

**HEALTH STATUS AND
RESEARCH PRIORITIES
IN REGION IX**

**GRACE J. REBOLLOS
CARMEN T. RAMOS
ROSALYN R. ECHEM**
Western Mindanao State University
Zamboanga City

Table of Contents

I.	Introduction	3
II.	Area Profile: Geography, Demography, and Economy	3
	A. Geographical Situation	3
	B. Demographic Data	4
	C. Natural Resources	6
	D. Economy	6
	E. Facilities	7
III.	Health Resources and their Distribution	9
	A. Health Human Resources	9
	B. Health Facilities	9
IV.	Health Status of the Region	10
	A. Maternal and Infant Mortality	10
	B. Leading Causes of Illness and Death	10
	C. Nutritional Status of 0-6 Year Old Preschoolers	12
	D. Birth Rate	12
V.	Health Research Situation	12
	A. Local Research Developments	12
	B. Regional Research Updates	13
VI.	Standard Matrix for Research Priority Areas/Topics	18

HEALTH RESEARCH STATUS AND PRIORITIES FOR REGION 9

Introduction

The delivery of health service has always been of key importance to our community. With the continuing struggle against poverty and the efforts toward social and economic development, we recognize the need for a healthy citizenry. Meeting this need has even assumed a greater significance after the devolution of services to local government units in 1992.

The timeliness, quality, and efficiency of health services delivery depend on supports such as health research. Yet from interviews and observations, there is broad agreement that this concern has not really taken off in spite of the acknowledged advantages of carrying it out. The situation of Region 9 may not vary much compared to those of other places. Yet its health conditions are unique because of its particular geography, economy, cultural make-up, and other features.

This report takes off from previous attempts to present the need for health information for the Region. It recognizes the advantage of applying other disciplines and perspectives - sociological, economic, political, anthropological, environmental, and geographical - to the process of sensing the health situation. This broader analytical approach allows for a more realistic appreciation of the Region's health picture.

Area Profile: Geography, Demography, and Economy

Geographical Situation

The Zamboanga Peninsula, also known as Region IX, is in the southernmost portion of the country. It is the second smallest region in Mindanao (14.13% of land area), with a total land area of 18,730.1 square kilometers. Its vast expanse of water is speckled with a chain of 958 islands and islets. It is strategically located to serve as a natural gateway to countries comprising the Association of Southeast Asian Nations (ASEAN).

The Zamboanga Peninsula region, as it is known now, was formerly Western Mindanao. It now has three provinces and five cities - the provinces of Zamboanga del Norte, Zamboanga Sibugay, and Zamboanga del Sur and as well as the cities of Dapitan, Dipolog, Pagadian, Zamboanga, and Isabela.

The creation of Zamboanga Sibugay in 2004 and the realignment of Basilan with the Autonomous Region of Muslim Mindanao (ARMM) with the exception of Isabela which likewise became a city together formed the major change in the region's composition in 2001. The region has 77 municipalities and 2,112 barangays (NSO 2004).



Figure 1: Map of Zamboanga Peninsula 1

The seat of government for Zamboanga del Sur is Pagadian City while that of Zamboanga del Norte is Dipolog City. Zamboanga City exists as a separate charter with its congressional representative.

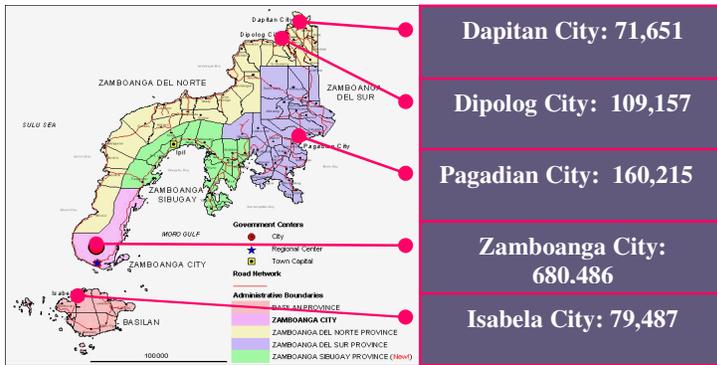
Zamboanga del Sur is the largest province in Zamboanga Peninsula (6,637.3 square kilometers). There are two cities situated in this province, Pagadian and Zamboanga City. Zamboanga del Norte, on the other hand, is the second largest province (6,183.1 square kilometers) with two cities, namely Dipolog and Dapitan.

In sum, the cities of Zamboanga, Dipolog and Pagadian serve as the centers of trade, commerce and education in the region. Zamboanga, the “Queen City of the South”, is a tourist destination besides being considered as the busiest city in Western Mindanao. It is located within 1,000 mile radius from Brunei Darussalam, Eastern Indonesia, East Malaysia.

Demographic Data

Population and Growth Rate

In 2000, Zamboanga Peninsula had a total population of 3.1 million (NCSO, 2003), representing 3.7 per cent of the country’s population. This is broken down by area as follows:



Province	Population
Zambo Norte	712,824
Zambo Sur	731,653
Zambo Sibugay	541,940
Region IX Total	3,087,413

Figure 2: Regional Population as of 2000

The regional population figure increased by 296 thousand over the 1995 census figure of 2.8 million (with September 1, 1995 as reference date) and 632 thousand over the 1990 census figure of 2.4 million. This population figure represents 562,180 households, with a household size of 5.49.

The region's population grew at the rate of 2.18 per cent in the second half of the nineties. This means that during this period, the population increased by 59 thousand persons per year on the average, or seven (7) persons per hour. If the population annual growth rate continues at 2.18 percent, then the population of ZAMPEN is expected to double in 32 years. After the 90s, the average annual growth rate of the region has increased to 2.42, with Zamboanga City alone having a rate of 3.65 per cent. This is because the city has been a common destination for in-migrants fleeing violence and dire conditions in their provinces.

Among the three (3) provinces and one (1) highly urbanized city in ZAMPEN, Zamboanga del Sur (excluding Zamboanga City) registered the largest population at 731,653 persons, followed by Zamboanga del Norte with 713 thousand persons, and Zamboanga Sibugay with 541,940. Basilan had the smallest population at 333 thousand persons.

Basilan was the fastest growing province in the region with an average annual growth rate of 2.58 percent, while Zamboanga del Norte was the slowest with 1.42 percent.

Zamboanga del Sur was the most populated among the three provinces in Zamboanga Peninsula (Region IX), comprising 23.7 percent of the 3.1 million persons in the region followed closely by Zamboanga del Norte with 23.1 percent.

Age and Sex Distribution

Zamboanga Peninsula had a median age of 20 years. This showed that in 2000, half of the population was below 20 years old. In 1995, the median age was 19 years. Zamboanga City had the highest median age of 20 years, followed by Basilan and Zamboanga del Norte, (both 19 years). On the other hand, Zamboanga del Sur had the youngest at 18 years. The sex ratio was recorded at 103. This meant that in this region, there were 103 males for every 100 females.

Dependency Ratio

In ZAMPEN, 57 percent of its total population belonged to productive ages or economically active population (15 to 64 years old). On the other hand, the young dependents (aged 0 to 14 years) accounted for about 40 percent while more than three percent were old dependents (aged 65 years and over). The overall dependency ratio in 2000 was 77. This meant that for every 100 persons aged 15 to 64 years, there were about 77 dependents, i.e., 71 young dependents and six old dependents.

Natural Resources

The region has vast forest resources and previously used to export logs, lumber, veneer and plywood. Its mineral deposits include gold, chromite, coal, iron, lead and manganese. Among its non-metallic reserves are coal, silica, salt, marble, sand and gravel. It has the biggest deposits of lead or 84% of the national total, zinc 49%, quartz, 52% and silica sand, 34%. It also has deposits of chromite, gold and marble. It is the major supplier of coal and silica sand in the country.

The region's marine resources are partly indicated by the length of its coastline estimated at 700 kilometers or about There are five (5) major fishing grounds for commercial and municipal fishing in the region. The first is in Zamboanga del Sur particularly in Moro Gulf. The second is in Zamboanga del Norte, the Sindangan Bay, and the third is in Basilan, the Pilas Channel. The other two are the neighboring fishing grounds of Sulu and Celebes Seas. Its coastline boasts of different fish species like tuna, sardines, mackerel, round scad, anchovies, and groupers. The region is also a major source of sea corals, pearls, ornamental seashells and other marine products (DTI, 2000). It has also aqua farms for brackish water and freshwater fishes.

Economy

The Zamboanga Peninsula has the first export-processing zone in Mindanao. Farming and fishing are the main economic activities of residents in the region. There are also rice and corn mills, oil processing, coffee berry processing and processing of latex from rubber. Its home industries include rattan and furniture craft, basket making, weaving and brass work.

The region is one of the top producers of rubbers, mango, banana and other tropical crops like mangosteen and lanzones in the country and rubber is one of the priority crops of Western Mindanao. To date, 52,162 hectares are planted to rubber, the bulk of which are in the Provinces of Basilan, Zamboanga Sibugay, Zamboanga del Norte, Zamboanga del Sur and Vitali, Zamboanga City.

ZAMPEN is the No.1 rubber-producing area in Mindanao, contributing nearly 50% to the total rubber output of the country. Over the years, however, the industry has not expanded significantly and attained a level of distinct competitiveness as envisioned. Despite its seemingly bright prospect both in the domestic and world market, the industry is plagued by a number of constraints requiring short and long-term concrete solution.

Zamboanga Peninsula's domestic economy ranks second in the entire Mindanao with an increase of 4.5% in 2003 compared to the region's economic performance in the year 2002.

According to NSCB (2002), the growth in Zampen's economic performance was mainly because of the good performance of the combined agriculture, fishery and forestry sectors. Although forestry sub-sector declined to 19.1 percent, it only represented 0.3% of the total output of the agriculture sector, and was easily offset by the growth in agriculture and fishery sub-sectors.

The agriculture, fishery and forestry sectors, accounted for 50.8% of the total economy of the region, manage to grow by 3.8% in 2003. The exclusion of the six municipalities of Basilan Province, which opted to join ARMM, had tremendously affected the agriculture sector in the region.

Industry, which accounted for 15.09% of the region's total output, grew by 3.2%. The industry sector of the region is characterized by a proliferation of small and medium-

scale companies. Most manufacturing activities are based in the cities of Zamboanga, Dipolog, and Pagadian (DTI, 2002).

With its rich mineral deposits, the Zamboanga Peninsula is a major supplier of lead, zinc, quartz, silica sand, chromite, gold, marble. Mining and quarrying reportedly had the highest growth of 16.5%. This was also due to the increase production of non-metallic products, particularly pebbles and filling materials.

Manufacturing on the other hand, reported a 5.2% growth with the increase of outputs of the food manufacturers in the region.

The service sector, accounted for 34.05% of the region's economy, posted a growth rate of 6.2% with transportation, communication and storage and trade showing the highest growth rates of 13.6% and 6.2% respectively.

The Gross Regional Domestic Product (GRDP) of the region exhibited a 5.2 per cent growth for 1999-2000. Per capita GRDP is P8,240.00.

The overall inflation in the region tapered off for the fourth consecutive month in November 2001 due to softer prices of food, fuel and services.

Facilities

Transportation. Land, air and water transport are available in the region. Buses and jeepneys are the main land transport. Inter-island ships and airlines service passengers to and from Manila, Cebu, Zamboanga and other island provinces almost daily. Both the government and private sectors provide telecommunication facilities. Cities also have post offices and telegraph stations.

There are ten government seaports and several private ports in the region. These include Pulauan, Liloy, Siocon, Zamboanga (port of entry), Isabela, Lamitan, Subanipa, Ipil, Naga, and Pagadian port. Sea routes to the BIMP-EAGA also include a direct ply from Zamboanga to Sabah.

Power. The Mindanao Power Grid Transmission Lines' extension into the Zamboanga Peninsula has substantially reinforced the power supply of the region. The National Power Corporation's power barges which supply 65 megawatts of power augment the power supply of the region so with the 100 megawatts barge in Sangali, Zamboanga City.

Water. As of 1996, only approximately 45% of the potential irrigable area of 62,600 hectares are irrigated. Only 40% of the region's population have access to water and the 60% can get their drinking water from rivers, lakes and open ponds. At present, sixteen water districts service the water needs of the populace. People living in rural areas tap water from shallow and deep wells.

Telephone. All carriers in the region have already installed 30,514 telephone lines with a working capacity of 18,549 lines. Telephone services are mainly provided by the Philippine Long Distance Telephone Co. (PLDT). Facilities provided include local trunk and international networks with direct dialing access. PILTEL also provides telephone services. Cellular phone services are now available in the region with PILTEL, SMART and Globe Telecom giving services.

Postal Services. Postal services cover international and domestic mails, post office boxes, money remittances, business postal cards, parcels and fax transmission. The region has 122 post offices, 6 telex stations and 3 facsimile service facilities. Currently, five (5) local

INTERNET Service Providers (ISPs) are operating in the city. These are Jetlink, ZAMBONET, I-next, Net Access and Philweb.

Regional Development Potentials

The region's potentials for development are the following :

1. The proclamation of Regional Agro-Industrial Center (RAIC) as special ecozone.
2. Provincial Agro-Industrial Centers and People's Industrial Enterprises
3. ZAMBOECOZONE or the Zamboanga Free Port
4. Its strategic location vis-a-vis its neighboring ASEAN countries
5. The BIMP-EAGA initiative

Poverty Incidence of ZAMPEN in 2002

Region IX's Poverty Threshold, which is the minimum yearly income required or the expenditure necessary to meet the food requirements and other non-food basic needs of an individual increased by 1.87 percent - from P9,511 in 2001 to P9,689 in 2002. This means that at the national average family size of five members (*Family Income and Expenditure Survey 2000, NSO*), an average family in Region IX needed at least, P4,037 monthly in order for them to have enough to buy food and other basic needs.

As expected, people living in urban areas had to spend more to survive than did folks in the rural areas. An average family needed a monthly income of P4,606 to survive in the cities compared to P3,908 for the rural dwellers.

A person living in Basilan had to have an annual income of P10,387, an individual living in Zamboanga Del Norte needed P9,619 a year while someone living in Zamboanga Del Sur required P9,639 annually to make ends meet.

The greatest increase in the poverty threshold from 2001 levels was 4.96%. This was observed in the urban areas of Zamboanga Del Norte. The increase was least felt in the urban areas of Basilan, with an increase of only 1.08%. However, in terms of peso amounts, Basilan appeared to be the most expensive place in the region to live in, where a family composed of five members needed a monthly income of P4,954 in the urban areas. (NSCB, 2002)

Table 1: Provincial Poverty Threshold

Provinces	Annual Per Capital Poverty Threshold	Incidence of Families (%)	Incidence of Population (%)
Basilan	9, 271	26.2	32.7
Zambo. Del Norte	9, 090	45.6	51.9
Zambo. Del Sur	9, 404	37.0	43.3
Region IX	9, 298	38.3	44.5

Source: (NSCB March 2003)

Employment

About 1.2 million individuals were employed in the region, whereas unemployment rate was 7.8%. Underemployment rate was 19.2%. This figure may be higher with more workers seeking more hours or additional work, as present income is not enough.

HEALTH RESOURCES AND THEIR DISTRIBUTION

Health Human Resources

In Region IX, the Department of Health estimates that there are 556 doctors, 31 dentists; 732 nurses; and 1,062 midwives. Majority of these, however, work in the private sector and are engaged in private practice.

In 2004, the local government units of Western Mindanao employed 87 doctors, 40 dentists, 182 nurses, and 662 midwives, while the Department of Health employed 153 doctors, 6 dentists, 233 nurses, and 7 midwives. Table 2 below shows the ratio between government health workers to the population.

Table 2: Health Worker and Population Ratio 2004

Health Workers	Standard Ratio	Actual Ratio
Doctor	1:20,000	1:12,864
Dentist	1:20,000	1:67,118
Nurse	1:10,000	1:7,440
Midwife	1:3,000	1:4,615

The table above shows that there is sufficient number of physicians to attend to the medical needs of the population. However, most of the doctors are based in urban centers like Zamboanga City and the cities of Dipolog and Pagadian. Almost five out of 10 doctors in the whole region are in Zamboanga City. The ratio between dentist and the population exceeds the standard.

Health Facilities

More than ten years after the devolution of health services and facilities from the DOH to the local government units, 6 hospitals still remain under the DOH as retained hospitals. Interviewed DOH personnel have raised some concerns about the lack of personnel, equipment, facilities, and logistical support. Also expressed was the need to expand capacity to accommodate patients who sometimes proceed to the regional medical center in Zamboanga City, bypassing poorly equipped provincial and district hospitals. Yet 96 municipal health centers or rural health units are spread throughout the region and are manned, in addition to the nurses and midwives, by 7,547 barangay health workers and 2,446 trained birth attendants.

Almost all of the 71 hospitals in the region are general rather than specialized, with only 1 public tertiary and general services hospital. All these translate to a total bed capacity of 2,209 and a ratio of 1 bed for 1,398 persons. In Zamboanga City, bed capacity is about balanced between government and private facilities. In the provinces of Zamboanga del Norte and del Sur, as well as Dapitan City, there are more in government hospitals.

Table 3: Category of Hospitals and Type of Services, 2004

Category of Hospital	General Services		Special Services		Total
	Public	Private	Public	Private	
Primary	20	22	1	0	43
Secondary	7	16	1	0	24
Tertiary	1	4	0	0	05
Total	28	42	2	0	72

CHD Report 2004

Of the hospitals in the region, there is only one public tertiary hospital for general services that serves the region's population. It is located in Zamboanga City.

Household Sanitation Facilities

Out of a regional household count of 562,180 households, it was found that majority (53%) had satisfactory garbage disposal facilities. About seven in ten households were with sanitary toilets. Water facilities were also determined by level, with nearly 30% availing of levels 1 and 3 water facilities. On the whole, only about one in three (33.4%) had complete sanitary facilities.

HEALTH STATUS OF THE REGION

Maternal and Infant Mortality

In almost 10 years, some improvements in health indicators have been registered. For example, infant and child mortality rates have declined from 1996 to 2004. One notes that infant mortality dropped from 13.51 per 1,000 live births in 1996 to 9.09 per 1,000 live births in 2004. Mortality rates for children under five was also noted to go down, from 98.33 per 100,000 population in 1997 to 57.91 per 100,000 population in 2004. However, these figures must be viewed with caution due to underreporting of deaths.

On the other hand, maternal mortality rates have not been uniform across the years, exhibiting a see-saw situation, rising steadily in 1998 (108.18 per 100,000 live births) and decreasing or improving in 2002 (80.27 per 100,000 live births). Toward 2004, however, a rise to 102.99 per 100,000 live births is observed.

By area, we note the high and low mortality areas of the region as follows:

Table 4: Regional Mortality Areas

HIGH MORTALITY AREAS		LOW MORTALITY AREAS	
AREA	RATE	AREA	RATE
(Infant Mortality)		Zamboanga Sibugay	6.75
Dipolog City	21.11	Zamboanga del Norte	6.64
Dapitan City	18.07	Pagadian City	6.15
Zamboanga City	17.04	Zamboanga del Sur	3.37
(Maternal Mortality)		Zamboanga del Sur	94.43
Pagadian City	239.32	Zamboanga Sibugay	91.99
Dipolog City	137.68	Zamboanga del Norte	78.57
Zamboanga City	123.55	Dapitan City	56.24

Leading Causes of Illness and Death

Communicable diseases appear to be the major cause of illness or morbidity. Among the top 10 leading cause of morbidity 6 of which affect the respiratory system. Non-communicable causes emerge as well, like hypertension and injuries. The leading causes of morbidity are:

Table 5: Leading Causes of Morbidity

Causes	Number	Rate
1. Acute respiratory infection	88,565	3179.94
2.. Influenza	46,407	1666.25
3. URTI / LRTI	33,389	1198.84
4. Bronchitis	32,403	1163.44
5. Diarrhea / Gastro-enteritis	32,329	1160.78
6. Pneumonia	23,495	843.59
7. Hypertension	21,954	788.26
8. Injuries (All forms)	19,284	692.40
9. Skin Disorders	15,965	573.23
10.TB (All forms)	6,135	220.28

Source: CHD IX, 2004

Mortality, on the other hand, is mainly traced to non-communicable causes. It is interesting that injuries (especially caused by trauma, accidents, gunshot wounds, assault by sharp objects) take the lead in causing deaths in the region, indicative of the pervasiveness of violence in the area.

A 1999 research led by Dr. Fortunato Cristobal associate these trends to growing urbanization, with the specific circumstances of violence being traced to situations of kidnapping, loose firearms, illegal logging, drug-related cases, etc. Recent incidents of violence particularly in Zamboanga City would also be attributed to the exportation of family feuds and political enmities from nearby islands, leading city officials to declare a gun ban in the area. The following are the ten leading causes of death in Region IX.

Table 6: Ten Leading Causes of Mortality Region IX, 2004

Causes	Rate
1. Injuries	38.17
2. Cancer (All forms)	32.31
3. Pneumonia	30.69
4. Cardiovascular disease	28.47
5. Ischaemic heart disease	23.70
6. TB (All forms)	22.65
7. Hypertensive disease	16.69
8. Disease of the kidney	13.71
9. Septicemia	10.79
10. Cerebrovascular disease	8.84

CHD Region IX Report shows that 40.37 percent of deaths in 2004 ranged from ages 65 and over. Only 5.77 percent among infants and 2.10 percent among children under 5 years old. Details across age groups and gender are indicated in Table 7.

Table 7: Mortality by Age-Group and Sex Region IX, 2004

Age Group	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
Under 1 year	312	3.19	253	2.58	565	5.77
1-4 years	109	1.11	97	1.0	206	2.10
5-14 years	161	1.64	111	1.13	272	2.78
15-49 years	1880	19.20	834	8.52	2714	27.72
50-64 years	1356	13.85	726	7.41	2082	21.26
65 & over	2161	22.07	1792	18.30	3953	40.37
Total	5979	61.06	3813	38.94	9792	100

Nutritional Status of 0-6 Year Old Preschoolers

Out of a total of 451,871 pre-schoolers weighed in 2004, majority (83%) were found normal. 13.3% or 59,733 were found to be moderately to severely malnourished and weighed below normal. On the other hand, 15, 624 children or 3.5% were found to be overweight. Zamboanga City had the highest malnutrition rate of 666.88 per 100,000 population(CHD2004). By 2004, with supplemental feeding, the number of underweight children 6 to 59 months has decreased by 22.95% from previous rates. However some areas in the region were not given food supplementation due to lack of funds.

Birth Rate

Regional population estimates are based on the annual growth rate of 2.31%. For 2004, a total of 62,143 live births were registered, with Zamboanga City, and the provinces of Zamboanga del Sur and del Norte contributing to this number of births. A crude birth rate of 20.13 was computed.

THE HEALTH RESEARCH SITUATION

Local Research Developments

The institutionalization of the Pediatrics Research Center for Mindanao (PRCM) in the mid-90s resulted to significant accomplishments in three main research thrusts: (a) implementing research projects, (b) providing technical assistance to young researchers, and (c) conducting research workshops. Included in its record are over 50 clinical trials and community-based researches done mostly in the fields of pediatrics and maternal and child health.

The establishment of Ateneo de Zamboanga University School of Medicine (ADZU-SM) has also contributed to research development in the region. Yearly, ADZU-SM would require research outputs from graduating medical students and post-graduate students both from the Master of Public Health and Medical Education. These researches were mainly focused on community-based interventions, public health and medical education.

In November 2002, a joint PRCM and ADZU-SM study on "Identifying and Prioritizing Health Research Areas; 1999-2004" was carried out led by Dr. Rosemarie Santana-Arciaga. The research findings continue to be reflected in current trends and have led to a number of research priority concerns, such as:

1. Morbidity: (Leading causes are infectious origin)
 - Diarrhea, pneumonia and TB;
 - Neonatal tetanus and rabies;
 - Malaria, dengue
2. Non-communicable diseases: Cardiovascular disease and cancer
3. Other identified health concerns : trauma, problems of displaced populations, malnutrition, mental illnesses, drug dependency
4. Quality of health service delivery and effect of devolution:
5. Current available health facilities severely inadequate;
 - Hospitals mostly either primary or secondary;
 - Abject lack of medical personnel and medical equipment;
 - Some municipalities without regular services;
 - Restricted / paralyzed services in many rural areas due to inadequate funds

Out of these findings, the following recommendations for health research and development were made:

1. The need for culture-sensitive education programs addressing health problems especially those of the cultural minorities and tribal groups. Educational strategies should include community-based participatory approach.

2. Health policy research; program evaluation and policy review, health policy research of the devolved hospitals and services.
3. Evaluation research to ascertain: :
 - Quality of health service delivery
 - Utilization of alternative health care interventions
 - Effects of devolution scheme on health programs implementation; policy review of devolved services;
 - Cost-effective treatment strategies especially on simple diagnostic tests for common illnesses and
 - Treatment compliance and drug resistance
4. People's health-seeking behavior;
5. Socio-behavioral research to determine region-specific risk factors of disease

THE REGIONAL RESEARCH UPDATES

Data Sources

- Documentary analysis of secondary data (DOH, MHO reports, NEDA, ZC Planning & Development Office, etc.),
- Fortunato Cristobal, Health S & T Priorities, Region 9, 1999-2004 (PCHRD) ; Arciaga, Rosemarie, et. al., Research Priority Agenda for Region 9, 2004 (CHD-DOH)
- Consultation with members of the original team of provincial doctors who contributed to the 2004 reports
- Key informant interviews of key DOH provincial / municipal and city health officials.

The Findings

Based on reviews of records and reports, interviews with key informants and consultation with health officials, the following are the key areas of concern for health research and related problems that contribute to their occurrence:

a. Public Health

- **Communicable diseases like pulmonary tuberculosis and pneumonia.** Low case finding and handling; inadequate drugs/ medicine, fast turn-over of trained personnel, inadequate facilities and logistics, poor information and health education, poor environmental sanitation, and malnutrition
- **Diarrhea/gastroenteritis.** Still prevalent due to inadequacies in medicines, inaccessibility to sanitary toilet facilities and potable water, poor environmental sanitation related to (poverty and low literacy)
- **STD-HIV/AIDS.** Related to poverty and vulnerability to human trafficking, low awareness of safe sex measures and non-compliance among sex workers to use protective devices.
- **Dengue.** Endemic in the region. Low community participation in control of breeding places / public awareness on preventive measures.
- **Rabies.** Low public awareness on control measures, poor enforcement of local ordinances / regulations on stray animals, and costly vaccines.
- **Polio.** Confirmed cases in Sulu including Indonesia and Malaysia, may spill over to Zamboanga due to open port situation and mobile population targets make immunization difficult

b. Degenerative Diseases

- **Cardiovascular disease and Diabetes mellitus.** Weaknesses in advocacy especially on promotion of healthy lifestyles, knowledge deficit in early detection, among high risk population, high cost of medicines; lack of personnel trained in case management
- **Malignant neoplasm.** Inadequate skills in early diagnosis and treatment; among health workers expensive detection procedures and lack of medicines
- **Disease of the Kidney.** Lack of equipment and medicine to manage cases, e.g., dialysis machine, reagents for lab exams; lack of trained personnel for case handling; insufficient advocacy on dietary limitations and healthy lifestyle
- **Chronic obstructive pulmonary disease.** Poor health seeking behavior and non compliance to regimen (complacent attitude), non-enforcement of anti-smoking regulations and lack of logistics to purchase medicines

c. Healthy Lifestyle Concerns

- **Nutritional health risks and disorders.** Poverty, food insecurity, food fallacies, inaccurate evaluation of nutritional status (age uncertainty, erroneous weighing procedures), insufficient food supplementation (iron, Vitamin A) also due to lack of funds, prevalence of parasitism,
- **Environmental / occupational health risks.** Poor environmental sanitation; improper solid/ water waste disposal; pollution from industry (E.g., sediment and chemical pollution of TVI mine tailings in Canatuan, Zambo del Norte), health care access limitations due to company controls (TVI checkpoints restrict availment of health services and facilities), and poor access to herbal resources.
- **Substance abuse.** Unbridled sniffing of rugby among youth and street children; weak anti-drug abuse advocacy, need for counseling and values formation programs
- **Peace and order.** Culture of violence; proliferation of weapons for destruction (firearms, bladed weapons, explosives, etc.); inter-religious/cultural biases and stereotypes; poverty, human displacement

d. Health of Families and Health of Special Populations

- **Infants and children.** High malnutrition, victims of physical and sexual abuse/trafficking, Reg. IX- 3rd highest in the Philippines for cases of child abuse. (Consuelo Foundation Inc. Survey 2000).
- **Adolescents and youth.** Prevalence of substance abuse and youth in conflict with the law
- **Urban poor.** Human insecurity - Landlessness/homelessness, congested living conditions, low income, high prevalence of malnutrition, high rate unemployment, lack of government assistance, growing number of migrants
- **Women in difficult circumstances** – Situations of VAW (physical and emotional abuse, incest, battering, slavery), need for more awareness of women's rights,

limited access to opportunities for personal growth and empowerment; trafficking and prostitution; prevalence breast cancer

e. Health Care Delivery

- **Programs and services:** Too many programs that need prioritization based on relevance, need to sustain community-based health programs; mismatch of services with the health-seeking behavior of communities
- **Health facilities:** Deteriorating facilities and equipment aggravated by lack of funding and slow bureaucratic processing and disbursement of operational funds; inability to procure much needed equipment due to lack of funds
- **Health personnel:** Inadequate number and clustering of health workers in urban centers; career shifts to nursing, job turnover and overseas employment; low compensation and unsatisfactory incentives and reward system;
- **Procurement of medicines and other health products:** Limited access to reasonably priced by safe and effective drugs; safety and efficacy of other health products need to be ensured; local production of drugs and other health products, including herbal medicine be encouraged

f. Local Health Systems

- **Low quality of local health service delivery.** Local health facilities need upgrading and repair, equipments to be procured, personnel to be trained to enhance local health service capabilities
- **Non-maximization of local health resources.** Due to lack of confidence on lower level facilities (Promote linkages and cost-sharing schemes including local health care financing systems for better use of local health resources)
- **LGUs hesitate to involve private sector, NGOs,** in the development of local health systems.. (Foster participation of private sector, NGOs, and communities in local health systems development)

g. Health Information and Education System

- **Poor databanking / retrieval, database on health statistics.** Need to establish updated, sharable, consistent data (proper reporting / recording); public information to improve health intelligence / statistics)
- **Inadequate advocacy and health education programs** especially for vulnerable groups
- **Lack of awareness on patients' rights;** Magna Carta for Patients
- **Intra- interagency linkage.** Need for inter-agency cooperation in various aspects of health education / research and IEC
- **For curricular infusion in training / education of health workers:** alternative / complementary medicine, gender sensitivity, preventive health care, primary health care, cultural sensitivity

- **Urban- or rural-poor community service** to be encouraged for medical and paramedical students / graduates
- **Culture-sensitive IEC materials and teaching models**

h. Health Care Financing

Inadequate funding, inefficient sourcing, ineffective allocation, and often subject to changing priorities, budget cutbacks, reserve requirements, budget deficits.

i. Health Policies / Legislation

- **Devolution:** Has been implemented inconsistently and unilaterally by LGUs without consideration for overall effects (devolution has been seen as deprivation); led to decrease in budgets leading to lowering of morale among health workers. Involvement of local health boards in decision-making, e.g., budgeting, prioritizing health programs and activities; how can health services management be integrated with long-term development plan of LGUs (ensuring sustainability / consistency of health plans regardless of leadership changes in LGUs)
- **Other ordinances:** Weak enforcement of regulations and ordinances relative to smoking, stray animals, senior citizens, persons with disabilities, etc.

j. Health Equity

- Limited access to health care due to poverty; tertiary hospitals clustered in city proper; health insurance benefits are biased toward hospital-based care when most are out patients
- Community-based financing schemes and seek ways to link them with national health insurance program.

A summary of these health research concerns is presented in a final table on pages 25 to 33, as the priority health research agenda for Region 9.

Special ZAMPEN Concerns

Certain special features of the health research priorities of the Zamboanga Peninsula are also indicated by specific concerns that stem from geographical, economic (industrial), cultural and administrative factors operating in the area. These are:

- **the plight of deportees**, owing to Zamboanga City's strategic geographical location as a transit point for deportees (externally displaced persons), drug trafficking, and trafficked persons
- **the mining operations** in Zamboanga Sibugay (Roseller T. Lim), Zamboanga del Norte (Canatuan, Siocon) and Zamboanga City (Vitali and Curuan)
- **the administration and operation of the health delivery system.**

a. The Deportees.

Mindanao shares at least two southern borders with its neighbors, Indonesia and East Malaysia. The ports of Western Mindanao often serve as the transit points for deportees who come on board passenger vessels that drop anchor in Zamboanga City on a weekly basis. These vessels come from Sabah, East Malaysia.

Over the years, somewhere between 300,000 to 500,000 Filipinos have found their way into Sabah. Some have legal papers and found decent good-paying jobs, whereas others have remained undocumented, vulnerable, and constrained to take on the so-called 4-D jobs: dirty, dangerous, difficult, and demeaning. (Cabaraban, Fernandez, 2005) Their conditions are enumerated as follows:

- Malnutrition (severe in some cases), respiratory infection, pneumonia, measles (outbreak) , diarrhea , dehydration, acute gastroenteritis, malaria in male deportees working in plantations / logging concessions
- Health risks increased with unhygienic conditions in congested jails (40 to 50 persons to a cell), rotten food
- Psychological scars due to prolonged detention
- Cases of : children dying in transit, mental imbalance; pregnant women suffering miscarriage; raped women; men mauled/ caned
- Illegal status and low education - prevent halaw from seeking health services. (fear of exposure)
- Usual response to illness: self-medication, massage, herbal application, treatment at private clinics, quack doctors
- “No watcher” policy in hospitals
- Undocumented / stateless street children

b. Mining Controversies

Mining operations in the provinces of Zamboanga del Norte, Sibugay and Zamboanga City have been questioned for their effects on various communities in the mining site. These communities – mostly Subanen - have accounts of environmental as well as cultural and personal effects that now include the following reported conditions:

- Some problems:
 - Food blockades
 - Blocking of health services by limiting movement within privatized forest area;
 - Militarization and acts of violence and intimidation
- Destruction of hunting and fishing grounds
- Construction of roads, camps, cyanide processing plant and tailing dam in herbal medicine area.
- Soil erosion and siltation through massive tailings dumped into waterways.
- Fisherfolk complain of low catch due to waste water or concentration of mud

c. Health Service Delivery: Concerns relative to this aspect have been enumerated in previous pages hereof (pages 20 to 22).

STANDARD MATRIX FOR RESEARCH PRIORITY AREAS/TOPICS

GROUP I: PUBLIC HEALTH					
Broad R&D Area	Specific topic(s)	Rationale	Objective	Responsible Agency*	Funding Source
1. Pulmonary tuberculosis and pneumonia	<ul style="list-style-type: none"> ▪ Evaluation of CARI Program ▪ Prevalence of TB ▪ KAP of mothers and health workers on pneumonia ▪ Factors related to the knowledge /referral of pneumonia cases to the health center ▪ Health-seeking behavior of patients with ARI ▪ Factors affecting implementation of DOTS (including attitudes of health personnel); ▪ TB Risk Factors (including gender and occupation) 	<ul style="list-style-type: none"> -Low case finding and handling; -Inadequate drugs/ medicine, personnel, facilities and logistics; -Low level of information and education; -Inadequate environmental sanitation; -Malnutrition 	<ul style="list-style-type: none"> -To evaluate extent of implementation of CARI/ Anti-TB Programs -To determine health information- and health care-seeking behavior of mothers and health workers; - To determine TB risk factors 	DOH LGU (CHO/ PHO/ MHO)	PCHRD
2. Diarrhea/ gastroenteritis	<ul style="list-style-type: none"> • Risk practices for cholera • Weaning behavior among indigenous communities • Access to Safe, potable water • Food handling (sanitary permits, intensive food sanitation campaign, etc.) • Home management of diarrhea, with focus on practices of marginalized groups 	<ul style="list-style-type: none"> -Inadequacies in medicines, -Unsanitary toilet facilities / environmental sanitation -Low access to potable water; -Poverty and low literacy -Scanty information about cultural communities 	<ul style="list-style-type: none"> -To examine factors related to case management of diarrhea especially among indigenous communities, marginalized groups; - To facilitate access to safe water resources 	DOH LGU (CHO/ PHO/ MHO)	PCHRD
3. STD- HIV/AIDS	<ul style="list-style-type: none"> • HIV/STD surveillance among high-risk population • Prevalence of STDs, AIDS in selected at-risk groups • Sexual practices and behavior of sexually active groups • Safe sex practices (inc. condom use) of sexually active groups; • KAP of selected groups at risk regarding STDs and HIV/AIDS • Strategies for prevention and control of STD/ HIV 	<ul style="list-style-type: none"> - Poverty and vulnerability to human trafficking; - Low awareness and compliance with safe sex measures; - Low public awareness on STDs and HIV/AIDS (including prevention and control) 	<ul style="list-style-type: none"> -To investigate HIV/STD KAPs and prevalence in high-risk and sexually active groups -To determine level of KAPs relative to safe sex practices -To enhance awareness of STD/HIV prevention and control measures 	DOH LGU (CHO/ PHO/ MHO)	PCHRD

4. Dengue	<ul style="list-style-type: none"> ▪ Local epidemiology of dengue ▪ Changing clinical course of dengue infection ▪ Larval index survey as an early warning indicator for dengue outbreaks ▪ Migration patterns of dengue vectors ▪ Evaluation of various strategies for control and prevention of dengue ▪ Evaluation of dengue control programs ▪ LGU and private agency participation in control and prevention of dengue 	<ul style="list-style-type: none"> - Low community participation in control of breeding places; - Lack of public awareness on preventive measures; - Low enforcement of local regulatory ordinances on stray animals 	<ul style="list-style-type: none"> -To model the spread of dengue -To determine effectiveness of early warning indicators, prevention and control strategies for dengue -To assess effectiveness of dengue control programs including participation of LGUs, private agencies in anti-dengue advocacy and promotion 	DOH LGU (CHO/ PHO/ MHO)	PCHRD
5. Malaria	<ul style="list-style-type: none"> • Incidence/ prevalence of malaria cases • Evaluation of type and pattern of anti-malarial drug resistance of <i>Plasmodium falciparum</i> (in- vitro and in-vivo) 	<ul style="list-style-type: none"> -Proximity to endemic areas of Sulu and Tawi-Tawi; Low community participation in control of breeding places; - Lack of public awareness on preventive measures; 	<ul style="list-style-type: none"> -To study prevalence/ incidence of malaria in Zamboanga City and other endemic areas -To examine anti-malarial drug resistance of Plasmodium falciparum 	DOH LGU (CHO/ PHO/ MHO),	PCHRD
6. Rabies	<ul style="list-style-type: none"> • Incidence/ prevalence of rabies / dog bite cases • Cost effectiveness of different modalities of post-exposure prophylaxis • Evaluation of dog anti-rabies immunization program • KAP of the community regarding dog bites / rabies • Utilization of the Animal Bite Center in Western Mindanao 	<ul style="list-style-type: none"> Low public awareness on control measures, enforcement of local ordinances / regulations on stray animals, costly vaccines 	<ul style="list-style-type: none"> -To examine incidence/ prevalence rabies/dogbite cases -To evaluate cost effectiveness of anti-rabies treatment programs, including utilization of public facilities (Animal Bite Centers) -To determine public KAPs on dog bites/rabies 	DOH LGU (CHO/ PHO/ MHO)	PCHRD

GROUP II: DEGENERATIVE DISEASES

<p>1. Cardio-vascular disease</p>	<ul style="list-style-type: none"> Epidemiologic studies on the incidence, prevalence of modifiable risk factors for CVDs, CFRs and prognosis of specific CVDs; Treatment compliance 	<p>Weaknesses in advocacy re healthy lifestyles; Knowledge deficit in early detection; High cost of medicines; Lack of personnel trained in case management</p>	<p>-To determine incidence/prevalence of CVDs -To study treatment management and compliance in CVDs</p>	<p>DOH LGU (CHO/ PHO/ MHO)</p>	<p>PCHRD</p>
<p>2. Diabetes mellitus</p>	<ul style="list-style-type: none"> Incidence and prevalence of diabetes Nutritional habits and diet preference of diabetics Treatment compliance in diabetes, including alternative medicine Education and advocacy for prevention/control of diabetes 	<p>Low awareness and education re diabetes prevention and care; Case management problems (expensive medicines and treatment compliance)</p>	<p>-To determine incidence/prevalence of diabetes; - To examine case management and treatment compliance including dietary management -To enhance awareness for prevention / control of diabetes</p>	<p>DOH LGU (CHO/ PHO/ MHO)</p>	<p>PCHRD</p>
<p>3. Malignant neoplasm</p>	<ul style="list-style-type: none"> Profile of cancer patients KAPs of physicians and surgeons on cancer pain management The role of support groups in the management of cancer patients Compliance with cancer management 	<p>Inadequate skills in early diagnosis and treatment; expensive detection procedures, lack of medicines</p>	<p>-To profile cancer patients -To determine cancer case handling practices including pain manage- and the role of support systems in case management</p>	<p>DOH LGU (CHO/ PHO/ MHO)</p>	<p>PCHRD</p>
<p>4. Disease of the Kidney</p>	<ul style="list-style-type: none"> Local capacity for case handling Health education and advocacy re lifestyle factors associated to kidney diseases. 	<p>Lack of equipment and medicine to manage cases, e.g., dialysis machine, reagents for lab exams; lack of trained personnel for case handling; insufficient advocacy on dietary limitations and healthy lifestyle</p>	<p>-To document kidney case handling practices and local treatment facilities/ personnel (in)capacities -To develop IEC materials and advocacy strategies relative to kidney disease prevention</p>	<p>DOH LGU (CHO/ PHO/ MHO)</p>	<p>PCHRD</p>

GROUP III: HEALTHY LIFESTYLE CONCERNS

<p>1. Trauma/ Violence</p>	<ul style="list-style-type: none"> • Peace Advocacy vs. the Culture of Violence including gun proliferation in the region • KAPs on safety precautions (including street signs) and incidence of local accidents • Local preparedness for mass violence, calamity or injury • Quick Reaction and Emergency Referral/ Response Mechanisms • Local capacities and mechanisms for Conflict Transformation (Resolution and Management) 	<p>Injury is foremost cause of death in the region; Peace and order is precarious, spillovers of violence from the island provinces; Urban-related problems due to presence of industrial factories; Need to activate / empower / train local peace and order councils (Lupong Tagapamayapa) for conflict management</p>	<ul style="list-style-type: none"> - To promote the culture of peace in the community through public education and media; - To enhance conflict transformation skills (negotiation, mediation, facilitation, dialogue handling, etc.) - To enhance local competence for disaster management and violence - To determine safety consciousness 	<p>DOH LGU (CHO/ PHO/ MHO) PNP, NGOs, Academe, Media, DSWD</p>	<p>-UNDP -LGSP -OPAPP -USAID (USIP)</p>
<p>1. Nutritional health risks and disorders</p>	<ul style="list-style-type: none"> • Prevalence of macronutrient malnutrition and anemia • Attitude toward commercially prepared multivitamins • Public awareness on nutrition and unhealthy eating habits • Nutritional and behavioral studies among indigenous communities • Bottle feeding practices: factors associated to exclusive use (vs. breast feeding) • Weaning practices of breastfeeding mothers • Food preparation habits of mothers • KAPs on appetite stimulants • Food fallacies • Evaluation and implementation of Milk Code in government and private hospitals 	<p>Poverty and food insecurity, Food fallacies, Inaccurate evaluation of nutritional status (age uncertainty, erroneous weighing procedures), Insufficient food supplementation (iron, Vitamin A) also due to lack of funds, prevalence of parasitism; Need to emphasize breastfeeding Low knowledge re practices of indigenous groups</p>	<ul style="list-style-type: none"> -To examine the prevalence of malnutrition (including macronutrient malnutrition and anemia); -To document public KAPs on nutrition and eating habits (including food fallacies, appetite stimulants, commercially prepared multivitamins and breastfeeding) -To determine nutritional and food preparation practices among indigenous groups 	<p>DOH LGU (CHO/ PHO/ MHO) Academe Media, NCIP, OMA, NNC, DA, BFAR, DTI</p>	<p>PCHRD</p>
<p>2. Environmental / occupational health risks</p>	<ul style="list-style-type: none"> • Waste disposal / solid waste management and the development of appropriate waste disposal technologies • Evaluation of compliance to the Sanitation Code 	<p>Poor environmental sanitation; improper solid/ water waste disposal; pollution from industry (E.g., sediment and</p>	<ul style="list-style-type: none"> -To explore KAPs in solid and water waste disposal (household and industry levels) - To examine the implementation of occupational safety 	<p>DENR-EMB, DOH LGU (CHO/ PHO/ MHO) Academe Media, NCIP, OMA</p>	<p>PCHRD</p>

	<ul style="list-style-type: none"> Occupational hazards and safety measures in factories and various workplaces (especially areas using chemicals) KAPs on proper food sanitation KAPs on solid and waste water management; Mining: Its effects on indigenous communities (also with implications for their access to health care) 	chemical pollution in factories, or waterways and communities within mining areas , i.e., mine tailings in the Zamboanga Peninsula), health care access limitations due to mining and industrial company controls, i.e., TVI checkpoints restrict availment of health services and facilities, and access to herbal resource	<p>measures in industrial areas and workplaces</p> <ul style="list-style-type: none"> -To determine the effects of mining on health status of affected communities; -To determine food sanitation KAPs among indigenous and marginalized households 		
3. Substance abuse	<ul style="list-style-type: none"> Prevalence of drug abuse among adolescents and young adults; Risk factors associated with drug abuse Random drug testing among students, government and private employees Utilization of Drug Rehabilitation Centers in Western Mindanao 	Unbridled sniffing of rugby among youth and street children; Weak anti-drug abuse advocacy, Need for counseling and values formation programs; Non-maximization of drug rehabilitation facility	<ul style="list-style-type: none"> -To determine prevalence of drug abuse among adolescents and young adults (including students, government and private employees -To examine patterns associated to drug use/ abuse -To study problems related to the operation and development of drug rehabilitation centers in the region 	DOH-DDB, LGU (Anti-drug abuse councils, CHO/ PHO/ MHO), PNP, drug rehab centers, Academe, Media	PCHRD
4. Smoking	<ul style="list-style-type: none"> Prevalence of smoking in different establishments / schools/offices Effects of passive smoking on the health of children KAPs related to smoking, Review of implementation of the Tobacco Regulation Act Effectiveness of Anti-Smoking Campaigns 	Seeming disregard for smoking hazards and anti-smoking notices; Exposure of children and non-smokers to passive smoking;	<ul style="list-style-type: none"> - To strengthen the anti-smoking campaign through an evaluation of adherence to anti-smoking law - To determine popular KAPs on smoking - To document cases arising from passive smoking effects especially among children 	DOH, DENR, DOST LGU (CHO/ PHO/ MHO) PNP, NGOs, Academe, Media, DSWD	PCHRD

GROUP IV : HEALTH OF FAMILIES AND HEALTH OF SPECIAL POPULATIONS

Broad R&D Area	Specific topic	Rationale	Objective	Responsible Agency	Funding Source
1. Infants and children	<ul style="list-style-type: none"> ▪ Immunization among cultural communities (factors associated with compliance to immunization); ▪ Impact of maternal education on child mortality among cultural communities in Region 9; ▪ KAPs associated to the low utilization of pre-natal services; ▪ Trauma healing services for displaced children ▪ Early childhood education and development services (day care and childminding services) especially among indigenous communities ▪ Needs of trafficked children /street children ▪ Parenting practices among indigenous communities 	<p>High malnutrition due to low awareness and knowledge of health services, especially home-based health care;</p> <p>Violence toward children / physical and sexual abuse;</p> <p>Lack of trauma healing services and facilities to deal with cases of child abuse and trafficking;</p> <p>Vagrancy and street children in urban areas</p>	<p>-To determine the reach of health and early childhood services among cultural communities</p> <p>-To document mothers' availment of prenatal and health education</p> <p>-To examine and evaluate services for children exposed to violent circumstances, including street children and undocumented juvenile deportees</p>	<p>DOH – PRCM, LGU (CHO/ PHO/ MHO) PNP, NGOs, Academe, NCIP, DOLE, Media, DSWD, church, DEPED</p>	<p>-UNICEF -PCHRD -ASIA ACTS- ECPAT / IACAT</p>
2. Women in difficult circumstances	<ul style="list-style-type: none"> ▪ Gender sensitivity among community leaders; ▪ Capacity for handling of VAWC cases (for health and law enforcement personnel; ▪ Availability of local services for traumatized women(e.g., feminist counseling and trauma healing services; pductive skills and livelihood opportunities); ▪ Sexual harassment in workplaces 	<p>Physical and emotional abuse; Lack of trained personnel to handle VAWC</p> <p>Poverty and risk factors for sexual trafficking and prostitution;</p> <p>Need for gender sensitivity among local community officials, including female leaders</p>	<p>- To determine availability of services especially to victimized women (VAWC cases, trafficked and prostituted women, etc.)</p> <p>-To evaluate local women support mechanisms (especially among health and law enforcement personnel) and strengthen these;</p> <p>-To enhance access to opportunities for skills development and income generation</p>	<p>DOH – PRCM, LGU (CHO/ PHO/ MHO) TESDA , PNP (Gender desk), NCIP, DOLE, DSWD, NGOs, Academe, Media, church</p>	<p>-Ford Foundation -UNIFEM</p>
3. Adolescent and youth	<ul style="list-style-type: none"> ▪ School and community services for youth ▪ Youth preparation for the world of work and career; for college and /or skills enrichment for vocational efficiency ▪ Gender and sexuality issues affecting youth, especially Muslim and IP youth ▪ Alternative learning systems for out of school youth and related services 	<p>Malnutrition, substance abuse, lack of basic health assistance; prevalence of youth in conflict with the law; lack of information on adolescent behavior relative to sexuality and fertility concerns especially among Muslim and indigenous populations;</p> <p>Idle out of school youth</p>	<p>-To strengthen school- and community-based youth services (counseling and training)</p> <p>-To document Muslim and IP youths' KAPs on gender and sexuality issues (love, friendship, marriage, reproductive health info-/ care-seeking behavior, etc.)</p> <p>-To determine opportunities for enhancing development options for out of school youth</p>	<p>DOH – PRCM, LGU (CHO/ PHO/ MHO) PNP, DEPED, CHED, Academe (Extension Services) , NCIP, DOLE, Media, DSWD, NGOs,church</p>	<p>-PCHRD -UNFPA</p>

GROUP IV : HEALTH OF FAMILIES AND HEALTH OF SPECIAL POPULATIONS (Cont'd)					
Broad R&D Area	Specific topic ²	Rationale	Objective	Responsible Agency	Funding Source
4. Urban poor	<ul style="list-style-type: none"> ▪ Conditions of habitability in landless and homeless households ▪ Livelihood-cum-health care financing strategies ▪ Advocacy for primary health care and herbal treatments; ▪ Document ation of displaced communities' needs and referral services 	Overcrowding, congested population; high prevalence of malnutrition; growing urban poor communities due to influx of migrants; high rate of unemployment; insufficient government assistance	<ul style="list-style-type: none"> -To determine the extent of health care services in urban poor communities, - To study urban poor alternatives in home-based treatment and availment of affordable health care financing schemes - To document urban poor community conditions of (in)habitability in support of anti-poverty advocacy -To explore ways of enhancing access to livelihood opportunities 	DOLE, DSWD, DOH, LGU (Social Service Offices), HLURB, DTI, NGOs, Church (Social Action), Academe (Extension Services)	<ul style="list-style-type: none"> -Ford Found'n -Peace & Equity Foundation -NAPC -DOLE -DTI
GROUP V: CROSS-CUTTING CONCERNS					
1. Quality of Health Care Delivery	<u>Health Programs and Policies:</u> (Focus on Devolution) <ul style="list-style-type: none"> ▪ Policy Review of devolved health programs and services, and standards for prioritization ▪ Effects of devolution on health programs ▪ Comparative studies on health service delivery before and after devolution ▪ Survey on level of client and provider satisfaction on devolution (pre- and post-) ▪ Status of community- based programs in the context of devolution 	<p>Precarious policy environment, too many programs that need prioritization based on relevance, \</p> <p>Need to sustain community-based health programs; negative attitude towards devolution</p> <p>Matching services with the health-seeking behavior of communities</p>	<ul style="list-style-type: none"> -To determine priority health policies and programs for implementation based on empirically grounded and relevant local realities -To examine the effects of devolution on the quality of health programs and services -To document broad KAPs on devolution among health management and staff, and served communities 	DOH, LGU (CHO / MHO/ PHO, Health Boards)	PCHRD
	<u>Health Equipment and Facilities:</u> <ul style="list-style-type: none"> ▪ Alternative strategies and creative budgeting for procurement of health equipment and facilities ▪ KAPs and advocacy on Primary health care 	<p>Deteriorating facilities and equipment aggravated by lack of funding and slow bureaucratic processing and disbursement of operational funds; inability to procure much needed equipment due to lack of funds;</p> <p>Tertiary hospitals concentrated in urban areas</p>	<ul style="list-style-type: none"> -To explore appropriate technologies as alternatives to expensive health equipment and facilities; -To study pro-active and responsive mechanisms as well as non-traditional budgetary resources for procurement of equipment; 	DOH, LGU (CHO / MHO/ PHO, Health Boards, Local budget offices), DBM	PCHRD

GROUP V: CROSS-CUTTING CONCERNS(Cont'd)

Broad R&D Area	Specific topic ²	Rationale	Objective	Responsible Agency	Funding Source
1. Quality of Health Care Delivery (cont'd)	<p>Health Personnel:</p> <ul style="list-style-type: none"> ▪ Distribution of health workers as to number and availability; • Implementation of incentives, continuing education, non-monetary benefits for health personnel • Innovations in human resource management and development that involves career path, incentives, and rural service component • Review of formative processes (education and training) in the value systems of health and medical professionals 	<p>Inadequate number and clustering of health workers in urban centers;</p> <p>Career shifts to nursing, job turnover and overseas employment;</p> <p>Low compensation packages and unsatisfactory incentives and reward system;</p>	<p>-To provide information for rationalizing the distribution of health workers in the region</p> <p>-To examine current compensation and incentive systems and develop innovative mechanisms for benefiting health personnel</p> <p>-To review curricula and other formative components in the education and training of health and medical professionals</p>	<p>DOH, LGU (CHO / MHO/ PHO, Health Boards, Local budget offices), DBM CHED (Boards/ Tech'l Panels of Medical Education & Nursing Education, Academe,</p>	<p>PCHR</p>
	<p>Procurement of medicines and other health products</p> <ul style="list-style-type: none"> ▪ Local production of drugs and other health products, including herbal medicine be encouraged ▪ Attitudes of the public and medical community re herbal medicines ▪ Clinical trials of indigenous plants and marine products 	<p>Limited access to reasonably priced by safe and effective drugs; safety and efficacy of other health products need to be ensured;</p>	<p>-To explore appropriate technologies as alternatives to expensive health equipment and facilities;</p> <p>-To study pro-active and responsive mechanisms as well as non-traditional budgetary resources for procurement of equipment;</p>	<p>DOH, LGU (CHO / MHO/ PHO), NCIP, DOST, DTI, Academe, Media, Business groups</p>	<p>PCHR</p>
2. Local Health Systems	<ul style="list-style-type: none"> ▪ Factors influencing poor LGU compliance to the implementation of health standards and regulations ▪ Sociocultural beliefs and value systems contrary to appropriate use of health services ▪ Factors associated to the role of the local health board in the delivery of quality health care 	<p>Low quality of local health service delivery; Local health facilities need upgrading and repair, equipments to be procured; personnel to be trained to enhance local health service capabilities</p>	<p>-To examine LGU compliance with health standards and regulations;</p> <p>-To determine the sociocultural environment for the availment of health services</p> <p>-To study the role of the local health board in delivering quality health care</p>	<p>DOH, LGU (CHO / MHO/ PHO, Health Boards), Academe (Public Ad / Health Sciences)</p>	<p>PCHR</p>

GROUP V: CROSS-CUTTING CONCERNS (Cont'd)

Broad R&D Area	Specific topic²	Rationale	Objective	Responsible Agency	Funding Source
2. Local Health Systems (cont'd)	<ul style="list-style-type: none"> Factors associated to the LGU engagement and participation of private sector, NGOs, and communities in local health policy determination and health systems development 	LGUs hesitate to involve private sector, NGOs, in the development of local health systems	-To investigate the factors related to LGU involvement of non-government stakeholders in determining health policy and health care systems	DOH, LGU (CHO / MHO/ PHO, Health Boards), Academe (Public Ad / Health Sciences) NGOs	PCHRD
	<ul style="list-style-type: none"> Strategies to promote linkages and cost-sharing schemes including local health care financing systems for better use of local health resources 	Non-maximization of local health resources due to lack of confidence on lower level facilities	-To explore ways of engaging a wider support base in the development of health care financing schemes and health resource utilization	DOH, LGU (CHO / MHO/ PHO, Health Boards), Phil-Health, NGOs	PCHRD
3. Health Information and Education System	<ul style="list-style-type: none"> Review and improvement of health reporting and documentation systems (with immediate and frequently updatable, sharable information) 	Poor databanking / retrieval, inadequate database on health statistics; Inadequate public information to improve health intelligence / statistics	-To strengthen health reporting and recording systems -To improve health intelligence retrieval and access	DOH, LGU (CHO / MHO/ PHO), NCSO, Academe (Health Sciences) NGOs	PCHRD
	<ul style="list-style-type: none"> Affirmative action in health advocacy and education programs for vulnerable sectors 	Inadequate advocacy and health education programs especially for vulnerable groups	-To focus public attention on the health status and overall plight of vulnerable sectors	DOH, LGU (CHO / MHO/ PHO), DEPED, CHED, NCIP Media, NAPC, Academe , PIA, NGOs, Church	-PCHRD -NAPC -PEF
	<ul style="list-style-type: none"> IEC on patients' rights Magna Carta for Patients 	Lack of awareness on patients' rights;	-To enhance the awareness of and sensitivity to patients' rights in the provision of health care	DOH, LGU (CHO / MHO/ PHO), CHR, Media, PIA Academe , NGOs, Church	PCHRD
	<ul style="list-style-type: none"> Inter-agency collaborative processes in health research, education, and healthy lifestyle advocacy 	Need for inter-agency cooperation in various aspects of health research and IEC	-To determine ways of engaging a multi-sectoral involvement in health research, education and advocacy	DOH, LGU (CHO / MHO/ PHO), DEPED, CHED, NEDA, NCSO, Media, Academe , PIA, NGOs, Church	PCHRD
	<ul style="list-style-type: none"> Development of culture-sensitive IEC materials and teaching models 	Health learning resources tend to be disregard of local cultural diversity; further translation and illustration needed	-To review and package culture-sensitive health IEC materials and develop a correspond-ing educational delivery system	DOH, LGU (CHO / MHO/ PHO), DEPED, CHED, NEDA, NCSO, Media, Academe , PIA, NGOs (Popular Education) , Church	PCHRD

GROUP V: CROSS-CUTTING CONCERNS (Cont'd)

Broad R&D Area	Specific topic²	Rationale	Objective	Responsible Agency	Funding Source
3. Health Information and Education System (cont'd)	<ul style="list-style-type: none"> ▪ Updating of curricular content with more socially relevant issues for infusion in training / education of health workers: ▪ Curricular review of rural and urban poor exposure and health service in the training of health and medical professionals 	<ul style="list-style-type: none"> ▪ Emphasis on commercial, biomedical orientation in training of health care providers; need for alternative / complementary medicine, gender sensitivity, preventive health care, primary health care, cultural sensitivity ▪ Need to intensify urban- or rural poor community service for medical and paramedical students / graduates 	<ul style="list-style-type: none"> -To root curricular content in empirically grounded problems and realities; -To develop a pre-service appreciation for the health needs of rural and urban poor communities 	DOH, LGU (CHO / MHO/ PHO), DEPED, CHED (Tech'l Panels in Med. & Health Scs), Academe , PIA, NGOs, Church	PCHRD
4. Health Care Financing	<ul style="list-style-type: none"> ▪ A survey of community-based financing schemes ▪ Linking community-based financing schemes with the national health insurance program 	<ul style="list-style-type: none"> ▪ Health insurance benefits biased toward hospital-based care when most are out patients; ▪ Low affordability of health care services (expensive medicines, professional fees, facilities, etc.) 	<ul style="list-style-type: none"> -To explore health care financing schemes for low income groups; -To examine flexibilities in entitlement to and availment of health care services outside traditional modalities. 	DOH, LGU (CHO / MHO/ PHO, Health Boards), PhilHealth, DSWD, NGOs	-PCHRD -PhilHealth,