Chapter 4 Development Objectives, Strategy and Projects

The overall strategy of the sub-sector on education is anchored on the assumption that the foundation for the success of any development effort is an empowered and dynamic populace and a social structure that responds positively to everyone's right to access quality basic services and productive and economic opportunities through education. That strategy, therefore, encompasses three intervention areas contained in the Social Reform Agenda of the Philippines, which are:

(1) Access to quality basic services;

(2) Access to productive and economic opportunities; and

(3) Institution-building and participation in governance.

Hence, the programs and projects contained in the education package for the DIDP Area include education in all levels and modes, including technical and vocational education. The anchor projects as well as other projects identified are envisioned as most likely to support the overall growth and development of the DIDP Area as it moves in time and space from Internal Integration, Globalization and High-tech High services strategy.

The programs and projects proposed are meant to ensure an empowered citizenry and increase in knowledge and skills for active participation in economic development. Yet, less poor people will need increased knowledge and skills to enable them to participate actively and productively in nation building under the three development strategies. Both technical and vocational education and higher education are expected to generate a cadre of highly skilled workers and professionals with skills and technologies to meet changing and diversified demands of the industrial sector and other employers such as government and NGOs under any of the strategies of internal integration, globalization and high-tech high-services.

4.1. Strategies

4.1.1. Basic education

The great social and economic importance of basic education, especially as an enabling need, makes it imperative for government to extend all-out support to the education sector. Government should put more investment in basic education and, in the DIDP Area, strive to improve its quality as well as ensure that basic education is accessible to all, particularly to the rural poor, Muslim and cultural communities and other disadvantaged groups.

In line with EFA (Education for All) plan of action in addressing the basic needs of the poor, a basic strategy for addressing basic education in the DIDP Area is a community-based approach that will provide, among others, elementary education, secondary education, literacy and continuing or adult education. The essence of the community-based strategy is partnership and the principal actors are the education sector, both public and private, the NGOs and the local government units (LGUs). Providing much needed if not indispensable support are line agencies performing related functions, such as the OSCC, OMA, DPWH, DILG, etc. As articulated in the Southern Mindanao Regional Development Plan (1996-1998, all key actors at different levels of execution and/or coordination are expected to forge vertical and lateral linkages to achieve common objectives.

Basically, however, the *greater involvement and participation of LGUs and NGOs in basic education should be sought.*

Satisfying varied educational needs of the rural and urban poor, indigenous peoples, the Muslim population and other special groups necessitates the involvement of all stakeholders in education. The participation of LGUs and NGOs should be encouraged, particularly in educational planning and policy-making. With its broader powers of self-determination, LGUs should, in the long term, assume greater responsibility for basic education in partnership with DECS.

In the short-term, however, LGUs, along with NGOs, should support DECS in partnership schemes to promote basic education in under-served rural areas and especially IP communities. Workable contracting schemes should be adopted and implemented in places where there are no schools and in schools with no teachers.

LGUs, empowered by the Local Government Code, should seek out on its own local and foreign grants to fund innovative projects as well as sustain ongoing ones. In coordination with the Government, the LGU should map out a strategy in its annual and long-term plans to build schools and put up equipment where they are most needed.

Partnership schemes between DECS and NGOs for pre-school education should be encouraged. In order to promote this partnership, LGUs should initiate organizational structures and other institutional arrangements that would encourage community participation, particularly that of NGOs.

The functions of the present municipal and provincial school boards may be expanded in order to correspond to a new mandate which includes educational policy making and educational planning. Its composition should, likewise, be increased to ensure community-wide participation and representation of all stakeholders. Community-based NGOs and parents should be represented in the board.

A similarly-constituted body may be formed at the barangay level. It has, however, been noted that even at the municipal level, coordination problems exist between the line agencies and the local school boards. Should this situation be a constraint, the Barangay Development Councils (BDCs) may create their own Education Committees to address education concerns at that level.

More specifically, the following approaches should be made to address the concerns of basic education through concerted effort of all actors concerned.

(1) Pre-school, elementary and secondary levels

a. Improving/rationalizing the supply and distribution of teachers and improving/enhancing the quality of teachers and learning materials.

While the average teacher-pupil/student ratio indicates no apparent lack of teachers in the DIDP Area, there is an uneven distribution of teachers across schools and districts. Ratios, therefore, from school to school and from district to district may vary. DECS should, therefore, rationalize the distribution of teachers with a view towards translating, as closely as possible, into reality the standard teacher-pupil ratio of 1:40.

There are, at least, two approaches that DECS should make to increase the supply of teachers where they are most needed: (i) to provide strong incentive schemes to encourage qualified teachers to work in rural areas, especially IP communities, and (ii) to pursue its para-teacher program in cooperation with SUC teacher-training schools, but with some modifications, if only to ensure quality and conformity with existing rules and regulations.

It is imperative for DECS to institutionalize a well-directed training program for teachers that is not merely reactive but proactive. In this regard, it should strive to work closely with teacher-training institutions (TTI) with existing capability for teacher training. In the process, the schools should see to it that only the best students enter the teaching profession. From its own end, the government should adopt an effective system of incentives to channel promising students to the teacher education program.

DECS should find a cost-effective way of increasing and/or maximizing the supply of teachers. However, while the ideal is to have a one-teacher-per-class ratio, the same may not be reasonable in hard-to-reach areas where the return-on-investment may be low due to poor enrollment. As such, the adoption of the multi-grade approach is imperative if only to improve access to education while keeping the cost of investment at a minimum. Investment may be thus be channeled to the improvement of the capability of teachers to handle multi-grade classes.

DECS has institutionalized programs and projects that only need strong political will to realize. It should intensify its efforts to pursue in earnest some of its programs which could bring in more resources for education. Some of these are "Adapt-a-School Program", "School of the Future", and others.

b. Development and adoption of innovations and proven educational technologies as well as alternative delivery schemes in remote and hazardous areas as well as IP and Muslim communities.

A curriculum should be designed that would fit the cultural requirements of the IPs. It is important that that curriculum should provide knowledge and skills which are useful to them and would make them productive members of the community. A revised school calendar may be adopted which would somehow accommodate the economic activities of our IPs.

Before a special curriculum can be arrived at, however, a thorough study of the culture of the IPs and identification of what aspects of their culture would make for a relevant curriculum should be made by competent people. The organization of IP schools could be piloted in each province/city to a limited group of pupils the scheme of which shall be patterned after similar successful programs with some modifications. NGO participation may be solicited.

DECS should implement *Madrasah* as embodied in the Comprehensive Mindanao Education Plan and the Mindanao 2000 Plan. It should immediately initiate steps to concretize plans with the support of OMA. Some gains have been made since the issuance of LOI 1221 but many things yet remain to be done, such as the recognition, accreditation and integration of the *Madaris* into the Philippine educational system not only in the DIDP Area and Region XI but in the entire island of Mindanao. The sooner these problems are addressed, the better it would be for the attainment of lasting peace in Mindanao.

In the short term, DECS should initiate moves to develop a curriculum after necessary consultations with pertinent entities are made. Corresponding textbooks and instructional materials could then be prepared.

A trust fund can also be established to ensure private and voluntary support for *madaris*. An appropriate body to administer the fund should be formed.

c. Improvement of the quality of teacher training.

Aside from improving the quality of teacher training institutions, there are at least two ways the quality of teachers can be enhanced. One is to strengthen pre-service education and the other is to improve and expand in-service training programs for both public and private school teachers.

The immediate and long-term need to professionalize teachers of early childhood and pre-school education should likewise be addressed. Teachers presently handling pre-school may undergo summer institutes leading to a new major in early childhood education (ECE) through an accreditation scheme with a TTI (teacher training institution). For a long term solution, some TTIs may be assisted to develop their capability to offer degree programs with major in ECE.

To ensure quality, teacher education programs should be accredited. Higher admission requirements for pre-service education programs should be adopted to ensure that only people with the right aptitude and motivation are into teaching.

As a response to a growing clientele of teachers, both public and private, another teacher training center, in addition to one already in the DIDP Area, should be set up to strengthen not only the science and mathematics content of teacher education courses but also that of English as well as educational management.

In addition to a periodic assessment of training needs which should be done, training materials should likewise be updated with emphasis on content. The use of research outputs and local resources in training programs should be encouraged.

A very important concern is to have competent supervisors who will assist teachers in the teaching-learning process.

(2) Non-formal education

a. Letting LGUs assume greater responsibility for literacy.

Literacy is a basic need and, ideally, should be the responsibility of the local level. The presence of LGUs in the membership of the local literacy coordinating councils should be fully harnessed. With the direct involvement of LGUs, it is expected that appropriate legislation can be formulated to support as well as sustain literacy efforts.

Existing partnership/collaboration in literacy program delivery, such as the Local Coordinating Council (LCC), should be strengthened and reinforced by encouraging the membership of other participants particularly the NGOs and private sector organizations. Their resources and expertise can be utilized to eradicate illiteracy.

b. Establishing a systematic monitoring and evaluation scheme of NFE projects.

Most programs/projects eventually fail because this component of the plan is often neglected. An effective monitoring and evaluation scheme would be useful as a guide to future action. It would also give an overall picture of the impact of the

NFE interventions on the lives of the clientele. A working group should be assigned by the local coordinating council to conduct this important activity periodically as a basis for the periodic review of NFE activities.

c. **Involving state universities and colleges (SUCs) and interested private HEIs in areas where there are no SUCs towards an integrated approach to NFE.**

SUCs all over the Country are expected to actively pursue extension activities and service functions in their service area; in fact, they have an allocation in their annual budget for such activities. Besides funds for the purpose, they also possess the expertise to do it.

Not all provinces, however, have SUCs in their respective areas. There are, however, private HEIs which have been actively engaged in outreach activities, especially with IPs and other disadvantaged groups. Their strengths and commitment to service can likewise be tapped and their efforts supported.

The HEIs can be tapped to offer capability-building trainings for NFE teachers, service providers and others involved in the program. They can also design instructional materials fitted to the needs of the clients as well as participate actively in actual extension activities through their faculty and students. They can also provide research, planning and evaluation services supportive of NFE.

Where there are SUCs in the province/municipality, a representative of a SUC, or the president himself/herself should sit in the local literacy coordinating council.

d. **Conducting an all-out sustained campaign to encourage wider participation of the target clientele.**

The local coordinating council may tap media, local officials and organizations and devise other means to generate awareness and interest in the NFE program. A deliberate public information campaign should be systematically planned and implemented by the local coordinating council. Unless this is done, it is very likely that those who should really benefit from it are left out.

e. **Conducting a systematic training needs assessment (TNA) by locality, including inventory of existing NFE activities as well as activities already conducted.**

To be done on a periodic basis, the TNA will help identify the training needs of the would-be clientele. This would therefore guide project inceptors to plan effectively activities that would be responsive to the needs of a specific clientele. This could also be the basis for the formulation of a short- to long-term plan to guide the conduct of trainings.

Efforts should be made to identify the training needs of IPs so that interventions planned are appropriate for their needs.

f. **Formulation and implementation of an accreditation scheme for attendance to some NFE activities.**

This strategy would improve the credibility of NFE skills training programs and convince industry, government agencies, NGOs and other would-be employers of the desirability and quality of such trainings. The scheme would call for constant involvement of industry in establishing standards and necessary skills for accreditation. It becomes imperative, therefore, that before training packages are made, there should be a study made to identify those skills which industry and

employers need, be they rural- or urban-located, so that, accordingly, they are those skills that are taught to the clients.

4.1.2. Higher education

CHED has prepared a Long-Term Higher Education Development Plan (1996-2005) which outlines policies and strategies that HEIs are expected to adopt during the planning period. Correspondingly, the Mindanao Comprehensive Educational Plan (MCEP) has prepared a plan for the period 1997-2014 with goals and strategies patterned after the CHED's plan but with some initiatives to fit the requirements of Mindanao for development. Some inputs for this portion were drawn from consultative meetings with DECS private schools and SUCs, as well as the two above plans.

(1) Promotion of networking/consortium and other forms of collaboration and complementation in research and academic programs among HEIs both public and private in order to maximize scarce resources, promote quality education and improve educational access.

Worthwhile undertaking is the establishment of common laboratory facilities in some HEIs in the Area. As regards access, the spatial distribution of HEIs in the area is such that the project is feasible. Host HEIs will be identified each according to its academic strength and potential. Such laboratories may include a basic sciences laboratory, engineering laboratory/tool and die and machine fabrication common facility laboratory, agriculture laboratory, biotechnology laboratory, etc. Eventually, such laboratories shall operate as income-generating projects (IGPs) in order to maintain as well as sustain the projects.

Consortia may also be established to improve educational access, especially with reference to city and provincial locations. Such is the engineering consortium of DOSCST and USEP. Collaborative research projects may also be undertaken as a way of maximizing expertise across the DIDP HEIs.

A library network system among all HEIs in the DIDP Area may also be established as a form of consortium in order to encourage research and enrich instruction, especially graduate education. This complementation scheme would maximize scarce library resources, improve the quality of research and instruction and provide students with a rich resource base for learning.

(2) Establishment of flagship programs by some qualified HEIs.

The choice of programs should be based on manpower demand and the development needs of the DIDP Area. This would make programs responsive and relevant, at the same time develop the facilities of the HEI concerned through CHED assistance for qualified programs. The scheme would provide a partial response to the clamor of private schools for government subsidy to private education.

At present, public HEIS in the Area each has a flagship program based on perceived needs, such as geology and marine sciences of DOSCST, engineering and IT of USEP, and agribusiness and fishery technology of SPAMAST. Private HEIs with "center of excellence" programs, provided the programs do not duplicate other programs in the Area, may also adopt them as flagship programs in order to merit CHED/government support.

(3) **Institutionalization of industry-academe linkage.**

Closer industry-academe linkage would encourage programs that are not only dynamic but also responsive to the needs of industry as well as produce employable graduates. The scheme would also operationalize "dual technology". An important component activity would be a study of the skills needed by government, industry and other employer sectors. Manpower supply and demand studies are also in order.

An employment management information system (EMIS) for the DIDP Area should also be established. It can be useful to predict future manpower demand by industry sector and help in job recruitment and placement.

(4) **Encouraging SUCs to develop and implement alternative learning and delivery schemes for special groups with limited access to formal education.**

These includes college leavers, disabled, drop-outs, those with limited geographical access to schools, and workers who need to upgrade their qualifications. The adoption of the distance education mode should be taken seriously as an alternative mode to be able to reach out to these groups thus improving access to higher education. The center, which may be called the Continuing Education Center (CCE) may be established as a consortium of some HEIs in the DIDP Area and managed by a duly designated body. The center will make use of existing facilities of one or two institutions except for the equipment needed to run the program which will be sourced from funding agencies.

(5) **Organizing a consultative body, such as may be called a Higher Education Council in the DIDP Area.**

It will serve as a forum wherein public and private HEIs can share and discuss among themselves matters that concern higher education as it affects them. It can also be a planning body, in a limited sense, as well as assume other roles as may be agreed upon by the members. It can also assume a legal personality to represent the common interests of HEIs, as before line agencies and funding institutions.

(6) **Adopting an innovative teacher education/training program specifically for IP students to be assigned to IP communities.**

In view of the flexibility of SUCs, the initiative for this innovation should come from that sector. The existing teacher education curriculum for both elementary and high school teachers may be reviewed and modified in order to give way to some courses whose content mirrors the unique culture of the IPs. Pedagogy should be reviewed and modified to fit the ways of the group.

The first two years of the teacher education curriculum may be considered "common" to all students. There will be two streams of students—the regular and the special curriculum for IP student teachers. The program would actually be an improvement on the para-teacher program of a few decades ago.

In order to attract students, a special package of incentives should be designed for them, such as scholarships, a reasonable return-to-service requirement, and an incentive scheme to motivate them to serve their own communities.

(7) **Establishing a training center for teachers in the DIDP Area.**

There is one teacher training center in the DIDP Area – the Regional Science Teaching Center (RSTC) of DOST based at the Ateneo de Davao University for science and mathematics. Considering the number of teachers in the Area and the limited mandate of RSTC, there is a need for another center to serve the other training needs not only of teachers but of school managers as well.

Because knowledge and pedagogy are dynamic, the center should have a research arm as well as a curriculum laboratory. A publication arm is indispensable. Like RSTC, the center should be attached to a university offering teacher education and with a ready Internet system supported by CHED. The latter is necessary because an Internet support system can become an important component of the teacher training center. Wherever they are, teachers can easily access the information they want.

(8) **Organizing a graduate consortium among HEIs with graduate programs.**

Graduate education in the Country, as articulated in the EDCOM report, is underdeveloped. Particularly in the DIDP Area, along with a limited range of graduate programs being offered, the products of social research are often wanting in quality. More often descriptive, they have very little use for policy making and are often done as a form of compliance to the thesis requirement. The proposed consortium would demonstrate that through complementation, HEIs in the DIDP Area would be capable of offering programs as well as produce research which are supportive of the development needs of the Area.

4.1.3. Technical and vocational education and training

The policy framework within which TESDA operates as the lead agency of government in formulating and continuing technical education and skills development plans and programs are sound, relevant, doable and sustainable. However, in view of the desire of the DIDP Area to fast track development in order to capture the internal and global markets as envisioned under the alternative strategies, the DIDP strategy in TVET will have to satisfy certain requirements.

First, the TVET system in the DIDP Area will have to refocus on the agriculture and fishery sectors with the view to upgrading traditional skills to adapt to diversifying needs (e.g. new crops/varieties, alternative farming systems, and various practices of aquaculture). Also, it will have to be made accessible to disadvantaged groups, including OSYs, women, elderly and other socially deprived. These are the conditions to be pursued under the Internal Integration strategy.

Second, as the DIDP socioeconomy is exposed to expanding markets and facing diversifying opportunities, the TVET system will have to respond to changing needs of industries and emerging structure and market incentives. For this, TESDA will have to operate efficiently, internally and externally, and clients need to be duly consulted. These conditions are pursued under the Globalization Drive strategy.

The High Tech – High Services strategy may introduce a wide range of high earning employment opportunities associated largely with increasing foreign investments. To capture such opportunities, the TVET system will have to be oriented increasingly to high quality skills training through exchange of information world-wide and a training system open to the rest of the world.

In principle, the mobility of labor across activities must be ensured. Programs for training and retraining should be dictated by and a response to emerging labor market needs. Those programs of TESDA that could be expanded or intensified should be identified and pursued. Close monitoring of programs should be done to ensure effectiveness.

Human resources should, however, be geared also for entrepreneurial and self-employment. To address this, some aspects of the curriculum in technical/ vocational education could be developed. This effort should be coordinated with livelihood and micro-credit programs in order to be relevant.

More specifically, strategies in the sector include the following:

(1) Strengthening the administration of the TESDA Regional Office and provincial offices through:

- more funds for hiring more qualified staff, equipment, machinery and supplies;
- more funds for other operating expenses;
- scholarship and training grants to deserving staff; and
- technical support in areas of training where TESDA is weak such as but not limited to agriculture and fisheries.

(2) Identified and well-defined technicians in agriculture and fishery with corresponding required minimum knowledge, attitudes, skills and social or leadership abilities could be one factor for turning high-tech from resource-based approach. Efforts have to be exerted towards addressing the above problem by tapping existing institutions with expertise.

(3) For a generic solution, the nagging issue of mismatch between available manpower and the requirements of industries should become available through institutionalized guidance and counseling at high school level directed by information from well-studied/researched data gathering, collation, projection and interpretation. Placement services should be part of this project. A grant with counterpart funds for this concern undertaken by TESDA itself should indeed be very useful.

(4) There has never been a situation where one single training institution has all the needed machinery, laboratory manuals/training modules books and other references. Since the above are expensive, it is proposed that common laboratory and library facilities be selected among training institutions, including the Regional Training Center. This project may require external assistance.

(5) The concept of dual tech training has worked very well in post-industrial environments. It is proposed that the above be thoroughly studied and modified to suit our culture and level of development. The incentives are quite attractive.

Since there is a severe lack of competent and credible guidance counselors in the high schools, it may become necessary and important to train them.

(6) The enhancement of any activity cannot be sustained without support from research. This concern should be institutionalized at TESDA and funded through the Agriculture Modernization Law as well as special funds earmarked for the purpose. The scheme of research approval and funding should follow the DOST model.

(7) There is a strong need to establish and implement a management information system (MIS) and monitoring and evaluation units at the regional as well as the provincial offices.

(8) Current government and private training institutions, after selection based on agreed-upon criteria, can be tapped by TESDA to become training providers with foreign technical and financial assistance. This strategy can become even more desirable if brought to the level of the municipal government. Perhaps, what could be done is to pilot test the concept with counterpart contributions from said LGUs selected on the basis of project proposals.

4.2. Anchor Programs/Projects

Identified as anchor projects in the Education Sub-sector are the following:

- Common Service Laboratory Facilities Development Project
- Special Indigenous Peoples Education Program
- Regional Skills Training Center Project

(1) Special Indigenous Peoples Education Program

Basic education in the Davao Gulf Area has seemingly failed to bring into the mainstream of development the indigenous peoples (IPs) who comprise about 15 % of the population in the Area. The reasons are lack of access to schools, an inflexible schedule of classes, irrelevant curriculum and educational materials. Added to that is the problem of lowland teachers who lack familiarity with the culture of IPs and refuse to serve due to distance of schools and other hazards.

On the other hand, lack of motivation, poverty and the corresponding demands for economic survival prevent many IPs from attending school.

The Special Indigenous Peoples Education Program (SIPED) aims to bring indigenous peoples into the mainstream of development through empowerment by a scheme of basic education specifically designed to suit their requirements. In the process, the program will generate accurate data on IPs as well as comprehensively document their culture for its historical significance. The project hopes to produce empowered IPs proud of their culture and active participants in the development process.

(2) Common Service Laboratory Facilities Development Project

The need to provide adequate laboratory facilities as requirements for quality instruction is imperative. Throughout much HEIs in the Davao Gulf Area, these instructional facilities are inadequate, obsolete or antiquated. No single institution in the area can meet the financial requirements to put up one without some form of external assistance.

The Project will be a network of five advanced science and technology laboratories situated in higher education institutions (HEIs) operating as common service

laboratory facility. These laboratories are envisioned to support the development of academic programs and research activities which are supportive of an evolving DIDP economy. The project will help produce globally competitive graduates as well as transform the DIDP Area into a center of higher education in the BIMP-EAGA.

(3) Regional Skills Training Center Project

It will contain state-of-the-art equipment and facilities including communication facilities to link the center with the rest of the world for more responsive and globally competitive trainings. institutions will have access to it. With highly trained manpower, the DIDP Area is expected to have a stronger competitive edge worldwide in strategic industries.

4.3. Other Programs/Projects

(1) Teachers Training Center Project

Through the years, the quality of teachers have declined, and with it the decline in the quality of education as well. Many teachers at all levels do not possess the minimum qualifications for teaching, particularly in science, mathematics, English and technical-vocational education. In higher education, less than 40 % have credentials beyond the baccalaureate degree. This finding is manifested in the poor performance of prospective teachers in the PBET as well as other qualifying examinations. This poor performance can be attributed to poor teacher training and the low quality of students who enroll in teacher education.

But quality of education is not merely a function of quality of teachers. It is also a function of the quality of management and facilities for education. While there is one DOST-supported teachers' institute in Region XI, its mandate is limited only to the in-service training of teachers. Besides, the size of the clientele—more than 23,000 teachers in all—is beyond the capacity of a single institution to address.

It is intended to answer the dire need to upgrade the quality of basic education. It is envisioned to serve as a training arm of DECS for training teachers in science, mathematics and English as well as educational managers. Its other components are Research and Production (of educational materials). A curriculum laboratory shall be maintained in keeping with the dynamic nature of pedagogy and education. The project is expected to bring about improved standard and quality of basic education as well as enlightened educational managers.

(2) Distance Learning Center Project

Demographic expansion, geography and transportation as well as communication problems continue to challenge the ability of exdisting educational institutions to adequately respond to demands for its services. An alternative, such as the distance learning mode/system can provide increased educational back-up in a more cost-effective and efficient manner.

The experience of other countries with distance education all point to its effectiveness, yet it has been little explored in the Philippines, hence this proposal.

The Distance Learning Center Project aims to provide a wide range of educational opportunities to a larger number of urban, geographically and socially isolated and disadvantaged people through distance learning. With a central hub in Davao City,

strategically located learning centers will be established across the DIDP Area with an academic pool of faculty from HEIs in the DIDP Area.

(3) DIDP Policy Studies Center Project

The advent of the DIDP strategy for the development of the Davao Gulf Area creates a strong case for the establishment of the DIDP Center for Policy Studies within one of the HEIs in the Area, preferably the University of Southeastern Philippines (USEP). USEP offers advanced degrees in development administration, public administration and environment and resource management with a strong faculty component. More importantly, USEP has a Mindanao Center for Policy Studies (MCPS).

The DIDP Center for Policy Studies shall be subsumed under the MCPS and will serve as research arm of the DIDP. The Center is expected to sustain the DIDP development effort through relevant studies that will expectedly generate data and information for policy formulation. It will maintain a library.

(4) DIDP Higher Education Council Establishment Project

Within the DIDP Area, there are considerable existing and potential complementarities in higher education that could produce economies of scale and foster greater individual strengths of HEIs. Areas of complementarities could be in joint research and extension projects, literature, student and faculty exchanges as well as sports. More significant complementation may be done in the area of joint academic programs and sharing of facilities, like libraries and laboratories.

The organization of a Higher education Council will be a step in this direction.

(5) Multi-Resource Library Networking Project

The project is intended to provide access to and maximize scarce educational resources through a network of libraries of HEIs in the Davao Gulf Area. The project will link into a network all 67 libraries of HEIs with the use of advanced IT equipment. Users will pay user fees to sustain the project.

(6) Pro-Disadvantaged Scholarship Program

Poverty has continued to systematically exclude the poor, whether rural or urban, from the benefits of higher education. Only about 15% of our high school graduates in the Davao Gulf Area enter college every year. Those deprived represent a potential human resource that could not only help propel the economy but more specifically, through guided career paths, help solve the problem of lack of scientists and higher-level engineers and technicians.

The Fund, which shall be created through an appropriate legislation by the DIDP member LGUs, will be used to directly fund the college education of deserving disadvantaged young people in scientific, engineering and other high tech courses. The fund shall come from LGU contributions from income/revenue. It will be augmented from other sources, such as foreign grants, and managed by an appropriate body.

(7) Basic and Teacher Education Systems Evaluation Project

The results of this research project will be most useful to teacher training institutions and education policy makers. It will provide answers to the long

nagging question of low academic performance of students in all levels of education. It will assess several dimensions of basic and teacher education systems in order to identify corrective measures and policy recommendations to address the problem of low quality of basic education.

(8) Non-Formal Education Internship Program

The cohort survival rate in the elementary level in the DIDP Area was only 65 % in 1997. This figure alone indicates that about 184,000 represents that segment of the population who will need interventions other than secondary and higher education in order to be productive. To this can be added the 200,000 or so out-of-school youth and adults in the DIDP Area who have not gone to school at all. Despite the efforts of DECS, its output in terms of quantity, quality and relevance of its programs and activities has not been quite satisfactory.

Its present literacy service contracting scheme with NGOs and LGUs, though sound, is insufficient to reach out to more beneficiaries due to their sheer number. The proposal, therefore, is an innovative way of reaching out to more clients.

The Non-formal Education Internship Program will institutionalize a 6-week summer internship program into the present teacher education curriculum requiring advanced teacher education students to teach literacy classes in their respective barangays.

(9) Tagum City Technical and Vocational Education and Training Project

The project will upgrade existing facilities of the USEP-Tagum campus and the Tagum National Trade School, the former its agricultural technology equipment and the latter machines in electricity and electronics. Also included are funds for scholarship and seed money for a loan scheme for graduates.

(10) Project Best

It will essentially be an agricultural extension activity of USEP-Tagum in cooperation with LGUs, DILG and banks. Successful farmers will teach fellow farmers, out-of-school youth and act as laboratory teachers of TVET courses. Scholarships and other forms of incentives will be built into it.

(11) Triad Labor-Market Information System Establishment Project

It is envisioned to be research-based and academe-led in consortium with business and industry and training institutions. It will establish a data bank/labor-industry information system and networking which output can be used as bases for program/project planning and vocational placement.

(12) Regional and Provincial TESDA Offices Strengthening Project

It is meant to address the concerns of Region XI TESDA, a relatively new agency whose effectiveness is hampered by lack of resources/funds. TESDA XI will be strengthened through injecting more funds for additional personnel, equipment, scholarship fund and technical assistance. Research will be promoted as a major function. A strengthened TESDA will result to improved delivery of TESDA services, more highly competitive and market-driven trainings and stronger research.

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
DAVAO PROVINCE				*10695*
1. Arriesgado Institute of Medical Sciences Foundation, Inc.	Bonifacio St., Tagum City	Mr. Vicente Arriesgado Sr.	Midwifery	138
2.Assumption College of Nabunturan	Nabunturan, Davao	Sr. Clarita Villaflor	Bahelor of Arts Biology English Mathematics	573
3. Assumption College of Mawab	Mawab, Davao		Bachelor of Arts Economics	
4. Davao del Norte State College	Panabo, Davao	Mr. Vicente Hermoso	Diploma in Fisheries Tech. Processing Culture Capture	681
5. Liceo de Davao	Tagum, Davao	Mrs. Erlinda de los Reyes	BS Commerce Bachelor of Sec. Education Bachelor of Elem. Education	118
6. North Davao College-Panabo	Panabo, Davao	Dr. Cesar Somoso	Bachelor of Arts - English Bahelor of Sec. Education - English Bachelor of Elem. Education - English Jr. Secretarial - Office Management	339
7. North Davao College - Tagum	Apokon, Tagum, Davao	Dr. Cesar Somoso	BS Nursing Midwifery	171
8. Northern Paramedical & Tech. Inst.	Panabo, Davao	Mr. Florencia Pascual	BSC (B & F)	16
9. Panabo Community Coll. of Tech.	Panabo, Davao	Mr. Teodoro Dawal	BS Commerce Jr. Secretarial	22
10. Phil. Institute of Tech. Education	Tagum, Davao	Engr. Aaron Apurada	Jr. Secretarial - Steno Typing	22
11. Queen of Apostles Coll. Seminary	Panabo, Davao	Rev. Antonio Llanes, DCT	Bachelor of Arts - Classical Philosophy	95
12. Saint Mary's College	Tagum, Davao	Sr. Maria Consuelo Albino	Bachelor of Arts - Economics English Literature	1777
13. Samal Institute	Babak, IGCS	Dr. Daisy Nacional	Bachelor of Arts - Political Science	160
14. University of Mindanao - Panabo	Panabo, Davao	Ms. Cecelia de los Reyes	Bachelor in Sec. Educ.-Fil/Math/Eng/Hist Bachelor in Elem. Educ. - Math/Fil/Eng Bachelor of Arts - Eng/Hist	1040
15. University of Mindanao - Tagum	Tagum, Davao	Mr. Eugenio Guhao	BS in Commerce General	5078

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
University of Mindanao - Tagum continued			Banking and Finance Economics Marketing Agri-Business Management	
16. USP Tagum Campus	Apokon, Tagum, Davao	Mr. Apolinario Cenabre	BS Agriculture BS Agri'l Engineering BS Forestry	
17.USP Mabini Campus	Mampising, Mabini, Davao	Dr.Carlito G. Edullantes	BS in Agri. Crop Science Agri. Educ. Animal Science	
DAVAO del SUR 1. Ca * s Paramedics Sch, Foundation of Davao del Sur Inc.	Rizal St., Digos, Dvo. Sur	Dr. Rodolfo Ca * s	Midwifery	**90647** 17
2. Cor Jesu College	Sacred Heart Ave., Digos Davao del Sur	Mr. Rolando A. Fabiana	Bahelor of Arts English History Economics Bachelor of Sec. Education Lib Sci/English/PE/Health/Music/Math Pil/Guid Bachelor of Elem. Education Lib Sci/Eng/Guid/Pil/ Math/PE/Art/Music BS Psychology Bachelor of Laws BS Civil Engineering BS Commerce - Acctg/Bus. Admin BS Accountancy Jr. Secretarial Midwifery Grad. School - Educ/MBA/MPA	2989
3.Holy Cross of Bansalan College	Bansalan, Dvo. Sur	Sr. Ma. Milagros Laredo RVM	Bachelor of Elem. Educ - Guidance Bachelor in Sec. Educ - Engl./Science BS Accountancy Jr. Secretarial - Office Management	479

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
4. Polytechnic College of Davao del Sur	Digos, Dvo. Sur	Ms. Florencia Pascual	2 Yr. Midwifery BS Nursing Radiologic Technology Physiotherapy BS Criminology BS Computer Science	890
5. Serapion Basalo Mem. Found. Coll.	Kiblawan, Dvo. Sur	Mr. Sabino Florentino	BS Agriculture- Gen. Agri BAT Bachelor os Sec. Educ - English	486
6.Southern Phil. Agri-Business and Marine & Aquatic School of Tech.	Digos, Dvo. Sur	Dr. Francisco Ladaga	BS in Fisheries - Inland Fisheries Fish Prcsng. Marine Fishery	
7. Southeastern College of Padada	Padada, Dvo. Sur	Mr. Peter Paul Sarabia	Bachelor of Sec. Educ- Engl/Fil/Hist Bachelor of Arts - Engl/Hist Associate in Arts	529
8. Southern Phil. Adventist College	Padada, Dvo. Sur	Mr. Jimmy Paderogaya	Bachelor of Arts BSED BEED BS Computer Science BS Secretarial Admin.	49
9. UM Bansalan College	Bansalan, Dvo.Sur	Mr. Rodrigo Basalan	Bachelor of Arts - Engl/Hist BS Commerce - Management/Acctg. Bachelor of Sec. Educ - History BS in Criminology - Sec. Safety/Pol. Adm Office Management Nursing Aide	679
10. UM Digos College	Digos, Dvo. Sur	Ms. Luisa Tinio	BS Commerce - General Accounting Banking and Finance Management COM MAC Marketing Bachelor of Arts - General English	2225

Name of Tertiary School	*Address*	*Institution Head*	*Academic Program*	*Total Enrollment*
UM Digos College continued			History Bachelor of Sec. Educ.- General English Filipino Math History	
DAVAO ORIENTAL				1937
1. Davao Oriental State College of Science and Technology (DOSCST)	Guang-Guang, Mati, Dvo. Or	Dr. Jonathan A. Bayogan	Bachelor of Sec. Educ.- Mathematics Int. Science English Bachelor of Elem. Educ - General Mathematics Bach. Business Management BS Mathematics BS Biology BS Env. Science BS Dev. Comm. - Journalism BS in Food Technology BS in Civil Engineering DAT - Bach. in Agri. Tech. DIT - Bach. in Ind. Tech. Midwifery EDP Computer Technician	1704
2. DOSCSCT-San Isidro Campus	San Isidro, Davao Oriental		Diploma in Agri. Tech. Bachelor of Agri. Tech.	
3. Mati Polytechnic Institute	Mati, Dvo. Oriental	Mr. Aresio Agbong	Bachelor of Elem Education BS Commerce - Banking/Fin/Mktg. BS Criminology - Pol. Admin./Sec/Safety Mgt.	233
4. USP-Baganga	Baganga, Davao Oriental	Dr. Edmundo Prantilla	2-year Liberal Arts	
5. Davao Oriental Technological Schl	Mati, Davao Oriental	Mr. Jorolan		

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
DAVAO CITY				66977
1. Agro-Industrial Found. College Phils.	Talomo Dist.	Ms. Sofia Basalo	BS Custom Admin BS Marine Eng'g. BS Asso. Marine Transportation	2173
2. AMA Computer College	City proper	Engr. Aida M. Rosales	BS Computer Science BS Computer Eng'g. BS Business Admin.	1895
3. Ateneo de Davao University	City proper	Fr. Edmundo Martinez, SJ	Master of Arts: Chem Economics Ed Ad English Ed Filipino G & C Mathematics Pastoral Rel. Educ. MAED - Psycho Management Social Research Course Total Master of Science Guidance and Counselling Teaching Biology Literature Mathematics Teaching Mathematics Social Research Teaching Chemistry Teraching General Science Teaching Physics Teaching Psychology Course Total	 279 79

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
Ateneo de Davao University continued			MA Religious Education	
			Master in Public Admin	
			MA in Nursing	
			MEP	
			Master in Bus Admin	
			Course Total	422
			BS Business Admin	
			Banking and Finance	182
			Management	694
			Marketing	650
			BS in Accountancy	899
			BS Commerce	854
			BSBA	0
			Course Total	3279
			BS Chemical Engineering	111
			BS Civil Engineering	155
			BS Electrical Engineering	65
			BS Industrial Engineering	213
			BS ECE	208
			BS Mechanical Engg.	81
			Course Total	833
			BS Computer Science	284
			Bachelor of Arts	
			BS Social Work	
			BS Biology	
			BS Mathematics	
			BS Chemistry	
			Pre-Dentistry	
			Course Total	1509
			Law	312
			Bachelor Secondary Education	77
			Bachelor Elementary Education	43
			Course Total	120
			Doctoral	19
			Cert in Theology	97

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
4. Brokenshire College	Madapo Hills, Dvo. City	Dr. Marcelo Satentes	BS Nursing Bachelor of Arts - Psycho Bach. Elem Education Bach Sec. Education BS Early Child Educ Bach Business Admin	319
5. Casa Mercado Teachers' College	Talomo District	Dr. Aurea Mercado		8
6. Davao Bible Seminary	Talomo District	Mr. Ricarte Y. Magsipoc	Theology	65
7.Davao Central College	Toril District	Ms. Delia Advincula	Bachelor of Arts - History Bachelor of Sec. Educ - Math Bachelor of Elem Educ - Math	244
8. Davao Doctors' College	City Proper	Mr. Sotero Palabyab, MA	BS Biology BS Physical Therapy BS Radiologic Technology BS Nursing 2 Yr. Pre-Dental Dr. of Optometry	1704
9. Davao Maternity Hospital School of Midwifery	City Proper	Ms. Maria Luisa Palacios	Midwifery	0
10. Davao Medical School Foundation	c/o AdDU Jacinto St., Davao City	Fr. Edmundo Martinez, SJ	Dr. of Medicine Dr. of Dental Medicine Cert. in Comm. Health Aide Diploma in Midwifery Master in Community Health Master in Participatory Dev't	336
11. Davao Merchant Marine Academy	Ecoland Drv., Davao City	Mr. Alberto Alejandre	BS Marine Transportation BS Marine Engineering BS Customs Admin. 10 Month Seaman Hotel and Rest. Mgt. (Tech Voc)	2525
12. Fabie School of Midwifery	City Proper	Dr. Evelyn R. Fabie	Midwifery	54
13. Ford Academy of the Arts	Buhangin, Davao City	Ms. Aida Ford	Bachelor of Fine Arts- Painting	44
14. General Baptist Bible College	Libby, Puan, Davao City	Rev. Ruben Angelo	Bachelor of Arts	71
15. Holy Cross of Davao College	City Proper	Sr. Anna Marie Noveda	Bachelor of Arts - English Pilipino	7437

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
Holy Cross of Davao College continued			Gen. Sci. Mathematics History Psychology Mass Comm. Catechetics Phys. Educ. Library Sci. Bachelor of Elem Education BS Commerce - Management Banking and Finance Marketing Management Acctg. BS Accountancy BS Customs Admin. Offeice Management BS Marine Transportation Certificate - Marine Transportation	
16. Joji Ilagan Career Centre	City Proper	Ms. Joji Ilagan-Bian	Secretarial HRM	211
17. MATS College of Technology	Agdao, Davao City	Mr. Senforiano Alterado	BS Aeronautical Eng'g. BS Aircraft Maintenance Tech Aircraft Maintenance Tech BS Marine Transportation BS Marine Eng'g. 10 Mts. Seaman BS Customs Admin. BS Airline Mgt. and Acctg. BS in Accountancy BS Tourism and Travel Mgt. Jr. Secretarial Course BS Criminology BS Civil Eng'g. BS Industrial Eng'g. BS Electrical Eng'g.	2802

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
MATS College of Technology continued			BS Mechanical Eng'g. BS Electrical and Comm. Eng'g. BS Elem Education	
18. Mindanao Medical Foundation	Agdao, Davao City	Ms. Amy A. Bautista	Pre- Dentistry Dr. of Dental Medicine Dr. of Optometry Midwifery BD Nursing BS Medical Technology BS Physical Therapy BS Pharma	536
19. Mindanao School of Midwifery	City Proper	Mrs. Julia M. Macasaet	Midwifery	38
20. Mt. Apo Science Foundation	Bayabas, Toril, Dvo. City	Ms. Dolores P. Torres	Diploma in Agri'l Technology	49
21. Phil. Women's College of Davao	Juna Subd. Matina, Davao City	Atty. Rosa S. Munda	Bachelor of Arts - Fine Arts Tourism 2 Yr. Fine Arts BS Business Admin. BS Hotel and Rest. Management 2 Yr. Junior Secretarial	721
22. Polytechnic School of Southern Phils.	R. Magsaysay, Davao City	Mr. Eliseo Rom	ACS	24
23. Rizal Memorial Colleges	City Proper	Dr. Evelyn A. Magno	MA Economics MA Educ. Management MA in Teaching - Engl/Fil/Guid & Coun. Ed. D. Gen. Clerical Course 2 Yr. Junior Secretarial Bachelor in Sec. Educ - Sci/Health History Math Guid/Coun. Filipino English HE Values Ed. Social Studies	4311

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
			Bachelor in Elem. Educ - HE Filipino Math Guid/Couns PSE English Music History Soc. Studies Sci/Health Bachelor of Arts - Economics Political Science	
24. San Pedro College	Guerrero St., Davao City	Sr. Patria Painaga, PM	BS Nursing BS Medical Technology BS Respiratory Therapy Bachelor of Arts - Env. Hygiene AB Psychology BS in Biology Bachelor of Science (BS) BS Pharmacy Pre- Dentistry MA Nursing MA in Hosp. Admin. MA in Industrial Counselling	2759
25. St. Francis Xavier College Seminar	Talomo District	Fr. Martiniano Gorgonio, DCD	Classical Liberal Arts - Philosophy	144
26. St. Francis Xavier Reg'l Major Seminary of Systematic Pastoral Ministry		Fr. Martiniano Gorgonio, DCD	Theology	95
27. St. Peter's College of Toril	Toril District	Sr. Anna Donatilla Cruz, PM	Bachelor of Arts - English Filipino BS Commerce - Management 2 Yr. Junior Secretarial	523
28. Toril Community Educational Inst.	Toril District	Ms. Margarita S. Laroda	BS Commerce Bachelor of Arts	55
29. UCCP Pag-asa School of Theology	Madapo Hills, Davao City	Dr. Cresenciano Mosot	Bachelor of Arts - Theology Christian Educ.	8

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
30. University of the Immaculate Conception	City Proper	Sr. Connie Albano, RVM	BS Civil Eng'g. BS Computer Eng'g. BS Elec. and Comm. Eng'g. BS Accountancy BS Commerce - Management - Marketing Bachelor of Arts - History English General Science Math BS in Computer Science BS Pharmacy Pharmacy Aide BS Music BS Chemistry ND Bachelor in Sec. Education Bachelor in Elem. Education BS Medical Technology	4612
31. University of Mindanao (Main)	City Proper	Ms. Dolores P. Torres	MA Ed. Mgt./Rel./Elem Ed. BS Commerce - Acct'g. AGB Banking Finance COM MAC Management Marketing BS Accountancy Secretarial Associate- Commerce Bachelor of Arts BS in Social Work BS in Mass Comm. BS in Hotel & Rest. Mgt.	25325

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
University of Mindanao (Main) continued			BS in Engineering - Civil	
			Chemical	
			Electrical	
			GE	
			Mechanical	
			BS in Architecture	
			Engineerin Technology	
			Bachelor in Elem. Educ.	
			Bachelor in Sec. Educ.	
			BS Criminology	
			Associate Criminology	
			BS Forestry	
			Associate Forestry	
			Graduate Educ	
			GS	
			MBA	
			MEP	
			Doctorate	
32. UM Guianga				39
33. University of Southeastern Philippines		Dr. Edmundo B. Prantilla		8667
1) Obrero Campus	Bo. Obrero, Davao City			
Advanced Studies				
College of Education				633
School og Govt. and Management				583
College of Technology				68
Inst. for Housing & Urban Studies				18
Tertiary				224
College of Technology				658
College of Arts and Sciences				510
College of Education				1330
College of Engineering				755
2) Apokon Campus	Tagum City			
Advanced Studies				224
Tertiary				1345
3) Mintal Campus	Mintal, Davao City			977

Name of Tertiary School	Address	Institution Head	Academic Program	Total Enrollment
4) Mabini Campus	Mabini, Compostela Valley			527
5) Bislig Campus	Bislig, Surigao del Sur			128
6) Baganga Extension	Baganga, Davao Oriental			240
7) Hinatuan Extension	Hinatuan, Surigal del Sur			359
8) Kapalong Extension	Kapalong, Compostela Valley			290
9) Pantukan Extension	Pantukan, Compostela Valley			90

SOCIAL SECTOR REPORT

PART 4: Health

Chapter 1 Government Policies and Initiatives

1.1. Health Services in the Country: Legal Basis, Goals and Targets

The 1987 Philippine Constitution mandates that "The State shall protect and promote the right to health of the people and instill health consciousness among them." In pursuit of this mission, the same document declares that "The State shall adopt an integrated and comprehensive approach to health development which shall endeavor to make essential health services available to all people at affordable cost."

This constitutional provision and the Philippine National Development Plan have provided direction for the vision of health services in the Country which is to help all Filipinos attain "a level of health and nutrition that would enable them to lead socially and economically productive lives and fulfill their human potential."

The Updated Medium-Term Philippine Development Plan (1996-1998) defines the focus of health services in the Country as the prevention and control of leading communicable, non-communicable and lifestyle-related diseases and illnesses or conditions arising from environmental and occupational health hazards while paying attention to health service capacity improvement.

The Department of Health (DOH), as the lead agency of the Government in the delivery of health services, has key measurable targets against which its performance is being measured. Among others, it aims to raise life expectancy, reduce infant mortality and bring down fertility rate and population growth rate. Higher incomes brought about by gains in the economy are expected to raise per capita energy intake, reduce rate of moderately and severely underweight population in both pre-school and school-age children and lower the incidence of anemia and other nutrition-related diseases.

DOH plans to accomplish these targets by meeting the basic needs (MBN) through health, nutrition and population programs, women's health and nutrition, safe motherhood and child survival, and the upgrading of hospitals or converting them into centers of wellness. Another strategy is to harness the people's productive capacity through strengthening local government capacity to manage the community's health, nutrition and population programs.

Greater social integration will be promoted by giving patients the right to make decisions relative to their health and welfare. Specific programs will address the high-risk groups of 10-24 years old in order to arrest the increase in the incidence of pregnancies or sexually-related problems. The rights of women and men to choose their desired family size and family planning practice will likewise be addressed.

1.2. Department of Health: Its Functions and Programs

DOH is the principal agency mandated to deliver basic health services to the population of the Country. Figure 1 shows the organizational structure of DOH. Its overall development thrusts and goals are those pursuant to the National Health Plan (NHP) and the DOH Medium-Term Plan. It implements programs and projects as well as activities pursuant to the Social Reform Agenda (SRA), Women in Development, Pole Vaulting for Health in the 21st Century and other programs of the national government.

Its key functions include the following: (1) policy making and planning; (2) assistance to LGUs, (3) information, education and communication, (4) standards development, licensing and regulations, (5) research and development, (6) resource management, including direct services delivery of vertical programs, (7) monitoring and evaluation, (8) disaster/epidemic management, (9) health information and exchange, and (10) service delivery in retained hospitals.

Its programs in 1997 gave priority to prevention and promotion measures, such as: women's health and safe motherhood, child survival program, control of prevalent diseases affecting the workforce through the National TB Control Program, the control of leprosy, rabies and dengue, healthy lifestyle programs, nutrition, environmental health service, STD-AIDS, services of DOH-retained hospitals, and other vertical programs.

1.3. DOH after the Devolution

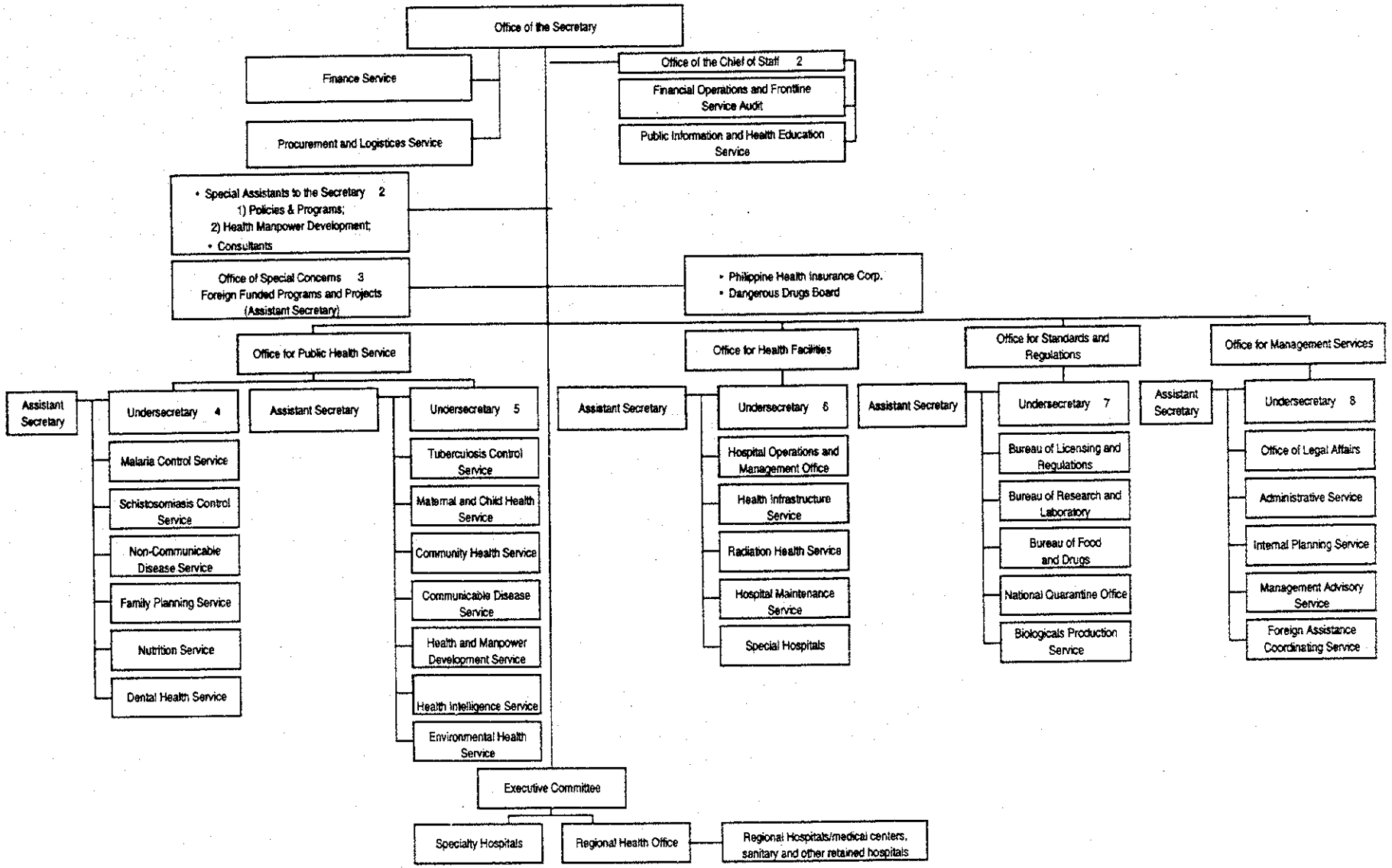
DOH is cognizant of the problems brought about by the Local Government Code of 1991 and its implementation in 1993 on its effectiveness as a service agency of the Government. It realizes that its ability to deliver health services to the poor and the underprivileged depends on how soon LGUs and DOH are able to fast track the entire devolution process and come up with an effective and efficient devolved health care delivery system.

On the part of DOH, it is pursuing a paradigm shift from a centralized system to a devolved system through re-structuring of the Department in order to be more responsive to LGUs. LGUs, on the other hand, need to develop their capacity to deliver health care services. Proof of such a capacity would be their willingness and resolve to allocate sufficient manpower and resources to insure efficient and effective health care to their constituents.

Before the implementation of the Local Government Code in 1993, the planning and implementation of health services was vested in the Regional Health Field Offices. Soon after, the delivery of basic health services was devolved to the Local Government Units (LGUs) in keeping with the policy of the Government to grant local autonomy to LGUs and decentralize its functions accordingly.

As a consequence, local DOH personnel, including physicians, nurses, midwives, and others were appointed by the local chief executive. The funding and administration of health facilities at the local level were transferred to LGUs concerned. DOH as the national government agency, however, had the responsibility of prescribing and providing standards and guidelines in the provision of support services, including grants-in-aid or block grants and technical assistance to LGUs.

Figure 1 Organization Chart of Department of Health



DOH retained supervision of regional hospitals and some other hospitals, while integrated provincial health offices (including provincial hospitals) and highly urbanized city health offices (including city hospitals, health centers, rural health units) were transferred to the supervision of provincial governors. The supervision of city health offices and municipal health offices (including health centers and barangay health stations) were likewise devolved to their respective city/municipal governments.

As in the past, NGOs and POs continued to play vital roles in helping the Government provide basic health services to the people, especially in places where the Government has failed to deliver them. Some NGOs and POs have been accredited by DOH.

1.4. DOH Regional Field Office No. XI: Its Scope of Work and Status of Programs

Prior to the full implementation of the Local Government Code in 1993, the Regional Field Office (RFO) XI was directly implementing health programs in multifarious levels from the regional, the provincial, and the district levels which includes the district and municipal hospitals, Rural Health Units and Barangay Health Stations. At present, the functions of DOH-RFO No. XI are mainly technical, covering practically all the key functions identified and discussed below along with the status of its programs. They are described below.

1.4.1. Planning

DOH-RFO XI conducts annual consultative planning workshops separately for each of the vertical programs such as maternal and child health care, nutrition, control of communicable and non-communicable diseases, environmental sanitation, oral health and disaster management.

1.4.2. Local government assistance

In 1996, DOH-RFO No. XI organized the Regional Technical Assistance Team (RTAT) which assists the provinces in submitting reports, doing regular monitoring and evaluation and conducting constant dialogue and consultation with local chief executives and Local Health Board.

1.4.3. Social mobilization

The Primary Health Care (PHC) program of the Government is responsible for mobilizing the community and networking with NGOs in order to realize the goals of making health accessible, available, acceptable and affordable at all times to all the people.

(1) Partnership for Community Health Development (PCHD)

DOH-RFO XI assists a process of building community capabilities to identify and prioritize health needs for planning, implementing, mobilizing and managing resources to achieve sustainable and healthy living conditions. The PCHD started in May 1993 in the DIDP Area specifically in Davao Oriental in the municipalities of Mati, Tarragona, Caraga, Baganga and Gov. Generoso identified as Target Areas for Development (TADs). In 1994, four towns in Davao del Sur were also identified as TAD areas.

(2) Innovative capability building program for different health personnel

This program is implemented by DOH in association with the Center for Education, Research and Development Health of the Davao Medical School Foundation with the following components:

1) Stepladder Education/Partnership for Alternative Health Science Education – a formal training medical course for Barangay Health Workers (BHWs) and their children;

2) Masters in Community Health – a post graduates scholarship-training program for devolved and non-devolved personnel;

3) Pre-training seminar for Health to selected indigenous cultural community students; and

4) Project TREAT – training on health activities for BHWs.

(3) Health of Youth (HOY) information caravan team

This team helps to disseminate main programs of DOH through stage shows.

(4) Health data board

A community based health information system which is organized and managed by the people in the community.

(5) Botika Binhi

This is a community drug insurance program that ensures the provision of affordable quality essential drugs.

(6) Indigenous people's health program

Under this program, community health projects are implemented in Little Baguio, Malita and barangay Buca, Sta. Maria both in Davao del Sur and the Talaingod municipality in Davao Province.

1.4.4. Standards/licensing/regulations

The licensing section of the Office of the Assistant Regional Director of DOH-RFO No. XI conducts the licensure activities for primary and secondary, government and private hospitals. The Bureau of Licensing and Regulation in Manila inspects and issues licenses to tertiary level government and private hospitals. In 1996, two government and one private tertiary hospital in the DIDP Area were downgraded to secondary hospitals because of lack of manpower and non-functional instruments and equipment in the hospitals.

The food and drug services section of DOH-RFO XI licensed the first bottled spring water in the DIDP Area in 1996. Licenses were issued in 1995 to Nenita Quality Foods, the biggest meat processing plant in Asia based in Toril, Davao City and Filipino Oil Corporation, an oil refinery at Mabini, Davao Province. The food and drug laboratories are monitored to ensure their compliance with the Good Manufacturing Practice (GMP) based on the ASEAN GMP standards.

1.4.5. Research and development

The Essential National Health Research (ENHR) Program of DOH aims to promote a scientific and data-based culture within the health sector and it intends to direct,

coordinate, support and sustain health research activities among the different institutions and researchers in the country. Since 1994 the ENHR Program of DOH has conducted four to five seminar workshops on research writing for government personnel and NGOs in Davao City only.

Other national health research institutions of the Philippines are the Philippine Council for Health Research and Development (PCHRD) and the Research Institute for Tropical Medicine (RITM). There is a Regional Health Research Development Committee (RHRD) of PCHRD, which is based at the Davao Medical School Foundation (DMSF). Health researches in the Area are financially supported by RHRD.

1.4.6. Monitoring and evaluation

Monitoring of vertical programs is done mainly through the review of data reported. Program reviews and evaluation are conducted annually at the regional level. Monitoring at the provincial and municipal levels are done by DOH representatives in the area. Program managers or coordinators are supposed to monitor programs regularly in the field but because of limited travelling allowances this is not happening. LGUs have limited technical manpower that can do the monitoring of health activities in the field.

1.4.7. Epidemic surveillance

The Regional Epidemiology Surveillance Unit No. XI (RESU XI) assists in the control and prevention of the following communicable diseases: acute flaccid paralysis, cholera, dengue fever, diphtheria, hepatitis A and B, malaria, measles, pertusis, meningococcal disease, tetanus for neonatal and non-neonatal, rabies and typhoid fever. In 1996, basic epidemiological trainings were conducted for DOH representatives from Davao City, Sto. Tomas and Tagum, Davao Province and Mati, Davao Oriental. RESU XI actively participated in the control, prevention and follow-up activities of the cholera outbreak in Baganga, Davao Oriental in April to June 1996.

1.4.8. Resource management

(1) Health personnel

The human resource development (HRD) program has to be redirected as a result of the shift of responsibilities of DOH from service providers to "servicers of servicers" due to the devolution. A series of training were conducted from 1993 to 1996 for the health personnel at different levels regarding the vertical programs, physical fitness, mental health and spiritual renewal.

(2) Maintenance of hospital equipment

The Hospital Maintenance Service-Mindanao (HMS-M) was established in 1993 and is operating as a service division of DOH-RFO XI for all hospitals in Mindanao. Objectives of HMS-M are to provide technical services on the proper maintenance and repair of health care equipment, to train health care staff and conduct researches on maintenance of medical equipment, and provide assistance to health care facilities in establishing health care equipment services.

HMS-M was able to repair 621 equipment in 1996, of which 65% are in Region XI. Prioritized equipment are X-ray machines, defibrillator, ultrasound, electro cautery,

anaesthesia, ECG machine, autoclave, infant incubator and spectophotometer. Dental units, operation room tables and lights are considered as major but not priority equipment.

(3) Finances

Since the devolution, the budget for devolved health functions including personal service (PS) and maintenance and other operating expenses (MOOE) for field health units and hospitals (except the Davao Medical Center and the Davao Regional Hospital) has been given to LGUs. DOH-RFO XI is still the conduit of funds released for foreign-assisted projects, congressional initiatives and President's Pump-priming Projects to LGUs and NGOs.

The total budget of DOH-RFO XI coming from the Government doubled from 1993 to 1996. Increases were noted in the budget for personal services for general administration and tertiary hospitals. However, the budget supporting indigent patients, decreased in the past four years for LGUs PHC programs, drugs and medicines, herbal processing plant and hospital maintenance service.

The funds coming from the congressional initiatives and the countryside development fund increased five times in the past four years. In 1996, 81% of these funds went to expenses for hospitals. Minimal support is given to rural health centers and health programs in the community by the congressmen and senators.

1.4.9. Health information system

(1) FSHIS

The only public health information system in the Philippines is the Field Health Service Information System (FSHIS) which is a facility-based system coming from the barangay health stations, municipal health centers and the provincial health offices. DOH-RFO No. XI has modified the FSHIS in 1997 to make it more user-friendly.

The elements of FSHIS did not change even after the devolution. After the devolution, however, LGUs have become the primary user and implementor of the data with DOH merely providing technical support. There are five component activities that comprise the system: recording, reporting, data entry, processing and production and dissemination of output tables.

The areas reported in the FSHIS are the control programs of acute respiratory infections, cancer, diarrheal diseases, dengue, leprosy, malaria, tuberculosis, rabies, filariasis and schistosomiasis, dental health services, expanded program of immunization, family planning program, cardiovascular diseases program, maternal care program, natality report, food and micro-nutrient supplementation, sexually transmitted diseases and under five clinics.

(2) Community health database

In the mid-1980s, the Davao provinces implemented the Cluster Profile Databoard which is an approach to empowering people through the community-based information systems. This was implemented by community organizations, the national and local governments, NGOs and the academe. The cluster databoard was used to monitor the Community Health through the Integrated Local Development (CHILD) Project.

In the early 1990s the databoard was modified by DOH in Region X to include a spot map that gave a geographic power base to the system; henceforth the name was changed to community health databoards.

The databoard is updated every quarter of the year by the community. Four important types of information are contained in the board:

i. demographic data – actual count of households, number of pregnant women, children below one year of age;

ii. public health data – immunization, prenatal, family planning, nutrition, water, disposal of garbage, toilet and smoking;

iii. comprehensive spot map – location of houses, physical characteristics or attributes of the community and water sources of all types; and

iv. community's health plan – not all databoards may have this but in some areas they have plans about their health infrastructures.

When the minimum basic needs (MBN) approach was implemented in 1995, the databoard was expanded to include the 34 indicators of survival, security and enabling capabilities. The Government enjoined all LGUs to adopt the MBN approach as a strategy for convergence to improved quality of life. The process of convergence shall provide for multilevel, multi-sectoral and interagency coordination and consultation.

1.5. Health Insurance Program

The National Health Insurance Program in the Philippines as embodied in Republic Act 7875 is the response of the Government to the need for new health care financing approaches. This law, signed in February 1995, aims to provide health insurance coverage and access to quality and affordable health care services for all Filipinos. Until now, however, there is no community in the Area that is being covered by this law.

The Philippine health insurance system recognizes the importance of people's participation. Community organizations all over the Philippines have developed alternative schemes for health financing. These endeavors should be strengthened, maintained and used as a basic foundation in implementing the national health insurance.

1.6. National Drug Policy

The Philippine National Drug Policy (PNDP) is the response of the Government to the problem of inadequate provision of good quality essential drugs to the people. The PNDP stands on five pillars that will eventually ensure the availability and affordability of safe, effective and good quality drugs for all Filipinos. The five pillars are:

1) Quality assurance – which involves the regulation of importation, manufacture, marketing, and consumer utilization of all drugs and their intermediates;

2) Rational drug use by both the health professionals and the general public;

3) Self-reliance – which seeks to strengthen Filipino capabilities in manufacturing basic and intermediate ingredients for drugs and medicines;

4) Tailored procurement of drugs by the Government to make drugs affordable; and

5) People empowerment and community initiatives that ensure the provision of essential drugs supported by the Government.

The Philippine National Drug Formulary (PNDF) is a basic component of the PNDP, which seeks to rationalize drug production, distribution, procurement and consumption through the Essential Drug Concept, thus the enactment of Republic Act No. 6675, otherwise known as the Generic Act of 1988.

Chapter 2 Existing Conditions of the Area

2.1. Health and Sanitation Conditions

2.1.1. Infant mortality rate (IMR) and maternal mortality rate (MMR)

During the period 1992-95, the DIDP Area experienced declining IMRs and MMRs (Table 1). The rates of decrease were largest in Davao City, presumably due to better accessibility to health services. The MMR decline in the City may also be attributable to the practice of having deliveries at health facilities or safe delivery with trained personnel at home rather than having delivery with untrained traditional birth attendant (Hilot) at home. Davao Oriental achieved the lowest rates or decrease in both IMR and MMR during the same period.

Table 1 Selected Demographic Data

	Davao Province	Davao del Sur	Davao Oriental	Davao City
1. Total population	1,191,443	677,069	413,472	1,006,840
2. Pop. Growth Rate	2.28%	1.28%	0.87%	3.22%
3. Life Expentancy		*57.63		
4. IMR (1,000 live births)				
1992	61.65	49.55	58.93	35.19
1993	60.07	48.94	58.8	33.24
1994	58.50	48.33	58.68	31.28
1995	56.92	47.72	58.56	29.33
AAGR (%) 1992-95	-2.63	-1.25	-0.21	-5.89
5. MMR (per 100,000 live births)				
1992	177.75	154.30	166.23	131.58
1993	173.26	158.41	165.90	124.27
1994	168.78	150.51	165.56	116.96
1995	164.3	148.61	165.23	109.65
AAGR (%) 1992-95	-2.59	-1.24	-0.20	-5.90

AAGR: Average Annual Growth Rate
Source: 1 & 2 – 1995 Census of Population (Southern Mindanao)
4 & 5 – Statistical Yearbook, 1996
3 – 1996 Census
*1990 figure

2.1.2. Diseases pattern

As experienced in most areas of the Country, the epidemiological transition has started in the DIDP Area especially among higher income population in urban areas. The immunization program has rendered all the immunizable diseases more or less under control. Still the leading causes of morbidity of all ages are communicable diseases such as bronchitis, diarrhea, influenza, pneumonia, malaria, TB (all forms), schistosomiasis, and others. On the other hand, there has been a rise in the incidence of non-communicable or degenerative diseases such as cardio-vascular diseases, accidents, hypertension, and malignant neoplasms making them among the leading causes of mortality in recent years.

The top three leading causes of mortality in Davao City are coronary artery disease, hypertension, and cancer. It has been observed that the changing disease pattern in the City goes along with urbanization and dietary changes. In the next 20 years, it is predicted that further progress of the epidemiological transition will result in an

even greater demand for therapeutic health service to cope with emerging chronic and degenerative diseases in the adult and the elderly population.

At present, emerging problems in most areas are still water-borne diseases. Diarrhea incidence and outbreak of cholera are high in Davao Oriental. The incidence of schistosomiasis has dramatically dropped in the last five years, but still ranked the sixth highest leading causes of morbidity in Davao Province in 1996. Upper respiratory diseases are high in all places. Pneumonia, particularly, is the top leading cause of mortality in two provinces: Davao Province and Davao Oriental. There seems to be no sign of tuberculosis being controlled. Paragonimus endemic has been identified in the east coast of Davao Oriental and needs to be looked into in other areas where there has been persistent cases of TB.

2.1.3. Nutrition

Davao City has the highest percentage of third-degree malnutrition in the DIDP Area, although improvements in recent years have been most significant (Table 2). This improvement of nutrition status among pre-schoolers in the City is partly due to the City government's efforts: supplementary feeding programs which provide fresh milk and Nutripaks to identified malnourished preschoolers and lactating mothers. Davao del Sur has a high percentage of third degree malnourished preschoolers which has not improved in the last four or five years.

Table 2 Percentage of Third Degree Malnutrition to Total Weighed Population among Preschoolers 1992-95

	Davao Province	Davao del Sur	Davao Oriental	Davao City*
1992	1.11	1.03	1.18	1.86
1993	1.04	0.94	1.06	1.63
1994	0.88	0.91	1.08	1.35
1995	0.64	0.91	0.85	1.23
AAGR (%) 1992-95	-9.14	-0.27	-5.74	-9.52

Source: National Statistics Yearbook, 1996

2.1.4. Persons with disability

It has been estimated that about 10% of the general population have disabilities, both physical and mental, out of which only 2 to 3% have access to rehabilitation services (DOH annual report, 1996).

According to the 1995 census, 9,629 persons in Davao City, or 1.0% of the total population, were reported to have disability. Of the toral, persons with low vision constituted the highest percentage (19.8%), followed by those with mental retardation (9.6%) and partial deafness (9.4%). Some 14,120 persons, or about 1.2%, of the population in Davao Province have disability. Low vision was the most common type of disability affecting 27.8% of all persons with disability. Partial blindness was reported to be 10.5%, partial deafness 8.0%, mental retardation 7.6% and paralysis of one or both legs 7.3%. Davao del Sur has 6,538 persons, or 1.0%

of the total provincial population with disability. Persons with low vision constituted the highest percentage of 14.8%, followed by partial deafness (11.0%) and partial blindness (10.9%). In Davao Oriental, only 6,715 persons or 1.6% of the total province population were reported to have disability. Persons with low vision constituted the highest percentage (41.8%), followed by those with partial blindness (9.5%) and partial deafness (6.3%).

Most rehabilitation services are located in urban areas and are quite expensive. Since it is not realistic to have such services in the rural areas, community based rehabilitation programs were created by DOH. This program is a creative application of primary health care approach in rehabilitation services, such as physical therapy, occupational therapy, speech therapy and psycho-social therapy.

In 1992, Community-Based Rehabilitation Program was implemented in four pilot regions (1, 6, 9, 10) and expanded to three regions (2, 4, 8) in 1995. In Region XI, this program was formally launched in Lupon, Davao Oriental as the pilot area in 1995, where 44 disabled persons received rehabilitation services on physical therapy, occupational therapy, speech therapy and psychosocial therapy all rendered by trained immediate and local supervisors.

2.1.5. Water

The existing situation of water supply in the DIDP Area is shown in Table 3. Davao Oriental has the lowest percentage (47%) of households with safe water, while Davao province has the highest percentage (85%). Davao Oriental is suffering from water-borne diseases such as diarrhea and outbreak of cholera due to this lower coverage of safe water in the province. The situation in Davao City is different from other provinces. While the majority of people in the urban area (76%) is now being covered by Davao City Water District (DCWD), the remaining rural areas (24%) still depend on springs, deep wells or free-flowing wells. Rural water supply development is a major issue that should be looked into.

Table 3 Percentage of Household with Safe Water

	Davao Province[1]	Davao del Sur[2]	Davao Oriental[3]	(Urban area only [4]) Davao City
Total Household	102,132	123,452	75,761	*(180,988) 198,068
HH with safe water	178,014	81,803	35,486	84,720
Percent (%)	85	66.3	47	**56.1

Source: [1] PHO Davao Province 1996
[2] PHO Davao del Sur 1995
[3] PHO Davao Oriental 1996
[4] Comprehensive Development Plan, 1998-2021
* HH in urban area; 76% of total HH
** based on number of HH in urban area which is served by Davao City Water District (DCWD)

2.1.6. Environmental sanitation

According to recent provincial reports, the ratio of households with sanitary toilets has been increasing in every province/city. In Davao del Sur and Davao Oriental, the ratio has increased rapidly from 40% to 65% in both provinces. However, both

provinces have still higher percentage of households without toilets. According to the Davao del Sur provincial report, almost one-fourth of total households do not have toilet.

Davao City has the highest ratio of households with sanitary toilet; however, the issue of sanitary toilets in squatter areas still pose a big problem in Davao City. The City has been putting up septic toilets in households; in fact, 10,000 septic toilets were installed during the period of 1995 to 1996. The City is now trying to place common toilets in urban slum areas and those common toilets charge minimum cost to users to maintain them.

Table 4 shows sanitation facility coverage in the DIDP Area in 1997.

Table 4 Sanitation Facility Coverage

	Davao Province		Davao City		Davao del Sur		Davao Oriental	
Year	1990[1]	1997[2]	1990	1995[5]	1990[1]	1996[3]	1990[1]	1997[4]
HH with Sanitary toilet	60.6	72.9	N.A.	82.3	39.7	66.8	38.7	65.4
HH with Unsanitary toilet	33.4	18.1	N.A.	7.5	49.4	11.0	13.4	13.4
HH without toilet	6.0	9.0	N.A.	10.2	10.9	22.2	21.8	21.2

Source: [1] – 1990 Census of Population and Housing
[2] – PHO Davao Province 1997
[3] – PHO Davao del Sur 1996
[4] – PHO Davao Oriental 1997
[5] – City Health Office 1995

2.1.7. Occupational health

The health need of the working population who are under-served and at greater risk is a growing concern of the society. In 1996, a study of the Occupational Health Program of the DOH-RFO XI showed high levels of mercury and cyanide in the blood of 21% of the 114 elementary schoolchildren examined in Barangay Apokon, Tagum, Davao Province. Biological examination was also conducted among 52 cacao plantation workers in Malita, Davao del Sur for possible pesticide (Diacenone) poisoning. Training of medical professionals on toxico-vigilance, prevention and management of toxicologic patients are the other activities of the program.

The effect of other agro-chemicals to the health of the people should be established through research to prevent other toxicological-related problems. In Nabunturan, Compostela Valley, it has been observed by the municipal health officer that there is prevalence of skin and gastro-intestinal illnesses among farmers and their families in commercial banana plantations.

2.1.8. Family planning

The Family Planning Program of the Philippines aims to guarantee the freedom of all to make a purely voluntary decision about their fertility, their family, their future, and quality of life. The program also aims to minimize pregnancy-related risks to women, while also protecting children and their rights to grow up healthy.

According to the Annual Report 1996, Region XI has the highest contraceptive prevalence rate (CPR) in the whole Country. The DIDP Area also has a higher CPR.

Davao Oriental achieved a CPR of 53.0% in 1997 and Davao del Sur had an even higher rate of 66.0% in 1993.

Among the methods used for family planning, reversible methods such as pills, IUDs, condoms, injectables, and natural family planning are most prevalent. Permanent methods, such as male and female voluntary surgical sterilization, are the least preferred method in any place.

Foreign aid agencies have been contributing to the family planning program in the Area. In Davao City, USAID and AusAID support the program. The grants are used for trainings, consultative meetings, procurement of equipment, instruments, and medical supplies and medicines.

2.2. Health System and Facilities

2.2.1. Some macro indices

(1) Hospital beds to population

Using the standard ratio of 1:500, Davao Oriental appears to be in the worst situation of all, while Davao Province also needs some improvement (Table 5). The inadequate number of secondary and tertiary hospitals would be contributing in part to the higher death rates, particularly among infants and mothers. In Davao Oriental, the private sector does not seem to contribute much to the health care services to the public. It seems that the higher rates of poverty incidence (62.1%, in 1994) is constraining the private sector activities, in general.

Another problem is the imbalance in the distribution of hospital facilities between urban and rural areas. Davao City, for example, has a geographically highly skewed ratio of hospital beds to population. Most of the secondary and tertiary level hospitals owned by both the government and the private sector are concentrated in the Poblacion, and the only government hospital outside the Poblacion is the Paquibato hospital with a total bed capacity of only 10 beds.

Table 5 Number of Public and Private Hospital beds, Ratio to Population and Poverty Incidence

	Davao Province	Davao del Sur	Davao Oriental	Davao City
1 Number of Public Hospital	230	200 [1)]	160	410 [2)]
2 Ration to Population	1 : 5180	1 : 3385	1 : 2584	1 : 1651
3 Number of Public & Private Hospital	1,300	1345 [3)]	242	1,813 [4)]
4 Ratio to Population	1 : 916	1 : 503	1 : 1709	1 : 555
5 Poverty Incidence	N.A.	[5)] 32.8%	[6)] 62.2%	[7)] 23.0%

Note: [1), 2), and 4)] – figure in 1996
[3)] – Figure in 1991
Source: DOH – Region XI
[5)] PPDO, 1990; [6)] NEDA, 1994; [7)] FIES Primary Results, 1991

(2) Main Rural Health Centers (MRHC) to population

Based on the standard MRHC to population ratio of 1:20,000, Davao Province and Davao City need significantly more MRHCs as shown in Table 6. Due to this inadequacy, the delivery of preventive health care services at the primary level is difficult and the referral system is made non-functional due to the tendency of patients to go directly to the secondary level health facilities.

Table 6 Number of Needed Main Health Centers

	Davao del Norte	Davao del Sur	Davao Oriental	Davao City
1992	36	19	10	30
1993	38	20	11	32
1994	39	20	11	33
1995	40	21	12	N.A.
1996	42	22	12	N.A.

*The table is based on the statistics on the standard MHC-population ratio of 1 : 20,000
Source: National Statistics Yearbook, 1996

(3) Deaths with and without medical attendance

The proportion of population who die without benefit of medical attendance is large in all places, particularly in Davao del Sur (98.0%) and Davao Province (85.1%) (Table 7). This could be explained partly by the problem of accessibility, unavailability of medical service in emergency cases, or perhaps elements in the culture of the people and quality of services.

2.2.2. Health facilities and equipment

DOH has a policy on standardization of services, personnel, equipment/instruments, and physical plant for the primary to tertiary hospitals shown in Appendix 1. Many of its health facilities have been found inadequate. In fact, some secondary level hospitals fail completely to offer vital services to the public due to total lack of equipment and instrument. Many secondary and even tertiary hospitals have not been able to perform up to their maximum capacity because of non-functioning equipment or lack of equipment. Many health personnel in those health institutions are frustrated and discouraged because of this deficiency. The situation of public hospitals as observed is listed in Appendix 2.

Table 7 Number and Percentage of Deaths with and without Medial Attendance (1994)

		Davao Province	Davao del Sur	Davao Oriental	Davao City
with medical attendance	Number	328	32	312	1,311
	%	15.0	2.0	30.8	30.6
without medical attendance	Number	1,867	1,543	700	2,981
	%	85.1	98.0	69.2	69.5

Source: National Statistical Yearbook, 1996

At the municipal and barangay levels, the situation is even worse. In many of Rural Health Centers, basic medical laboratory facilities are not up to standard. There are very few RHUs having dental care service facilities. A large percentage of barangay health services are not equipped with minimum basic equipment and instruments. For example, not one blood pressure apparatus was found in any of the Barangay Health Stations visited during the field survey. Barangay health workers kits are no longer provided by LGUs in some areas.

A study revealed that, on the average, hospital facilities in developing countries absorb, 60% to 80% of government health facility expenditure (Mills, 1991). It follows, therefore, that if those hospitals are not able to reach their maximum capacity, a large portion of government funds are wasted. For places isolated by insufficient infrastructure, it is vital to keep health facilities functional to save people's lives especially in cases of emergencies. Also, it is important to equip community level health facilities with minimum basic equipment in order to trace disease incidences and monitor people's health.

2.2.3. Health personnel

Table 8 shows the situation of health personnel in the DIDP Area. There are two main problems associated with human resources in the health sector. One is that, even when the number of health personnel meets the standard ratio to the population, their geographic distribution is not balanced. The preference of many health personnel to reside in a city/urban area is making health services in rural areas inadequate and sub-standard.

Dentists are very much needed in the Area, yet, there are not enough to meet the standard dentist-popularion ratio, and 115 additional dentists are needed in the Area. Together with lack of manpower, dental care services are crippled severely by inadequate equipment and instruments. Field observations revealed that the number of pharmacists at the community level is also very inadequate (Actual number of pharmacists is difficult to obtain from existing statistics).

Table 8 Number of Physicians, Nurses, Mid-wives, and Dentists Needed (Excess) (1996)

	Davao Province	Davao del Sur	Davao Oriental	Davao City*
Number of Physicians needed	(31)	(19)	(21)	26
Number of Nurses needed	28	(16)	(18)	62
Number of Mid-wives needed	20	(28)	(51)	162
Number of Dentists needed	44	18	10	43

Source: National Statistical Yearbook, 1996
*The number is the personnel under the plantilla position and Philippine Health Development Project employees, Health City Office, 1994

2.2.4. Drug supply

The national drug policy was formulated in 1988, and the Philippine National Drug Formulary is reviewed quarterly and updated annually. After the devolution,

however, the drug management system at the local level is no longer efficient. The procurement procedure is now horizontal rather than vertical (i.e. from the Central Government down to local), resulting in the losses in administrative efficiency, simplicity of the procedure and loss in the economies of scale. With the budgetary procurement process all vested in LGUs, insufficient budget allocations have been often observed. As a consequence, drug shortages at lower levels of health facilities have been high.

This situation has jeopardized health services in the DIDP Area. There are times when even tertiary hospitals are short of drugs both for out-patients and in-patients. Even the TB program of some provincial level health facility have suffered because of shortages of anti-TB drugs. The fact is that there are many health facilities without drugs. Delays in the procurement can take up to nine months at a time. Thus, there are practically no drugs at the community level.

2.2.5. Information system

The existing health information system starts from the community level. Midwives of a health center fill up the forms of the Field Service Health Information System (FSHIS) and submit the same to the public health nurse of the municipality. From the nurse, the data go to the provincial health office where the data are processed in the computer and submitted to the region.

Some of the existing problems of this system is the delay in the submission of reports and weak feedback mechanism to the implementors of health programs in the locality. LGUs are not regularly informed about the situation of a program. There is no existing integration of data from the community health data board to the FSHIS and to the hospital information system.

2.2.6. Health financing

Since the devolution, LGUs have been responsible for the financing of health services. The provincial government provides funds for drugs, salaries and other operational expenses of government primary, secondary and tertiary hospitals. The municipal government supports the operations of the health centers with supplies and drugs.

(1) Provincial level

The allocation for health services in practically all provinces/City is a far second to economic service including infrastructure, which have a 59% share of the development fund. Davao Oriental, for example, allocates 18% for health care. Of the total allocation to health, 87% goes to support operations of curative services and 11% to preventive care. Somehow, deficiency of government budget is augmented by funds from other sucrose. In particular, foreign assisted programs support maternal and child health and family planning programs, and the Philippine Charity Sweepstakes have made significant donations of equipment for the hospitals.

(2) Municipal level

Budgets of health centers have considerably decreased since the devolution. Almost 90% of these budgets goes to personal services. This leaves a very small allocation for drugs. There seems to be no way to procure the needed amount for drugs for the populace.

The Nabunturan municipality in Davao Province, for example, allocated 22% of its development fund for health. Drugs and medicines, supplies and materials for training and traveling expenses and salaries of health personnel took 58% of the budget for health, followed by medical outreach activities with 26% and 15% for BHWs' traveling expenses and honoraria. However, BHWs in some barangays receive only ₱100 quarterly as honoraria. No traveling expenses were provided for attending trainings.

2.2.7. Tertiary hospitals

Tertiary hospitals are under the administration of the National Government and are the only health facilities not affected by devolution. These hospitals are discussed separately as they are under a different administration and their impact on the health of general populace is considerably significant.

(1) Davao Regional Hospital (DRH)

The Davao Regional Hospital (DRH) is a *de facto* tertiary level training hospital. The DRH is the second largest hospital in the DIDP Area next to the Davao Medical Center with a bed capacity of 150 since 1987. The bed occupancy rate has been over 100% in the last three years. Outpatients number 200 to 300 per day. The hospital manpower in 1995 consisted of 95 personnel for administration, 64 for medical services, and 93 for nursing services. These are below standard, especially nursing services and administration service with 31 and 36 personnel deficiencies respectively.

The total budget of the DRH has been increasing every year. It increased three times over from ₱26.8 million in 1992 to ₱67.7 million in 1996. The DRH also generate a revenue from drugs and fees charged to medical laboratory examinations. Recently, income generated by the hospital goes to a trust fund intended for future use of the hospital.

The hospital offers not only curative but also community-oriented services with various innovative programs. Some of those innovative programs are Surgical Networking Program, Kapitbahayan, Summer Youth Program and other health education programs such as Diabetes Clinic and so on. The Surgical Networking Program is now a joint effort of DRH and LGUs. It offers curative services in hard-to-reach areas, where health volunteers themselves come from the community. It was well recognized that this program received a HAMIS award in the past.

The DRH, however, has an unstable power supply which can cause problems to some sophisticated medical equipment. The hospital badly needs a generator in times of power failure.

(2) Davao Medical Center (DMC)

The Davao Medical Center (DMC) was upgraded to 400 beds in 1992, which incorporated the 200-bed Davao Mental Hospital located in another location in the City. It has 13 specialized departments and 750 official staff including 200 physicians, and many volunteer staff. The DMC acts as has a flagship hospital in Southern Philippines and is now the main referral center among DOH hospitals in Mindanao. The DMC, being a tertiary level hospital, has also training and residency/internship programs.

Of the total patients affected, 80% are from Davao City and the rest from all over Mindanao. Recently, the bed capacity at the DMC was expanded to 580 due to increasing number of in-patients particularly from the urban poor. The mental hospital encountered the same problem despite increase in the number of hospital beds to 400.

Basically, the DMC funds come from the National Government budget (₱234 million in 1997) and some supplemental budget from Davao City. As a project base, the DMC receives support from other countries such as Germany, Austria, France, and Japan. Recently, the Austrian government is supporting a disinfection and waste management project in the DMC and expected to support a wastewater treatment project in the phase 2 of its program from 1998 onward. The project is going to equip the DMC with a large capacity incinerator to dispose hospital wastes. A proposal to expand the capacity of the outpatient department has been submitted to the Japanese government. GTZ of Germany currently funds has a Hospital Equipment Maintenance Service Program while the French government donated five X-ray machines.

The revenue of the DMC is also large. It earned ₱15 million in revenues in 1996 and more than ₱20 million in 1997.

Some of its innovative programs are stationary clinics in barangays for training purposes, a mobile team for ophthalmological service, and patients clubs for diabetics, tuberculosis patients, cancer and hypertension patients.

Problem areas identified for the DMC are as follows:

1) The physical infrastructure is not catching up with the demands for services. The original main building block was designed for 350 patients, but the number of patients have increased tremendously. In 1996, for example, more than 500 patients filled up the hospital occupying even the corridors. On the other hand, the patients who flock to the DMC are not necessarily tertiary level but because of the absence of secondary hospitals at the district level, the DMC is under pressure to service parients.

2) The teaching, training and research dimension of the DMC must be strengthened and further developed. The therapeutic and diagnostic facilities and equipment should be upgraded, in-house research programs strengthened, and research facilities and linkage with other research organizations further developed.

2.2.8. Herbal Research and Processing Plant (HRPP)

The Herbal Research and Processing Plant (HRPP) of DOH-RFO XI became operational since 1983, producing tablets from medicinal plants such as Lagundi, Tsaang-gubat and Sambong. The Certificates of Product Registration for the three plants were obtained in 1994. To insure the production of high quality herbal products, the government of Japan donated ₱7.8 million worth of equipment together with technical support in 1996.

One of the main concerns of the plant is to provide high quality drugs at a very low cost (one bottle of 100 tablets costs ₱50). In 1996, more than one million tablets were produced, 73% were from Lagundi. With the upgrading of equipment the plant hopes to triple its production.

Other activities of the HRPP include: annual herbal fairs and scientific fora to promote community awareness about Philippine medicinal plants; seminars and lectures to LGUs, NGOs, GOs and POs on the preparation of herbal medicinal dosage forms; researches; and multi-sectoral linkage with the academe and other institutions for stability testing and bioassay of drugs and other agricultural products.

One of the constraints of the HRPP is shortages of raw materials. Recently, the HRPP tried an innovative solution by encouraging the Barangay Health Workers Association in Paquibato to plant herbs for the HRPP. This community activity is now becoming a good means of income generation and community empowerment.

2.3. Non-Government Organization (NGOs) in the Health Sector

Some non-government organizations (NGOs) in the DIDP Area are implementing health programs to complement the delivery of health services by governments. These NGOs are either community-based, church-based or just a group of volunteers. Some of the outstanding NGOs in the Area are recognized by the Health and Management Information System (HAMISA) contest as model implementors of efficient, effective and equity oriented health programs.

2.3.1. Archdiocesan nutrition program

This is a church-based program that aims to provide access to poor families to social services that will result in attaining proper or better nutrition, improved physical well-being and spiritual maturity. The program has been operating for the past 22 years in Davao City. In 1990, a total of 7,000 children, infants, pregnant and nursing mothers benefited from the program.

2.3.2. Institute of primary health care

The Institute of Primary Health Care (IPHC) of the Davao Medical School Foundation is one of the active NGOs providing technical skills training in capability building such as community organizing, planning and implementing primary health care programs in the Area. They offer training courses for both local and foreign participants. DOH tasked IPHC to establish a community-based information system in five barangays of the municipalities: Sta. Cruz, Matanao, Bansalan, Sta. Maria and Kiblawan in Davao del Sur.

2.3.3. Tagbitan-ag Women's Organization

The Tagbitan-ag Women's Organization (TAWO) started in 1983 as a Primary Health Care organization of 95 mothers in barangay Tagbitan-ag, Samal, Davao Province. TAWO was started by a rural health midwife to improve the health status of the families in Samal. Activities of the organization include a community drugstore, emergency medical insurance, capability building, immunization, health education, income generating programs, sick and mortuary aid and information education campaign on family planning. TAWO is recognized by different agencies of the Government: DOH-HAMIS contest and the Department of Labor and Employment Women's Office.

2.3.4. Barangay Health Workers Federation of Gov. Generoso

In the municipality of Gov. Generoso in Davao Oriental, 200 volunteer barangay health workers from 18 barangays are actively involved in the collection of health data and assisting health personnel in implementing health programs. This

federation was organized in 1989 starting with only four barangays but eventually other barangays joined in because of the initiative and encouragement of the president.

2.3.5. Community Drug Insurance Program (CDIP) - *Botika Binhi*

The *Botika Binhi* (BB) (Drugstore "Seeding") is an example of a community managed health program which aims to make essential quality drugs affordable, accessible and available in barangays. In the DIDP Area, there are *Botika Binhi* projects in Davao del Sur and Davao Province mainly in indigenous communities.

The *Botika Binhi* started in Smokey Mountain Tondo, Manila in 1990. DOH recognized it as an outstanding program in 1991, 1994 and 1997 and thus it was replicated all over the Philippines by the Government and the *Samahang Manggagawa ng Binhing Kalusugan* (SMBK) (Association of Workers of Seed of Health).