HEALTH RESEARCH AND DEVELOPMENT PRIORITY AGENDA SETTING CENTRAL MINDANAO AND THE AUTONOMOUS REGION IN MUSLIM MINDANAO OCTOBER 2005

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Table of Contents

I.	Introduction	3
II.	Regional Report: Region XII A. Socio Economic Profile B. Health Situation/Resources C. Health Issues and Emerging Concerns D. Priority Health Research and Development Areas	3 3 4 6 9
III.	Regional Report: Autonomous Region in Muslim Mindanao (ARMM) A. Socio Economic Profile B. Health Situation/Resources C. Health Issues and Emerging Concerns D. Priority Health Research and Development Areas	10 10 12 13 15
IV	References	17

INTRODUCTION

Health is basic human right and is both a means and an end of development. In pursuit of health development, the status of the population, the health sector and the health-related sectors becomes crucial.

Relevant to the status of the population are the growth, fertility, age structure and distribution of populations in the region. With regards the public and private health sector, the status of the health services—promotive, preventive, curative and rehabilitative services, together with the provision of human resources, drugs and medical supplies are important. In addition, the socio-economic factors affecting and are affected by health such as trends in urbanization, industrialization, communication and transportation, environment and natural resources, education, science and technology, among others, are also crucial considerations.

The Philippine Council for Health Research and Development, in collaboration with the Philippine National Health Research System Assembly, launched several consultation for a in the different regions of the country to identify health research and development priority areas for the next five years (2005-2010).

In this context, the health research priorities are classified into two types-- the biomedical concerns and the operational/ service delivery/ policy concerns. The biomedical concerns include the areas of a) natural products development, b) development of pharmaceutical products, c) development of other technologies and processes, and d) development of telehealth. The operational/ service delivery/ policy concerns focuses on a) health care financing, b) local health systems development, c) public health issues/ programs, d) standards and regulations, e) hospital management and f) research ethics.

Cast against the backdrop of this orientation, the consultation forum aimed to obtain relevant information on the following:

- A. health situation in the region
- B. health gaps, problems and emerging concerns and
- C. regional priority health research and development areas.

Several strategies and research techniques were employed in the process. The assessment of health situation was through desk review of existing documents and reports of relevant institutions like the DOH, DSWD, NEDA, etc., as well as key informant interviews of key personnel of the institutions. The identification of gaps, problems and the identification of priority research and development areas were conducted through consultative workshop with various public and private stakeholders on health development.

REGIONAL REPORT: REGION XII

Socio-Economic Profile

Region XII is composed of four provinces (South Cotabato, Cotabato, Sultan Kudarat and Sarangani) and five cities (General Santos City, Cotabato City, Kidapawan City, Koronadal City, and Tacurong City). It has a total land area of 20,566.26 sq.km., and with a total population of 3, 222,169 (as of 2000, NSO). Majority of its population are consisted of llonggo, Cebuano, Ilocano, and Magindanao. Some indigenous peoples such as T'boli, B'laan, Kalagan, Tiruray, Manobo, Iranon, Ubo, and Tagakaolo are found in the region. Most of them occupied the mountainous/hilly part of the area.

The region's population registered an average annual growth rate of 2.68% within the period of 1995 to 2000 which is a bit higher than Mindanao population growth of 2.44%. About 42% of the population are below 15 years old. The dependency ratio is 84

dependents per 100 persons of productive age group. This means that the very young population and high dependency ratio require bigger resources for basic services such as education, health, food, housing, and the like.

The simple literacy rate of the region's population 10 years and over in 2000 was 87.4% while the functional literacy was 77.1%.

The region is basically dependent on agriculture. Its major crops include rice, corn, coconut, pineapple, asparagus, cassava, sugarcane, and rubber. The region's export earnings contribute 27% of the total Mindanao earnings. About 35% of palay and corn production of Mindanao come from the area. Fish production also contributes 15% of the overall Mindanao production.

The Regional Development Plan for 2004 indicates that the poverty incidence rate of the region was estimated at 45 % in 2000. This figure was 11% higher compared to the national poverty incidence rate of 34%. Of the four provinces, Sultan Kudarat has the highest poverty incidence rate with 54.3% while the lowest was South Cotabato with 37.3%. The annual per capita poverty threshold of the four provinces in year 2000 ranged between Ph10, 338 to Ph11, 368.

The Health Situation/Resources

Out of the total barangays of 1,190 in the region, about 899 or 75.5% have barangay health stations. Based on the 2004 Annual Report, the region has 114 doctors, 190 nurses, 14 nutritionists, 58 medical technologies, 39 dental aids, 53 dentists, 802 midwives, 1 sanitary engineer, 95 sanitary inspectors, 6,760 active barangay health workers (BHWs), and 2,714 trained birth attendants. In terms of health office and facilities, the region has four (4) Provincial Health Offices, 27 government hospitals, 76 private hospitals, 3,237 hospital beds, 47 main health centers, and 899 barangay health stations. (Source: Region XII Annual Health Status Report 2003).

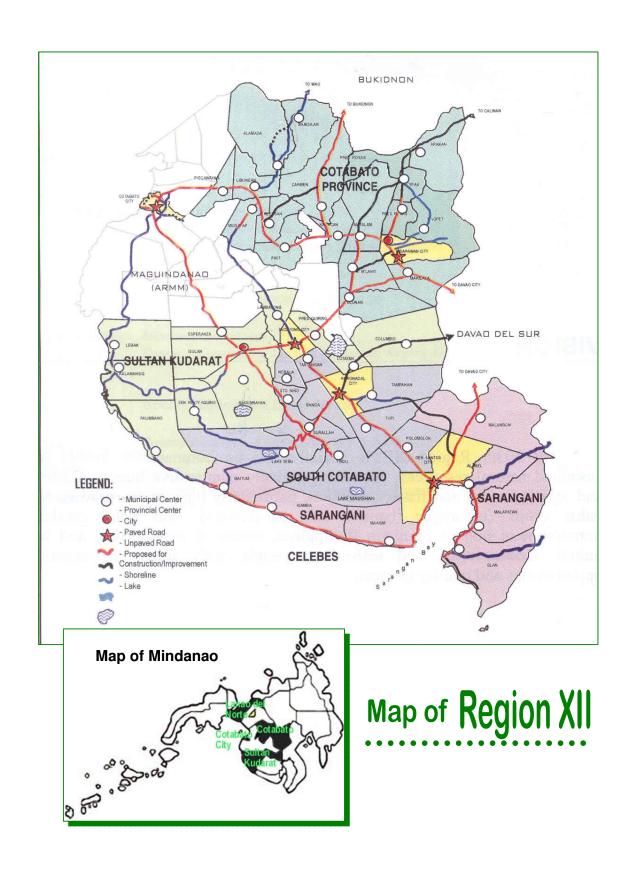
The health status of the region in 2003 showed the following information:

- A. 81,977 or 76.82% of 12 months old children were fully immunized
- B. 19.26/100,000 population died due to tuberculosis
- C. 2.70/100,000 population died due to diarrhoea
- D. 1.07/100,000 population died due to malnutrition
- E. 18,310 or 4.22 of children 6-59 months old were moderately underweight
- F. 2,170 or 0.50% of children 6-59 months old were severely underweight
- G. 479,752 or 74.99 households have sanitary toilets
- H. 552,498 or 86.36% households have access to potable water supply

Crude Birth Rate

Region XII has a total of 70,562 live births in 2004. Compared to 2003 report, crude birth rate at 19.32 per 1,000 populations reported a decrease of 0.59 rate points. Approximately 8% of the total live births belong to low birth weight. Births attended by trained and untrained hilots accounted for 45.31% and 7.21% respectively.

Sarangani has the highest CBR among the provinces at 20.51 per 1,000 populations while North Cotabato has the lowest at 17.36 per 1,000 population. Among the cities, Gen. Santos City has the highest at 24.60 per 1,000 populations while Cotabato City has the lowest at 14.26 per 1,000 populations.



Crude Death Rate

The total deaths of 10,814 in 2004 resulted to a rate of 2.96 deaths per 1,000 populations, registering a very slight decrease of 0.03 rate points compared to 2003. Of the total deaths, 62% are males. Male mortality rate was 3.58 per 1,000 male population while that for females was 2.32 per 1,000 female population.

Infant Mortality Rate (IMR)

With a rate of 5.82 per 1,000 livebirths, infant deaths accounted for 3.8% of the total deaths of the region in 2004. This registered 0.53 rate points compared to 2003. South Cotabato has the highest IMR of 6.96 per 1,000 livebirths while North Cotabato has the lowest with 3.20 per 1,000 livebirths. On the other hand, Gen. Santos City has the highest rate with 11.32 per 1,000 livebirth while Kidapawan City has the lowest rate with 2.54 per 1,000 livebirths.

The leading causes of IMR were acute lower respiratory infection (rate is 1.05), septicaemia (0.94), prematurity (0.79), congenital anomaly (0.51), diarrhea (0.30). The others include bacterial sepsis of newborth, birth asphyxia, sudden infant death syndrome, malnutrition, tetanus neonatorum, and respiratory condition of newborn.

Maternal Mortality Rate (MMR)

Maternal deaths accounted for 0.54% of the total deaths in 2004, with a rate f 0.82 per 1,000 livebirths. An increase of 0.17 rate points compared to 2003. Sarangani has the highest MMR of 1.30 per 1,000 livebirths and Sultan Kudarat has the lowest with 0.48 per 1,000 livebirths. Kidapawan City has the highest rate of 1.02 per 1,000 livebirths while Cotabato City has the lowest with no maternal death reported.

The leading causes of MMR are post partum haemorrhage (0.38), eclampsia in pregnancy (0.07), injury of the uterus (0.06), amniotic fluid embolism (0.04) and congestive heart failure (0.04) and retained placenta (0.04). The other causes include congenital malformation, eclampsia in the puerperium, pre-eclampsia and puerperal septicaemia.

Leading Causes of Morbidity

The top five leading causes of morbidity in the region in 2004 were acute lower respiratory infection (rate is 2,653.52), influenza (965.87), diarrhoea (814.23), acute upper respirator infection (761.43), and bronchitis (355.91). Among the other leading causes are primary hypertension, accident/violence/wounds, anaemia, skin disorders, and tuberculosis.

Leading Causes of Mortality

The top five leading causes of mortality were pneumonia (rate is 29.22), cancer—all forms (27.58), accident/violence/wounds (26.81), atherosclerotic heart disease (22.68) and cardiovascular diseases (18.81). The other leading causes include respiratory tuberculosis NOS, hypertensive heart diseases NOS, diabetes mellitus, end-stage renal disease and septicaemia.

Health Issues and Emerging Concerns

1. Quality of Health Education

The incidence of children morbidity due to infectious diseases presents a concern for promoting quality health education among the school children. The cases of dengue, diarrhea, tuberculosis, substance abuse, smoking and others are among the health issues among the young populations. The dental health conditions of school children also showed that almost 70% of the children in schools have dental problems. These conditions indicate the need to promote general health awareness and knowledge and the need to integrate health education into the school curricula particularly in Science, Social Studies, etc. in the elementary, high school and even in tertiary level curricula.

2. Health Policies/Legislations

There are national and local health legislations and policies that are meant to promote health development. The health sectors need the knowledge on the different health policies already in place in the local government units. There are also concerns on the poor implementation of these health policies that place constraints in promoting health. Such examples are the nutrition policy, early child care development and others. There are health programs needing health legislations and health policy support to generally pursue health development.

3. Public Health Issues

In the region, the emerging public health issues include the acute respiratory infection, tuberculosis, diarrhea, dengue, and others.

There is a high incidence of acute respiratory infection among the poor and indigent children. The cases of TB among the school children and even among schoolteachers as reported in the department of education. There is the problem of inadequate supply of medicines. There is also the failure to submit to sputum test for proper diagnosis. The incidence of diarrhoea is primarily due to improper food handling and water handling in the households.

Dengue, as a communal disease, had been an endemic disease in the region and in the major cities. The prevalence demands continuous vigilance by the community and rigid campaign for environmental sanitation. The department of health discouraged the practice of fogging because of its adverse effects in simply driving the mosquitoes to other areas, in addition to the high cost of fogging operations. The problem is also complicated by the inadequate supply of available blood from the blood bank to respond to the requirements of dengue cases.

4. Health Care Delivery System/ Field Care Service

There is poor health care delivery system in the region due to the lack of medical personnel to provide the services to the people. The poor in need of health services cannot afford to avail of professional health providers like private doctors and health services so they depend so much on the public health services. The barangay midwives need to be fully trained and must be made permanent health workers to provide access to local health services.

5. Advance Local Health System (RHU giving augmentation/ assistance

The capability of the local health system in providing health services generally depends on the financial augmentation of the local government units. In most instances, the issue really is on augmentation although the Regional Office is trying to help the LGUs. The local health systems are encouraged to promote referrals to the regional hospital for health services since about 75% of the patients in the CRMC come from Cotabato City.

6. Hospital System

The Cotabato Regional Medical Center derives hospital funds from the national DOH. Currently, with its present fund constraints, it gets inadequate in providing quality care to its clients.

7. Environment Health Risks/ Disaster Management

Two emerging issues of environmental risks in the region are the avian flu and the exposure to hazardous agricultural chemicals in plantations. There is a need to strengthen our environmental disaster management system, particularly to strictly implement the quarantine rules and to intensify agency coordinations and advocacy campaign through the use of trimedia to prevent the bird flu from getting into the country.

Likewise, the health risks of communities exposed agricultural chemicals and pesticides in plantations Polomolok and North Cotabato include RFI, cancer, skin diseases, etc.

The personnel from the DOH and DA need to undergo training in Subic for environment and disaster management.

8. Rabies

In South Cotabato, the alarming cases of dog bites calls for massive education about rabies and rabies management. There are three stages of rabies infection—licking, scratch and bite. The dogbite presents greater seriousness. In the new rabies management, it is also important for the owner of the dog to be vaccinated. The DOH has established bite center throughout the country at CRMC and the CHO.

9. Healthy Lifestyle

The leading causes of mortality in the region are attributed to unhealthy lifestyles. The major diseases are hypertension, diabetes, kidney and lung diseases. There is a need for individual education and advocacy for healthy lifestyles.

10. Herbal Processing

In Region XII, the herbal processing plant has closed down due to the decreasing quality standards of its products, mainly lagundi and sambong. This presents the general lack of herbal medicines in circulation for the health needs of the people. The DOH is intensifying campaign on backyard planting of herbal plants.

11. Waste Disposal

The problem of garbage and disposal present a serious threat to the health of the people in the region, particularly in urban centers. The inadequate garbage collection services, in addition to the improper waste disposal practices of most households, contribute to this waste disposal problem.

Priority Health Research and Development Areas

Central Mindanao, Region XII

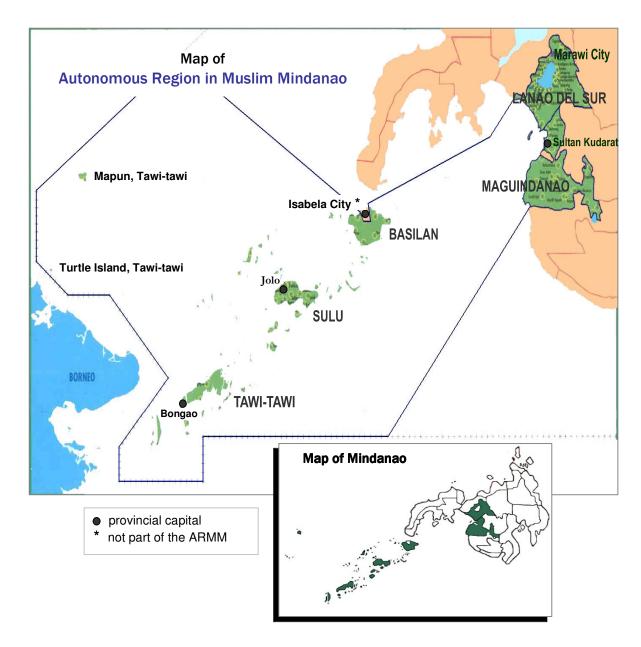
Health					
Research & Development Area	Research Specific Topic	Rationale	Specific Objectives	Agency	
1. Healthy Lifestyle Concern - Substance Abuse	Factors Affecting Substance Abuse In Central Mindanao	- increasing incidence of criminality attributed to drugs - lack of Mental Health Facilities and Drug Rehab Centers in Cities of Region XII - increasing incidence of Region XII - increasing	 determine the extent of substance abuse and use of illegal drugs Incidence of drug-related criminality Causes and factors affecting drug addiction Profiling users (PDEA, DSWD, NARCOM) 	NGO	
2. Quality Health Education	Extent of Integration of Health Education in School Curriculum in Region XII	- increasing incidences of children diseases - improve diseases prevention among children through increased health education for school children	- determine the nature, level and extent of subject integration of health education in the Elementary/ High School/ College - determine the teachers capability/ preparation for subject integration of health education	DepEd CHED DOH	
3. Healthy Lifestyle Concern – Environmental Health Risks	Impact on Community Health of Chemical Exposures in Agricultural Plantations in Sarangani & Cotabato Provinces	- rising incidence of chemical exposure — related diseases in different plantation areas, especially in major agricultural communities	- determine the nature and effect on health of communities exposed to hazardous chemicals in agricultural plantations: (types of diseases assoc with chemical exposures, types of hazardous chemical used that is hazardous to health, profiling of affected communities/ plantations using chemicals, safety preventive measures of communities/ plantations)	DOH DENR DA- BAR NGO	
4. Health Policies/ Legislations	Nature of Health Policies and Its Implementation in the Local Government Units	- improve the quality of health care delivery systems in the local governments	 determine and classify local health policies 1999-2004 of the national and local LGUs identify its implementation issues and recommendations for strengthening health legislations role in health development of the region 	DOH NEDA DILG	

5. Local Health System	Functionality and Effectiveness of Local Health Boards in Health Promotion & Development	- strengthen and empower local health bodies for effective regional health development and delivery systems	 determine the funding, priority issues, collaboration mechanisms, board capacities/ needs, etc. determine the functionality, effectiveness, efficiency of the local health boards for health development identify best practices of functionality 	DOH DILG
6. Traditional Health Care Practices/ Norms	Health Practices, Alternative Medicines and Health Seeking Behaviors among Indigenous and Cultural Communities in Region XII	- inadequate information for health promotion and service delivery for the indigenous communities	- determine the health problems, health practices, alternative medicine, health seeking behaviors of indigenous and cultural communities in the region—Teduray, Bilaan, Tboli, Maguindanao, Maranao, etc.	NCIP DOH
7. Public Health Issues - Infectious Diseases a. Dengue	Dengue Immunization and Cure	- no vaccine/ medication cure for dengue	- Identify alternative sources of herbal/ chemical cure for dengue disease	RITM DOH
8. Family Health and Health of Special Populations – Mother and the newborn	Factors affecting Incidence of Neonatal Tetanus in Region XII	- high prevalence of neonatal tetanus	- Identify perceptions and practices of mothers and hilots leading to neonatal tetanus	DOH CRMC

REGIONAL REPORT: AUTONOMOUS REGION OF MUSLIM MINDANAO (ARMM)

Socio-economic Profile

The region has five provinces (Basilan, Lanao del Sur, Maguindanao, Sulu, and Tawi-Tawi) and one city (Marawi City). It has a total land area 13,451.5 sq.km. The total number of municipalities is 94 with 2,148 barangays.



As of 2000 NSO data, ARMM has 2,837,532 total population, with an average annual population growth rate of 2.44 percent. Majority of the 13 Filipino Muslim groups are found in the region. These are the Magindanao, Maranao, Tausug, Iranuns, Samal, Jama Mapun and the Badjao.

The regional economy is largely dependent on agriculture, fishery, and forestry sectors, which accounted for more than 50% of the region's gross domestic products. Palay, corn and coconuts (copra) are the major crops of the farmers in the area. Fishing industry thrives in the coastal areas of Maguindanao, Lanao del Sur, Sulu and Tawi-Tawi. Majority of its labor force derive income from agriculture.

The incidence of poverty in the region in 2000 was 62.9% while the average household income was Php 81,519.

The functional literacy rate of the region in 2003 was 62.9% as indicated by the Functional Literacy, Education and Mass Media Survey (NSO-FLEMMS, 2003). According to the World Bank Report (November 2003) ARMM trails behind all regions with respect to basic indicators of educational development. This condition is further aggravated by the disruption of education among school age children due to sporadic armed conflict in the area. This armed conflict has resulted directly in the destruction or abandonment of school buildings, used as evacuation centers, or served as headquarters for military troops.

Health Situation/Resources

The DOH ARMM Regional Annual Report in 2004 showed that of the 1,872 barangays about 238 or 12.7% have barangay health centers. In terms of health personnel the following figures were gathered from the report – 53 doctors, 83 nurses, 4 nutritionists, 19 medical technologists, 14 dentists, 299 midwives, 98 sanitary inspectors, 1,622 active barangay health workers, and 862 trained birth attendants.

In 2004, about 255,024 or 59.8% households have access to safe water and 165, 108 or 38.7% households have sanitary toilets. A total of 120,670 or 28.3% households were reported having satisfactory garbage disposal.

The data on the nutritional status of 6-59 months old children in 2003 showed that 20,236 or 5.4% were reported moderately underweight. Of this number, about 2,342 or 11.57% were rehabilitated. About 3,815 or 1.03% 6-59 months old children were reported severely underweight. Of this number, 344 or 9.02% were rehabilitated.

The region's crude birth rate (CBR) in the same year (2003) was 19.13 per 1,000 populations while the crude death rate (CDR) was 1.54 per 1,000 populations. These data were based only on the reported cases of births and deaths in the area.

The maternal mortality rate (MMR) was 1.57 per 1,000 populations while the infant mortality rate (IMR) was 5.91 per 1,000 populations in 2003.

The ten (10) leading causes of mortality in the region (per 10,000 populations) in 2003 as reported by the DOH – ARMM included the following:

A.	Accident/GSW	2.24
B.	Cardio-vascular diseases	1.72
C.	Unknown	1.58
D.	Pneumonia	1.42
E.	TB Respiratory	0.99
F.	Diarrhoea	0.97
G.	Hypertension	0.81
Н.	Cancer, all forms	0.79
l.	Measles	0.67
J.	Old age/senility	0.67
K.	Myocardial Infection	0.19

The ten (10) leading causes of morbidity in the ARMM (per 1,000) in 2003 were:

•	Influenza	12.86
•	Diarrhea	11.14
•	Skin Diseases	9.02
•	Pneumonia	7.28
•	Bronchitis	4.91
•	Hypertension	3.78
•	URTI	3.53
•	Malaria	3.28
•	Parasitism	2.05
•	Schistosomiasis	0.83

The ten (10) leading causes of maternal mortality per 1,000 live births in 2003 were:

•	Postpartum Hemorrhage			0.82
•	Hypertension in Pregnancy			0.37
•	Retained Placenta			0.09
•	Postpartum Sipsis		0.05	
•	PP HPN	0.02		
•	Raptured Uterus		0.02	
•	Hemorrhage due to uterine	atomy	0.02	
•	Epilepsy	0.02		
•	Toximia in Pregnancy		0.02	
•	Fatal Malpresentation with r	manipu	lation 0	.02

The ten (10) leading causes of infant mortality per 1,000 live births in 2003 were:

Pneumonia	1.80	
Diarrhoea	0.82	
Unknown	0.50	
Measles	0.32	
Neonatal Tetanus	0.25	
Prematurity	0.23	
Malnutrition	0.14	
Congenital Anoma	ly0.12	
Septecemia	0.09	
Cord Bleeding		0.05
	Diarrhoea Unknown Measles Neonatal Tetanus Prematurity Malnutrition Congenital Anoma Septecemia	Diarrhoea 0.82 Unknown 0.50 Measles 0.32 Neonatal Tetanus 0.25 Prematurity 0.23 Malnutrition 0.14 Congenital Anomaly 0.12 Septecemia 0.09

The 2001 data on the health system capacity of the ARMM indicate that the number of government hospitals per 100,000 populations was 0.46 while the private hospitals was 0.58 (World Bank Report, November 2003).

Health Issues and Emerging Concerns

1. Public Health Issue - Infectious Diseases

The most prevalent diseases affecting communities in the ARMM are hepatitis, scabies, diarrhea, food poisoning and dengue. The health sector has inadequate program management and delivery of health services of these diseases, in addition to the lack of awareness proper education of the vulnerable groups of the disease.

2. Violence against Women and Children

There is general low level of awareness of personal, maternal and child care among the mothers in the region.

3. Internally Displaced Persons Health

Due to the intermittent armed encounters in many communities in the region, the internal displacements that happen pose serious havoc on the health of children, women and elderlies in the communities. The conditions in the evacuation centers, both crowded and unsanitary, results to many incidences of health problems for children and women.

4. Health Policies/ Legislations

There is a need to conduct a documentation of health policies/ legislations in the region and determine the extent of its implementation to support the health development program of the government.

5. Postnatal and Health Services for the Indigenous Peoples

The Indigenous Peoples in the region are the sector with the lowest access to the health services of the government. They are also the sector with high incidence of maternal and child health problems, particularly postnatal health problems.

Priority Health Research and Development Areas

Priority Health Research and Development Areas					
Research & Development Area	Research Specific Topic	Rationale	Specific Objectives	Responsible Agency	
Public Health Issues – Infectious Diseases a. Hepatitis b. Scabies c. Diarrhea d. Water-borne diseases e. Food poisoning f. Dengue	Prevalence, Causes, Practices and Management of Infectious Diseases in the ARMM	 inadequate program management and delivery of basic health services high prevalence of infectious diseases in the region enhance the knowledge, attitudes and practice of disease management among vulnerable groups improve the capacity of health service providers in the management of infectious diseases 	- determine the prevalence of infectious diseases in the region - determine the knowledge, attitudes, practice (KAPs) among vulnerable groups to infectious diseases - assess the capacity of health service providers in the management of infectious diseases	DOH LGUs DILG DepEd DOST	
2. Family Health and Health of Special Populations - Violence Against Women and Children (VAWC)	Prevalence, Degree of Occurrence & Effects, and Advocacy Situation on VAWC in the ARMM	- low level of awareness and knowledge of personal, maternal, and child care - need for advocacy through multimedia on RA 9262 - need to strengthen interfaith collaboration - need to intensify implementation of RA 9262	- conduct situational analysis of programs/services/ interventions on the prevention/ elimination of VAWC in the region - determine prevalence, types, degree of occurrence, effects of VAWC - determine the extent and	CHED DSWD RCBW (Regional Commission on Bangsa- moro Women) DILG	
3. Family Health & Health of Special Populations - a. Internally Displaced Persons (IDPs)	Health Needs and Access to Health Care Services of the Internally Displaced Communities in the ARMM	 poor access, quality, practices on health promotion among IDPs low level of health education/ awareness and their rights inadequate mechanisms on disaster management 	- determine the health diseases/ issues/ problems affecting the internally displaced communities - determine their access to quality health services - determine their health and sanitation practices and problems	DSWD DOH LGUs CFSI	
4. Health Policies/ Legislations	Situational Analysis of Advocacy and Implementation of Health Policies/ Legislations in the ARMM	- need for advocacy and lobbying for more laws/ legislations on health promotion and development	- determine the nature and extent of implementation of the health laws in the region - determine the problems in the implementation of health policies - determine the health issues and concerns needing legislative aid in the regional and local levels	DOH DILG RLA LGUs	
5. Family Health and Health of Special Populations - Indigenous Peoples	Maternal Health Practices & Diseases and Health Services for the Indigenous Peoples in the ARMM	 high incidence of maternal and infant deaths among the IPs high prevalence of health diseases among the IPs poor access to health services among the IPs 	- determine health diseases/ issues among the IPs - identify IPs health practices and health seeking behaviors especially on the mother and newborn health - identify postnatal and health practices among IPs	DOH CFSI LGUs	

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References

Annual Accomplishment Report 2003 Department of Health Center for Health Development Cotabato Region

Annual Accomplishment Report 2004 Department of Health Center for Health Development Cotabato Region

Feature Article: Women in Philippine Business and Industry: 1999 Journal of Philippine Statistics Volume 56 Number 1 First Quarter 2005 National Statistics Office Manila

Medium- Term Regional Development Plan 2004-2010 National Economic and Development Authority Region XII 2004

NSCB StatWatch August 5, 2005 National Statistics Coordination Board

Profile of the Expanded ARMM
DataBank Bulletin June – August 2003
Notre Dame University Research Center

Profile SOCCSKARGEN
DataBank Bulletin March – May 2003
Notre Dame University Research Center

Regional Accomplishment Report FY 2003 Department of Health ARMM Region

Regional Accomplishment Report FY 2004 Department of Health ARMM Region