

# **AGRO-INDUSTRIAL AND INFORMATION PROFILE OF MINDANAO**

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This paper attempts to depict the profile of agroindustries and information sources/channels in Mindanao. In all the four regions of Mindanao, agroindustrial and information potentials appeared to exist at different levels.

## **I. Western Mindanao**

The smallest of all the 12 regions in the country, Region IX, Western Mindanao, has a total land area of 1,868,510 hectares. It consists of Basilan, Sulu, Tawi-Tawi, Zamboanga del Norte and Zamboanga del Sur provinces.

### **Mineral**

The latest mineral inventory showed that Region IX has enormous mineral resources that still remain untapped. Among the metallic ores, iron is the most predominant mineral with an estimated reserve of 8.7 million M.T. Also found in commercial volume are ores of lead, zinc and copper, all of which are only found in Zamboanga del Sur. (Table 1).

The region is also rich in non-metallic mineral deposits like limestone (500 million M.T.), silica sand (39.2 million M.T.) and clay (26,000 M.T.) which are basic inputs to industry.

**Table 1. Distribution of Mineral Resources, 1982 (Metric Ton)**

Mineral Resources	Zamboanga del Norte	Zamboanga del Sur	Region Region IX
<b>Metallic</b>			
Gold/Silver	—	2,591,200	2,591,200
Copper	—	6,041,520	6,041,520
Iron	—	8,700,700	8,700,700
Manganese	—	56,800	56,800
Lead	—	5,904,520	5,904,520
Zinc	—	5,904,520	5,904,520
Chromite	—	1,780	1,780
<b>Non-Metallic<sup>3</sup>/Ore<sup>2</sup>/</b>			
Guano	35	245	280
Phosphate Rock	3,000	—	3,000
Silica Sand	36,167,000	—	36,167,000
Clay (Ceramics)	—	26,000	26,000
Limestone	—	500,000,000	500,000,000
Asbestos	5,000	—	500,000

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1/ includes Zamboanga City

2/ Estimates for coal not covered by the Bureau of Mines and Geo-Sciences

3/ Reflects actual volume covered by permits only

Source: Philippine Metallic & Non-Metallic Ore Reserves,  
Bureau of Mines and Geo-Sciences.

## Irrigation Potentials

Western Mindanao had a total irrigated area of 32,416 hectares as of 1982. This represented about 45 percent of the potential irrigable area registered at 72,255. About 80 percent of the total irrigated area in the region is found in Zamboanga del Sur and the rest are in Zamboanga del Norte and Basilan. The province of Sulu and Tawi-Tawi had no available data on irrigation (Table 2).

Table 2. Irrigated Areas of 1982 (in hectares)

Province	Irrigated Area	Total Irrigable Areas	% Irrigated To Total Irrigable Area
Zamboanga del Sur	25,779	38,763	66
Zamboanga del Norte	6,377	31,732	20
Tawi-Tawi	—	150	—
Sulu	—	1,300	—
Basilan	260	310	83
<b>TOTAL</b>	<b>32,416</b>	<b>72,255</b>	<b>45</b>

Source of Data: National Irrigation Administration, Region IX

## Economic Profile

*Gross Regional Domestic Product (GRDP).* The performance of the regional economy in terms of the Gross Regional Domestic Product (at 1972 prices) showed a moderate improvement between the period 1978 to 1982. It grew from a level of P 2,880 million in 1978 to P 3,350 million in 1982 at an average annual growth rate of 3.9 percent over the four year period.

In terms of the major sectoral components of GRDP, the combined output of agriculture, fisheries and forestry in 1982 contributed 60 percent of the total regional output. The industrial sector's share, meanwhile, expanded from about eight percent in 1978 to ten percent in 1982. The services sector likewise expanded its output from P 876 million in 1978 to P 1012 million in 1982 (Table 3).

*Employment and Labor Productivity.* Labor force expanded at an average annual rate of 2.7 percent. Employment in Agriculture manifested not only the highest growth rate but also accounted for a little over 69 percent of those employed in 1980. Meanwhile, employment grew by 2.5 percent annually in the non-agriculture sectors (Table 4).

**Table 3. Gross Regional Domestic Product by Major Sector  
1978 - 1982  
(In million pesos and at 1972 prices)**

	1978	1979	1980	1981	1982	Average Annual Growth Rate (In %)
<b>Gross Regional Domestic Product</b>	2,880	2,964	3,102	3,256	3,350	3.9
<b>Agriculture, Fishery, and Forestry</b>	1,771	1,758	1,846	1,944	2,010	3.2
<b>Industry Sector</b>	233	294	298	320	328	9.4
<b>Service Sector</b>	876	912	958	992	1,012	3.7

Source: NEDA, Regional Development Information

**Table 4. Employment Status by major sector, 1978-1982**  
(In thousand persons)

Year	Number of Persons Employed				Total Per- sons Un- employed	Percent Employed in Agriculture
	Total	Agriculture	Non- Agriculture	Industry Not Adequately Described		
1978	691	462	228	1	26	66.9
1979	658	396	262	—	40	60.2
1980	759	474	285	—	38	62.4
1981	752	544	208	—	4	72.5
1982	752	516	236	—	38	68.6

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Source: NEDA, Regional Development Information

With a total employment of about 752,000 persons, labor productivity in 1982 is estimated at P 4,455. The non-agriculture sectors recorded a higher aggregate labor productivity at P 5,678 than the agriculture at only P 3,895 (Table 5).

*Loans and Deposits.* Loan granted by banks in Zamboanga City accounted for a little more than one half of the total loan portfolio. Sulu accounted for only 0.5 percent (P 3.1 million). The deposit holdings of banking institution in the region stood at P 587.8 million. In terms of contribution to total deposit generation, private commercial banks represent 81 percent or P476 million and 58 percent is shared by Zamboanga City.

**Table 5. Labor Productivity by major sector, 1978-1982****(In Pesos)**

<b>Year</b>	<b>All Sectors</b>	<b>Agriculture</b>	<b>Non-Agriculture</b>
1978	4,167	3,833	4,864
1979	4,505	4,439	4,603
1980	4,087	3,895	4,407
1981	4,330	3,574	6,308
1982	4,455	3,895	5,678
<b>Average Annual Growth Rate</b>	<b>1.9</b>	<b>1.1</b>	<b>5.9</b>

**Source of basic data: NEDA, Regional Development Information**

## **Agriculture**

Agriculture in Western Mindanao has excellent potentials for development. An analysis of the climate, slope and soil types reveals that the region has 697,670 hectares of existing and potential farmland suitable to most agricultural crops. The region has access to rich fishing grounds and a potential of 41,623 hectares of mangrove for fishpond development. In forestry, Region IX has a total of 986,211 hectares of forest land.

*Crops.* Rice, corn, coconut, abaca, rubber, fruit trees, rootcrops and vegetables are the crops planted in Region IX. Sixty percent (60%) of the total regional population considers rice as its staple food and about 32 percent prefers corn. Meanwhile, the cultural communities of Sulu, Basilan and Tawi Tawi consider rootcrops, particularly cassava, as their staple food.

*Effective Crop Area.* The total effective area planted to all crops in the region was 996,610 hectares in 1982. Coconut, rice, and corn occupied the largest area accounting for 87 percent of

the total area.

Palay was planted in about 144,020 hectares of the total effective area. These were primarily located in Zamboanga del Sur and Zamboanga del Norte. Most of the areas planted to corn were in Zamboanga del Norte having an aggregate area of 275,570 hectares. A greater percentage of the area planted to rootcrops especially cassava were grown in Basilan, Sulu and Tawi-Tawi.

Coconut leads all other commercial crops in terms of area planted. It is grown throughout the region on an area of 451,830 hectares. Rubber, meanwhile, is primarily grown in Basilan, Zamboanga del Sur and Zamboanga del Norte.

*Production.* For the year 1982, Region IX produced 322,720 M.T. and 186,985 M.T. of rough rice and corn, respectively. Zamboanga del Sur, followed by Zamboanga del Norte, accounted for the bulk of production. The region's coconut production for the year was 384,866 M.T. while rubber which accounted for around 60 percent of the country's production was 46,469 M.T. Gross vegetable production was likewise recorded at 4,687 M.T. (Table 6).

The productivity of some major crops in the region in 1982 was notably higher than the national average. Rubber and rootcrops whose average yield per hectare were 1.69 M.T. and 10.02 M.T., respectively, surpassed productivity per hectare at the national level.

*Livestock and Poultry Population.* Zamboanga del Sur lead the other provinces in livestock and poultry production. It accounted for 60 percent of the total number of carabaos in the region. Zamboanga del Norte had 28 percent and Basilan, 6.7 percent. In 1981, the total number of carabaos in the region totalled 158,500 heads, cattle 103,680, hogs 315,900, goats 110,400, chicken 2,690, and ducks 274,700 (Table 7). It may be observed that poultry, hogs and cattle were the major livestock raised for commercial purposes in the region. Carabaos were raised primarily as work animals.

Table 6. Effective Crop Area, Production, and Average Yield by Kind of Crop, 1982

Crops	Area (Has. )	Production (M.T.)	Average Yield (M.T./HA)
Palay			
Irrigated	63,900	207,335	3.24 <sup>1/</sup>
Non-Irrigated	80,120	115,385	1.44 <sup>2/</sup>
Com	275,570	186,985	0.68 <sup>3/</sup>
Coconut	451,830	384,866	0.85
Rubber	27,550	46,469	1.69
Abaca	9,710	11,989	1.23
Coffee	11,800	21,373	1.81
Vegetables	890	4,687	5.27
Fruits & Nuts			
Except Citrus	28,150	251,218	8.92
Root Crops	47,090	471,995	10.02
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TOTAL	996,610	1,702,302	
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<sup>1/</sup> Equivalent to 65 cavans per hectare.

<sup>2/</sup> Equivalent to 29 cavans per hectare.

<sup>3/</sup> Equivalent to 14 cavans per hectare.

Source : NEDA Regional Development Information

## Industry

The industry sector in Western Mindanao has been characterized by the predominance of small-and-medium scale industries and by the relative concentration of firms in the Zamboanga Peninsula; particularly Zamboanga City. In terms of output, the sector has been growing at a slower pace vis-a-vis the national industry sector, partly because of the lack of infrastructure support

and unstable peace and order conditions.

A total of 1,858 manufacturing establishments were registered as of 1982. Of this number, 658 or around 35 percent manufactured wearing apparels, 618 or about 33 percent were in the manufacture of food, 125 or almost 8 percent were in the manufacture and repair of furniture and fixtures primarily made of metals. The remaining firms of 457 or about 24 percent were engaged in other industries such as the manufacture of transport equipments or wood and cork products.

Table 7. Livestock Population by Province as of 1981

Province	Goat	Duck	Hog	Cattle	Carabao	Chicken	Total
Basilan	6,350	40	31,450	5,500	12,060	129,150	184,500
Sulu	12,590	183,170	80	42,720	—	565,430	803,990
Zamboanga City	3,220	13,620	16,810	2,920	6,980	172,940	216,490
Tawi-Tawi*	—	—	—	—	—	—	—
Zamboanga del Norte	23,980	9,870	99,060	23,170	44,480	723,820	924,380
Zamboanga del Sur	64,260	68,000	168,500	29,420	94,980	1,362,350	1,787,510

\*Data Not available

Source: Bureau of Agricultural Economics, Region IX, Zamboanga City

*Wood Processing Industry.* As of December 1978, Western Mindanao had a total of 62 wood processing industries. Five of these were plywood and veneer plants, 16 were sawmills to take care of the first stage processing of logs, while the remaining 46 firms were either engaged in the manufacture of boxes or in the manufacture of sash and other wood products except furniture.

*Coconut Processing Industry.* The coconut oil milling industry, which heavily utilizes the indigenous resources of Western Mindanao accounts for a significant portion of the regional income. As of 1982, there were four operational oil milling plants in the region. These were in Zamboanga City, with an aggregate daily rated input capacity of 780 metric tons, and one is in the municipality of Roxas, Zamboanga del Norte with a total of 1,180 metric tons of copra daily.

*Others.* The four existing fish canning plants in Region IX are all located in Zamboanga City. Three are engaged in the canning of tuna while one is engaged in the canning of round scad and sardines. Small fish processors in the region are limited only to drying, salting, and smoking. In the mining industry, only seven out of fourteen registered firms are operating in the region. Most are engaged in the mining of chromite while some are in gold, copper, iron and asbestos.

In 1982, there were 19 firms registered with the Board of Investment and 548 with the National Cottage Industries Development Authority.

*BOI Registered Industries.* The 19 BOI registered firms in the region have an aggregate investment of over P 500 million. These industries are engaged in activities ranging from processing of coconut oil, lumber and veneer to mining of gold, copper, lead and zinc and construction of barges and fishing boats. Thirteen or around 68 percent of these industries are located in Zamboanga City. Of these firms, the smelting of pig iron of Surigao Consolidated Mining has the biggest investment with P117 million.

*NACIDA Registered Industries.* As of May 1983, there were 548 NACIDA registered firms in Region IX with an aggregate investment of a little over P 21 million. These firms employed some 3,600 workers. Roughly 23 percent of the workers were employed by the furniture industry, 15 percent by the garment industry while the remaining 62 percent were employed by other industries

like handicraft, metal-craft, food processing, among others.

Of the 548 cottage industries, Zamboanga del Sur including the City of Pagadian had the highest number of registered firms, 185. It was closely followed by Zamboanga City, 117, Zamboanga del Norte, 60, Sulu, Basilan and Tawi-Tawi, 64, 43 and 19 firms, respectively.

## Trade

The port of Zamboanga registered a favorable balance of trade of P371 million in 1981 to about P452 million in 1982, an increase of 22 percent. Export increased by about 19 percent, while import rose by only 14 percent.

The remarkable increase in the performance of the trade sector can be attributed to the significant increase in volume of export particularly coconut oil and other coconut by-products. Coconut oil alone accounted for 58 percent of the total regional export earnings. It should be noted that an increase or decrease in the price of coconut oil, which is the major export of the region, has a tremendous effect on the region's export earning.

*Export.* The four major exports from the port of Zamboanga in 1982 were coconut oil, valued at about \$44.1 million, canned tuna fish at \$10.3 million, plywood at \$7.7 million and copra by-products at \$6.7 million. Total earnings from these products amounted to around 68.8 million comprising about 90 percent of total export value.

It is noteworthy that the volume of forest products decreased by about 18 percent from 1981 to 1982. The volume of exported coconut oil and marine products increased by 124 percent and of the total fish volume landed. Zamboanga City, from where 116 commercial vessels operate, accounted for 76.8 percent of the total commercial catch. Zamboanga del Norte registered 3,067 M.T. while Zamboanga del Sur accounted for 4,534 M.T. Basilan and Tawi-Tawi registered 2,901 M.T. and 2,016 M.T. respectively. Meanwhile Sulu had only 384 M.T.

A total of 6,655 fishermen in the region were engaged in commercial fishing. Zamboanga City had the most number of fishermen with 2,818 followed by Zamboanga del Norte with 1,708 fishermen. The average productivity of commercial fishing in terms of productivity per fisherman was 8.4 M.T.

### Radio and TV Stations

The region has 15 radio broadcasting stations. Nine are in Zamboanga City. The cities of Dipolog and Pagadian as well as the provinces of Tawi-Tawi and Sulu have one station each (Table 8).

The region has eight television stations. Three are located in Zamboanga City, namely Channels 3, 5, and 9. The other five are being operated by the Ministry of Public Information (MPI IX) and are located in Jolo, Tawi-Tawi and in the cities of Pagadian, Dipolog and Dapitan.

*Telegraph Stations.* The region has 57 private radio/telegraph stations. These include PT&T with 44 stations, Radio Communication of the Philippines Inc. (RCPI) with 12 stations and Universal Telecommunication with one. Among the provinces, Zamboanga del Sur, including the City of Zamboanga, has the biggest number of telegraph stations.

The government also operates 63 telecommunications stations in the region. Majority are radio types which totalled 57 and the rest are telegraph and radio/telegraph. Most of the communication facilities are located in Zamboanga del Sur and Zamboanga del Norte.

Table 8. Television and Radio Broadcasting Stations, 1983

Province/City	TELEVISION STATIONS			RADIO STATIONS		
	Channel	Frequency	Operator	Call Letters	Frequency	Operator
Pagadian City	:TV-7	:174-180 MHZ	:Office of Media :Affair, Region IX	:DXKP	:1370	:Network :RPN
Zamboanga City	:TV-3	:60-66 MHZ	:DXLL Zamboanga :TV Corp.	:DXLL	:1050	:L-SBS
	:TV-5	:1.0 KW	:DXXX-Radio Phil. :Network (RPN)	:DXXX	:1010	:RPN
	:TV-9	:166.192 MHZ	:FUBC-First United :Broadcasting Corp.	:DXLA-FM :DXLA-AM :DXRZ :DXYZ :DXSC :DXTY-FM :DXAS	:93.9 MHZ :549 Khz :950 Khz :980 Khz :819 Khz :101.3 MHZ :1125 Khz	:FUBC :FUBC :UMBN :NBC :MASCOM :NBC :FEBC :Welfare
Dipolog City	:TV-11	:298-304 MHZ	:OMA, Region IX	:DXKD	:1060 Khz	:Kanlaon :Broadcasting :System :KBS
Dapitan City	:TV-6	:68-72 MHZ	:OMA, Region IX	:DXDR	:960 Khz	:RMN (Radio Mindanao Network)
Jolo	:TV-7	:74-180 MHZ	:OMA, Region IX	:OMA	:1226Khz	: -
Tawi-Tawi	:TV-11	:298-304 MHZ	:OMA, Region IX	:DXRT	:890 Khz	: -
Basilan	:TV-11					

*Telephone System.* The municipalities of Jolo and Isabela and all the cities in the region, except for Dapitan City, are provided with telephone services. To date, the biggest number of lines being operated is in Zamboanga City with 3,600 lines (Table 9).

**Table 9. List of Towns and Cities with Telephone Service, Operators, and Number of Lines, 1982**

Cities/Municipalities	Telephone Company	Number of Lines
Dipolog City	1. Dipolog Telephone System	240
	2. Cruz Telephone Company	250
Zamboanga City	Pagadian City Telephone System	150
Zamboanga City	PLDT	3,600
Isabela, Basilan	Basilan Electric Light and Telephone System	240
Jolo, Sulu	Jolo Telephone System	320

### Postal Services

Western Mindanao has a total of 133 post offices as of 1982. These are distributed in the different municipalities and cities of the region. Zamboanga del Sur has the highest number of postal stations (65) serving 38 municipalities, including the cities of Pagadian and Zamboanga. Zamboanga del Norte has 33 stations. Sulu and Tawi-Tawi have 13 each and Basilan has nine.

### Local Publications

There are 12 publications in the region, eight of which are in Zamboanga City, two in Pagadian City and two in Dipolog City. Of the 12 publications, however, only two are circulated daily while the rest come out twice a month.

## II. Southern Mindanao

Southern Mindanao, Region XI, comprises five provinces and two cities, namely, Davao Province, Davao del Sur, Davao Oriental, Surigao del Sur, South Cotabato, and cities of Davao and General Santos, with Davao City, as the regional center. The second largest region in the country, Southern Mindanao has a land area of 3,157,966 hectares.

### Food Crop Production

Food crop production in the region reached 1,236,377 metric tons. Combined rice and corn production account for 92.4 percent of the total. For both crops, South Cotabato led in production level and area planted. For palay production, 54.1 percent of total production came from South Cotabato as the province accounted for 47.6 percent of total land area planted to palay. For corn production, 89.9 percent of total production came from South Cotabato as land area planted to it was 34.33 percent of total area planted.

*Commercial Crop Production.* Aggregate commercial crop production which is recorded at 2,625,926 metric tons only increased by 0.14 percent from last year's level. The only notable increases were attained in rubber, citrus, fruit and banana production. In some cases, production for some commercial crops declined with decreases in area planted. Coconut and cacao production are cases in point.

### Livestock and Poultry Production

This year, total animal population in the region is recorded at 11,308,676. On the whole, livestock and poultry population grew by 27 percent over last year's population. Poultry population accounts for 80.6 percent of total animal population.

### **KKK Implementation**

For this year, KKK investible funds in the region amounted to P175 million. Regional trend showed preference for agrolivestock activities which accounted for almost 50 percent of the total investments. The remaining share were distributed to agroforestry (7.44 percent), cottage and light industries (3.41 percent), services (3.85 percent) and shelter components (3.14 percent).

### **Capital Formation**

Firms registered at the Securities and Exchange Commission during the year totalled 101 representing a 5.94 percent reduction against last year's registrations. This resulted from the over-all 23.5 percent decline in the number of newly-registered partnership firms. However, despite this fluctuation, total paid-up capital of stock corporations and partnerships increased by 50.9 percent and 90.1 percent, respectively. Specifically, stock corporations engaged in construction activities registered the highest increase at 911.9 percent. Among partnerships, only firms engaged in transportation, storage and communications registered a positive increase of 1,580.0 percent.

### **Cottage Industries**

As of this year, the region has a total of 1,545 registered cottage industries employing 8,114 workers with aggregate capitalization of P 73.2 million. Around 24.5 percent of these industries are engaged in garment-making. Loans granted to these industries through the CIGLF amounted to P 6.4 million. Recipients of these loans are mostly engaged in garment-making, furniture-making and metalcraft.

### **Electric Energy Consumption**

A total of 133,609 electric energy consumers were served this year with an energy consumption level of 389.5 million kilowatts valued at P 198.0 million. Around eighty percent of those served were residential clients while the remaining consumers were commercial users.

### **Domestic Trade**

Total import payments in the region exceeded total export receipts by P 4.3 billion. Likewise, for this year, volume of commodities shipped by air amounted to 674,006.7 kilograms with Davao City accounting for 96 percent of total volume.

### **Water Resources**

As reported, of the 27 communal irrigation projects scheduled for the year, 17 were completed. Likewise, for the year, 522 artesian well projects were programmed in the region. Accomplishments of this project, include a completion rate of 75.47 percent while 20.11 percent are reported on-going projects and 4.42 percent are as yet unstarted operations.

### **Postal Communication**

“Project Mercury” was launched during the year in the region. The project is an attempt to lessen the time lag between mailing and delivery time of airmail and surface mail. As of this year, the region is being served by 129 post offices.

### **Telecommunications**

To date, the Bureau of Telecommunications has 10 stations authorized to handle telegraphic transfer and 72 stations extend-

ing social telegram services in the region. As a whole, 85 telegraphic stations serve the region's needs.

### Employment Protection

The Labor Regulation Sector of the Ministry of Labor and Employment has inspected a total of 55 establishments, 42 of which were found violating several labor regulations. The Ministry also handled 850 labor standard cases of which 448 were settled.

### Regional Income

Preliminary estimates of gross regional domestic product (GRDP) indicated a modest growth of 3.7 percent in 1982 over the previous year or from 26.34 billion to P 6.58 billion at constant 1972 prices.

The biggest share to GRDP is accounted for by the agriculture sector at 46.3 percent. The services sector contributed 35.2 percent while industry had a share of 18.5 percent. Per capita GRDP in 1982 was higher by 0.5 percent than the preceeding year at an estimated P 1,836.

Gross value added (GVA) for industry slightly outpaced the growth rates of the other sectors at 5.2 percent or from P 1.15 billion in 1981 to P 1.22 billion in 1982. GVAs: for agriculture and services posted growths of 3 percent and 4 percent respectively. The growth in industry was mainly influenced by an accelerated expansion in the mining and quarrying subsector which marked a 57.1 percent increase during the period.

Among the industry subsectors, manufacturing registered the biggest share to GRDP at 13.3 percent while electricity, gas and water supply contributed only 0.2 percent. In services, the commerce and transport, communication and storage subsectors maintained their shares at the 1981 levels of 4.2 percent and 23.9 percent, respectively, while the services subsector slightly increased from 7.0 percent to 7.1 percent (Table 10).

## Labor Force and Employment

Population projection for 1982 based on medium assumption showed that an estimated 2,126,534 persons in the region belonged to the age group 15 years old and over. Of this total, 1,365,235 or 64.20 percent represented the labor force population. Approximately, 35.80 percent are estimated to compose the region's non-working members of the labor force. This includes housewives, the disabled and elderly persons not engaged in any economic activity.

The employment rate for the region rose to 93 percent in 1982 indicating that 1,269,669 persons held jobs out of the total population in the labor force. Labor absorption was higher in the agriculture sector at 56.6 percent or 718,633 persons compared to the non-agriculture sector which accounted for 43.4 percent or

Table 10. Gross Regional Domestic Product, Region XI, 1981, 1982, (in million pesos at constant 1972 prices)

Sector	: 1981	: % Share	: 1982	: % Share	: % Increase/ (Decrease)
Agriculture, Fishery and Forestry	2,960	46.6	3,048	46.3	3.0
Industry	1,159	18.3	1,220	18.5	5.2
Mining and Quarrying	21	0.3	33	0.5	57.1
Manufacturing	832	13.1	875	13.3	5.2
Construction	292	4.6	297	4.5	1.7
Electricity, Gas Water Supply	14	0.2	15	0.2	7.1
Service	2,228	35.1	2,318	35.2	4.0
Transport, Communication and Storage	269	4.2	276	4.2	2.6
Commerce	1,513	23.9	1,574	23.9	4.0
Services	446	7.0	468	7.1	4.9
GRDP	6,347	100.0	6,586	100.0	3.7
Per Capita GRDP (P) 1,826			1,836		0.5
Population (in thousand persons)	3,476		3,586		3.1

Preliminary Estimates

Source: National Accounts Staff; NEDA, Manila

551,036 workers. The underemployment level was placed at 28.2 percent of the total persons employed or 358,521 who did not work full time or received lesser compensation. The underemployment consisted of 32.1 percent of workers within the agriculture sector or 230,681 and 23.2 percent of the non-agriculture sector or 127,840 persons. Persons who were seeking jobs or were unemployed during the period numbered 95,566 or 7 percent of the total labor force.

Among the provinces, the highest employment rate was exhibited by Davao Oriental at 98.3 percent followed by South Cotabato with 97.6 percent, Davao 97.4 percent and Surigao del Sur 94.3 percent. The lowest employment rate was experienced by Davao del Sur at 86.5 percent. The employment structure also showed that Davao del Sur registered lower employment in the agriculture sector as compared to the other provinces in the region which had agriculture as their main economic activity.

### Foreign Trade

The aggregate value of exports and imports in the region slightly levelled down by 4 percent from U.S. \$683.9 million in 1981 to U.S. \$656.3 million in 1982 on account of reduced payments for imported goods by as much as 21.4 percent to U.S. \$136.4 million. This brought down the share of imports to total trade from a previous 25.4 percent to 20.8 percent. The share of exports, which accounted for 74.6 percent in 1981, increased to 79.2 percent and its value posted a moderate growth of 1.9 percent. The balance of trade remained favorable in the region with exports exceeding imports by U.S. \$383.5 million or 13.9 percent above the value registered in 1981.

### Exports

Total exports in 1982 increased both in volume and value by 13.8 percent and 1.9 percent, respectively. Major dollar earners

during the year included bananas which posted a 17.8 percent increase in receipts. Other goods which fared well are as follows: coconut oil, 46.7 percent growth; logs and lumber, 21.4 percent; fruits and nuts, 26.5 percent; and copra meal or cake, 17.8 percent. The combined values of these exports amounted to U.S. \$401.3 million or 77.2 percent of the aggregate export value. Meanwhile, the oversupply and depressed prices in the world market toned down exports of other commodities such as plywood, frozen fish, veneer and dessicated coconuts as compared to the previous year.

Table 11. Foreign trade, Region XI, 1981 and 1982 (F.O.B. value in million U.S. Dollars).

Particulars	: Value	1981	:	1982	:	: Growth : Rate
		: Percent : Share	:	: Value	: Percent : Share	
Total Trade	683.9	100	:	656.3	100	(4)
Exports	510.3	74.6	:	519.9	79.2	1.9
Imports	173.6	25.4	:	136.4	20.8	(21.4)
Balance of Trade	336.7	383.5	:			13.9

Source: National Census and Statistics Office Region XI, Davao City

### III. Northern Mindanao

Northern Mindanao, Region X, is composed of Agusan del Norte, Agusan del Sur, Bukidnon, Camiguin, Misamis Occidental, Misamis Oriental and Surigao del Norte provinces, and the cities of Butuan, Cagayan de Oro, Gingoog, Oroquieta, Ozamis, Surigao and Tangub. The land area of the region measures 28,327.4 square kilometers.

## Mineral

Northern Mindanao is rich in mineral resources. Some 3.1 billion M.T. metallic minerals and 42.9 million M.T. non-metallic minerals are known to be found in the region. Nickel makes up the biggest metallic mineral deposit estimated at 2.7 billion M.T. The second biggest is aluminum laterite, estimated at 292 million M.T. Both minerals are most found in Surigao del Norte. Gold, chromite, copper and manganese represent the rest of the important metallic minerals available in the region.

The biggest non-metallic deposit in the region is limestone with a total estimated reserve of 40 million M. T. Clay follows next with 2.5 million M. T. Sulphur, diatomaceous earth, feldspar, and coal are also found in the region.

## Employment

The sector with the highest number of employment is agriculture with a percentage share of 69 percent. Industry (composed of mining, manufacturing, construction and utilities) accounted for only 8 percent of the total. The others were employed in transport, communication and storage, commerce, and services sectors, representing 22 percent.

## Gross Regional Domestic Product and Per Capita Output

Latest estimates of the Gross Regional Domestic Product (GRDP) of Northern Mindanao showed an 8.6 percent increase from ₱3,240 million (at constant 1972 prices) in 1977 to ₱3,818 million in 1979. The latter figure represents 4.4 percent of the national level.

Whereas, agriculture and industry accounted for 56.7 percent and 17.5 percent, respectively, of the regional total of 1977, a gradual shift has been noted in 1979 where agriculture contributed some ₱1,563 million (40.9%) and industry, some ₱787 million (20.6%) to the regional economy in 1979. The industry sector therefore grew by 38.8 percent from 1977 to 1979.

Likewise, the service sector (transport, communications, storage, and commerce) shared 38.4 percent of GRDP posting a stunning 75.6 percent increase from 1977 to 1979.

## Agriculture

1. *Crops.* Both food and commercial crops are extensively cultivated in the region. During crop years 1979-1980 (July–December 1979 and January–June 1980), the region produced a total of 2,797,784 metric tons of food and commercial crops valued at P 3,669 million. Commercial crop production was estimated at 764,573 metric tons, with a total value of P 1,866 million.

Among foodcrops, palay ranked first in terms of production valued at P 464.4 million, followed closely by pineapple which was worth P 460.2 million. Other top moneymakers included rootcrops, banana, white corn, and fruits.

In commercial crop production, coconut and coffee products ranked first and second – each producing P 709.6 million and P 571.9 million worth, respectively. Sugarcane, tobacco, abaca, followed in that order.

Locationally, coconut production are done mostly in the coastal provinces, namely, Misamis Occidental, Surigao del Norte and Misamis Oriental. On the other hand, the production of pineapple, white corn, palay, sugarcane and coffee are concentrated mainly in Bukidnon. Rootcrops abound in Surigao del Norte while bananas, in Mindanao Oriental and Agusan del Sur.

2. *Livestock and Poultry.* Another vital economic activity in the region is livestock, swine and poultry raising. As of 1979, the region had a total of some 246,900 cattle, 618,400 swine and 2,963,000 chickens. The leading provinces engaged in the production of cattle, swine and chicken are Bukidnon and Misamis Oriental. Other provinces merely raise these animals on a backyard level. Also common in all provinces is the raising of ducks, goats, and rabbits and the domestication of carabao and horses as work animals.

## Industry

Region X is steadily turning into an industrial center in the south. Among the 577 BOI-approved projects in the country in 1977, 36 were located in the region established at a total cost of P 3.9 billion and employing some 8,194 workers. Twenty-eight of these projects are engaged in the processing of local agricultural raw materials such as logs, copra, fruits and other related crops. Most of the amount invested in the region, however, went into four mining and mineral processing plants that were recently set up in the region. These are the nickel plant in Surigao City, the sintering plant in Tagoloan, Misamis Oriental and the two ferro alloy plants in Manticao, Misamis Oriental. The rest of the amount were invested in one metal based industry, two chemical-based industries and one electric utility plant.

In terms of number of industrial establishments, the region had a total of 3,610 as of 1978. Out of this, 3,513 were engaged in manufacturing, 40 in electricity, gas and water, 36 in construction and 21 in mining and quarrying. All these represented 13 percent of the total number of business establishments in the region during the year.

In cottage industries, some 2,875 firms were registered in the region by the NACIDA as of 1980. These were put up at a total cost of P8.39 million with an employment of 9,532 workers.

## Mining

The last few years saw the resurgence of the mining industry in the region. Starting with a mere P 5.5 million at the onset of 70s, total mineral production soared to P 390.9 million in 1975 and grew a triple to P1,592.5 in 1979. This phenomenal increase is ascribed largely to the operation of the nickel plant in Nonoc Island, Surigao City which started in 1975 and, to a certain degree, the improvement in the mining of limestone (for cement) by the three cement plants in the region. Also noted was the expansion of quarrying activities in support of the burgeoning local cons-

truction industry.

In 1979, metallic minerals accounted for 89 percent of the total mineral production contributed mostly by the province of Surigao del Norte while non-metallic minerals represented 11 percent of the total due to the active operations in Misamis Oriental.

### Foreign Trade

Foreign trade statistics of the region continue to reflect a positive performance in its balance of payments. The 1980 data showed export receipts exceeding import payments by P. 1.7 billion indicative of the region's role in contributing to the improvement of the country's BOP position.

The ten principal export products include :

<i>Commodity</i>	<i>Value (In Million Pesos)</i>
Nickel briquettes	876.3
Coconut oil	734.3
Pineapple	533.7
Mixed sulphides	425.0
Sintered Ore	380.2
Lumber	197.1
Sugar	139.7
Cement	129.9
Nickel Powder	117.8
Logs	104.8

Export partners were mainly Japan and the United States representing 33 and 24 percent, respectively, of total export receipts.

The region's ten principal imports, on the other hand consisted of :

<i>Commodity</i>	<i>Value (In Million Pesos)</i>
Mineral fuel/lubricants	P 1, 191.0
Various base metals .	440.8

Chemical elements	247.6
Metal products	143.7
Machineries and parts other than Electrical	114.8
Paper board	60.2
Fertilizers	43.4
Other non-metallic minerals	23.7
Electrical Machineries	10.9
Other foodstuffs/products	5.1

Import partners were mainly Bahrain and Japan representing 40 and 21 percent, respectively, of the total import payments. All export and import activities are done through the ports of Cagayan de Oro, Butuan, Ozamis and Surigao.

### Infrastructure

*Road Network.* To support its growing economy, the region has been provided with a total of 17,204.4 kilometers of national, provincial, city, municipal and barangay roads as of June 30, 1981. Of the total road network, 63 percent and 30 percent, respectively, were of earth and macadam type while only 7 percent were paved. More than half of the network (57%) were barangay roads, while only 14 percent were national roads.

Among the provinces, Bukidnon had the longest road network with 36 percent of the total, mostly barangay and municipal roads. However, a mere 0.38 percent of its roads were paved. Next to Bukidnon are the provinces of Misamis Occidental and Agusan del Sur (in that order) accounting for 21.1, 12.9 and 9.7 percent, respectively, of the regional total (including roads of cities under each provincial jurisdiction).

Intra-regional transportation in Northern Mindanao has been given a boost with the completion of that portion on the Pan Philippine-Japan Friendship Highway which extends from Surigao City to the two Agusan provinces. Almost to be completed is the Iligan-Cagayan de Oro-Butuan Highway (concreting) and the road

linking Bukidnon and Davao City via Calinan; while a major on-going construction is the Sayre Highway (asphalting) in Bukidnon.

*Ports and Airports.* The major ports of Northern Mindanao are those of Cagayan de Oro, Butuan, Surigao and Ozamis which handle both domestic and international trade. The port of Cagayan de Oro, the largest in Region X, is undergoing an extensive improvement and expansion (under the World Bank Assistance) to meet the increasing trading activities of the city and its environs. Municipal ports number 34 while private ports are now about 49.

The region has one trunkline, 4 secondary and 2 feeder airports. The lone trunkline airport is found in Cagayan de Oro City while the secondary airports are located in Ozamis, Butuan, Surigao and Malaybalay, Bukidnon. The feeder airports are in Mambajao, Camiguin and Siargao, Surigao del Norte. No new airport is planned for the region in view of the on-going improvement of its road network.

*Power.* The region is covered under the Mindanao Grid Power Development Plan of the National Power Corporation which draws its power supply from its hydroelectric plants along the Agus River in Lanao del Norte. At present, only the provinces of Camiguin and Agusan del Sur are not yet served by the NPC.

From Mindanao Power Grid, electricity is distributed to the consumers through the various electric cooperatives and companies operating in the region. Additional power supply is expected within the next years from the Pulangi River in Bukidnon which is presently undergoing development.

*Irrigation.* To support the various crops development projects of the aggie sector, a number of major irrigation projects were set up in the region. Among them, the Pulangi River Irrigation Project in Valencia, Bukidnon, the Agusan I and II Irrigation Projects in Bayugan, Agusan del Sur and the Bukidnon Irrigation Project, also in Valencia, Bukidnon. Upon completion the pro-

jects are expected to benefit some 42,000 hectares of farm lands. So far, the region has serviced some 40,343 hectares with its irrigation projects which include some 247 communal irrigation systems.

### **Transport and Communications Network**

In 1979, some 42,611 motor vehicles were registered in the region posting a 10 percent increase over the previous year. Cars and trucks were the most registered types.

Telecommunications stations totalled 97 as of 1979, with radio telegraph systems accounting for 86 percent of available means of message transfers.

Mail services are handled by 128 post offices within Northern Mindanao. In CY 1981 alone, the region received 6,523,073 and dispatched 6,683,181 letters.

## **IV. Central Mindanao**

The Central Mindanao, Region XII, is bounded by the provinces of Misamis Oriental and Bukidnon, and the Bay of Iligan in the North, the provinces of Zamboanga del Sur and Misamis Occidental and Illama Bay and the Moro Gulf in the West, Davao del Sur and Davao City in the east, and South Cotabato and the Celebes Sea in the south. The region has a total land area of 23,293.2 square kilometers. On the whole, 70 percent comprises the Ripruarian provinces (Maguindanao, North Cotabato and Sultan Kudarat) while the rest make up the Lanao provinces.

### **Coastwise Trade**

As reported by the Bureau of Customs, Iligan City, inter-island trading was propitious for the region during the period January to December, 1982.

Table 12. Agriculture Indicator

INDICATOR	UNIT	1981	1982	% CHANGE
<b>1. Regional Rice Production</b>				
Production	metric tons	684,708.2	1,085,597	58.7
Area	hectares	146,960	274,469.5	86.8
Average Production	cavans/ha.	93.1	85.1	(8.6)
Consumption	metric tons	239,325	249,939.5	4.4
Surplus/Deficit	metric tons	+160,936.8	385,134.7	139.3
<b>2. Regional Corn and Feedgrain</b>				
Production	metric tons	160,165	225,543.3	40.8
Area	hectares	85,950	120,985	40.8
Ave. Production	cavans/ha.	37.2	37.2	0.3
Consumption	metric tons	11,367.1	11,408.9	43.3
Surplus/Deficit	metric tons	+148,797.9	+214,134.4	43.3
<b>3. Farmers Assisted</b>				
Rice farmers	farmers	121,351	161,111	32.7
Corn and Feedgrains	farmers	46,431	78,266	69.3
Farmers	farmers	74,920	82,845	10.6

## Exports

Exports of the region for CY 1982 amounted to \$137.34M with a volume of 473,445 MT. Coconut products like crude coco oil, and coco meal solvent pellets were still the dominant dollar earner of the region. Volume-wise they consisted 103.401 MT. or 75.3 percent of the total.

Accounting for the 24.71 percent of the region's exports were products such as ferrosilicon/ferrochrome, lumber/wood products, plywood and non-metallic mineral products. The major importance of the region's products were USA, Japan, Europe and Singapore.

### **Agriculture Indicators**

Generally, the performance of the agriculture sector for 1982 was impressive despite the drought experienced during the last quarter. Total grain production increased by 55.2 percent which led to the considerable bulk of surplus. The only evident effect of the drought was the decline in the average yield per hectare in rice. This was however compensated for by the magnitude of the area involved in production during the year under review.

### **Infrastructure and Utilities**

An assessment of the performance of the infrastructure and utilities sector from 1980 to 1982 show a continuing growth in the number of facilities vitally needed by the people. The total length of roads receiving regular allocation of maintenance funds increased from 10,843 to 11,125 kms. for a percentage change of 2.60, upping the region's road density to 0.48 kilometers per square kilometer of land area. If the trend continues, the road density of Central Mindanao would then be comparable to that of the country before the end of current plan period (1983-1987).

The completion of two diesel engine-powered plants in Aplaya, Misamis Oriental and General Santos City during the two-year period under review brought the total installed capacity of the Mindanao Grid to 580.9 megawatts or an increment of 7.38 percent. Although no figures are available, the number of barangays now enjoying electrical energy has been observed to be constantly rising.

Communications was also given a boost with the establishment of three more telegraph stations and 20 post offices located in the remote areas of Central Mindanao.

In support of the agriculture sector, 13,857 hectares of rice-lands were provided with irrigation water by the NIA, representing a remarkable growth of 16.90 percent in two years.

### Performance Index: Agriculture and Natural Resources

For the period 1982, majority of the programs implemented under agriculture and natural resources sector, on the average, showed that every percent unit of disbursement had a corresponding 1.01 unit of accomplishment. This implies that the sector is along the normal implementation performance which is 1.0. It

Table 13. Infrastructure and Utilities Indicators, 1980-1982

INDICATOR	UNIT	% CHANGE		
		1980	1982	1980-1982
1. Road Kilometerage	Kilometer	10,810	11,125	2.60
2. Road Density	Km./Sq. Km.	047	.48	2.13
3. Installed Power Capacity	Megawatts	541	580.9	7.38
4. Telecommunication Stations (Butel)	Number	61	64*	4.92
5. Post Offices	Number	109	129	18.35
6. Irrigated Areas	Hectares	81,980	95,837	17

\* One is temporarily closed

Source of Basic Data: MPWH, Butel, NIA, NPC, Bureau of Post

SUB SECTOR	% AVERAGE ACCOMPLISHMENT	% AVERAGE DISBURSEMENT	% ACCOMPLISHMENT % DISBURSEMENT RATIO
Food Production	90.56	100.0	0.90
Fishery Development	88.31	96.46	0.92
Land Development	99.83	100.00	0.99
Agrarian Reform	95.26	100.00	0.95
Cooperative Development	99.92	77.89	1.28
<b>SECTOR</b>	<b>94.78</b>	<b>94.87</b>	<b>1.01</b>

Source: Regional Development Council, NEDA. Region XII

further indicated that program implementation in the sector were efficiently undertaken.

The average accomplishments of each major program in relation to its target indicated the following: food production, 90.56 percent; fishery development, 88.31 percent; agrarian reform, 95.26 percent; and cooperative development, 99.92 percent.

Table 14. Performance Ratios: Agriculture and Natural Resources 1982

SUB SECTOR	: % AVERAGE : ACCOMPLISHMENT :	: % AVERAGE : DISBURSEMENT	: % ACCOMPLISHMENT, % DISBURSEMENT RATIO
Food Production	: 90.56	: 100.0	: 0.90
Fishery Development	: 88.31	: 96.46	: 0.92
Land Development	: 99.83	: 100.00	: 0.99
Agrarian Reform	: 95.26	: 100.00	: 0.95
Cooperative Development	: 99.92	: 77.89	: 1.28
SECTOR	: 94.78	: 94.87	: 1.01

Source: Regional Development Council, NEDA, Region XII

## Food Production

Rice and corn production for 1982 totalled 1,311,140 MT representing 71.6 percent of the programmed target. Rice constituted 1,089,597 MT or 82.7 percent of the total production while 225,543.3 MT was attributed to corn production.

Cassava production overshot its target by 37.7 percent while vegetable production was 7,314.9 MT, realizing only 51.2 percent of the target. No report was submitted on plantation crops.

Under agricultural extension services, a total of 59,982 farmers, homemakers, out-of-school youths were organized, while only 19,239 cavans of seed materials representing 9.4 percent of the target was produced during the year.

In soil services, only 3,264 soil samples were analyzed and 4,222 fertility/soil maps were made representing 23.3 percent and 73.31 percent of the targets, respectively. Around 43,600 hectares were covered by the land capability classification services.

An aggregate area of 393,550 hectares were surveyed and 83,533 hectares were treated under crop protection. Some 5,742.9 MT of meat were produced during the year under review. This represents 191.6 percent of the target.

Of the scheduled 510 animals for dispersal, only 399 were dispersed while 488,823 animals were dewormed and immunized realizing 66.1 percent of the scheduled target. Some 6,784 borrowers and loan beneficiaries with livelihood projects on livestock and poultry were assisted, registering an accomplishment percentage of 87.9 percent. The programmed fund in the amount of ₱ 17,001,697.00 was totally released and disbursed during the year under review.

### **Cooperative Development**

Inclusive January to December of 1982, 378 cooperatives were organized obtaining an accomplishment rating of 92 percent. As to registration and supervision, some 318 various cooperatives were registered while an aggregate of 710 cooperatives were given supervisory assistance. Along with this, some 61 trainings on cooperatives were conducted. Amount disbursed for cooperatives development totalled to ₱3,742,008.00.

### **Industry and Trade**

The year ended showcased anew the efforts and accomplishments of the public sector in trying to promote and develop industrial and trade activities in the region. The National Cottage Industries Development Authority (NACIDA), Small Business Advisory Center (SBAC), Bureau of Domestic Trade (BDT), and the agencies responsible for carrying out the bulk of the government's

industry and trade-related programs in the region have vigorously initiated their respective activities programmed for the year. Practically all of these activities, however, are continuing activities and what varies every year is only the magnitude of targets as well as the extent of financial requirements.

For cottage industry, the regular activities being implemented include accelerated technological development; intensified market research, development and promotion; regulation of cottage industries; and extension of financing assistance. The establishment and maintenance of production centers and common facility services is likewise a continuing activity. During the past twelve months, average accomplishments for all these undertakings soared to a high 237% or more than double the targets, as some component activities registered extremely high accomplishment levels. Total financial support (distributed) amounted to P 1.2 M.

Industrial extension and business consultancy services constitute the major program for other industrial activities. It has accomplished all of its targets for the year and used up only a meager sum of less than half-a-million pesos financial outlay.

Trade activities, on the other hand, cover consumer education and information, consumer assistance, consumer protection, domestic trade promotion, trade assistance services, business registration, and accreditation of service and repair establishments. A complete report on the accomplishment level in these activities, however, is still unavailable, hence deliberately omitted in the succeeding presentation.

### **Cottage Industries**

Accomplishments under accelerated technological development exceeded targets (percentage and absolute-wise) by a sizeable margin. Five researches, instead of four as previously set, were actually undertaken; three quality control procedures were adopted (instead of two as planned); and 1,337 persons and 45 entrepre-

neurs were trained as against the 300 persons and 45 entrepreneurs targeted, respectively. Only in the number of organizations organized did accomplishment fell below the targeted level.

Intensified market research, development and promotion component reflected a more than 100% average accomplishment despite a lean performance in the conduct of market researches (only one out of the six researches targeted was accomplished). The targets on the number of producers served and domestic sales generated were both exceeded, thus, raised the percentage performance of the program to a still high average.

Under regulation of cottage industries, the year's accomplishment level was more than double the target. Some 569 cottage industries were registered representing 284.5% of the 200 industries earlier targeted to be covered.

On extension of financing assistance, fantastic accomplishment levels were reported during the year. The target on the number of consultancy services rendered was rolled more than nine time the amount of firms monitored or supervised twice. However, the collection of loan amortization suffered setbacks during the year. Only a third of the P 1.0 M targeted collection was realized.

### **Industrial Extension and Business Consultancy Services**

All the targets for the year were matched 100% by accomplishments. Sixty-nine clients were generated, 60 clients services, two industrial studies completed, and seven trainings attended/ conducted. In addition, a total of 130 referrals and other consultancy services (untargeted) were extended to entrepreneurs and would-be-entrepreneurs in the region during the year.

### **Implementation Problems**

The lack of adequate manpower support was still the foremost problem that plagued implementation. Heavily affected

were the market research activities of the NACIDA and project study preparation of SBAC. This problem has long been expressed by both agencies in their past reports, but because of budgetary constraints, the much needed hiring of additional personnel had not been (and could not be) realized.

### **Transportation**

During the year under view, of the 20.27 kilometers targeted for construction of national road, only 2.85 kilometers has been realized. Likewise, the total length of bridge constructed was 226.719 lineal meters. Of the 74.15 kms. barangay and municipal roads slated for improvement only 52.12 kms. were repaired. Reported accomplishment on foreign-assisted road projects exceeded the target by 9 percent.

For portwork projects, 14 out of the targetted 19 projects were accomplished. On the other hand three out of seven scheduled projects were finished under shore protection. Of the 1.44 km. programmed for over-laying for Malabang Airport only 0.49 km was accomplished, while the programmed upgrading and re-surfacing of Iligan Airport accomplished 128 percent.

Total amount spent for transportation was P 26,153,201. This represent only 23.3 percent of the programmed amount and 38.9 percent of the released amount.

### **Water Resources**

An average of 66.3 percent accomplishment was reported on the three national irrigation system projects scheduled. Of the 22 communal irrigation projects eight gained 100 percent completion. The rest gained accomplishment ranging from the lowest 5 percent to the highest 94.0 percent.

From January to December of 1982, 300 level I deep wells, nine level II deep wells and 29 level III waterworks were completed. In addition, 179 waterworks were rehabilitated. Water supply program rated 70.9 percent accomplishment. Only four of

the nine flood control and drainage projects programmed were completed during the year under review.

### **Communication**

The Mail Distribution Center and Post Office Complex Building at Cotabato City was reported completed as of December, 1982. The power house construction at Tacurong Telephone Exchange Office was finished while the fencing of the premises is still ongoing. Three trylon towers were erected and the programmed construction of a repair center and garage was realized although the funds for the procurement of some radio telegraph equipment was not released. A total of P 583,820.00 was released and spent for communication which was only 13.7 percent of the programmed amount.

### **Power and Electrification**

Southwestern Mindanao Electric Project registered an average of 62 percent accomplishment for the entire project. The planned 40 percent accomplishment in the establishment of a 138 KV transmission line was met, while 30 percent of the 40 percent target in the establishment of 69 KV transmission line was achieved. For the establishment of 138 and 69 KV substations (30 MVA), only 5 percent of the 45 percent target was accomplished. The programmed amount for the project was P 78.385 million with a dollar counterpart of \$10.793 million. The amount disbursed was only P 9.828 million and \$7.110 million of the dollar counterpart.

For the Agus I Hydroelectric Power Project, reported accomplishment was 78.50 percent. The total amount disbursed for the year was P 728.03 million.

Agus IV Hydroelectric Power Project is 54.66 percent completed. The total amount released in the amount of P95.330 million with \$5.094 million as foreign loan counterpart had a disbursement of P 83.80 million and \$4.400 million dollar counterpart, respectively.

Amount spent for Agus V Hydroelectric Power Project was P 73.843 million with a foreign loan counterpart of \$4.400 million. The report on the project reflected a 66.14 percent accomplishment of the programmed 92.5 percent. The release to date is P 74.043 million with \$5.094 million foreign loan counterpart. The entire Agus VII Hydroelectric Power Project is already 97.62 percent completed. Amount spent for 192 was P 547.563 million.

## CONCLUSIONS

Agriculture and smallscale industry development are very important in the regional economy; this sector has however decreased in relative importance over the last two and a half decades in terms of absolute employment.\* The government feels that to revive and sustain the growth of this sector of the Philippine economy policies will have to be developed in terms of an accessible market for the producers' increased output; agriculture and smallscale industry sector should be made attractive to foreign investors; financing on favorable terms to increase production; and small industry dispersal throughout the country. Considering these factors, industrial information is one vital instrument needed to contribute to the economic development, primarily to support policy makers in formulating strategies to effectively implement their plans and to upgrade and update skills, technical services and expertise for the entrepreneurs in their production activities.

Industrial information needed are those which should immediately be applicable to current problems of smallscale industries and presented in a form that can be easily assimilated. Thus an effected agroindustrial information service system is needed in Mindanao.

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 \*World Bank, *The Philippines: Priorities and Prospects for Development*, (Manila: National Economic and Development Authority. 1977), p.230-33.