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# Working Paper A Documentation of the Annual Poverty Indicators Survey

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# A Documentation of the Annual **Poverty Indicators Survey**

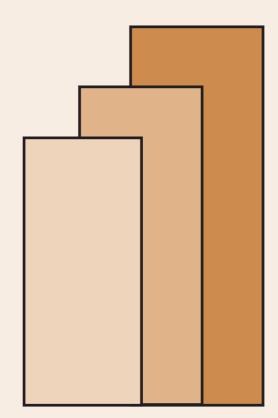
Carmelita Ericta and Jeremias Luis

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# A Documentation of the Annual Poverty Indicators Survey<sup>1</sup>

Carmelita Ericta and Jeremias Luis<sup>2</sup>

#### Abstract

In years when the Family Income and Expenditure Survey (FIES) is not conducted and when funds are available, the National Statistics Office administer the Annual Poverty Indicators Survey. The APIS has been conducted in the years 1998, 1999, 2002, 2004, 2007 and 2008. It presents the socio-economic profile of Filipino families and other information relating to their living conditions. This document makes it possible for users to understand better the APIS, its scope, how it differs from the FIES, and the objectives of the survey among others.

Key words: Annual Poverty Indicators Survey (APIS), bottom 30%, poverty

<sup>&</sup>lt;sup>1</sup> This paper is part of a bigger report for the UNDP-funded project titled "Comprehensive Documentation and Analysis of the Official Poverty Estimation Methodology of the Philippines" implemented by PIDS in cooperation with the National Economic and Development Authority (NEDA) and the Technical Committee on Poverty Statistics (TCPOVSTAT).

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# A Documentation of the Annual Poverty Indicators Survey

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#### A Documentation of the Annual Poverty Indicators Survey<sup>1</sup>

Carmelita Ericta and Jeremias Luis<sup>2</sup>

#### **CAPTER 1 - INTRODUCTION**

#### **1.1 Rationale**

Poverty statistics are presently based on the Family Income and Expenditures Survey (FIES) which is being conducted on a nationwide basis by the National Statistics office (NSO) every three years since 1985. The FIES obtains data on the income and expenditures of families for one whole year. Other than poverty incidence, FIES also gives the distribution of families by income class, income decile distribution, sources of income, spending pattern by income class and poverty related indicators like housing characteristics. During periods when FIES is not conducted, there are no available statistics to use in assessing and monitoring poverty. Hence, the Annual Poverty Indicators Survey (APIS) is conducted. The APIS is a response to the demand for statistics relating to poverty using income and non-income based indicators.

Since 1998, the NSO has been conducting the APIS as a rider to its Labor Force Survey (LFS) during the years when the FIES was not conducted, except in 2001 and 2005 due to budgetary constraints. The APIS was envisioned to be undertaken in the years without the FIES to provide flash non-income indicators of poverty that can be used as inputs to the development of an integrated poverty indicator and monitoring system in the country. It presents a socio-economic profile of Filipino families and other information relating to their living conditions.

#### **1.2 Re-designed APIS Questionnaire**

The FIES and APIS are sample surveys designed to provide indicators related to poverty. The salient difference between the two survey instruments is that, the FIES has a detailed questionnaire items on both income and expenditures while APIS has a summarized version in terms of income and expenditure items. Also the two surveys have different reference period so that when income data from APIS would be used to estimate poverty incidence, the result could be very different. However, much of the difference would be attributed to the difference in measurements given the difference in the questionnaire items. This was the main reason why income and expenditures data of APIS were never utilized in updating the official poverty statistics on an annual basis.

While the APIS provides some comparison of social indicators across regions, it only gives a rough idea on the prevalence of poverty, depth of poverty and the severity of poverty. The seemingly inconsistent income and expenditure data of APIS with that of the FIES

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cannot serve their purpose of providing income-based estimates of these measures that can substantiate the information provided by the non-income indicators.

In 2006, a memorandum of agreement (MOA) between the National Economic and Development Authority (NEDA) and the NSO was signed for the implementation of the WB-ASEM Grant for Poverty Monitoring and Analysis. The WB-ASEM Grant for Technical Assistance (TA) is provided to the Government of the Philippines (GOP) to enhance the impact of poverty analysis on policy formulation and decision-making by ensuring that decisions are based on informed analysis and that resources are allocated to interventions resulting to greatest poverty reduction. Under the TA, the NSO proposed to implement projects which the steering committee approved. Considering the need for efficient survey tools whether income or non-income-based, in monitoring poverty, and the need to produce reliable poverty indicators in an annual basis, the project "Redesigning the Annual Poverty Indicators Survey as Poverty Monitoring Tool" was carried out by the NSO in collaboration with the NEDA.

This project proposed to redesign the APIS questionnaire and generate appropriate indicators to provide estimates for poverty monitoring. Specifically, it was aimed to:

- Consult stakeholders on the proposed utilization of APIS.
- Redesign the APIS questionnaire.
- Recommend at how poverty monitoring indicators can be generated from APIS at the desired level of disaggregation.
- Undertake pretest survey, on a limited scale, using the revised APIS questionnaire.

There were four consultative meetings conducted among major stakeholders and data users on the proposed utilization of the redesigned APIS. Representatives from the following agencies participated during the consultative meetings.

- Ateneo de Manila University
- Bureau of Labor and Employment Statistics
- Congress
- Department of Interior and Local Government
- De la Salle University
- Department of Social Welfare and Development
- Food and Nutrition Research institute
- National Economic and Development Authority
- National Statistical Coordination Board
- Office of the President
- Philippine Institute for Development Studies
- Statistical Research and Training Center
- United Nationa Development Program
- United Nations Children's Fund
- University of the Philippines School of Statistics

The first consultative meeting was held last June 2005. The main agenda was to solicit recommendations in which non-income poverty indicators were given priority. A brief background of APIS and the evaluation of data items were presented as well as the matrix showing data items per APIS round (1998, 1999, 2002 and 2004) were given to the

participants to guide them in giving their comments and suggestions on how to improve the questionnaire.

The data items identified by the stakeholders to be considered in the redesign of the APIS were evaluated and presented in the second consultative meeting on October 10, 2005. In this meeting, the data items to be included in the redesigned APIS questionnaire were finalized and proponent agencies were asked to formulate the questions pertaining to the items they wished to be included. The third consultative meeting was held in October 25, 2006 to review and further improve the questions for the proposed additional items. In January 2006, the fourth meeting was organized to present to the stakeholders the final redesigned APIS questionnaire for approval.

During the consultative meetings, the stakeholders proposed several items they suggested to include in the future APIS questionnaire. The NSO and the stakeholders were expected to agree on what questions to retain, delete add or not consider. A number of factors have to be considered. The proposed data items must meet the following criteria:

- Have a strong relationship with poverty
- Relevant for poverty monitoring
- Can improve the current non-income poverty indicators,
- Can measure effectiveness of national programs.

Based on the results of the consultative meetings, the redesigned APIS questionnaire was finalized and pre-tested. Results of the pretest show that:

- The redesigned questionnaire produced indicators that are not significantly different from the original design.
- The redesigned questionnaire is more cost-efficient in terms of number of pages of the questionnaire and length of interview.
- The poverty indicators by income stratum using the redesigned questionnaire are not significantly different from the original design.
- Generating poverty indicators at the provincial level will not produce precise estimates based on the current sampling design.

The redesigned questionnaire was adopted in the 2007 and 2008 APIS.

#### **1.3 Objectives of the Survey**

The APIS is designed to provide accurate and consistent production of poverty-related data to be used at the national and regional level for policy-making and development planning. The survey aims to supplement the identification of poor families through the use of non-income based indicators and to gather data on their socio-economic profile and other information that relates to their living condition.

It also generates indicators such as own or owner-like possession of house and lot, roofs and walls of housing units made of strong materials, access to safe water, with sanitary toilet, children 6-12 years old enrolled in elementary, children 13-16 years old enrolled in high school, with members 18 years old and over gainfully employed, and with working children 5-17 years old.

# **CHAPTER 2 – SCOPE AND COVERAGE**

#### 2.1 The Sample

The 1998, 1999, and 2002 APIS had a national sample of 41,000 households drawn from 3,416 sample barangays/enumeration areas, of which 2,045 are urban and 1,371 are rural. Twelve households were selected in every sample EA/barangay.

The 2004, 2007 and 2008 APIS had a national sample of approximately 51,000 housing units drawn from the 2,835 PSUs (barangays). For operational considerations, at most 30 housing units were selected per sample EA. All households in the housing units were interviewed except for housing units with more than three households. In such a housing unit, three households were randomly selected with equal probability.

As a rider to the Labor Force Survey (LFS), all sample households of the LFS were interviewed for the APIS. However, only members of the family that is related to the household head by blood, marriage or adoption, were considered as members in the APIS sample. Family members working abroad were excluded.

#### 2.2 Survey Questionnaire

The APIS questionnaire contains questions on the following topics:

- **Demographic Characteristics** Obtains the demographic characteristics of each family member such as relationship to the family head, sex, age and marital status.
- <u>Health Status</u> Obtains information on the types of illnesses and/or injuries experienced by the family and whether these are work related or not, the type of health facilities that they are visiting or consulting in case of illnesses and/or injuries or anything pertaining to their family health.
- <u>Schooling Status and Highest Grade Completed</u> Determines the educational attainment of the family members 5 years old and over. It also determines whether a family member aged between 6 to 24 years is currently attending formal school, and if so, the level the member is currently attending. If not, then the reason for not currently attending school is also asked.
- <u>Economic Characteristics</u> Obtains information on the employment status of each family member 5 years old and over. It also includes questions on occupation and business engaged in by the household members, and the salaries and wages from employment of each working family member.
- <u>Family Member Engaged in Hazardous Occupation</u> Findings were based on the responses to the question "At anytime from (*reference period*) did (*name of the person*) engage in an occupation hazardous to his/her health?"
- **Family Planning** Assesses the knowledge of women 15 to 49 years old in the family regarding family planning.

- <u>Housing, Water and Sanitation</u> obtains information that relates to housing characteristics and household conveniences/amenities owned by the family. The main source of water supply and kind of toilet facility used were also asked.
- **Credit Information** Obtains information on the availment of credit by the family for use in the operation of economic activities.
- <u>Other Relevant Information</u> Determines if any member of the family has health insurance plan, and if any member of the family is a member of any people's organization and/or non-government organization.
- **Family Sustenance** Determines whether or not the family is engaged in family sustenance activities, which is for home consumption only, in order to augment family income. This section asks for the net receipts and value consumed of the products derived from the family sustenance activity.
- <u>Net Share of Crops, Fruits and Vegetables Produced or Livestock and</u> <u>Poultry Raised by Other Households</u> - Determines whether or not the family has received a share on crops, fruits, vegetables, livestock, poultry, etc. which were raised and harvested by other households, in terms of the produce or in cash. This also asks for the total net value of share, sold for cash and value consumed of the products received.
- <u>Entrepreneurial Activities</u> Determines if any member of the family is engaged as operator or self-employed in any agricultural or non-agricultural family-operated activities. This section asks for the total value, value consumed and value given away as gifts of the products derived/produced from such activity and the operating expenses incurred in doing such activity.
- <u>Other Sources of Income</u> Obtains information on other sources of family income not derived from work.
- <u>Other Receipts</u> Obtains information on the sources of non-income receipts of families, that is, those that do not come from earnings, property income and gifts received.
- <u>Family Expenditure</u> Determines the expenses made by the family purely for personal consumption.
- <u>Changes in Welfare</u> Obtains information on the standard of living as assessed by the family.
- <u>Impact of Financial Crisis to Filipino Families and How They Cope Up With</u> <u>It</u> – Obtains information on the steps taken by the family in response to the financial crisis.

The matrix below shows the questions/items included in the questionnaire in each year of the APIS and the indicators derived.

	Les d'an é a sur		1	APIS	Year	S	
<b>Items/Questions</b>	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>
Family Members	-	-				_	
• Listing of persons bound by ties of kinship	• Average family size						
Demographic Characteristics	I						
• What isrelationship to the family head?	• Families by background characteristics of family						$\checkmark$
• Sex	head					$\checkmark$	
• What isage as of last birthday?		$\checkmark$	$\checkmark$	$\checkmark$	V	$\checkmark$	
Health Status							
• Did_get ill/injured during the last six months*/past month?	• Population 5 years old and over who had an illness or injury during the past six months	√*	√*	V	V	V	V
• Was_ilness/injury work related?	• Population 5 years old and over who had an illness or injury during the past month whether work related or not				V	V	
• What type of illness did_have during the last six months?	• Population who had an illness or injury during the past month by illness or injury	V	$\checkmark$	$\checkmark$			
• What did_do when he/she got sick?							
• Did _ visit a health facility like hospital, clinic, etc. during the past six months?	• Families with at least one member who visited any health facility during the past six months by type of health facility visited	$\checkmark$	V	V	V	V	
• What health facility did_visit during the last six months?		V	V	V	V	V	
Schooling Status	I	I	ı	ı	ı	I	
• What is the highest educational attainment completed by_?	• Population 5 years old and over by highest grade completed	$\checkmark$	V	V	V	V	$\overline{\mathbf{v}}$
• Is_ currently attending school?	• Population 6 to 24 years old who are currently attending school.		V	V	V	V	

Itoms/Owestigns	Indiastors			APIS	<u>Ye</u> ar	rs				
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>			
• What grade or year is_currently attending?	<ul> <li>Population 6 to 24 years old who were attending school by grade/level currently attending</li> <li>Families with children aged 6 to 12 who are attending elementary school.</li> <li>Families with children aged 13 to 16 who are attending high school.</li> <li>Population 6 to 24 years old who were attending school by grade/level currently attending.</li> </ul>		1	1			N			
• What type of school is_currently attending?	• Population 6 to 24 years old by type of school attended.	V	V							
• How does_travel to school?	• Population 6 to 24 years old by means of going to school.	V	V							
• How many hours walk does_taken to reach school?										
• Why is _not attending school?	• Population 6 to 24 years old by reason for not attending school.	$\checkmark$	V	V	$\checkmark$	$\checkmark$	V			
<b>Economic Characteristics</b>		, ,								
<ul> <li>Did_work at all or had a job or business?</li> <li><i>Note: Difference in reference</i> <i>period.</i></li> </ul>	<ul> <li>Families with members 5 to 17 years old who are working.</li> <li>Families engaged in any economic activity.</li> </ul>	V	V	V	V	V	V			
• What was_'s primary job or business?	• Employed persons 5 years old and over by major occupation group.	V	$\checkmark$	$\checkmark$	V					
• What kind of business/industry did_engage in?	• Employed persons 5 years old and over by major industry group.	V	V	V	V					
• What was_class of worker?	• Employed persons 5 years old and over by class of worker.	V	V	V	V	V				
• At anytime during the past six months did_engage in an occupation hazardous to his/her health?	• Families with at least one member engaged in hazardous occupation.			V	V					

	T P 4		1	APIS	Year	s	
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>
• Did_look for work at anytime during the past six months*/week? <i>Note: Difference in reference</i>		√*	√*	V	V		
period.		1					
• Why did_not look for work?		$\sqrt{\frac{1}{\sqrt{2}}}$			$\sqrt{1}$		
• What was_'s nature/status of employment?		,		N	N		
Number of days worked.		N	N				
• Salaries and wages from employment.	• Income derived from employment	N	V	V	V	V	ν
Family Planning				1	1	1	
• Are you aware of any family planning method?	• Married women 15 to 49 years old who have	$\checkmark$					
• Do you know where to get or avail of the family planning service?	access and who practice family planning.	$\checkmark$	V				
• Did you use any method of contraception e.g., pills condoms, IUD, etc. during the past six months?		V	V				
• Are you pregnant or lactating during the past six months?	• Pregnant/lactating married women 15 to 49	$\checkmark$	V				
• Were you given at least 2 doses of Tetanus Toxoid Injection (TTI) during your last pregnancy?	years old who received iron, iodine and tetanus toxoid injection.	V	$\checkmark$				
• During your last pregnancy and/or during lactation period were you provided with Iron?		V	V				
• During your last pregnancy and/or lactation period were you provided with Iodine?		V	V				
Housing	I	<u> </u>	L				
• What type of building/house does the family reside?	• Families by type of building/house	$\checkmark$				V	
• What type of construction materials the roof is made of?	• Families by type of construction materials of the roof	V	$\checkmark$	$\checkmark$	$\checkmark$	V	V
• What type of construction materials are the outer walls is made of?	• Families by type of construction materials of the outer walls	V	V	V	V	V	

			1	APIS	Year	Years				
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>			
• What is the tenure status of the housing unit and lot occupied by your family?	• Families by tenure status of the housing unit and lot they occupy	V	V	V	V	V	V			
• What is the floor area of the housing unit?	• Families by floor area of housing units they occupy.	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				
• Did you acquire your house and lot thru the assistance of the government housing or financing program?	• Families with at least one member who acquired any house and/or lot thru the assistance of government housing or financing program	V	V	V	V	V	V			
Family Planning										
• How many house and/lot										
have you or any member of										
your family acquired thru										
government housing or										
financing program?							,			
• When did you or any member of your family acquire this house and/or lot?					V	$\checkmark$	V			
• Do you own any land which										
you use for other purposes other than residence?										
• Did you acquire the agricultural land under the CARP land distribution program?		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
• Do you own any other housing unit elsewhere which you also use as residence?		$\checkmark$	V	V	$\checkmark$	$\checkmark$	V			
• Is there any electricity in the building/house?	• Families with electricity					$\checkmark$				

	<b>T 1</b> <i>i</i>	APIS Years								
<b>Items/Questions</b>	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>			
<ul> <li>Which/how many of each* of the following item does the family own?</li> <li>Radio/Stereo</li> <li>Television set</li> <li>Refrigerator</li> <li>Sala set</li> <li>Dining set</li> <li>Car, jeep, motorcycle</li> <li>Washing machine</li> <li>Gas stove/Gas range</li> <li>Telephone</li> <li>Cellphone</li> <li>Personal Computer</li> <li>Aircon</li> <li>Component</li> <li>Karaoke</li> <li>CD/DVD/DVD Player</li> <li>Video Cassette/ Recorder</li> </ul> Note: Not all amenities were included in the 1998, 1999 and 2002 APIS	• Families owning household conveniences			V	V					
Water and Sanitation	Ι									
• What is the family's main source of water supply?	• Families by main source of water supply.	V	V	√	V	V	V			
• What kind of toilet facility does the family have in the house?	• Families by type of toilet facility.		V	V	V	V	V			
<b>Credit Information</b>										
<ul> <li>During the past six months, did you or any member of your family avail of any credit to finance your business or entrepreneurial activity?</li> <li>What was/were your</li> </ul>		V	V							

Itoms/Oursettoms	Indiastans		1	APIS	Year	- I I				
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>			
• Why did you not avail of any loan to finance the entrepreneurial activity?		V	V							
Impact of Financial Crisis										
• During the past six months, did the following problems affect you and your family?		V								
• Did you take the following steps in response to these problems?		$\checkmark$								
<b>Other Relevant Information</b>										
• Have you or any member of your family received any educational/scholarship assistance for tertiary education program?		V	V							
• Are you or anyone in the family a member of any people's organization and/or any non-government organization?	• Families with at least one member who joined any people's organization and/or non-government organization.	V	V	V						
• Did you receive any agricultural extension services during the past six months?	•	V	V							
• Are you or any member in the family a member of any health insurance plan/life and/or pre-need insurance system*?	• Families with at least one member who had health insurance plan by type of health insurance.			V	V	√*				
• Are you or anyone in the family a member of any people's organization/cooperative* and/or non-government organization?	• Percentage of families with membership in any organization/cooperatives	√*	√*	V	V					
• Are you or any member of your family aware of any government's program on affordable drugs/medicines like "Botika sa Barangay/ng Bayan", GMA 50 and NFA rolling store	• Families who are aware of any government's program on affordable drugs/medicines					V	V			

Itoma/Owestions	Indiastons		1	APIS	Year	S	
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>
• Have you ever purchased medicines/drugs under this program?	• Families who did not purchase medicine under government's program					$\checkmark$	V
• What is your main reason why you did not purchase medicine under this program?	<ul> <li>Families who did not purchase medicine under government's program by main reason for not purchasing</li> </ul>					V	V
• Is there any member of the family a recipient of any scholarship assistance from any government program or any private individual/ organization?						V	V
• Are you or any member of your family aware of any lending institution or private individual whose business is lending money with interests?	• Families who availed of loan in the past six months					$\checkmark$	V
• Did you or any member of your family avail of any loan in the past six months?						$\checkmark$	V
• Where did you or any member of your family avail of this loan?							V
• Where did you use the money?						V	V
Hunger							
• During the past 3 months, did it happen once that you or any member of your family experienced hunger because you did not have food to eat?	• Families with at least one member who experienced hunger					V	V
Changes in Welfare							
• How do you compare your household's situation at present and for the last 12 months?	• Families by their perception on present situation compared to that in the last 12 months.			V	V		
• Why is your household better off/worse off?	• Families by indicator on perceived economic situation			$\checkmark$	$\checkmark$		

	T 1 4		1	APIS	Year	5	
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>
• How do you cope with the situation?	• Families affected by financial crisis and their response to the crisis	V	V	V			
• In the next 12 months, do you expect your household's economic conditions to improve, stay the same, or worsen?	• Families by their expectation of their household's economic situation in the next 12 months.			V	$\checkmark$		
• Imagine a ladder with ten steps, the first represents the poorest in the society and the tenth the richest. On what step of the ladder would you be?	• Families by their expectation of their economic condition in the next 12 months.			$\checkmark$	$\checkmark$		
Family Expenditures	1						
<ul> <li>Food, Beverages and Tobacco</li> <li>During the past six months, how much on the average is your actual weekly consumption on the following?</li> <li>(Includes all food items consumed from purchases made whether in cash or on credit, received as gifts, and</li> </ul>	• Family expenditures for food, beverages and tobacco	N	V	V	V	V	V
<ul> <li>own produced)</li> <li>Food consumed at home</li> <li>Food regularly consumed outside the home</li> <li>Alcoholic beverages</li> <li>Tobacco</li> </ul>							

Itoms/Overtions	Indiaataus		1	APIS	Year	s	
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>
<ul> <li>Fuel, Transportation, Household and Personal Care and Effects</li> <li>During the past six months, how much on the average is your monthly expenses/consumption on the following? (Includes all expenses/consumption whether purchased/paid in cash/on credit, received as gifts or own-produced.)</li> <li>Fuel light and water (electricity, firewood, candle, etc.)</li> <li>Transportation and communication (transport fare, gasoline, feeds for animals used for transport</li> <li>Household operations</li> <li>Personal care and effects</li> </ul>	• Family expenditures for fuel, transportation, household and personal care and effects			$\sqrt{1}$	<u>√</u>		
Clothing, Education, Medicine, Taxes and Others • During the past six months, how much on the average is your actual disbusment/expenditures on the following? (Include expenditures whether purchase/paid for in cash or on credit, received as gifts.)	• Family expenditures for clothing, education, medicine, taxes and others	V	~	~	V	~	V
Family Income	I	1			1	1	1
Basic salaries and wages from employment including allowances, honoraria, tips housing, clothing, food, etc.	• Income derived from employment	V	V	V	V	V	V

	<b>T 1</b> /		1	<b>APIS Years</b>				
<b>Items/Questions</b>	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>	
Family Sustenance and Entrep	reneurial Activities						,	
<ul> <li>During the past six months, did you or member of your family engaged in any of the following entrepreneurial activities?</li> <li>Family sustenance activity</li> <li>Net share of crops, fruits and vegetables produced or livestock or poultry raised by other households</li> <li>Crop farming and gardening</li> <li>Livestock and poultry raising</li> <li>Fishing</li> <li>Forestry and hunting</li> <li>Wholesale and retail</li> <li>Manufacturing</li> <li>Community, social, recreational, and personal services</li> <li>Transportation, storage and communication services</li> <li>Mining and quarrying</li> <li>Construction</li> </ul>	• Income derived from family sustenance and entrepreneurial activities			V				
Other Sources of Income		1	/	/	1		/	
<ul> <li>During the past six months, how much did you or any member of your family receive on the following?</li> <li>Cash receipts, gifts, support, relief and other form of assistance from abroad</li> <li>Cash receipts, support, assistance and relief from domestic source, government or private</li> <li>Rentals received from non- agricultural lands, buildings, spaces and other properties</li> <li>Interest</li> <li>Pension and retirement, workmen's compensation and social security benefits</li> </ul>	• Family income derived from other sources.	N					N	

It and Oracetican	In dia stand		<b>APIS Years</b>						
Items/Questions	Indicators	<b>'98</b>	<b>'99</b>	<b>'02</b>	<b>'04</b>	<b>'07</b>	<b>'08</b>		
• Dividends from investments									
• Other sources of income not									
elsewhere classified									
Other Receipts									
• Net winnings from gambling,									
lottery, sweepstakes and raffle									
• Profits from sale of stocks,									
bonds and real and personal property									
• Back pay and proceeds from									
insurance									
• Inheritance									
• Sale of real and personal									
property									
• Loans from other									
families/business firms and									
government institutions									
• Payments received from									
loans granted to others									
Withdrawals from savings/business equity									
<ul> <li>Others such as tax refund</li> </ul>									
and dowries									

#### **CHAPTER 3 - SURVEY DESIGN**

#### 3.1 Sampling Design

The NSO has been using a master sample (MS) of PSUs for its surveys since 1965. A master sample has been defined under the United Nations Household Survey Capability Programme (UN-NHSCP) as a sample from which sub-samples can be selected to serve the needs of more than one survey or survey round. It is a common sample of units down to a certain stage of sample selection from which further sampling can be done to serve individual surveys (Verma, 1994).

The 1998, 1999, and 2002 APIS adopted the 1996 master sample. The 1996 MS was created based on the 1995 Census of Population (POPCEN). The multi-stage sampling design of the 1996 MS involves the selection of the sample barangays for the first stage. The sample barangays were selected systematically with probability proportional to size from the list of barangays that were implicitly stratified. Selection of sample enumeration areas (EAs) at the second stage was done systematically with probability proportional to size. An EA is a physical delineated portion of the barangay. The selection of sample households for the third stage in each stratum for every domain was also done systematically from the 1995 POPCEN List of households.

Since 2004, the APIS has been adopting the new master sample (MS) created in 2003 based on the 2000 Census of Population and Housing. The entire MS was divided into four sub-sample or independent replicates, such as a quarter-sample contains Primary Sampling Units (PSUs) found in one replicate and a half-sample contains PSUs in two replicates. PSUs consisted of a barangay or a group of contiguous barangays. The survey used four replicates of the MS. In each region, a stratified, three-stage cluster sampling design was employed: the selection of primary sampling units for the first stage, of sample enumeration areas (EAs) for the second stage, and of sample housing units for the third stage.

In the first stage, primary sampling units (PSUs) were selected with probability proportional to the number of households in the 2000 Census. In the second stage, in each PSU, EAs were selected with probability proportional to the number of households. An EA is defined as an area with discernable boundaries consisting of approximately 350 contiguous households. In the third stage, from each EA, housing units were selected using systematic sampling. PSUs within a domain were stratified based on the proportion of households living in housing units made of strong materials, proportion of households engaged in agricultural activities and per capita income of the municipality. The selection of samples using the multistage sampling scheme was carried out for each region (domain) and stratum. The 2003 MS considered the country's 17 administrative regions as defined in Executive Orders (EO) 36 and 131 as its sampling domain.

#### **3.2. Estimation Procedure**

Sampling weights or expansion factors were applied to the data obtained from sample households in order to derive estimates for the larger population from which the sample households were selected for the purpose of survey interviewing. The weights or expansion factors applied to each sample household reflected the probability of the households being selected for the survey sample. More specifically, the basic sampling weights assigned were equal to the inverse of the joint probability of selection in the three stages of sample selection. Since the sample was self-weighting within domains or strata, each household in a particular stratum received the same weight, or raising factor.

The weights adjustment factor takes into account the sample EAs which were not enumerated and households which were not interviewed. The product of the basic weights and weights adjustment factor was used to obtain the preliminary weighted estimates of the total number of families.

Further weighting adjustments, termed as population weighting adjustment, was made to make the survey estimates consistent with known population distributions. For adjusting household level estimates, the reference count of household is obtained by dividing the total projected population by the average household size.

# **CHAPTER 4- CONCEPTS AND DEFINITIONS**

This chapter presents and discusses the concepts and definitions used in the APIS.

Lowest 30%	In descending order of the family per capita income, the lowest 30 percent refers to the bottom 30 percent of the total families in the income distribution. This grouping of families was used as a proxy for those falling below the poverty line. <i>Note: The 1998, 1999 and 2002 APIS used 40% as a proxy for those falling below the poverty line.</i>
Highest 70%	In descending order of the family per capita income, the highest 70 percent refers to the upper 70 percent of the total families in the income distribution. It is the complement of the bottom 30 percent.
Respondent	Knowledgeable member of the sample family who can provide accurate answers to most of the questions in the survey.
Family	Aggregate of persons bound by ties of kinship, which live together under the same roof and eat together or share in common the family food. It covers both the nuclear family and the extended family. In cases where persons not related with each other by blood, marriage or adoption is in the same household, only the head of the household is considered. This case is a single person family.
Married	Marital status of a person who has been united in matrimony with another person of opposite sex through a religious or civil rites or who lives together consensually with another as husband or wife. To be considered married, the couple should still be living together or if living apart from each other, the separation must only be temporary.
Family Planning Method	Included are natural and modern methods of contraception. These include basal body temperature, billings/ovulation/mucus method, calendar, withdrawal, periodic abstinence, condom, diaphragm, vasectomy/male sterilization, pills, foam, injection, intra-uterine device and ligation/female sterilization.
With Access to Family Planning	The ratio of the number of families with married women 15-49 years old who know where to get/avail of family planning services to the number of families with married women 15-49 years old.
With Access to Health Facilities	The ratio of the number of families where at least one member visited any health facility to the total number of families.
Visited any Health Facility	A person is considered to have visited any health facility if he consulted or received any medical care from any health facility. Health facilities include government hospital, private hospital, private clinic, rural health unit/health center, and barangay health stations.
Sanitary Toilet	Sanitary toilet facilities include water sealed and closed pit types of

	toilet facilities.		
Proportion of families own*/with sanitary toilet	<b>th</b> The ratio of the number of families with flush toilet (either owned shared) and close pit to the total number of families.		
	Note: The 1998 APIS used the term "own".		
Proportion of	The ratio of the number of families who access water from community		
families with access to safe drinking water*/water	water system (piped into their dwelling, yard/plot or public tap) and protected wells to the total number of families.		
supply	*The 1998 APIS used safe drinking water.		
Strong Materials	Strong materials include galvanized iron/aluminum, tile, concrete, brick, stone and asbestos.		
Proportion of	The ratio to the total number of families of those families with houses		
families with	having roofs and outer walls made of strong materials such as		
houses made of	galvanized iron/aluminum, tile, concrete, brick stone and asbestos.		
strong materials			
School	Refers to formal schools including vocational/technical schools		
	offering post secondary courses.		
Proportion of	The ratio of the number of families with owned or amortized housing		
families with	units to the total number of families.		
owned or owner-			
like possession of			
housing units	The ratio of the number of families with a family head who is gainfully		
Proportion of families with	employed to the total number of families.		
gainfully employed	employed to the total number of fammes.		
family head			
Proportion of	The ratio of the number of families with gainfully employed members		
families with	18 years old and over to the total number of families with members 18		
gainfully employed	years old and over.		
members 18 years			
old and over			
Proportion of	The ratio of the number of families with children 6-12 years old		
families with	attending elementary school to the total number of families with		
children 6-12 years	children 6-12 years old.		
old in elementary			
Proportion of	The ratio of the number of families with children 13-16 years old		
families with	attending high school to the total number of families with children 13-		
children 13-16	16 years old.		
years old in high			
school			
Proportion of	The ratio of the number of families with children 5-17 years old who		
families with	are working to the total number of families with children 5-17 years		
members 5-17	old.		
years old who are			

working				
Proportion of families with membership in any PO/NGO	The ratio of the number of families with one or more members affiliated to any people's organization/non-government organization to the total number of families.			
Hazardous Occupation	Persons who were reported to have worked in a hazardous occupation during the reference period include workers exposed to dangerous environmental elements, contaminants, or work conditions including ionizing radiations, chemicals, fires, flammable substances, noxious components; those engaged in construction work, logging, mining, quarrying, blasting, stevedoring, dock work, deep sea fishing, mechanized farming; those engaged in manufacturing or handling of explosive powder-activated tools; and workers exposed to biological agents like bacteria, fungal viruses, potassium, nematodes and other parasites.			
Gainfully Employed	A person is considered as gainfully employed if he is engaged in any occupation for which he is remunerated, directly or indirectly, in cash or in kind.			
Working	A person is considered working if he is engaged in any economic activity for pay, in cash or in kind, in any establishment, office, farm, private home or for profit or without pay on family farm or enterprise.			
Class of Worker	Refers to the relationship of the worker to the establishment which he/she works.			
Occupation	Refers to the type of work, trade or profession performed by the individual during the reference period such as palay farmer, typists, physician, beautician, etc. If he/she is not at work, it refers to the kind of work he was doing or will be doing if merely waiting for a new job to begin within two weeks from the date of interview.			

# **CHAPTER 5 – 2008 APIS FIELD OPERATIONS**

## 5.1 Training

There were three levels of training for the APIS. The first-level or task force training (TF) was conducted in the Central Office. The second-level training was held in the Regional Offices and the third-level training in the Provincial Offices. Each level of training was conducted for five days.

#### • Task Force Training (TF)

There will be 17 participants who will come from the Central Office and 17 participants from the regions (one participant per region except for NCR with two participants). The participants in the TF training served as trainers in the second-level training.

#### • Second-level Training

The participants in each region were the Regional Director (RD), the Regional Statistician/Designated Alternate, the Provincial Statistics Officers (PSOs) and the Provincial Statisticians/Designated Alternate. Central Office staffs who attended the TF training were assigned in the regional offices to assist in the conduct of the second level training.

#### • Third-level Training

In each province, the participants were Selected District Statistics Officers (DSOs), Statistical Coordination Officers (SCOs) and hired Statistical Researchers (SRs) who served as team supervisors (TS) or interviewers. The PSO and the Provincial Statistician/Designated Alternate served as trainers in the third-level training. CO staffs were also assigned in some provinces to assist during the conduct of the training.

Interviewer's manual, processors's manual, and field operations guidelines (FOG) were prepared in order to have a uniform instructions in all levels of training and field operations.

Personnel Involve	Mandays	Number
Central Office Statisticians	5	17
Central Office Programmers		3
Regional Statistician/		18
Designated Alternate		
Regional Directors	5	17
Regional Statisticians		18
Provincial Statisticians		80
Provincial Statistics Officers	5	80
Provincial Statisticians		80
District Statistical Officers		330
Hired Statistical Researchers		625

#### **5.2 Field Enumeration and Supervision**

Field operation was completed in 21 days including Saturdays. The interviewer was expected to meet a daily output rate of at least three completed APIS questionnaire APIS Form 1) per day.

The RDs, PSOs, and the Statisticians or designated alternates from the Regional and Provincial Offices who served either as trainers or participants in the training supervised during the field operation. The RDs, PSOs and Statisticians from the Regional and Provincial Offices were each provided with five mandays for supervision.

DSOs, SCOs/provincial staffs who attended the third-level training and who were designated as APIS supervisors, supervised for the entire duration of the field operation in their respective areas of assignment.

Personnel Involve	Mandays	Number
Hired SRs	21	625
CO Statisticians		17
Regional Directors		17
Provincial Statistics Officers		80
District Statistical Officers		330

#### **5.3 Processing of Questionnaires**

#### Manual Processing

Manual processing of questionnaires was done at the Provincial Offices by the provincial staff and/or hired processor who attended the training of APIS processing. Manual processing includes checking for completeness, consistency and reasonableness of entries in the questionnaires. Questionnaires found to have incomplete, inconsistent and unreasonable entries were verified from the sample household by the interviewer assigned in the area.

Personnel Involve	Mandays	Number of Processors
Regular Staff/Hired Processors	20	169

#### Machine Processing

The APIS questionnaires were encoded in the Regional Offices. After encoding the data were subjected to completeness checking and machine editing. Machine editing involves checking for correctness of codes, consistency and reasonableness of entries using an edit program. Questionnaires that did not pass the machine edit program were verified from the questionnaire or field verified by the interviewer from the respondents in order to make the appropriate action. The data files that were submitted to the Central Office were also subjected to further machine editing (certification pass).

Personnel Involve	Mandays	Number of Processors
Hired Encoders/Machine	20	91
processors		

#### 5.4 Tabulation

Preliminary unweighted tabulations are generated for evaluation. When the generated tables show inconsistencies, selected data items are subjected to further scrutiny and validation. The cycle of generation consistency tables and data validation are conducted until questionable items are verified from the questionnaires or field verified by the interviewer from the sample household. Final tables are generated as soon as the questionable entries are validated.

#### 5.5 Data Dissemination

The following mediums of data dissemination are being utilized for NSO surveys:

- Press Release
- Special Release
- Final Report/Bulletin
- Public Use File (PUF)
- Data User's Forum

#### 5.6 Budget

The 2008 APIS was allocated Thirty Five Million One Hundred Forty Four Thousand Pesos (Php 35,144,000.00).

#### **CHAPTER 6 - LIMITATIONS OF THE DATA**

The survey covered a national sample of households deemed sufficient to provide reliable estimates about the population at the national and regional levels only. Hence, tabulations and cross-tabulations of variables at lower levels (provincial, municipal) are not generated since these may not be statistically reliable.

Survey estimates may also be affected by non-sampling errors such as deliberate under or over reporting of income and expenditures or reluctance on the part of the respondents to reveal their true levels of income/expenditures.

Considering that both cash and non-cash expenditures and income are gathered in APIS, valuation of non-cash income and expenditures may pose some problems. The instructions are to use market prices prevailing in the locality for goods and services received as gifts and farm gate prices for goods consumed from own production. However, market prices may not be available for all items in the locality or market prices/farm gate prices may be highly variable for different localities.

Although APIS is a rider to the LFS, matching during data processing was limited to the geographic identification of the sample households and some demographic characteristics of household heads. Therefore, users should be prompted by the resulting variations of estimates from the two data sets.

Further, data users attempting to match APIS and the FIES should take note of the differences in the reference period. The FIES was done in two visits covering the periods January to June and July to December while APIS covered January to June.

In comparing regional data, take note of the differences in regional groupings:

- MIMAROPA and CALABARZON were reported as two separate regions,
- The province of lanao del Norte and Iligan City, which were formerly under Region XII, were under Region X,
- The province of South Cotabato and the new province of Sarangani, General Santos City and Koronadal City, which were formerly under Region XI, were transferred under Region XII.

## **REFERENCES**:

- 1. APIS Interviewer's Manual (Various Years)
- 2. 2008 APIS Field Operations Guidelines
- 3. Report on the Project "Re-designing the APIS as a Poverty Monitoring Tool"
- 4. Family Income and Expenditures Survey (FIES) Interviewer's Manual