

# **HEALTH RESEARCH PRIORITIES OF REGION X**

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## HEALTH RESEARCH AGENDA SETTING IN REGION 10

### Introduction

#### Rationale

In general, research has been the most valuable tool one could ever utilize in order to test and verify inquiries, by which possible answers could be of practical use. Outcomes of researches done in various spheres have long been proven to contribute enormously to the development of a particular sector, or, on a larger scale, to that of a country. However, research is not given much priority in the allocation of resources by several institutions. One of the reasons given is that there are greater and more important concerns, programs, and intervention projects, besides research. This reason is repetitively expressed to cause inattention to this sector.

In health, research is undeniably an imperative component. Several factors in society prompt one to conduct a study to ensure its effects on the population's health. However, each region has its own health concerns that require specific health researches. This plurality of research priorities results to more strain in the availability of financial resources earmarked for research. Prioritization of health research topics would result to a more efficient and effective research allocation.

The need for a unified national health research agenda was a major recommendation raised by some of the technical working groups of the First National Health Research Assembly. The unified health research agenda will consolidate the efforts of the different public agencies, private agencies and non-government organizations and serve as one of the unifying activities of the Philippine National Health Research System.

Thus, the objective of the priority setting is to formulate a unified national health research agenda. The formulation of a unified health research agenda is envisioned to provide focus on research and development efforts by addressing health concerns of the country's medium term development plan (2004-2010), provide a convergence of research efforts and support, minimize duplication of efforts and maximize research utilization with the proper delineation and coordination among stakeholders and promote R & D for health. The priority setting will involve multi-disciplinary and multi-sector participation and provide the arena for collaboration among major stakeholders. The agenda resulting from the priority setting will serve as the template for the country's research and development efforts for the next five years and a platform to advocate for local, national and international support.

The identification and prioritization of researches in the unified national health research agenda is expected to improve health policies and standards and regulatory activities, promote health technology/product development, and quality health education. The research results are expected to improve equitable delivery of health services, the development of safe, cheap, accessible world-class health technologies/ products, and the development of qualified health personnel. All these are supposed to address the health needs of the population particularly those who are disadvantaged.

In Northern Mindanao, a significant output of this research prioritization is the identification of health research priorities in the region. Research prioritization would determine what health issues and concerns are plaguing the region. At the same time, it validates the health issues and concerns which are affecting other regions as well.

## **B. Northern Mindanao: A closer look**

**Land Area and Political Division.** Northern Mindanao or Region 10 occupies an area of 20,186 square kilometers and is subdivided into five provinces – Bukidnon, Camiguin, Lanao del Norte, Misamis Occidental and Misamis Oriental. There are eight cities in the region (Cagayan de Oro, Gingoog, Iligan, Malaybalay, Ozamiz, Oroquieta, Tangub and Valencia), 85 municipalities and a total of 2,020 barangays.



Fig.1 Map of the Philippines with Northern Mindanao highlighted in yellow.

**Population.** Based on the 2000 census of population, the region has a total population of 3,505,558 and is growing by an average of 1.99 percent per year from 1995. Of the five provinces in the Region, Bukidnon registered the highest population growth rate of 2.6 percent between 1995 and 2000. This is followed by Misamis Oriental with a population growth rate of 2.53 percent. Among the eight cities, Gingoog showed the highest growth rate of 3.42 percent.

The increasing population of Northern Mindanao has produced a population density of 174 per square kilometer. Accompanying this population growth is the presence of 39.1 percent of the 3.5 million population who are dwellers in the urban areas. Among the cities that registered a continuing increase in the number of dwellers in the urban areas are Cagayan de Oro, Ozamiz, Iligan, Malaybalay and Valencia.

Another attribute of Northern Mindanao, as of the latest population survey, is that it has a largely young population - belonging to the 19 years old and below age group. In its total population, males comprise 51.98 percent, while females occupy the remaining 48.02 percent. Aside from that, the dependency ratio per 100 workers of 15-64 age group has increased to 76.96 percent as compared to 1995, which was only 72.78 percent.

**Agriculture.** The agricultural sector of the Region is undergoing low productivity, particularly its major products. Rice production for instance decreased by 15.47 percent from 106,980 metric tons (MT) in the second quarter of 2004 to 90,432 MT in the second quarter of 2005 (*Regional Economic Situationer for the Second Quarter of 2005*). Only the Province of Camiguin did not experience reductions in production. This decline in productivity is attributed to the dry spell which resulted to lesser production of irrigated lands and no production of rainfed lands. There are also areas that are left idle or are converted to vegetable farms. High cost of fertilizers and the use of third generation seeds also contribute to low rice production. Other major crops in the Region that are affected by the decline in production are corn, green nuts, and commercial crops, such as sugarcane.

Sugarcane, though, was seen to be the top producing crop for three straight years. The occurrence of the dry spell is basically the reason for this low productivity.

There is also a decline in production of some livestock products, such as carabaos and ducks, are also experiencing decline in production. This is also true with regard to the total volume of production for the fishery sector. In this area, the unloading by some fishing vessels outside the region, particularly in Samar and Bohol, has been affected due to lesser frequency of fishing trips, the continuing price hike and the repair of some commercial fishing vessels are the mentioned factors that led to the decline.

Nevertheless, the Department of Agriculture (DA) has given attention to improve the situation. For rice production, the regional office has been pushing for the use of hybrid and inbred rice technology because these quality seeds show greater yield advantage as compared to the non-certified and home saved seeds. As for corn, several researches and extension support and services were also conducted to facilitate efficiency and increase in production. Assistance in the production of commercial crops were done through the strengthening of agricultural extension with the conduct of 74 various trainings on various production, protection, processing, post harvest handling and marketing on different commodities, and the continuous advocacy and support that the Region holds for private sector led endeavors. Self-sufficiency in carabao as well as cattle production was also aimed at by DA by doing interventions on the genetics and nutrition of these animals, in order to produce genetically improved animals that have efficient feed conversion ratio and would yield high carcass when slaughtered.

**Environment.** At present, the Region's environmental security is threatened. Although Northern Mindanao is admittedly rich in natural resources, several economic activities expose these resources to devastation.

In the upland/forest ecosystem, illegal economic activities (such as illegal logging) and illegal settlements continue to harass ecological integrity (NEDA 2004). Deforestation and resource extraction abuse of the buffer zones of some protected areas are inevitable. Small-scale mining has also been reported in protected areas and watersheds. There is also this problem in the identification of some protected areas as part of ancestral domain of indigenous peoples. Adding more injury to the forest resources is the practice of "kaingin" farming among the upland dwellers, which affects soil fertility in these areas.

The lowland/agricultural ecosystem is also not spared. The inadequate or conflicting policy implementation has caused inappropriate use of agricultural lands as well as their conversion to industrial use. This would lead to threat to the region's food security. Not only that, the intensive use of chemicals in agricultural production poses danger to the future productivity of the land. For one, heavy use of fertilizers and pesticides, in order to increase production, is feared to bio-accumulate and undermine land integrity. Moreover, production of genetically modified crops remains to be a concern of the region, due to the resistance of several environmentally-concerned groups and consumers.

Water resources are also undergoing misuse and abuse similar to what is happening to the land resources. The freshwater ecosystem for example has been continuously harmed by the agricultural runoffs, domestic wastes, and industrial effluents. The region's coastal/marine ecosystem is also debilitated by the discharge of untreated and incompletely treated domestic wastewater and both agricultural and industrial garbage. According to the Northern Mindanao Regional Development Plan prepared by NEDA, this practice not only degrades habitats (e.g. mangroves), which leads to loss of marine species and reduced fish production, but also jeopardizes human health.

As the population in the region increases, environmental issues also multiplies in the urban ecosystem. Population growth due to natural increase and migration from rural to urban areas has resulted in the increase in the number of informal settlers and a corresponding increase in solid waste generation. Expectedly, this condition would further lead to other urban environmental problems such as deterioration of air quality, which is a common outcome of increased vehicular traffic and industrial emission. Moreover, there would definitely be an increased pressure in the provision of urban services.

**Education System.** Participation and completion rates for both the elementary and secondary level in Northern Mindanao are generally below targets. Inadequate books and classrooms are just some of the contributors to the low level of participation rates. Moreover, there is a greater challenge set on differently-abled children to enter and remain in school. According to the 2000 census, there are only about 46 teachers in the region who are trained in special education to cater to the overwhelming number of differently-abled children (33,601 for ages 0-19). This is further aggravated by inadequate facilities and materials available to them.

The quality of basic education offered in Region 10 also remains a challenge. This is an outcome of unwieldy and large-sized classes; congested curriculum; and the use of some outdated and inflexible teaching and learning techniques that inhibit active participation and feedback, among others. School performance indicator is also slowly improving because aside from income, poverty and health factors, students' lack of interest in school as well as parent's choice to sacrifice schooling in return for additional income or farm help, still exist.

Technical Vocational Education and Training (TVET) in the region received modest accomplishments in terms of support. That is why there is still a need to i) promote certification of workers among industry organizations; ii) monitor schools offering short term TVET courses; iii) adopt and promote the ladderized system to increase enrolment levels in TVET; and iv) explore other scholarship schemes to address the increasing dropout rates in TVET scholarship programs.

As of 2004, there are 70 higher education institutions (HEIs) in the region. Seven of these – five private and two state universities - are considered as Centers of Excellence and Centers of Development. These seven leading institutions demonstrate competence in the fields of engineering, science and technology, and information technology education. They have done or attended various activities in relation to i) faculty development/training, workshops, seminars; ii) research and extension, networks and linkages; and iii) equipment purchases/building construction/other facilities.

Notably, the number of enrollees as of 2004 has increased to 107,504 compared to the previous year, 105,144. Along with this increase, is the increment of the pool of graduates that entered the labor force. This 12 percent increase of graduates getting into work was mostly in the field of Education and Teacher Training, Business Administration and Other Related Courses, and Medical and Allied Courses. Nonetheless, as the Region's number of alumni went up, the number of scholars funded by CHEDRO 10 decreased by 30 % in 2004, from 2,248 in 2002 to 1,708 in 2004. Reduced budgetary support and the graduation of previous batch of scholars were some of the reason for the decrease in the number of scholars.

CHEDRO 10 has also created 10 Councils of Deans in order to initiate activities that would facilitate the implementation of CHEDRO's authorized program. So far these councils have conducted various seminars, conferences and workshops that unanimously aimed at the development and enhancement of educators in the region. Among the activities that they have initiated are: i) Seminar on "Research Methodology in Agriculture – by the Council of Dean in Agricultural Education; ii) Conference on "Career Prospects for Engineering" – by

the Council of Deans of Engineering Education; iii) “Program of Instructors’ Training on Fundamental IT for the Philippines” – by the Council of Deans for Information Technology; and iv) General Assembly and Seminar Workshop on “Developing Culture of Personal Excellence Among Tertiary Educators” – by the Council of Deans of Business Education.

As CHEDRO 10 continues to improve the performance of the educators in the Region, it never failed to monitor and evaluate programs of existing schools. This was done to improve program standards that will somehow result to quality graduates. As of the first quarter of 2005, there were already 39 programs among the schools in the Region that were monitored/evaluated.

Moreover, the beneficiaries of the Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP) for the local government units and the members of the National Police Commission and the Philippine National Police, has increased by 30 percent. Their initiative of linking with other government and non-government agencies through the information-dissemination of the program has, indeed initially flourished as seen in the increase.

Research in this area, is grounded on the theme that research as an academic function, differentiates higher education from basic education. Then again, outputs of the research conducted by the HEIs were described by the Congressional Education Commission of 1992 (EDCOM) to be repetitive and stereotyped and heavily biased in favor of the field of education and allied areas. Researches in the field of science were given less priority. Aside from that EDCOM also stated that the quality of research outputs was below world standard and very few of these dealt with the development of unifying theories and models or developed new programs and strategies.

Several reasons have been raised why this is the state of higher education research. These are: i) inadequate public education, information and campaign on research results; ii) low rate of public investments on research and development; iii) inadequate allocation of funds; iv) weak coordination among higher education institutions; v) inadequate or lack of research facilities and library resources and other logistics to support research; and vi) the conduct of research by students merely to comply with school requirements.

Even as higher education research is plagued with the above-mentioned problems, it is aimed at i) pushing the frontiers of knowledge across all the identified higher education disciplines in the country; ii) enhancing instruction through original contributions in specialized disciplines thereby encouraging students to become creative, innovative and productive individuals; and iii) developing unifying theories or models which can be translated into mature technologies for the purpose of improving the quality of life of the Filipinos within the sphere of influence of the academic institutions in the country (*The National Higher Education Research Agenda, 1998-2007*). Moreover, principles of multidisciplinary, policy-orientation, operationalization, and participation and broad impact were used to come up with the National Higher Education Research Agenda (NHERA). Priority thrusts in research and research areas were also developed and then categorized based on discipline and other research emphases. Examples of prioritized research areas according to discipline are i) Multidisciplinary research aimed to advance the frontiers of science and mathematics; ii) Research on product development in industrial technology cluster; iii) Breakthrough and pioneering researches in the information technology discipline; iv) Peace and development studies with direct application to Philippine situations in the field of humanities, social science and communication; and v) multidisciplinary research on health and health-related disciplines leading to better quality of life for Filipinos and the delivery of basic health services to the rural areas for the Health and Health Related Discipline.

**Employment Status.** The Region's employment condition could be viewed in three aspects: i) Employment Preservation; ii) Employment Facilitation; and iii) Employment Generation.

Generally, in the employment preservation division the number of initiatives conducted or assisted to prevent disputes decreased. For instance the number of seminars/training and dialogues or symposia conducted on labor education in 2003 decreased as compared to 2002. Collective bargaining agreements also registered a decrease of 29 percent – 12 CBAs in 2003 to 17 in 2002. Still the Region is fortunate because even in this state the cases on med-arbitration and money claims decreased. This could be accorded to the increase of labor unions in the Region. It is noteworthy, that the members of these unions have extensively utilized the Workers Organization and Development Program (WODP) created by DOLE.

For the past years DOLE 10 had been providing career and employment guidance counseling for students in the Region. For 2003, the number of students seeking this service has slightly decreased as compared to the number in the previous year. Programs that assisted placement of students and job applicants in different firms, such as the Public Employment Service Office (PESO) and the Work Appreciation Program (WAP), also displayed decreases in the number of applicants and students, respectively, placed in various establishments. This is a clear consequence of the fact that as of the year 2003 the number of job vacancies solicited went down by 13 percent – 34, 957 in 2002 to 30,379 in 2003.

In order to generate employment with equality, DOLE 10 had included capacity building for specific sectors, such as those who are differently-abled and working students. Of the 6,520 students registered during the summer and December of 2003 under the Special Program for the Employment of Students (SPES) 99 percent were placed in various private and government agencies. Not only that, one livelihood project for Goat Dispersal & Dairy Production was approved in a specific municipality of Misamis Oriental and the number of livelihood assistance accorded to differently-abled individuals increased by 50 percent - from 10 livelihood assistanceships in 2002 to 15 in 2003.

However, even as livelihood support for the differently-abled individuals and the number of placed students under the SPES increased, there were still very few of the differently-abled individuals who were accepted in establishments, and only one project was established benefiting 35 working youths and generating the same number of jobs. Reluctance to participate in the capacity-building program was the reason why differently-abled individuals were less fortunate in being accepted to establishments. A meager budget, resulting to the formation of only two working youth centers, on the other hand, was the explanation for the single project produced.

Taking a look at the employment status in the region, it would only be logical to check its standard setting and enforcement programs. Gathered from a review of secondary data from DOLE 10, it was revealed that as of 2003 there was a decrease of about 22 percent in the inspection of establishments in the region and whether they were enforcing the general labor standards. Technical assistance was also slightly lower as compared to 2002. Nonetheless, the number of units inspected to be without violations in terms of technical safety standards has increased as compared to 2002.

**Social Welfare Services.** There are several vulnerable groups in the region that are beset with different challenges. For the farmers and fisherfolks, they are faced with problems on low productivity and low income. Opportunities available to them are very limited due to environmental predicaments and inadequate support systems. The workers in the informal sectors are somehow in this state too. Their jobs are considered as easy to land in with but

are less productive and less compensatory. More so, these workers are usually situated in establishments that are not in favor of organized labor groups and somehow are not enforcing proper labor laws.

Poor Muslim communities as well as those who live in urban and rural poor communities, all experience poor living conditions characterized by deprivation of basic socio economic services, credit and other financing sources, and participation in any local development process. Specific concern for those in poor Muslim communities is that they have distinct culture and religious beliefs which somehow requires modification in the delivery of basic services (e.g. health services).

Women and children in difficult circumstances also require specialized services to address their needs. Child labor in Mindanao was quite alarming after registering at 294,000 in 2001. Poverty could be identified as the main cause of this occurrence, but other complicated factors contributed to this too. The number of youth offenders and children in need of special protection (CNSP) in Region 10 had also been increasing. There is now a push for the improvement and strengthening of CNSP services as well as the coming up of concerted efforts to study a number of issues related to youth and children in difficult circumstances.

Women, on the one hand, have members in their sector who have limited opportunities to participate in community development. They are victims of violence, and have limited access to information and services. These women are usually characterized as having low income, low literacy and poor health.

Other vulnerable groups which necessitate special attention are the persons who are differently-abled and the senior citizens/elderly. For the former, they are continuously faced with challenges such as i) discrimination in employment; ii) slow implementation of Batas Pambansa 344 or Accessibility Law; iii) limited database for persons who are differently-abled; iv) exclusion in the Socialized Housing Program; and v) lack of protection. The senior citizens at the same time are contraposed with difficulties in availing of discounts for medicines and transportation privileges. The unstable income and livelihood that they have as well as the limited rehabilitative services and facilities available for them, hamper not only their health needs but their living condition in general.

One of the social services accorded to the lower income groups in the region is housing. It is worth noting that around 82 percent of the 11,552 total units generated for the period 2001-2003 was for social housing. As stated in the Regional Development Plan of the Region, this proportion is way above the 76 percent of the planned target. But despite this accomplishment, the socialized housing backlog in the Region remains large. This could be partially attributed to the influx of informal settlers in the urban centers.

Access to Early Childhood Care and Development (ECCD) Services is another social welfare service made obtainable in order to provide the children the best start in life. This is made possible through ensuring their good health and proper nutrition, protection/security and early learning. Nevertheless, it was observed that availment of ECCD services in the region is scarce and even absent in some remote barangays. Quality ECCD services in the Region still remains a challenge, especially that parents and guardians have very limited involvement in the provision of these services.

**Indigenous Peoples.** In terms of their ancestral domains and lands, the general picture is that an increasing number of indigenous peoples' communities are being dislocated from their ancestral domains. This is due mainly to the following: 1) intrusion of large development projects that overlap with existing and/or potential claims of property rights; and 2) existing conflict in the implementation of policies on land tenure and resource

use. Self-governance among this group means that they should be included and recognized in the mainstream society's mechanisms for participation, but still their traditional political organizations and structures should be continuously strengthened. Another challenge facing this group is that their knowledge systems and practices have not been fully documented. As much as they want to cope with the fast-changing world around them, they find it difficult, as their culture, traditions and institutions are eroded.

Basic services provided to this group are also in question. Since most of the IPs are located in the remotest rural areas, they are somehow excluded from developmental program designs and the delivery of basic services. Even if there are basic services that reach them, these services are not attuned to the indigenous peoples' culture and beliefs.

**Health System.** To provide a background of the health condition in Northern Mindanao, it can begin by disclosing that much work needs to be done to improve health access by poor and vulnerable groups that are living in remote and underserved areas. Threats of emerging and life-style related diseases are prevalent in the region that is why provision of quality health and nutrition programs, especially to the impoverished and vulnerable groups, is a must.

The *Gamot na Mabisa at Abot Kaya* (GMA 50) Program as well as the Parallel Drug Importation Program (PDIP) also has its shortcomings. For the former, it is not yet widely available because of limited hospital budget. The latter program, alternatively, still needs to be expanded so as to include medical supplies which are not affordable by the poor.

Reproductive health services have particular concerns too. The prevalence of the use of contraceptives in the region has remained at only 55 percent. To further aggravate this situation, the USAID has already started phasing out its programs of contraceptive provision in 2004. There is really a need for LGUs to create mechanisms that would continue the assistance provided by foreign donors to effectively advance the population program.

Although the health sector is faced with various challenges, generally, there have really been improvements in the overall health situation in the region. For instance, the insurance coverage in Northern Mindanao as of September 2004, was reported by Philhealth to have reached a total of 967,455 members or 88 percent of total targeted population. The nutrition situation, likewise, showed slight progress among pre-school children and school children. Partially, these results could be attributed to Region 10's implementation of the Health Sector Reform Agenda (HSRA) over the past years.

The following is just a presentation of some of the health features in Northern Mindanao, since a more detailed discussion on the region's health status will be presented in the "*Overview of the Health Situation*" section.

### **C. Where is Northern Mindanao heading?**

Generally speaking, all regions in the country are confronted with problems specific to their environment, culture and assets on hand. Relative to the situationer presented above, Region 10 has created development strategies until the year 2010.

**Job creation and economic growth.** The region planned to create jobs and promote economic advancement in the following areas: i) agriculture and fisheries; ii) micro, small and medium enterprise; iii) exports; iv) tourism; v) mining; and vi) information and communication technology (ICT).

Beginning with agriculture and fisheries, an estimated 230,000 jobs by 2010 is projected to be produced in this sector. In order to achieve this, Northern Mindanao shall develop around 188,000 hectares of agri-business lands along with the i) intensification of

land use for both under-irrigated areas and uplands to increase productivity level; ii) recommendation of measures for increasing livestock and poultry production; iii) promotion of agri-business and agro-forestry development, and entrepreneurial and investment promotion in community-based forest management (CBFM) areas; and the iv) continuation of the asset reform strategy pursued by the Macapagal-Arroyo administration to guide the provision of incentives to expedite completion of land acquisition, distribution, and leasehold operations. Fishery development, on the other hand, shall be attained through i) organizing and strengthening of fishermen groups' involvement in cooperative deep-sea fishing, to allow exploration of farther and richer fishing grounds; ii) promoting primary and secondary processing of seaweeds, particularly in the Panguil ang Gingoog Bays; and iii) providing assistance in the form of collective ownership, management and risk-taking in order to acquire more modern fishing equipment, assurance of a year-round fishing, and longer, safer and faster sea travel, among others.

Development of the micro, small and medium enterprises in Northern Mindanao would be seen through supporting around 40,000 existing business establishments and producing some 10,000 new entrepreneurs or enterprises. Not only that, Region 10 shall likewise extend some Php 630 million worth of financial assistance to this sector at the end of the plan period.

The next sector in which economic growth will be promoted is on export development and promotion. For the next six years, Region 10 shall strive to reach about US\$3.5 million worth of export earnings by utilizing the industry clustering approach as a development strategy, strengthen marketing linkages with existing major markets as well as emerging markets, assist MSMEs in developing new export products, and continue the diffusion of appropriate technologies and best practices to MSMEs.

The tourism industry also expects at least 3.3 million visitors to come into the region during the plan period. This influx of tourists in the region is foreseen to boost the competitiveness of the industry to generate jobs and accelerate countryside development. For this goal to be realized, Northern Mindanao would, among others, i) develop more tourism destinations and attractions; ii) restore and preserve historical sites and landmarks that highlight the communities' identity and history; iii) undertake partnership with the private sector and media in terms of marketing promotion and product development; and iv) encourage the private sector to invest in the development of identified tourist attractions and provide support facilities.

Economic growth in the mining industry is, in addition, viewed by Region 10 too. The reversal of the Supreme Court of its ruling on several provisions of the 1995 Mining Act (RA 7942) and the full implementation of the National Agenda on Revitalizing Mining in the Philippines will consequently lead to the creation of some 100 livelihood projects that will benefit the 13 mining communities present in the region. Moreover, there will still be continuous monitoring of existing mining activities in Northern Mindanao that are not otherwise restrained by the Supreme Court ruling. This is to ensure that their operations are in compliance to the provisions of RA 7942.

As a final point, job creation and economic growth would never be complete without the development of the ICT sector. Modestly, Northern Mindanao is envisioning the establishment of two call centers and the formation of an ICT cluster to come up with an ICT Development Plan. To further promote the region as a favorable destination for ICT investments, capacity-building activities on systems and website development, global standard setting, and other technical trainings/seminars shall be pursued to raise the level of ICT awareness, among others. The Multi-purpose Community Tele-Centers (MCTs) will also be continuously supported to demonstrate the utility of ICT even in rural areas.

**Social Development and Direct Anti-Poverty Measures.** The region had already made developments in improving the availability of basic social services including education, health, water and sanitation facilities, housing, and electricity. But still, the regional development plan for 2004-2010 reported that there is still chronic deprivation and limited access to such basic services by those families in the lowest income groups. So to fight these indicators of poverty, Northern Mindanao shall i) increase elementary and secondary participation rate from 83 percent to 87 percent and 52 percent to 59 percent, respectively; ii) construct a total of 1,200 classrooms by the end of the plan period to bridge the gap in classroom supply and needs; iii) reduce infant mortality rate from nine percent as of 2003 to eight percent by 2010; iv) raise the number of households with sanitary toilets (from 72 percent in 2003 to 85 percent in 2010); v) ensure that all households have access to potable water; and vi) expand housing assistance to cover at least 30 percent of the total housing needs of the population.

Since six of the Millenium Development Goals in Region 10 are health related and poverty encompasses health-related concerns, the following are the region's health-related priority policies and programs:

- Maternal and Child Care Program
- Expanded Program on Immunization
- Control of Diarrheal Diseases Program
- Nutrition Program
- Environmental Health Services (Safe Water and Sanitation)
- AIDS/STD Prevention and Control Program
- Program on the enforcement of anti-tobacco control and healthy lifestyle activities
- Control of Acute Respiratory Infections
- Dengue Prevention and Control Program
- Diabetes Control Program
- Herbal and Traditional Medicine
- Greater Medicare Access (GMA) 50 Program
- Malaria Prevention and Control Program
- Family Planning Program
- National Health Insurance Program; and
- Standard Regulation Licensing and Enforcement

**Development Dispersal.** Comments have been made that most of the economic development in Northern Mindanao have been greatly concentrated in the regional capital, Cagayan de Oro City. With the intention of providing balanced development in the whole Region 10, the polycentric development strategy and corridor development strategy were taken on to provide the overall direction for economic growth of the region. The Polycentric Development Strategy involves the development of more strategic centers throughout the region which would influence the growth in their respective areas of influence (Northern Mindanao Regional Development Plan, 2004). The Corridor Development Strategy, on the other hand, encourages the dispersal of development especially in locations suitable for agri-industrial development, through the increase in industrial corridors. Therefore, aside from the Cagayan de Oro-Iligan Development Corridor, expansions are expected along Eastern Misamis Oriental, Tangub-Oroquieta and Cagayan de Oro-Bukidnon.

Aside from these two strategies, sub-regional roles are now assigned to each of the five provinces composing the region. In assigning these roles, the unique features and physical endowments of the component areas were taken into consideration. Bukidnon to start with, will become Northern Mindanao's "food basket," due to having the biggest agricultural area with soils and climate highly suited to agriculture. Malaybalay and Valencia

City serve as the main centers that will drive development of the province in the immediate period, but Maramag is expected to spur development in the southern part of the province.

For Camiguin, it is envisioned to be Region 10's "tourism haven" due to its natural beauty, unpolluted beaches, cold and hot lagoons and springs. More than that, its rich aquamarine resources could be utilized for livelihood and recreation. Even if the island is constrained in agricultural and industry-based resources, it will capitalize on its rich tourism resources and market itself.

Lanao del Norte, the new addition to the provinces encompassing the region, will be promoted as an "agri-industrial center and eco-tourism destination." In order to support this effort, the Metro-Iligan Regional Agri-Industrial Center (MIRAIC) in the municipality of Linamon will be established.

For Misamis Occidental, it shall continue to be the major source of fishery and aquamarine products. It will also capitalize on its rich eco-tourism potentials especially the Mt. Malindang Range (NEDA 2004). Other than that highland agricultural development shall be encouraged along this range too.

Misamis Oriental will continue to be the "industrial and trade center" of the region. While the western side of the province constitutes half of the Cagayan de Oro-Iligan Development Corridor, the eastern side of the province will also be given special attention (NEDA 2004).

**Improved Infrastructure.** The region has made several infrastructure targets. The first is to energize all barangays by 2008. Policies and strategies that will be implemented, such as the promotion of environmentally friendly technologies and power stability-and reliability-enhancing transmission related projects, will help ensure the accomplishment of this target. The second aim is to attain 894.4 megawatts of additional power generation capacity for Northern Mindanao. Once more, this direction could only be followed if supporting policies that reasonably balance the interest of the private energy industry players and of other stakeholders, among others will be implemented and heeded.

The improvement of existing seaports in the region is another infrastructure target for the years 2004-2010. Improvements will be done by i) considering the development of base and alternate ports in response to the growth in cargo and passenger traffic not only in the base ports of Cagayan de Oro, Iligan and Ozamis cities, but also in the terminal ports in the region; ii) encouraging the development of the ports of Balingoan, Benoni, and Guinsiliban; iii) facilitating private sector participation via Build-Operate-Transfer (BOT) schemes; and iv) encouraging all sectors to provide their institutional support for the full operation of the Mindanao Container Terminal at the PHIVIDEC Industrial Estate.

In order to address rice sufficiency in the region, additional irrigation facilities and rehabilitation of existing irrigation systems is targeted. It shall be executed to irrigate an additional of 37,000 hectares of land in Northern Mindanao.

Moreover, funding for the Laguindingan International Airport, Panguil Bay Bridge, East-West Lateral Road, Alae-Phividec Road and the Misamis Oriental-Bukidnon-Agusan Road shall be pursued, not only to keep pace with the demands of providing adequate, reliable and efficient physical infrastructure support facilities and utilities to the populace of Northern Mindanao, but also to boost economic and commercial activities in Northern Mindanao.

**Promotion of Good Governance and Peace and Order.** Effective and efficient LGUs play a crucial role in the development of the region. The series of FGDs conducted by

Sangga Kagay-anon last 2004, revealed that good governance is not only a contributor to the peace and order situation of Northern Mindanao but also to its holistic development as a region. Thus, to advance good governance in Northern Mindanao, first and foremost, support should be given to the restructuring and streamlining of government. Support shall be discharged by improving the quality and efficiency of government services delivery and harnessing ICT to promote efficiency in the delivery of services. Then, capabilities to further professionalize the civil service shall be enhanced. This will be fulfilled by establishing a capability program and strictly implementing HRD plans, among others.

Other strategies planned to promote good governance and peace and order in the region are: i) improvement of the capacities of LGUs in resource mobilization; ii) strengthening of capacities of stakeholders to network and share expertise; and iii) improvement of disaster preparedness and quick response (NEDA 2004).

All of the enumerated plans are partially based on the comparative advantages that Northern Mindanao enjoys. First, it is strategically located. It means that Northern Mindanao is accessible to all regions in Mindanao through its road network and the transport link between the regional centers in Visayas and Luzon. The region is also situated outside the typhoon belt and has a climate favorable to agriculture and industrial activities. Second, Northern Mindanao is blessed with skilled and productive men and women. Its functional literacy rate for SY 2004-2005 is 95 percent. In addition, there are almost 70 HEIs, which continue to educate its population.

The fertile soil which is highly suited to agriculture and the rich aquamarine resources is another great advantage that Northern Mindanao benefits from. The region serves as one of the top exporters of crude coconut oil, canned pineapple products, fatty alcohol, and fresh/frozen shrimps. Other than that, the availability of abundant resources for hydro-electric power, the substantial industrial capital, the presence of service and financial establishments and the generally secure, orderly and peaceful environment that Northern Mindanao possesses, are just some of the other comparative advantages that the region enjoys.

Together with some guiding policies, Northern Mindanao is aiming to become the leading industrial and trade center in Mindanao with vibrant, skilled and productive men and women enjoying equal opportunities in harnessing the potentials and resources in building a decent, peaceful and healthful living environment.

#### **OVERVIEW OF THE HEALTH SITUATION/ CURRENT HEALTH PROBLEMS**

A person's health status would somehow tell if he or she is generally in good condition. This holds true to a certain community - healthy people comprise a progressive community, or the other way around. It is therefore necessary to check the health condition of the society.

This section will discuss the health situation in Northern Mindanao. It will be divided into specific subsections that will relate the health condition in the region, namely: 1) highlights on fertility and mortality rate; 2) leading cause of morbidity and mortality; 3) status of potable water and toilet facilities ; 4) health facilities and Botika sa Barangay; 5) health care financing; 6) health regulations and 7) current health problems.

#### **Highlights on Fertility and Mortality Rate**

Diseases like dengue, acute respiratory infection (ARI), and malaria are endemic in the region. Although these diseases are not the leading causes of death, their prevalence contribute to the increase of the crude death rate (CDR) - from 3.89 to 7.79 per 100,000 populations. For instance in the province of Misamis Oriental, a total of 744 cases of dengue hemorrhagic fever was noted last September 2004. Meanwhile, the province of Lanao del Norte has the lowest CDR while Camiguin province has the highest. Despite the fact that

Lanao del Norte has the lowest CDR, there are still four municipalities in the province that are endemic with the above mentioned diseases.

Remarkably, the crude birth rate (CBR) is decreasing from 23.14 to 10.35 per 100,000 of the population. The province of Misamis Oriental has the lowest CBR of 38.17 per 10,000 population all over the region. This is probably because of the Family Planning Program which is successfully conducted and implemented among various cities and municipalities in the region. To note, the Contraceptive Prevalence Rate (CPR) of Lanao Del Norte is increasing. There is a significant increase of 120% for the new acceptors and 140% for the current users. The same thing goes for Misamis Oriental. More couples are adopting methods of controlling and birth spacing. This just signifies the effectiveness of the program and the high level of awareness and acceptability of family planning program.

On one hand, other factors that contribute to the decrease of the CBR is the support from LGUs; technical and financial assistance from the Center for Health and Development 10 (CHD 10); the linkages among GOs and NGOs; Women's Health & Safe Motherhood partnership; and the skills and knowledge of the health workers.

On the other hand, infant mortality is increasing from 8.14 to 11.62. One of the major causes of this is malnutrition resulting from poverty and poor health practices, which includes the absence of sanitary toilets and potable water supply. This could be illustrated by the decline of nutritional status among children in Misamis Oriental and intestinal parasitism in Bukidnon. Likewise, Camiguin province has the highest infant mortality rate (IMR) of 22.74 while the lowest is that of the province of Lanao del Norte. Other factors which caused the increase of IMR, as well as one of the reasons of maternal death, are the high percentage of pregnant women who delivered at home. There is a need to be cautious. As mentioned by a UNICEF representative, death reporting has improved because of the on-going UNICEF project that sees to it that maternal deaths will be reported.

The percentage of normal nutritional status of children is increasing from 68.73 to 76.35 percent. The Early Childhood Development Care Program in Misamis Oriental is also seen to help lower infant mortality rate in the coming years.

The call for full immunization coverage among infants to be carried out to help prevent pneumonia, and the increased Vitamin A coverage for disease prevention and increase of body resistance to infection is still needed.

Maternal mortality rate (MMR) is also increasing from 0.91 to 21.33 percent. This is due to a high rate of pregnant women who opt to give birth at home. In Bukidnon, for instance, there are 89% deliveries that were administered at home while only 10 percent were in the hospitals. Untrained hilots which are starting to become visible especially in far flung areas is another explanation for this increase. Despite awareness of the risk in delivering the baby at home more mothers still preferred home delivery because of poverty, inability to pay the hospital fees, and geographical location. The flock of teenage pregnancies is another contributor to the increase of maternal death. Deliveries are prone to risk since the pregnant women are still very young. In Misamis Oriental for example, 35.26 percent of this young pregnant women are at risk in their pregnancy. Other than that, there are also some cases in which teenage pregnant women and unwed pregnant women do not undergo pre-natal check-up.

Moreover, Valencia City in Bukidnon registered the highest CBR and the lowest IMR across the region, while Malababay City, another city in the province of Bukidnon, has the highest MMR. Oroquieta City, Ozamiz City, Tangub City and Valencia City, on the other hand, have zero rate of MMR.

### **Leading Cause of Morbidity and Mortality**

The highest leading cause of sickness in Region 10 is ARI with a rate of 2,500 cases for every 100,000 population. This is distantly followed by Bronchitis with a rough estimate of 1,400 cases for every 100,000 population. The third cause of morbidity in the region is Pneumonia with 1000 case per 100,000 populations. Nonetheless, it is also important to note that although these are not in the picture of the ten leading disease in the region, dengue hemorrhagic fever and malaria cases are also prevalent and are major health problems in some areas in the region. Misamis Oriental for instance was reported to have a total of 744 cases of dengue hemorrhagic fever, as of September 2004. Alarmed by this rising number of cases, the Provincial Health Office of Misamis Oriental created a Dengue Task Force with the aim to reduce morbidity and mortality incidence of the disease. This was done through health education and advocacy in removing mosquito breeding places through sanitation within the household, in school and in public places. The province of Bukidnon on the other hand, is endemic of malaria, dengue, filariasis and other mosquito-borne diseases. Malaria was pronounced to be rampant in the southern municipalities of Bukidnon province for the past years already. The CHD 10 is already providing for free the services needed for the prevention and control and treatment of malaria in Bukidnon. Global Fund Malaria Component (GFMC) under the Philippine Rural Reconstruction Movement (PRRM) has also launched its assistance for malaria control during the year. They hired malaria workers as community organizers assigned in 19 municipalities and one city in the region to do malaria prevention activities. This activity was also done in other provinces in the region.

Disease of the circulatory system is the topmost leading cause of death in Region 10. There are 101.63 cases of deaths for every 100,000 population. Pneumonia comes in second as for every 100,000 people there are 47.98 cases of pneumonia. Malignancy ranked third with a percentage of 38.72 per 100,000 population. Deaths are attributed to various factors, which include unhealthy lifestyle such as unhealthy habits of eating, lack of exercise, too much intake of alcohol, smoking and vehicular accidents. On the other hand, pneumonia is the top most leading cause of death among infants. It has a rate of 1.09 per 100,000 populations and has a five-year average of 2.2. Furthermore, the top three leading causes of maternal mortality is post partum hemorrhage, other complication in pregnancy and hypertension in pregnancy, respectively.

### **Status of Potable Water and Toilet Facilities**

All areas in Northern Mindanao have high percentage of household with potable water (98.19 percent). In the province of Misamis Oriental, the percentage of households with safe water supply has increased from 95.88 percent to 99.24 percent. This is due to the many waterworks projects done at the LGU level in trying to cope up with the demands of the community for a safe water supply.

In addition, most households in region 10 own sanitized toilets. For the whole region there are 64.90 percent of households who have sanitized toilet. Only a small percentage (7.46 percent) of households in the region does not have toilets.

Among the provinces of Region 10, Lanao del Norte and Bukidnon have high rates of unsanitized toilets. In Lanao Del Norte, the rate is 52.95 percent while Bukidnon registered 68.15 percent. Among the cities, Ozamiz city has the highest rate of households who do not have toilets. There are about 13.17 percent of household in this city who still do not have toilets. Cagayan de Oro city comes in next as 10.91 percent of its households still do not have toilets of their own.

### **Health Facilities and Botica ng Barangay**

The presence of hospitals and clinics in a certain municipality or city is one indicator of the health status of the area, itself. In Northern Mindanao every province has a secondary level hospital. Bukidnon has seven provincial and two national government-operated

hospitals. A 100-bed capacity hospital located in Malaybalay City is the only secondary level provincial government hospital in the whole province and the second level referral hospital of the ten southern municipalities under the South District Inter-Local Health Zone (ILHZ). This hospital serves as the Core Referral hospital of the four municipalities and two cities in the central district of the province under the ILHZ. There are also about 64 private hospitals or clinics operating in the province. However, considering this number of health facilities, Bukidnon still has four municipalities that do not have a government nor a private hospital or clinic.

In the meantime, the province of Lanao del Norte has six government hospitals located in the coastal areas. It has one provincial hospital, three district hospitals and two municipal hospitals funded by the provincial government.

The Provincial Government of Misamis Oriental has recently upgraded their public hospitals in terms of infrastructure and standards of the Department of Health and PhilHealth for accreditation. They also hired competent staff to fill in vacant positions in order to serve better their constituents.

*Botika sa Barangay* and GMA 50 *Botika* are also operating in various cities and municipalities in the region. The Province of Misamis Oriental has the biggest coverage of Botica sa Barangay in Region 10. There are 62 *botika sa barangay* situated in various areas in the province. This is followed by the Province of Bukidnon which has 57 *botika sa barangay*. Other than that there are 11 GMA 50 *Botika* operating in four provinces. These are either located in the hospital or somewhere near the hospital.

Aside from these *botika sa barangay*, the province of Misamis Oriental, initiated a program called, "Tabang Medico" headed by the Provincial Health Office. This program enables the constituents to avail of free medical and dental services at a scheduled date. The activity includes, minor consultations and operations including cyst excision, operation tuli (circumcision), free x-rays, ECG, and dental services.

### **Health Care Financing**

Misamis Oriental, Misamis Occidental and Bukidnon Province were able to reach beyond their desired coverage for health care financing. The provinces find it helpful to enroll their constituents in the Philippine Health Insurance Corporation 10 (PhilHealth 10) that is why the provincial government of Misamis Oriental gladly supported the indigency program by conducting a validation of indigent families. As a result, a total of 82,000 families all over Misamis Oriental was enrolled.

In line with this is the Provincial Indigency Health Program of the Province of Bukidnon. This is a local health insurance program which was launched in February 2002 and is anchored on Bukidnon's Health System. This program enables the enrollees to have unlimited access to out-patient services in the PHS and BPH, from basic diagnostic tests to medicines. They also enjoy totally free hospitalization in their provincial hospitals, including subsidy on bills not allowed by PHIC. This best practice by the provincial government of Bukidnon is suggested for replication to other cities and municipalities in order to attain better health condition in the whole region.

Camiguin and Lanao del Norte have reach only 31 and 33 percent, respectively, of their coverage. Among the cities, Cagayan de Oro got the lowest percentage of coverage for health care financing all over the region. As what the CPD officer explained, the LGU in the city is giving much attention and budget to the upgrading of the city hospital to cater more people belonging in the poverty threshold. The budget which is supposedly allocated for the health care financing was used to improved health services in the hospital.

## **Health Regulations**

An interview with Dr Simer Belacho, the Officer-in-Charge of the Regulations, Licensing, Enforcement Division (RLED) of CHD 10, and Ms. Bobbie Aportadera, Food and Drug Regulation Officer III, revealed that there were not much problems with regard to the issuing and renewing of license among the hospitals in the region. They both stated that hospitals really make it a point to follow the standards set based on the level they are in. Renewing of license was not a problem too because they make sure that they upgrade or check their equipment and procedures to get a renewal. Dr. Belacho said that as of this year there were no hospitals that were revoked of their license because they complied with the set standards.

Deficiencies come in the food and drug regulation. Ms. Aportadera strongly expressed that in the region those who go into the food manufacturing business are not so aware of the regulatory functions that they should perform. Those who are in the business without knowing about the enterprise tend not to practice the appropriate ways in doing the business. One example is making processed juices. The manufacturer must see to it that the equipment that they are using are calibrated and are appropriately assembled to perform the task it is brought for. Ms. Aportadera cited that there are instances that, aside from non-quality raw materials used, there are equipment and facilities that do not pass the required standards. There might be some portion of the containers which are not properly put together making it a possible entrance for bacteria and other microorganisms. Ms. Aportadera encourage that these small-scale food manufacturers should develop standardized procedures of their own as to how to operate with efficiency and safety.

Drug regulation was not spared from flaws too. Ms. Aportadera admitted that since the ownership and operation of drugstores became a free enterprise, majority of the community drugstores in Cagayan de Oro are not owned by pharmacists. To address problems that may arise from this condition, it was agreed in RA 5921 that a drugstore could operate given that it has hired its own pharmacist. However, this year Ms. Aportadera reported that three pharmacies in Misamis Oriental were given a cease and desist order due to absence of a pharmacist and operating without any license to operate.

The fight against counterfeit drugs is an ongoing battle for the region. Counterfeit drugs include those unregistered drugs, unregistered drugs with local equivalent, and substandard drugs. One of the three drugstores mentioned above was ordered to temporarily close because of the presence of counterfeit drugs. Ms. Aportadera emphasized that the presence of just a single tablet or capsule of a counterfeit drug, this would already serve as a ground for temporary closure. Luckily, this year saw a decrease of drugstores being closed for the enumerated reasons, compared to the previous last year. The frequent monitoring made this achievement possible.

## **Current Health Problems**

Several health problems were raised by the provincial governments in the region. To start with, it was discouraging to note that despite the efforts of the service providers and the many maternal death reviews conducted, still the maternal deaths increased. During one of the maternal death reviews, it was found out that the most high-risk pregnant women were advised by the midwives to really have the hospital delivery. However, they reject this advice and are willing to take the risk of dying for reason of poverty. These women expressed that they could not afford the hospital bills and the traveling expenses if they will have a hospital delivery. Mothers are already aware of the risks but financial constraints were the most common factor for the rejection of the proper care. Second, pneumonia is still the number one killer in infants, followed by pre maturity, and septicemia. A large portion of diseases is attributed to unhealthy pregnancy.

Province-specific, Bukidnon is faced with problems on standard setting using the International Classification of Diseases (ICD). This could be due to a fact that some doctors do not have an ICD book in their hospital or clinic which is supposed to be a requirement by the licensing division of the CHD 10. Disease-wise, Bronchitis cases in the province still remain number one for so many years already. Another health predicament encountered in the province is that a high percentage of households is not guaranteed that their water sources are all safe from bacteria all the time. Thus the use of commercial mineral or purified water has become very popular. But sad to note, only those families with above average family income can afford to avail of such safe water. In terms of the anti-fraud campaign launched by PhilHealth 10, it is surprising that the province with a unique indigency program has a number of hospitals with licenses revoked due to cases of fraud.

In the province of Lanao del Norte rabies still remains a major health problem since dog bites ranked highest among that of any other animal. Most victims of dog bites are poor and cannot afford to buy vaccines. Even if CHD 10 and some municipalities in the province would provide assistance to the victims the limited supply of vaccines due to its high cost of vaccines limits the number of recipients. Some municipalities had already implemented laws for responsible pet ownership, especially for safekeeping of dogs to prevent dog bites in their locality. Yet, enforcement of the law in this aspect is unstable. Dog vaccination was also done in the province, still some pet owners do not submit their dogs for vaccination.

On the other hand, the province of Misamis Oriental is now experiencing the scarcity and delayed arrival of contraceptive supplies with the phasing out of USAID support. The LGUs should give due attention to include contraceptive procurement in their procurement plan in order to make the family planning program in the region successful.

Moreover, there is a need to conduct feeding activities to identified malnourished children especially those belonging to the very-low-weight group. Aside from that there is a need to buy more weighing scales to replace unusable ones and repair for those that can still be restored.

#### **Status of Health Researches/ Resources in the Area**

From the interviews conducted among the Provincial Planning and Development Coordinators, Provincial Health Officers and a few national line agencies' representatives, the LGUs do not initiate researches but only identify the site where the regional office could conduct such research interventions. Among the NLAs, they admitted that their respective central offices are still in charge of creating their research agenda which will then be materialized into a study either by those in the regional offices or the central offices as well. DA and DENR 10 were able to provide for a number of the researches that they have recently conducted. They claimed that somehow it has an effect on the health status of the region.

Aside from these, several of the academic institutions in the region also have their own staff which go into health research. Xavier University-Ateneo de Cagayan, the only autonomous HEI in Northern Mindanao, has the Dr. Jose P. Rizal College of Medicine and Research Institute for Mindanao Culture (RIMCU) doing these studies. Capitol University (CU) and Liceo de Cagayan University (LDCU), two of the deregulated HEIs in Region 10, also have research and development extension offices to cater to these studies. State universities, such as Mindanao Polytechnic State College (MPSC), MSU-Iligan Institute of Technology, MSU-Naawan, and Central Mindanao University in Bukidnon, are also into several researches that have an impact on the health condition of the region.

To enumerate some health researches undergone by each institution, we begin with that of the Dr. Jose P. Rizal College of Medicine of Xavier University. In their research development plan for 2000-2005, it was stated that the unit hopes to become a research

center in health and medicine in the region. It developed its research agenda based on identified gaps in community research, basic science research, clinical research, and herbal medicines research, among others. In these topics, several specific areas were given attention. For community research, focus was directed on three spheres and these are: 1) impact of indigenous methods of treatment and diagnosis on common health problems in the community; 2) methods of prevention of common diseases in the community; and 3) baseline information on various health and health-related issues. Basic science research centered on gross anatomy, biochemistry, histology, and microbiology, among others, while clinical research on the top causes of morbidity and mortality in Region 10 aimed its study on prevention and disease patterns, recognition/diagnosis, and treatment/management. For herbal medicine research, attention was set on preparation and dosaging, among others.

Considering the amount and extent of research they are in and will be, Dr. JP Rizal College of Medicine has five committees to look into the research proposals coming from its students and faculty. These are the: 1) Technical review committee, which is commissioned to review all aspects of the research proposals (except for ethical considerations); 2) Ethics review committee, to do the review of research proposals in terms of ethical considerations; 3) Finance committee, that has the main task of looking into the possibility of tapping funding agencies for the various research proposals of the College ; 4) Publication Committee, with the primary function of editing all completed researches for purposes of publication in the College Journal; and 5) Training committee, which would conduct training for faculty and students with regard to research. Together with the committees and its Research Unit Head, the research entity of Dr. JP Rizal College of Medicine will promote and coordinate research activities within the College, develop the research capabilities of its faculty and students, and establish linkages with affiliate institutions regarding research activities. *(Dr. Jose P. Rizal College of Medicine Research Development Plan 2000-2005)*

The Research Institute for Mindanao Culture (RIMCU) was founded in 1957 to concentrate mainly on researches in the fields of demography, anthropology, economics, history, and political science. But for about 50 years since its founding, more than 400 research projects have already been successfully completed by the institution, including topics on health, nutrition, medical and epidemiology research as well as those which involve women. Aside from the researches it has conducted, the office has several monographs on health such as: 1) Women for Peace: A Study on the Impact of Armed Conflict Among the Women in Mindanao; 2) Health and Survival of the Urban Poor of Cagayan de Oro City, Philippines; 3) Rural Mother's Management of ARI in the Northern Mindanao Region; 4) Health Care Financing for the Rural Poor; and 5) Child Labor in Northern Mindanao, Philippines *(RIMCU Brochure)*

At present, RIMCU has around eight research associates, including the Director, who are mostly into the field of social science (demography, sociology, anthropology). Most, if not all of these research associates, has been and continue to be into health research. To name some of the health researches undergone by the research associates *(See Annex A)*:

- Pilot study on the Dissemination of the Standard Days Method (SDM) of Family Planning
- Conflict Situation: Its Consequences on Reproductive Health and Rights
- An Assessment of Reproductive Health Services: Its Responsiveness to Adolescents' Needs in Selected Communities in Region 10
- Looking Into the Adolescents Reproductive Health and Risk Behavior in Selected Communities of Region 10.
- The Social Acceptance Project – Family Planning in the Autonomous Region of Muslim Mindanao
- A Study on “Priority Disease Control Programs: Who Decides? Who

Implements? Who Benefits?

- Evaluating the Introduction of the Standard Days Method of Family Planning into the Family Planning Program of the City of Malaybalay
- A Study on Malnutrition Among the Elderly Population of Cagayan de Oro City
- Introducing the Standard Days Method of Family Planning into Kaanib: Testing Counseling Services

The Research and Extension Office (REXO) of CU takes charge of both in-house researches and those which are sponsored by other funding institutions. Like the other research agencies mentioned above, it also conducts seminars and trainings to develop and enhance the culture of research among faculty members in the academe (*Capitol University Office of the Vice-President for Research and Extension*).

The research agenda of this component of CU is based not only on the mission of the university itself, but also, on the 12 point agenda of PGMA. Dr. Alicia Diel, Director for Extension, added that they usually come up with researches that would strengthen the existing courses and programs offered by CU. They have a technical committee and ethics review board that screens and reviews proposals, respectively, based on the financial and manpower resources, policy of the school, and the priority needs/areas of the school. The research agenda is usually arrived at after a consultation with the different research officers from the different colleges they have.

Since the establishment of the research unit of CU in 1995, Dr. Diel admitted that all their researches were funded by the University itself. Looking at their Medium Term Institutional Development Plan for 2004-2009, around Php 500, 000 per year would be allotted to fund research projects, among others. With this budget, REXO is expected to conduct around 30-40 researches for two years. Not only that, the institution would also earmark a separate budget for data banking, research congress, publication of college journals and research outputs, and other research-related activities just to strengthen research in the institution.

Their research associates are into various fields of specialization, especially that each college of the university has its own research officer. Gathering from the interview conducted with Dr. Diel, although health and extension services is one of the research priority areas, most of the health researches in CU were conducted by or in coordination with the College of Nursing. Some of these researches are: 1) Health-Related Quality of Life of Breast Cancer Patients (2003); 2) Women Leaders of Barangay Dayawan Playing Participatory Lead Roles in the Health Resources Development Program of CCC (2002); 3) Contraceptive Failure in Northern Mindanao: Results from a Population-Based Survey (2002); 4) Analysis on the Family Planning Survey in Region 10 (2002); and 5) Knowledge and Perception on HIV/AIDS and Sexual Attitude and Behavior of High School Students of Cagayan Capitol College (2001) (*See Annex A*).

Another institution that is into research is Mindanao Polytechnic State College (MPSC). It has four major areas of concentration namely: Science and Technology, Engineering, Environmental Modelling and Policy Studies. Although much focus is made in these four areas, the institution has done some health researches since 1998. To name a few: 1) Research Facility Survey for DOH Project Safe Motherhood Project Facility Survey; 2) The treatment Practices of Mothers in the Control of Diarrhea in Misamis Oriental; 3) The Solid Waste Management Sensitivity Level of the Residents of Isla de Oro, Cagayan de Oro City; and 4) Identification and Analysis of Indigent Patient Benefits of Pilot. These researches were conducted with external assistance since only those researches that fall under the research focus of the state college are allocated funds. (*See Annex A*)

## ARRIVING AT THE HEALTH RESEARCH PRIORITIES AND CRITERIA USED



Coming up with the health research priorities for Northern Mindanao involved the gathering of secondary and primary data, and most of all the conduct of a consultative workshop.

For the secondary data, annual and quarterly reports, medium-term developmental plans, and strategic development plans were gathered from pre-selected national line agencies (NLAs) and local government units (LGUs). Among the pre-selected line agencies are the Department of Agriculture, Department of Environment and Natural Resources, Commission on Higher Education, and National Economic and Development Authority (See *Annex B*). These secondary data were procured by sending letters addressed to the Regional Directors, who in return, pointed the researchers to the research coordinators of their respective agencies. Pertinent documents were also obtained from the provincial health units and provincial planning and development office of the Provinces of Bukidnon, Lanao and Misamis Oriental.



Primary data were gathered through the interviews conducted among a few point persons in the national and local government units, as well as those in the academe. A semi-structured questionnaire was used to gather information such as whether the institution has their own research agenda, how was it formulated, and if there are there technical committees that screen research proposals (See *Annex J*). In addition to the questions posed in the institutional form, the informants were also asked about the current problems and issues experienced by each sector, and how they have been dealing with these concerns. Inquiries on the researches they have done were also asked, especially those in the academe.



Basically, the purpose of collecting all these information was to see the current situation of Northern Mindanao in all sectors, especially those that affect health. The presentation of these pressing concerns that affect the health status of the region, would help in creating better health researches as well as aid in considering what area should be the main priority in terms of research, aside from the criteria set. Another purpose for the gathering of both secondary and primary data was to come up with some explanations for the health research priorities.

Prior to the consultative workshop, letters of invitation were sent to the pre-selected NLAs, LGUs, non-government organizations and academic institutions. The Department of Science and Technology-10 (DOST 10) and DOH-Center for Health Development for Northern Mindanao (CHD 10), were mainly the agencies who did the legwork in inviting and informing the invitees of what the workshop is all about. Confirmation of the invitees' attendance was then handled by the researchers from RIMCU. Along with the invitations that were sent to these agencies and institutions, they were given the standard matrix, to guide them on how to go about with the prioritization (*See Annex L*).



The consultative workshop held on the 14<sup>th</sup> of October proved to be productive. About 49 participants attended the workshop. Before the main objective of the activity was conducted, the current status of all the sectors in Northern Mindanao, as well as its plans to address present issues and concerns was presented by NEDA's Regional Director. The health and science and technology status of the region were also shown by representatives from CHD 10 and DOST 10, respectively. The research coordinator of CHD 10, Dr. Fortunato Ramonal also demonstrated how their agency did their own health prioritization. All of these presentations were targeted to aid the participants in coming up with the health research priorities for Northern Mindanao. Moreover, as a supplement to all the presentations made, a representative from RIMCU, displayed some of the issues and concerns of the region culled out from the secondary and primary data gathered.



Health researches in relation to four aspects, namely: 1) public health; 2) environment; 3) vulnerable groups; and 4) health care financing and regulation, were the centers of the prioritization. Urgency/magnitude of the issue/ problem/ prevalence (rank) of the disease/burden to the community; feasibility/do-ability of the research based on existing capabilities; impact of R & D (mortality, morbidity, cost...); research has impact on the health issues being addressed; and area is not well funded by other agencies, were the criteria used to arrive at health research priorities for the region. Participants which were grouped based on the interests of their respective agencies, came up with a list of studies they deemed necessary for the particular group they were in. These lists were then discussed in a plenary to finally identify what specific sector should be given attention first, in terms of research.

### **IDENTIFIED HEALTH RESEARCH PRIORITIES FOR NORTHERN MINDANAO**

The consultative workshop on health research priorities, held at the Population Commission's Training Center, came up with the following prioritization: 1) Public health; 2) Environment; 3) Vulnerable groups; and 4) Health care financing/regulation.

**Public Health.** The group had three broad R & D areas namely: dengue, chronic diseases and cancer. The increasing prevalence of dengue cases as well as chronic diseases was just one of the reasons why the focus was on these diseases. True to its task of promoting prevention of diseases, most of the objectives of the researches in the public health group aimed at identifying factors that attributed to the increase of the diseases occurrence. Consequently, this is where their interventions as a sector would come in. There is also a noted increase in the maternal mortality rate for births delivered in the homes. Thus, there is a need to look into the profile of traditional birth attendants as well as their practices in assisting birth deliveries. An addition to the topics identified is the health of

children under five in a family whose mother is working overseas. This is in response to the issue of the feminization of overseas workers. (See Annex C).

**Environment.** This cluster identified more R & D areas as compared to the other groups. The areas they classified to be in need of research interventions are the following: 1) environment, health risk and safety management; 2) environmental pollution; 3) rural-urban migration; 4) pesticides; 5) small-scale mining; 6) land conversion; 7) medicinal plants in Region 10; and 8) indigenous medical practices. Unavailability of data or information was basically the rationale why they chose these specific topics to be studied (See Annex D).

**Vulnerable Groups.** This group showed five broad R & D areas which dealt on improving the situation of those who belonged to these groups. A few of the topics which they wanted to be studied are: 1) the profile/characteristics of domestic violence perpetrators in jail (for women and children); 2) preservation of cultural heritage or indigenous knowledge system (for IPs); 3) assessment of the Expanded Senior Citizens Act (for elderlies); 4) assessment of the status of implementation of Batas Pambansa 344 (for differently-abled persons); 4) health and well-being of child workers; and 5) mental health of children who are victims of armed conflict (See Annex E)

**Health Care Financing.** The only topic they identified to be researched on is that which concerns the willingness and capacity to pay by the members and the LGUs. From this singular subject matter sprang a number of reasons why this topic should be of prime consideration. The presence of capable but unwilling customers as well as sustainability of contributions of individual paying members and the LGU were just some of grounds why this topic should be of foremost concern (See Annex F).

There were no clear debates when public health was identified to be of prime consideration in terms of health research. It seemed that all of the remaining participants agreed with the reason raised by City Health Officer of Valencia City, Bukidnon that all the other aspects would not be able to move if the public health sector would be defective. Discussion only begun when it was time to select as to what comes next in the prioritization, should it be the environment sector or the vulnerable groups. Participants from each group took turns in citing why their group should be considered of second priority. For instance, Mr. Virgilio Fuertes from DOST 10 stated that the environment should be of next priority because majority of the illnesses in the region as well as other parts of the country were environmentally-based. Ms. Virginia Cardona, on one hand, pronounced that studies on the vulnerable groups and their health conditions should be next in line because “people could not wait,” and some interventions need to be done to address their needs. However, the argument made by Mr. Fuertes gained more credits resulting in the “environment” becoming the second priority in health research. Research on vulnerable group, such as the indigenous peoples and elderlies, and health care financing, came in as third and fourth priority, respectively.

Moreso, each of the researches identified in the four sectors were already ranked as to which should be studied first.

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