THE PAST TEN YEARS OR SO have been a critical period for the Philippines as a number of crucial developments took place in both economic and political arenas.

In 1986, for instance, the People Power Revolution at EDSA brought about a dramatic shift in the country's political set-up and consequently in its Constitution. In the late 1980s and early 1990s, a series of military coup attempts against the Aquino administration followed by several natural calamities and international turbulence, shattered business confidence in the country and eventually triggered the recession of

national trade due to the shifts in trading arrangements inherently brought about by such commitments.

Beginning in 1987, the government began instituting a series of economic reforms and adjustments, partly as a response to the various developments that occurred and partly as a component of its economic program. What are the effects of these reforms especially in terms of economic growth performance and income distribution?

This brief paper looks precisely into these aspects. At the outset, it should be mentioned that it is difficult to attribute whatever results on

Economic Reforms and Adjustments:
Zeroing-in on their Impact

the early 1990s. In the international arena, meanwhile, the signing of commitments in the ASEAN Free Trade Area (AFTA) in 1991, the gradual phase-out of the Multi-Fiber Agreement (MFA) starting in 1995, and the implementation of the World Trade Organization (WTO)-Uruguay Round Agreement in 1995 resulted in a re-orientation in inter-

the economy and in the poverty situation to these reforms and adjustments since other factors could have had similar effects.

To illustrate, consider the case of the Philippine economy. During this past decade, the economy had experienced a "roller-coaster" ride as seen in Table 1. While growth was

evident in the second half of the 1980s, it was not sustained in the early 1990s because of the political crisis and natural calamities mentioned earlier as well as because of the generally weak fundamentals of the economy. Despite the fact that economic reforms were instituted beginning in 1987, no visible change was felt during the early 1990s as manifested by the sharp increases in prices and interest rates and by the widening of the macroeconomic imbalances.

The government nonetheless continued to further implement economic reforms and adjustments, extending such even during the recession period. Favorable indications then eventually started to show up in 1992 as economic growth performance began to get better and macroeconomic fundamentals started to improve. The incidence of poverty among families also dropped from 44.5 percent in 1985 to 35.5 percent in 1994, indicating an improvement in the poverty situation in the country. Public officials are even optimis-

Congressman Margarito Teves

*A*S PART OF ITS CULMINATING activity for the year, the MIMAP-Philippines Project held a policy workshop on the "Impacts of Macroeconomic Adjustment Policies on Growth and Equity" last September 30, 1997 at the Dusit Hotel Nikko in Makati City. Invited as guest speakers were Chairperson Marietta Primicias-Goco of the Presidential Commission to Fight Poverty (PCFP), Congressman Margarito Teves of the House of Representatives, and Secretary Lina Laigo of the Department of Social Welfare and Development (DSWD).

In his opening address, Congressman Teves stressed that policymakers are aware that in spite of the economic growth posted in recent years, there still remains the question of whether or not this growth has been shared fairly with the people, especially those in the rural areas. As such, legislations have been initiated and are still being pursued to address issues on food security and environmental protection, basic and technical education, small, medium, micro and cottage enterprises, and continued decentralization, among others.

Meanwhile, direct interventions to alleviate the plight of the

Policy Workshop
Tackles Issues on
Growth and Equity

From left, Dr. Ponciano Intal, Jr. of PIDS, Chairperson Marietta Goco of PCFP, Cong. Margarito Teves of the House of Representatives, Sec. Lina Laigo of DSWD, and Dr. Celia Reyes, MIMAP-Phils. Project Director.
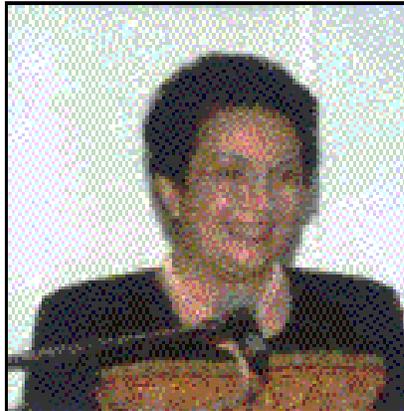

poor are the main courses of advocacy taken by the PCFP. According to Chairperson Goco, the poverty alleviation programs seek to provide equitable access to opportunities to 24 million Filipino poor so that they can participate in governance, gain productive employment, and avail of basic government services. And as a tool to understand better the real needs of the poor in order to come up with more relevant programs for them, the PCFP has employed the minimum basic needs (MBN) approach in gathering information about the poor.

Sec. Lina Laigo

Chairperson Marietta Goco

poverty, there is still much to be done in order for the lower income classes to be direct participants in the development process.

It is to be noted that prior to this policy workshop, the MIMAP Project held a series of consultative meetings with concerned government agencies and planning units last July to validate the preliminary policy results of its research studies as well as to elicit suggestions and comments on these findings.

In attendance during the workshop were experts and officials from the Bangko Sentral ng Pilipinas, Congressional Planning and Budget Office, Department of Budget and Management, Department of Finance, Institute for Labor Studies, Food Nutrition and Research Institute, National Economic and Development Authority, Philippine Institute for Development Studies, Philippine Council for Agriculture, Forestry and Natural Resources, Research and Development, United Nations Children's Fund, UP School of Economics, University of Asia and the Pacific, and Center for Policy and Development Studies of the University of the Philippines at Los Baños. *BEM*

In addressing the issue of poverty alleviation, the DSWD, on the other hand, goes beyond raising incomes and delivery of basic social services to the most vulnerable groups of society. It initiates programs that build capabilities of the local government units (LGUs), communities, and families. As Secretary Laigo emphasized, *it is through social mobilization, effective use of resources, and institution of structural reforms that families and communities are able to cope with the effects of macroeconomic adjustments as well as meet the needs of their members and constituencies.*

The workshop also focused on the presentation of findings of various MIMAP studies looking at the impacts of major economic policies implemented in the country for the past ten years. Among the policies examined in the workshop are tax and tariff reforms, privatization, deregulation and demonopolization, financial and foreign exchange liberalization, and stabilization measures. Most of the presentations showed counterfactual simulations which made use of models previously developed in the early phases of the MIMAP project.

A study done by Dr. Josef Yap of the Philippine Institute for Development Studies (PIDS), for instance, using a macroeconometric model with an income distribution bloc, shows that some adjustment policies which expand economic growth (depending on the source of growth) tend to favor the upper income groups, thereby resulting into a deterioration of income distribution. It states that *while it is true that higher economic growth is needed to alleviate*

R E S E A R C H   R E S U L T S

tic that by 1998, the poverty incidence will be on track at 30 percent as per the official target.

But then, to be sure, other things likewise transpired in the same period. The new political administration in 1992, for one, brought in a climate of political stability and at-

lier instituted. To address this ambiguity, two studies under the "Micro Impacts of Macroeconomic Adjustment Policies (MIMAP)" project[1] embarked on an exercise that attempted to segregate the effects of this particular set of economic reforms and adjustments on growth and income distribution over the recent years from other factors that occurred in the same period and could be perceived as having led to the same effects. This brief paper discusses the results of this exercise.

* tax reforms from 1987 up to the present;
* financial liberalization, with the entry of foreign banks in 1994;
* demonopolization of agricultural monopolies between 1986 and 1989 and deregulation of the telecommunication industry; and
* stabilization policies in the early 1990s.

The method of analysis used is counterfactual simulation, using two

Table 1: Economic Indicators, 1986 - 1996

		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
1	GNP (real growth, %)	4.3	4.7	7.6	5.5	5.4	0.2	1.5	1.3	5.3	5.0	7.0
2	Inflation Rate	-0.4	3.1	8.9	12.2	14.2	18.7	9.0	7.6	9.1	8.1	8.5
3	91-TBILLS	16.1	11.5	14.7	18.6	23.7	21.5	16.0	12.4	12.7	11.8	12.3
4	FX (P/US$ depreciation)	1.8	0.2	0.5	0.6	2.6	3.2	-2.0	1.6	-0.7	-0.7	0.5
5	BOT/GNP (%)	-0.7	-3.1	-2.9	-6.2	-9.0	-7.0	-8.6	-11.2	-11.9	-11.7	-12.9
6	CA/GNP (%)	3.3	-1.4	-1.0	-3.5	-5.8	-1.9	-1.6	-5.5	-4.5	-4.3	-4.1
7	BOP/GNP (%)	4.2	0.8	1.6	1.1	-0.2	4.6	2.7	-0.3	2.7	0.8	4.7
8	Fiscal Surplus/Deficit (-)/GNP (%)	-5.2	-2.5	-2.9	-2.1	-3.4	-2.1	-1.2	-1.5	0.9	0.6	0.3

Sources of basic data: Bangko Sentral ng Pilipinas
Bureau of Treasury

tracted foreign capital and investment. These positive factors could certainly have helped in bringing about the improvement in the economic performance and the decline in poverty incidence evident in the past few years.

As such, it cannot easily be ascertained that the economic growth and poverty reduction in the last four years are the results of the economic reforms and adjustments ear-

In particular, the economic reforms analyzed in the paper are:
* foreign exchange liberalization in 1992;
* tariff reform programs since 1986 up to the present;

economic models of the Philippine economy, namely, the macro model with an income distribution bloc and the economy-wide model.[2] In particular, the following question was asked in the simulation exercises:

[1]*These studies are "Structural Adjustment, Stabilization Policies and Income Distribution in the Philippines: 1986-1996" by J.T. Yap, 1997 and "Tariffs and Direct Household Taxes (An Economy-Wide Model Analysis)" by C.B. Cororaton, 1997.*

[2]*Macroeconometric model with income distribution sub-model and economy-wide model of the Philippines constructed under the MIMAP project. The latter model was constructed in cooperation with the PIDS-NEDA Technical Resource Project.*

What would have happened to economic growth and income distribution if certain policies were not implemented?

The results of the simulations are discussed in the following sections while the detailed discussion of the models used and the assumptions incorporated in the simulation may be found in the full versions of the papers mentioned in footnote 1.

Table 2 summarizes the results of the analysis.

Foreign Exchange Liberalization. To analyze the change from the controlled exchange rate regime to a liberalized one, the macro model was used. The result of the counterfactual simulations showed that if regulations governing foreign exchange were not liberalized, GDP would have contracted and the general price level would have been higher. Trade balance was also shown to improve following a currency depreciation. The overall results generally indicated that foreign exchange liberalization led to higher growth. However, due to a bigger fall in the agricultural output as compared to industry and service, a deterioration in income distribution was likewise noted.

Tariff Reform. In the simulation, both the macro model and the economy-wide model were used to analyze the income distribution effects of tariff and other trade reforms. In the case of the macro model, a computed aggregate tariff variable was introduced into the model. The analysis showed that a reduction in tariffs, together with a

Table 2: Summary of Simulation Results

Economic Model	Reforms	Output Effect	Income Distribution Effect
Macro Model	Foreign exchange liberalization	+	-
Macro Model	Financial liberalization	+	-
Macro Model Economy-wide Model	Tariff reform	+	- -
Macro Model	Stabilization policies	-	+
Macro Model Economy-wide Model	Tax reform	+	- +
Macro Model	Deregulation: Agriculture sector Deregulation: Telecom sector	+ +	+ -

currency depreciation, leads to higher output and an improvement in the trade balance. The impact on income distribution, however, is negative, meaning that the distribution deteriorated as shown in the changes in the computed Gini ratio.

On the other hand, in the economy-wide model, sectoral implicit tariff rates in 1988 and 1992 were inputed into the model. Implicit tariff rates were computed using border prices of goods and commodities to account for changes in both tariff and nontariff barriers. Furthermore, implicit tariff rates were adjusted for the tariff equivalent of other taxes like value-added tax exemption, BOI incentives, duty drawbacks, and duty exemptions.

Changes in the implicit tariffs between the two years resulted in the following effects:

❋ a drop in agriculture production and an increase in both industry and service sector production;

❋ a movement of employment towards industry;

❋ an increase in both non-agriculture wages and capital rent rate and a decline in agriculture wages; and

❋ regressive effects, with the first 6 deciles getting a lower income share, while the last 4 deciles getting a higher income share.

These effects came about as a result of the prevailing bias in the trade protection system against the primary sectors. Although an overall reduction in both tariff and implicit tariff rates were observed between the two years, the bias against the primary sector still prevails.

RESEARCH RESULTS

Tax Reforms. In the simulation, both the macro model and the economy-wide model were used to analyze the income distribution effects of tax reforms. In the case of the macro model, the counterfactual analysis was done by inputting into the model the estimated revenue impact for the period 1986-1996 of the tax reforms. The overall results show that the tax reforms led to higher government revenue and higher output. However, they also led to a deterioration in income distribution.

In the case of the economy-wide model, meanwhile, the ratio of taxes paid by household groups to household income computed from the 1991 and 1994 Family Income and Expenditure Surveys (FIES) were inputted into the FCGE model. The ratios would indicate the change in the effective direct income tax during these two years. It would have been interesting to incorporate the 1985 and 1988 FIES—years when the FIES were also available—in the analysis but the information were not ready at the time the simulation exercises were conducted. These years, though, will be included in the next round of simulation exercises.

In terms of the overall effect, the change in the effective direct income tax was progressive. The progressivity is seen in a higher government revenue as shown in the first iteration resulting from the change in the effective direct income tax. All things being constant in the first iteration, the increase in revenue led to an increase in government savings. The increased savings were brought back to the system through government transfers and investment. People in the lower income bracket benefit most from increased government transfer. On the other hand, increased investment results in a multiplier effect that benefit agriculture.

Thus, based on the two sets of results from the CGE and macro model, the income distribution effects are not generally consistent. Further exercise would therefore have to be done to reconcile the results which were independently generated.

Financial Liberalization. The results in the simulation in this aspect are generally the same as that of the foreign liberalization simulation. Overall, the results indicate that financial liberalization led to higher growth and a deterioration in income distribution. Again, the deterioration in the income distribution was mainly due to the fall in agricultural output relative to those in the industry and service sectors.

Deregulation/Demonopolization. This simulation exercise attempts to analyze the effects of the dismantling of agriculture monopolies in the period 1986-1989 and the deregulation of the telecommunications sector which was accelerated after the issuance of Executive Orders related to the Service Area Scheme and the Interconnection Policy.

The overall simulation results indicate that the deregulation in the telecommunication industry led to higher growth but to a deterioration in income distribution.

On the other hand, the effect of demonopolization reforms in agriculture was higher overall output growth and improvement in income distribution. The factors behind these effects are the increase in farm gate prices and the reduction in fertilizer prices which favorably affected the agriculture sector.

Stabilization Policies. The stabilization measures instituted in the early 1990s included the cutting of government expenditures, tightening of money supply and the devaluation of the currency. Furthermore, a 9 percent import levy was imposed in 1991 to generate more revenues. The overall effect shows a lower output growth but an improvement in income distribution. Industry output fell, while the trade deficit narrowed as a result of the general decline in the overall economic activity.

In sum, the lesson to be learned from the above exercises is that while some of the economic reforms are output-enhancing, they tend to favor the upper income groups. Thus, while it is generally true that higher economic growth is needed to alleviate poverty, there is still much to be done for the benefits of growth to trickle down to the lower income classes. *CBC* **MIMAP**

Current Peace and Order Situation:

Is Crime Rate on the Downtrend?

counted for 62.3 percent of the total crime volume. However, in 1996, they decreased to 55.1 percent of the total, one percentage point even lower than that of 1995, as shown in Table 1.

The average monthly index crime rate (AMICR)—defined as the average monthly index crime inci-

Introduction

One of the identified minimum basic needs of the individual is security, and this includes safety from crimes. Recent data seem to indicate that we are achieving some progress in this area, although much remains to be done.

Overall Crime Statistics

Recent statistics from the Philippine National Police (PNP) seem to indicate that the crime volume or the number of crime incidence reported to police authorities in the country is in a downward trend. From 79,248 crime incidences in 1995, the figure declined to 77,657 in 1996. The average monthly crime rate (AMCR) or the average number of crime incidence reported every month for every 100,000 of the population also dropped from 9.6 in 1995 to 9.2 last year. Five years ago, crime incidence reached a high 115,259 figure, with an AMCR of 15.5 (Table 1).

Data on index crimes or crimes which are sufficiently significant and which occur with sufficient regularity to be meaningful likewise exhibit a declining trend. Index crimes include murder, robbery, physical injury, theft and rape while all other crimes are classified as non-index crimes. In 1991, index crimes ac-

Table 1: Crime Statistics

	1991	1992	1993	1994	1995	1996	1997Q1	1997Q2
Volume	115,259	104,689	96,688	95,733	79,248	77,657	18,459	17,250
Percent of index crimes	62.3	64.3	60.7	58.0	56.1	55.1	54.4	55.4
AMCR*	15.5	13.7	12.2	11.9	9.6	9.2	8.7	7.9
AMICR**	9.7	8.8	7.5	6.9	5.4	5.1	4.7	4.4
AMNICR***	5.8	4.9	4.7	5.0	4.2	4.1	4.0	3.5

* Average Monthly Crime Rate
** Average Monthly Index Crime Rate
*** Average Monthly Non-index Crime Rate

Source: Philippine National Police

Source: Philippine National Police
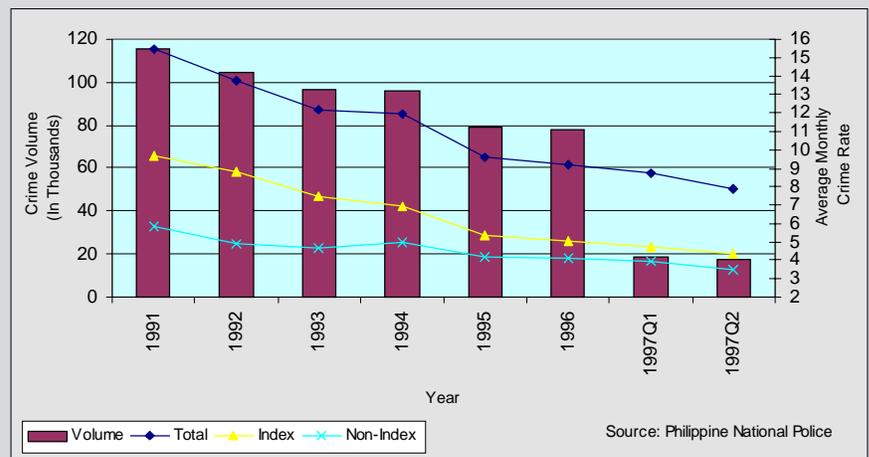
dence per 100,000 population—posted a decrease from 5.4 percent in 1995 to 5.1 percent in 1996. In contrast, the AMICR in 1991 was recorded at 9.7 percent.

On the other hand, the average non-index crime rate (AMNICR) decreased by 0.1 percentage points from the 1995 figure of 4.2 percent. The 1991 figures, though, were posted at a high of 5.8 AMNICR.

Crime Incidence by Index Type

Table 2 presents the trend in the crime incidence by type for the past three years. Crimes against persons are on the decline as the average monthly crime rate versus persons went down from 4 percent in 1994 to 3 percent in 1996. All three sub-types—murder, homicide, and physical injuries—recorded a downtrend in statistics. Physical injuries, for instance, had an average monthly crime rate of 2.3 percent in 1994 but experienced a relatively substantial drop in 1996 as the figure registered at 1.6 percent.

Incidences of crimes against property are also on a decline. Incidence for this particular crime reached a high of 2.7 percent monthly crime rate in 1994 but steadily dropped in the past few years to register only about 1.8 monthly crime rate in 1996. Theft incidence declined from 1.6 AMCR in 1994 to an incidence of only one per month

Table 2: Average Monthly Crime Rate by Types of Index Crime (In percent)

	1994	1995	1996	1997Q1	1997Q2	Crime Volume First half of 1997
Crime vs persons	3.9	3.2	3.0	2.8	2.6	11,689
Murder	0.8	0.7	0.8	0.7	0.7	2,923
Homicide	0.8	0.7	0.6	0.6	0.5	2,358
Physical injury	2.3	1.8	1.6	1.6	1.4	6,408
Crime vs property	2.7	1.9	1.8	1.5	1.4	6,379
Robbery	1.2	0.9	0.8	0.7	0.6	2,781
Theft	1.6	1.1	1.0	0.9	0.8	3,598
Rape	0.3	0.3	0.3	0.4	0.3	1,523

Source: Philippine National Police

Source: Philippine National Police
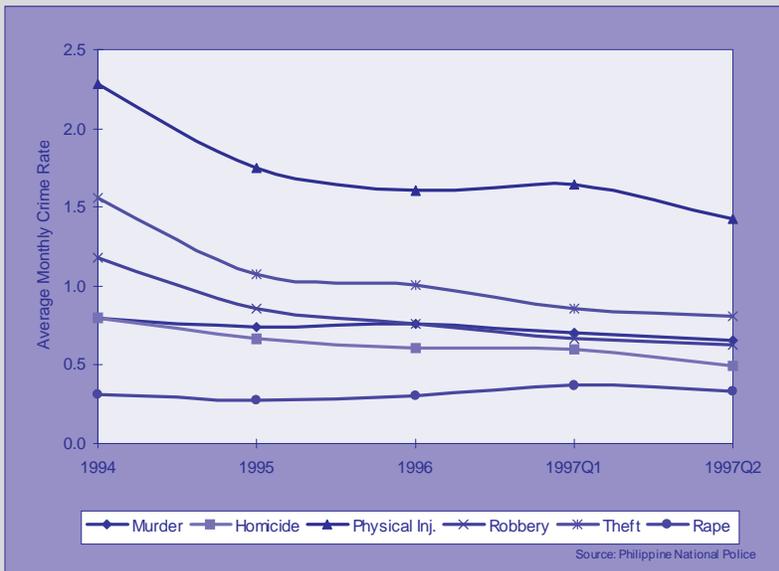
in 1996. Robbery incidence also dipped as the crime rate of 1.2 in 1994 was reduced to a minimum 0.8 AMCR last year.

Rape incidences, however, remained static for the past few years.

Efficiency Rate

Meanwhile, in terms of the annual crime solution efficiency rate (ACSER)—defined as the percent of crimes solved from the total crime volume—the numbers show that it

had steadily improved from 80.2 percent in 1991 to 89.1 percent last year.

Will the Trend Continue?

It seems that the trend would be maintained in the current year as seen in Table 3 as the volume of crime for the first six months of 1997 remained stable at 35,709, a number less than half of the total volume last year. Of the 35,709 criminal incidents reported, about 32,359 cases have been solved, giving the crime solution efficiency rate a high grade of 90.6 percent.

The first quarter (January to March 1997) reported a total crime volume of 18,459 while the second quarter (April to June 1997) crime volume saw a decrease to 17,250 or about 6.5 percent. The AMCR likewise decreased from 8.7 to 7.9. For the first six months of the current year, index crimes accounted for 54.9 percent of the total crime volume while the second quarter AMICR was posted at 4.4 percent, lower than the first quarter figure of 4.7 percent (Table 1).

Crime against persons constituted the largest number of cases reported with 11,689 or about 32.7 percent of the total crimes reported. This gave about 2.7 AMCR for crime against persons for the first six months of the year. Under this, physical injury accounted for 6,408 cases while murder and homicide cases numbered 2,923 and 2,358, respec-

tively. Monthly crime rates for physical injury, murder and homicide were posted at about 1.5, 0.7, and 0.6, respectively.

Meanwhile, robbery and theft, which are categorized as crimes against property, accounted for 6,379 or 17.9 percent of the total crime volume in the first six months of 1997. A total of 3,598 theft cases have been reported while robbery cases reached 2,781 for this period. Crime rates regarding these violations reached an average of 1.4 per month. Incidence of theft reached about 0.9 cases per month while robbery incidence occurred at a rate of 0.7 per month.

Table 3: Regional Crime Statistics, First half of 1997

Region	Index Crimes			Non-index Crimes			Total Crime			AMCR* (%)
	Total	Solved	Eff. Rate (%)	Total	Solved	Eff. Rate (%)	Volume	Solved	Eff. Rate (%)	
Philippines	19,591	16,899	86.3	16,118	15,460	95.9	35,709	32,359	90.6	8.3
NCR	4,116	3,695	89.8	4,463	4,247	95.2	8,579	7,942	92.6	15.3
Region 1	810	666	82.2	678	660	97.3	1,488	1,326	89.1	6.2
Region 2	464	418	90.1	266	266	100.0	730	684	93.7	4.4
Region 3	1,296	997	76.9	1,726	1,621	93.9	3,022	2,618	86.6	6.8
Region 4	2,100	1,890	90.0	1,860	1,858	99.9	3,960	3,748	94.6	6.9
Region 5	1,280	1,109	86.6	894	877	98.1	2,174	1,986	91.4	7.9
Region 6	1,665	1,465	88.0	753	742	98.5	2,418	2,207	91.3	6.1
Region 7	1,252	984	78.6	1,783	1,632	91.5	3,035	2,616	86.2	9.8
Region 8	806	741	91.9	509	505	99.2	1,315	1,246	94.8	6.3
Region 9	1,484	1,284	86.5	701	662	94.4	2,185	1,946	89.1	9.0
Region 10	882	824	93.4	494	486	98.4	1,376	1,310	95.2	8.2
Region 11	831	729	87.7	713	695	97.5	1,544	1,424	92.2	7.0
Region 12	1,423	1,114	78.3	693	643	92.8	2,116	1,757	83.0	11.6
ARMM	213	142	66.7	71	64	90.1	284	206	72.5	2.1
CAR	556	498	89.6	311	300	96.5	867	545	62.9	7.8
CARAGA	413	343	83.1	203	202	99.5	616	798	129.5	6.3

* Average number of crime incidence reported every month for every 100,000 of the population.
Source: Philippine National Police

Peace and Order Situation...
From Page 9

On the other hand, rape cases totaled 1,523 or about 4.3 percent of the total crime volume for the first six months, resulting into a rate of an average 0.4 rape incidence per month.

Of the 19,591 total index crime volume, the police authorities have successfully solved 16,899 cases in the first semester of 1997, posting an efficiency rate of 86.3 percent for index crimes. On the other hand, a total of 16,118 non-index crimes were reported during the same period, 15,460 of which have been solved,

resulting in an efficiency rating of 95.9 percent (Table 3).

Regional Picture

So far as the regional peace and order situation is concerned, Table 3 shows that the National Capital Region (NCR) exhibited the highest crime volume for the first semester of 1997 at 8,579. This is more than double the figure posted by the Southern Tagalog Region (Region 4) and Central Visayas Region (Region 7) which came in second and third, respectively. The Autonomous Region of Muslim Mindanao (ARMM) exhibited the lowest crime volume with 284 crime incidence.

The NCR also posted the highest average monthly crime rate among the regions at 15.3. Regions 12 and 7 followed at second and third, respectively. Central Mindanao

Region (Region 12) posted an AMCR of 11.6 crime incidence per 100,000 population while the Central Visayas Region (Region 7) had 9.8. Again, the ARMM posted the lowest AMCR with 2.1 crime incidence per 100,000 of its population.

The ARMM's crime solution efficiency rate of 72.5 percent, however, is the lowest among the 16 regions of the Philippines while Northern Mindanao (Region 10) has the highest crime solution efficiency rate with 1,310 solved crimes out of the total crime volume of 1,376 for a 95.2 efficiency rate. *KCI*

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