi City, Baguio City.

Visayas: Bacolod City, Cebu City, Tacloban City, Iloilo City, Dumaguete City.

Mindanao: Davao City, Jolo (Sulu), Cotabato City, Zamboanga City, Ozamis City, Puerto Princesa City.

Table 4.5. PREPF Income Distribution - All Philippines, * 1975

	Income per Household	% of Households
The Poor	Less than P10,000	61
Lower Class	P10,000 - 19,000	21
Middle Class	₹20,000 - 49,000	14
Upper Class	₹50,000 and above	14
The Rich	1100,000 and above	1
	Lower Class Middle Class Upper Class	The Poor Less than \$10,000  Lower Class \$10,000 - 19,000  Middle Class \$20,000 - 49,000  Upper Class \$50,000 and above

Obtained from splicing the PREPF national survey (GINA) with an upper class survey of parents of students in exclusive schools in Metro Manila.

regions. For the reference period of October 1973-September 1974, the PSSC survey found a mean household annual income of \$\mathbb{P}8901\$, which is the largest among all the income surveys thus far. Nevertheless, this mean income is still on the low side since (a) the same PSSC survey's mean household expenditure was \$\mathbb{P}10,185\$, giving an implausible aggregate deficit of over 14%, and (b) the Personal Income per household implicit from the National Accounts was well over \$\mathbb{P}12,000\$ at that time.

Table 4.6 contains the PSSC 1974 income distribution. The implicit Gini concentration ratio is .62, which is the highest among all Philippine studies, including the PREPF reference distribution's .56. The coverage of income items in the questionnaire was fairly comprehensive, including, for example, the value of home-consumed crops and livestock, and income from hunting and fishing, though excluding tips, bonuses, commissions, transfers and home-produced and consumed manufactures.

Like the PREPF-GINA survey, the PSSC survey is valuable from the research standpoint in that many sampling and non-sampling problems are documented for scrutiny. Again, one may surmise that the official surveys may have faced similar problems, e.g., the inability of fieldworkers to include peace-and-order problem areas, such as rural Sulu, in the sample. The no-response rate on the income variable was 9.1% of the urban sample and 2.2% of the rural

Table 4.6. Distribution of Income, PSSC National Survey, October 1973-September 1974

	Percenta	ge of Househo	lds
Annual Income	National	Rural	Urban
Below #1000	10.67	14.10	4.80
<b>F</b> 1000 - 4999	41.23	43.20	37.86
5000 - 9999	23.61	23.45	23.88
10000 -19999	11.44	9.99	13.92
20000 -29999	4.04	3.58	4.83
30000 -39999	1.04	.79	1.46
<b>40000 -49999</b>	.75	.45	1.26
50000 -59999	.68	.60	.81
60000 -69999	.27	.02	.70
70000 -79999	.19	.22	.14
80000 -89999	.20	.24	.13
90000 -99999	.12	.19	-
100000 and above	.99	.93	1.10
No Response	4.77	2.24	9.09
Total	100.00	100.00	100.00

Source: Parel and Caldito (n.d.) Table 48, p. 68.

sample (Parel and Caldito, n.d., p. 73). For income from land, in particular, the NR rate was 20% of agricultural landowners and a huge 70% of non-agricultural landowners. The PSSC survey is notable in having included separate items on land ownership, land values, and net income from land; some summary data are found in Table 4.7.

Table 4.7. Land Ownership and Land Income, PSSC National Survey, 1974

National	Rural	Urban
499	328	545
below 5	below 5	below 5
10,224	below 5,000	15,940
7,930	7,174	9,400
1,727	2,078	1,354
1,327	1,069	1,894
2,608	2,415	3,124
1,874	642	2,549
	499 below 5  10,224 7,930  1,727 1,327 2,608	10,224 below 5,000 7,930 7,174  1,727 2,078 1,327 1,069  2,608 2,415

a Including only those owning some land.

Source: Parel and Caldito, n.d., pp. 57, 58, 59, 62.

bIncluding only those earning some income.

## 4.5. Some Non-Nationwide/Non-Income Surveys

The National Food and Agricultural Council (NFAC) has conducted a quarterly Income and Food Consumption Survey since 1970. The sample size is small (no more than 1000 households) and, in view of the survey's prime objective (nutrition information), income questions are asked only as a reference. Since income is finally tabulated in only 4 or 6 classes, the survey is, in general, not extremely useful.

Ideally, tax records would provide invaluable information on earnings. This is especially true of the upper income groups.

Unfortunately, the Bureau of Internal Revenue have been traditionally reluctant to allow researchers access to records of tax returns.

However in 1960 the Joint Legislative-Executive Tax Commission did conduct a special household survey to assess tax burden.

Although detailed analysis is precluded by the scarcity of possible crosstabulations of the results, they do permit some estimation of an income distribution profile, as the sample size is 6956 families.

The Wage Commission Annual Report of 1973 contains survey results covering 2062 respondent firms with an employment size of 276,557 persons and representing 62 industry groups. Daily and

An exception appears to be Samson (1967) who managed to use these records in her paper, discussed below.

²⁵ The report on tax burden is discussed in a later section.

monthly wage and salary rates are given for 16 rate classes.

Consumer Pulse Inc. is a private firm engaged primarily in market studies. Consequently, it has gathered, annually since 1972, income data for urban areas. These data, cross tabulated against such characteristics as occupation and educational attainment of family members, household ownership and appearance, are published in their Factbook.

A large number of sizeable and small surveys have been conducted for the rural/agricultural/farm sector. One that is particularly interesting, especially with respect to the methodology used, is the Bureau of Agricultural Economics (BAEcon) Farm Record Keeping Project. One of the main objectives of the project was to teach farmers to keep detailed accounts of activities which would yield reliable farming and household data. Programmed to last three years and beginning from January 1976, four types of accounts were left for the farmer to keep: (a) an inventory of farm produce and consumption, tools and work animals; (b) a daily farm and household record including farm and non-farm income and labour utilization; (c) a farm parcel (topographical) map; (d) cropping patterns and farm practices record.

Only households with at least one family member completing third year high school were selected as cooperators. Some economic activities such as the gathering of firewood and nipa were excluded,

as was the imputed value of home consumed production. These shortcomings may have resulted in the omission of lower income units and the underestimation of income. All in all, however, the 550 respondents whose records are intact and fairly reliable provide a storehouse of valuable data.

There are also a number of other reports which contain primary income data generated from surveys conducted specifically for the studies in which they are used. Some cover sizeable areas, include a fair number of the population and date rather far back 26 Others enumerate fewer households but appear at regular, if not frequent intervals. They may conceivably be used, to a limited extent, as cross-checks against larger studies. However, such sources are too numerous to mention here and, for the most part, are too narrow in scope to be used in the type of studies reviewed below.

### 4.6. Conclusions

The distributional data system may be appraised in terms of four attributes: coverage, accuracy, frequency and promptness.

In the preceding section, lack of coverage in the data was seen

²⁶ For example; Rivera and MacMillan (1954).

²⁷See, for example, studies of the Agricultural Tenancy Commission.

as a serious constraint to macro research. In particular, the consistent exclusion of information on ownership of land, physical capital and other sources of income streams (with the notable exception of schooling) has hindered forward-looking research into aspects of land reform and other 'wealth-democratization' policies. Ideally, research should precede the formulation of public policy, as well as restrain premature, possibly counterproductive action in situations only superficially understood. But this does not always happen.

In the case of land reform, for instance, it was P.D. No. 27 (the Tenant Emancipation Decree) of October 1972, which became a jump-off point for the gathering of such basic data as the number of landlords, the distribution of landed estates by size, the distribution of tenants by size of landed estate to which they belonged, the configuration of landlords by occupation (to see how many were in the government service, particularly in the military), etc. It will be recalled that a succession of orders was then issued, in late 1972 and in 1973, calling for compulsory registration of landlords, surveys of estate sizes in 'pilot provinces', and surveys of landlords' occupations. These data-gathering missions were crucial to the resolution of thorny issues such as the land-retention cut-off point (for a given cut-off, how many tenants and landlords would be excluded from compulsory land transfer?).

For a fuller description of the hurried efforts to gather data for the administration of Operation Land Transfer, see the paper on land reform in the Ranis Report (ILO, 1974).

The traditional agricultural data system was ill-prepared for such obviously equity-pertinent questions. Being purely productivity-oriented, the agricultural censuses and surveys emphasized farm-size, never hacienda-size; they estimated the number of farmers and farm workers, but not the number of landlords. The indicators of agrarian inequity were to be found in the rural peace-and-order statistics; but one can search in vain through the agricultural economics statistics for quantitative materials on land-ownership concentration. The basic problem has still not been solved. The ad hoc efforts did provide guidance in the rice and corn case, but they have not been integrated into the regular statistical system, for proper monitoring of the rice and corn policy and for a fuller appraisal and understanding of land concentration in other sectors.

Where data-gatherers confine themselves to topics which are completely non-political, they run the risk of becoming socially irrelevant. For instance, assuming that the relative well-being of Muslims and non-Muslims in Mindanao is an important issue, it follows that data should be gathered (classified as to Muslim and non-Muslim) on income, employment, and ownership, access to government services, and so forth.

Another issue is the 'gap between rich and poor'. The assertion that 'the rich get richer while the poor get poorer' may or

may not be factually true. 29 What seems clear, at any rate, is that the assertion has much potential for social agitation; that is, many people do care whether the statement is true or not. But it is seldom realized that the answer requires longitudinal data, which is not provided by a series of ordinary income surveys. These surveys cannot tell to what extent today's poor are the same families as the poor of say 5 or 10 years ago. A society in which families of different economic classes can 'exchange places', so to speak, can be regarded as more desirable than one of rigid class structure.

Research on class mobility is rather limited. Traditionally, it has been of less interest to economists than to sociologists, such as Lauby (1976), who found that intergenerational mobility across broad occupational groups (farm, non-farm manual, non-manual) was of moderate degree about 30 years ago, but seems to have lessened since. It is fairly easy, in an interview, to get data on both the respondent's occupation and his parents' occupation(s). But it is difficult enough to accurately survey last year's income, much more so to find out a respondent's income of say 5 years

It has been claimed, for instance, that in the Philippines the rich are getting richer and the poor are not getting worse but simply maintaining their old position (Sicat, 1972, p. 284).

earlier. One approach would be to form a panel of respondents for repeated surveying over time; this would require long-term commitment of the research institution involved. Another approach would be to use variables other than income which are less sensitive to memory bias, e.g., ownership of consumer durables, access to certain home amenities, and self-ratings as to poverty and other socio-economic class-membership conditions.

It is worth noting that the Philippine Statistical Development Program for 1978-1982 promises remedies to the inadequacies of the equity-data system in some areas: 30

- Agriculture. In the line-up are surveys of income and expenditure of farming operations, farm size, farm labor and farmers' assets and liabilities.

  (One would hope (i) that these could include farmland owners or landlords and not merely farm operators or tenants and (ii) that the data will be classified according to vertical groups such as income or wealth classes.)
- (b) Finance. It is stated only that "the tax system is continuously being assessed and reassessed to make taxation more equitable."
- (c) National accounts. Among the projects promised for 1978-1982 are (i) estimation of a social accounting matrix for 1975, as an improvement over the matrix for 1972; (ii) construction of a system of social and demographic statistics, or SSDS, including information on social class, stratification and mobility, and leading to the measurement of Net Beneficial Product; and (iii) construction of national wealth and balance sheet statements.

³⁰ Philippine Development (1979).

- (d) <u>Prices</u>. There is a plan to compute separate commodity price indexes appropriate to various income groups.
- (e) Labor, employment and income. Items of interest in the statistics program include (i) a survey of labor mobility; (ii) a survey of hours of work, and their effects on output, prices, wages, profits and employment; (iii) a study of labor utilization, to improve measurement of the labor force and of underemployment; (iv) a study of labor absorption of graduates; (v) an area survey of skills; (vi) a study of employee benefits; (vii) a survey of rural workers in selected industries; (viii) a study of income-generating skills for women; (ix) a study of expenditure patterns of wage-and-salary-earning households.
- (f) Social services. The equity-oriented elements in the statistics program include (i) a study on the distribution of facilities and of recipients of services; (ii) studies to determine least-cost, nutritionally adequate and socially acceptable diets; and (iii) establishment of a data system on housing conditions by location and according to socio-economic groups.
- (g) Standards and classification. There is a plan to develop standard definitions for (i) income levels and classes, and (ii) types of underemployment.

The second major consideration regarding the data is <a href="majorate">accuracy</a>. Obviously, people may be reluctant to disclose how much they earn, what they own, and what their debts may be. The willingness of respondents is not the only problem. Surveys must be carefully designed in order to minimize errors of memory of the respondents. Procedures must be constructed for imputing income from government-financed services, dwellings, home-production, etc. In his detailed assessment of various sources of distributional data, Lim (1978)

concluded that an income survey requires many, detailed questions on income and production in order to hold under-reporting down to a minimum. This makes interviews a taxing experience, particularly if there are other purposes to the survey aside from measuring income and its correlates.

Accuracy depends also on the sampling procedure and on the sample size. The latter is a straight-forward matter, related to the size of the field-work and data-editing budget. An estimate of the Gini ratio accurate to the second digit (i.e., an expected error of less than plus or minus one-half percentage point, requires a sample size of about 15,000; if an error of one point in the second digit is allowable, then the sample size can be reduced to about 3,000 (see Appendix to Mangahas, Quizon and Lim, 1977). Thus, in general, income surveys in the Philippines have been of adequate size.

Sampling procedures, however, still seem to be deficient. If the data are to be valid for inter-group comparisons, then obviously group-representativeness is vital. This suggests that sampling stratifications should be group-related, e.g., poor/lower class/middle class/upper class/rich, Muslim/non-Muslim, tenant/ landlord. The usual procedure of stratification according to geographical area can be relied upon to capture respondents from among the poor and the lower classes, since these are large groups;

but it is bound to miss the top economic brackets, unless their residential enclaves are pre-identified and incorporated into the stratification system at the start. This seems to be one reason why the aggregate of incomes measured in household surveys are so much less than that obtained from the production side in the National Income Accounts.

The point here is not that the household surveys are expected to arrive at the same average income as reached by the National Income Accounts. Income under-reporting is, after all, found all over the world. Nevertheless, efforts should be made to improve on or at least maintain the proportion of income captured in the household survey; the 1975 FIES saw a tremendous slump here Secondly, it is advisable to make an upward correction in the household survey data, as was done by PREPF, for consistency with the Personal Income. Failure to do this will lead to incongruous results in analyses which require accuracy not only of relative inequality but also of absolute levels of income. For instance, poverty incidence results will appear unusually large if the 1975 FIES is used (see next section). Tax and expenditure incidence studies will also be affected; tax burdens and expenditure benefit will both be greatly overstated if a severely under-estimated inco base such as the 1975 FIES is used (see section below).

Finally, we come to the issues of <u>frequency</u> and <u>promptness</u>

Since the NDS, PREPF and PSSC surveys were ad hoc, the burden of

continuity in the income distribution data clearly lies in the FIES, which are 4-5 years apart. The time lag between reference period and time of availability of the basic data summaries is typically 2 years (this holds not only for the FIES but also for other surveys). The general experience is that delays occur in the data-editing stage rather than in the field-work stage. 31 This combination of infrequency and tardiness in reporting severely diminishes the usefulness of the distributional data for the up-todate guidance of all sectors. Frequency and promptness are key elements by which a reporting system maximizes its impact on the social, economic and political consciousness. Given the netural lags between recognition of a problem, policy formulation, implementation and impact, a monitoring cycle of 2-1/2 years (to enable a mid-term review within a 5-year planning term) requires that the measurement frequency be annual and the reporting lag be only 6 months, i.e., nearly comparable to the schedule of the National Income Accounts (Mangahas, 1979b). 32

³¹ Contrary to the popular view, 'computerization' of inputdata makes for very long waiting periods. When survey summaries are needed on a rush basis, the data-gathering institutions turn to 'manual' procedures.

The view that the income distribution need not be measured so often because 'it hardly seems to change' is unwarranted because (1) it reflects an attitude of disinterest which is liable to lead to a neglect of distributional policy, and (2) there do exist dangers, especially in years of hyperinflation (1974 and possibly 1979), that inequality can worsen very rapidly.

#### 5. Poverty

The recent annotated bibliography on poverty studies in the seventies by Abad, Villanueva and Picazo (1978) suggests that recent empirical research can be divided into two broad categories. One category of studies, mainly by non-economists, characteristically analyzes a specific segment of the poor population, such as squatters agricultural workers, slum dwellers, and so on. Income figures are not necessarily provided in these case studies, which judge from the outset that the subjects of study are impoverished. The second group of studies, dealing with macro poverty issues, has been much concerned with the definition of a poverty line (usually in terms of income) and the measurement of the number of persons or families falling below it. The emphasis in the review that follows will be on the macro studies.

Recently, the United States Agency for International

Development has sponsored case studies of target or potential target

areas for projects. Social Research Associates (1977) has reviewed

past work to identify the poor via characteristics of age, region,

occupation, source of income. The emerging picture is that poverty

incidence is (1) high for both young and old,(2) associated with

having wages and salaries or farming as a source of income,(3) higher

in rural areas, and (4) more prevalent in Eastern Visayas, Cagayan Val

Bicol and Northern Mindanao. (A follow-up study by Alburo et al. (1978)

Association of Collegesof Agriculture (1978), a survey (N=513) of Leyte, Cotabato, Cagayan de Oro, and Bohol, led to a socioeconomic profile of the poor. Eighty nine per cent fell below an arbitrary threshold income of \$76,000 per year; they were mainly characterized by low educational attainment and wages/salaries as income sources. It discerned some correlation between resource endowment and income. Hickey and Flammang (1977) have examined 35 individual case studies from 14 localities and recommended that target groups should be assisted in the areas in which they themselves perceive their needs and the root cause of their poverty.

### 5.1. Poverty Lines

We turn now to the research on poverty lines. The conception of a critical minimum level of purchasing power, expressed in money terms, has been accepted for quite some time. The first such line, very likely, was that of the 1948 Rice-Wage Formula developed by the Bureau of the Census and Statistics and the Department of Social Welfare. It was figured that a family of 5, in order to feed, clothe, shelter and educate itself 'with decency and health', would need the purchasing power equivalent of 145 gantas of rice per month (22 gantas to eat and 123 gantas-equivalent to consume in other ways). Relative commodity prices were thought