

**Project Formulation Study
on
the Project of Improvement of Second Level Hospital
in the Aspect of Human Security
Republic of Guatemala**

Study Report

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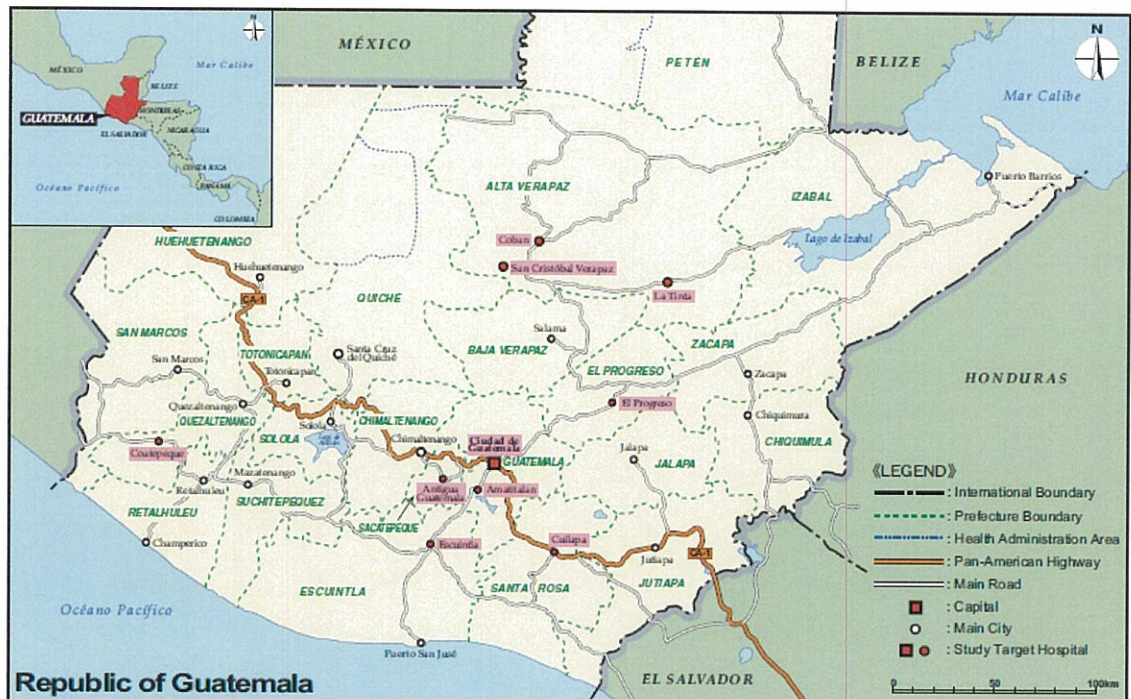


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Abbreviation

	Spanish	English
GDP		gross domestic product
HIV/AIDS		Human immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome
IBD		Inter-American Bank of Development
IGSS		Institute of Guatemalan Social Security
INDAPS	Instituto de Adiestramiento para Personal en Salud	Institute of Training for Personnel in Health
INE	Instituto Nacional de Estadística	National Institute of Statistic
MCH		Maternal and Child
MMR		Maternal Mortality Rate
MSPAS	Ministerio de Salud Pública y Asistencia Social	Ministry of Public Health and Social Welfare
NGO		Non-governmental Organization
Ob/Gyn		obstetrics and gynecology
PAHO		Pan American Health Organization
SIAS	Sistema Integral de Atención en Salud	Integral system of Attention in Health
WHO		World Health Organization

Executive Summary

Guatemala is recently obtaining peace after civil conflict, predominantly rural, and ethnically complex country that has an extremely unequal distribution of income among its inhabitants. Nearly 80% of the rural inhabitants are indigenous peoples, speak 22 different languages. The regions of the country with a high proportion of rural and indigenous population tend to be the poorest. Income inequality is related to the several factors: (a) concentration of land ownership; (b) growing gap between salaries of skilled and unskilled workers; (c) regressive tax system; (d) concentration of public spending in metropolitan areas; and (e) paucity of public services and low coverage of social security in rural areas and marginal urban areas.

Only 67% of Guatemalans have access to health services, and the figure drops to 49% for low-income population living in rural areas. Poor people often have difficulties covering even the nominal fees that are collected in public facilities. In addition, seeking services usually involves high transportation costs (relative to family income) and loss of working days. The low coverage also reflects the inefficient distribution of resources. The country has nearly one physician and one hospital bed per 1,000 people; however, 80% of the physicians and 50% of the nurses are based in the urban areas, which are home to only 35% of the population. Within the public sector, health services are provided by the Ministry of Public Health and Social Welfare (MSPAS), which is part of the central government, and the Institute of Guatemalan Social Security (IGSS) operates as a decentralized and autonomous entity.

Besides, accessibility from rural area to the tertiary hospital in Guatemala City by land route is within one day trip due to the improving of infrastructure. However, the big inflow of low-income population seeking for medical services in the tertiary hospital has in turn, increased payments default rate. In general, rural residents distrust the medical service quality of department hospitals due to the lack of drugs, doctors, as well as misdiagnoses and mistreatments, hence, patients prefer to go the tertiary hospital in the city. Such overwhelming crowdedness of patients has negative impact on the hospitals' finances, work motivation of the staff and patients in severe health conditions who need medical staff's attention.

The private health sector includes for-profit establishments, NGOs, and informal medical services providers. The for-profit sector provides medical services through insurance companies, prepaid medical services, hospitals, and clinics in Guatemala City and other urban areas. Deterioration in the quality of the medical care provided by the public sector (particularly during the civil conflict) resulted in a boom of private establishments, mainly in the capital city. These establishments often recruited poorly paid public employees who were happy to supplement their income in the private sector, which led to widespread side job by health care professionals.

The purpose of ECFA mission is to formulate project and its preliminary study through co-working with the MSPAS staffs and coordinating meetings with other related government authorities. According to the discussion with MSPAS, among 43 hospitals, only several hospitals were selected as priority facilities for the Project of Improvement of Second Level Hospital in the Aspect of Human Security in Republic of Guatemala.

Criteria-1: Hospitals can reduce the overconcentration of patients in National Reference Hospitals.

These are urgent needs to reduce overcrowdings in metropolitan hospitals in order to strengthen the referral system. Our mission is to select adequate hospitals and to devise the plan how to improve and restore reputation of the hospitals and trust of the patients in order to attract them. However, simply constructing new facility and supplying modern medical equipment will not restore hospitals' reputation and patients' trust. The most difficult part is recruiting medical professionals from quality and quantity point of view. Without skilled medical professionals, medical equipment is not used, and medical facility is just a hostel. Generally, skilled medical professionals do not want to work in rural areas for the same salary and less opportunity of advancement in career and technique; though, if the terms and conditions are satisfying, medical workers, especially doctors, are willing to work given the hospital is in the commutable area. Therefore, the key to recruit medical professionals is to target sub-urban hospitals that are located in 1 to 1.5-hour commutable area.

Criteria-2: Hospitals have urgent needs of the human security concept.

The concept of human security places individual human beings at its core, seeking to defend them from fear and want: fear of things like conflict, terrorism, disaster, environmental destruction, and infectious disease, and want in the face of poverty and in social services and infrastructure. By building up people's abilities to address these issues themselves, this approach aims to build societies in which they can live with dignity. In order to defend the weakest members of society from these various threats, JICA will support efforts to bolster social and institutional capacity and to increase people's ability to deal with threats themselves.

Under the Millennium Development Goals, mother and child health indicator have been focused as a top priority goals. MCH indicator is important for global health; however, some kind of health topics, such as mental health and chronic diseases, were neglected even from populations. Due to the long civil conflicts, violence and drugs are still social problems in Guatemala. Because of the impact that violence and drugs have on mental health, integrated health service should be considered to be provided along with other MCH problems.

Criteria-3: Hospitals should develop medical human resources.

In order to strengthen the referral system, hospitals should have medical services activities on adequate level. Primary level facilities such as health centers and health posts do not have enough medical professionals and medical equipment in Guatemala; therefore, they can provide only

minimum medical services. On the other hand, secondary level facilities such as district, department and regional hospitals, do have facilities, but they too, do not have enough professionals and medical equipment. Therefore, these factors give patients an incentive to go directly to central tertiary hospital, especially when their health condition severs. Reforms to strengthen the secondary level facilities to reduce overconcentration of patients in metropolitan hospitals are needed. As the first step, secondary hospitals should improve the hospital activities. Teaching hospital is one of the good pilot projects to restore the trust of the patients by increasing the number of qualified medical workers including medical students and resident doctors as well as basic clinical service provision. Through such reforms, we can also expect improvement of the quality of medical education.

As the result, four (4) hospitals that satisfy the above conditions were selected by MSPAS for the project of improvement of the second level hospitals in the aspect of human security, integrated capacity building of medical workers, and medical service provision.

CHAPTER 1. INTRODUCTION

1.1 Background and Objectives

Guatemala is recently obtaining peace after civil conflict, predominantly rural, and ethnically complex country that has an extremely unequal distribution of income among its inhabitants. Approximately 44% of Guatemalans are 14 years of age or younger and 65% live in rural areas. Nearly 80% of the rural inhabitants are indigenous peoples belonging to one of three major ethnic groups: Xincas, Garifunas, and Mayas; the last group speaks 22 different languages. The regions of the country with a high proportion of rural and indigenous population tend to be the poorest. Income inequality is related to several factors: (a) the concentration of land ownership; (b) the growing gap between salaries of skilled and unskilled workers; (c) a regressive tax system; (d) the concentration of public spending in metropolitan areas; and (e) the paucity of public services and low coverage of social security in rural areas and marginal urban areas.

Only 67% of Guatemalans have access to health services, and the figure drops to 49% for poor people living in rural areas (Instituto Nacional de Estadística: INE). This low coverage reflects physical barriers (e.g., residence in a remote area, rugged topography in rural areas) as well as economic factors. Poor people often have difficulties covering even the nominal fees that are collected in public facilities. In addition, seeking services usually involves high transportation costs (relative to family income) and loss of working days. 40% of the rural poor must travel over 1 hour to reach a health care facility. The low coverage also reflects the inefficient distribution of resources. The country has nearly one physician and one hospital bed per 1,000 people; however, 80% of the physicians and 50% of the nurses are based in the urban areas, which are home to only 35% of the population (PAHO/WHO). Within the public sector, health services are provided by the Ministry of Public Health and Social Welfare (MSPAS), which is part of the central government, and the Institute of Guatemalan Social Security (IGSS), which operates as a decentralized and autonomous entity. It has been estimated that the public health care system serves 48% of the population: MSPAS accounts for 32% of that figure, and the IGSS accounts for the other 16%. Approximately 20% of the population relies on private services, leaving 33% of Guatemalans without health care coverage.

Besides, accessibility from rural area to the tertiary hospital in Guatemala City by land route is within one day trip due to the development of infrastructure. This led the excessive patients- inability-to-pay to the tertiary hospital and induced budget pressure for debits from delinquency. In general, rural residents distrust the performance of department hospitals from the lack of drugs, doctors, diagnoses and treatments, so that patients prefer to go the tertiary hospital in the city in pursuit of satisfaction to pay. The overwhelming crowdedness of patients depresses the hospital finance, work motivation of staff and real severe patients.

Improving hospitals in suburban areas and strengthening the referral system will solve this inequality of health service provision. Also, neglected hospitals being left behind the prominent international cooperation are the priority to cover the rear area and sector.

The purpose of ECFA mission is to formulate project and its preliminary study by means of co-working with the MSPAS staffs concerned and through coordination meetings with the other related government authorities. According to the discussion with MSPAS, several hospitals are selected as priority facility for the project among 43 hospitals.

CHAPTER 2. CURRENT SITUATION OF HEALTH SECTOR

2.1 Health Policies

Under “In Guatemala, in the year 2020 all and all the Guatemalans, in the different stages from the service life, has equitable access to integral and integrated services of health, with a human approach, of quality and cultural relevance through an effective inter-institutional and inter-sectoral coordination” vision, the National Health Plan draws up the following health strategies:

“Health Strategic lines 2008-2012 (Lineamientos Estratégicos para la Salud 2008-2012)” determines nine (9) clauses, and insists six (6) priorities of the action plan. MSPAS highlights strengthening health network through partnership with institution, improving human resources and infrastructure.

Table 1. Nine (9) clauses in “Health Strategic lines 2008-2012”

1.	Fortification of the Rector of the Ministry of Public Health (to fortify the State of Guatemala)
2.	To improve and extend the cover of attention and benefit of the integrated health services
3.	To promote and fortify actions that guarantees the accessibility to the medicines as well as recognition of the use and practices of the alternative and traditional medicine.
4.	To promote the investigation, and technological development in health sector.
5.	Fortification of the investigation, development and administration of the labor force in health sector.
6.	Development of the environmental primary health by means of the regulation, monitoring and control of the application of the effective norm in the matter of potable water, cleaning and hygiene, improvement of the quality of life of the population
7.	To respond to the demand of services of health sector, generated by the implementation of the programs of solidarity and social fairness
8.	Improvement of the financing and the quality of the cost in health sector
9.	Sectorial harmonization and alignment of the international cooperation to the national interests and priorities

Source: MSPAS

Table 2 Six (6) priorities of Action in “Health Strategic lines 2008 – 2012”

1.	Institutional fortification
2.	Fortification of the Rector
3.	Information system
4.	Extension of covering health network in 125 municipalities and all the country
5.	Strategy of Reduction of Neonatal Maternal Mortality
6.	Strategy Reduction of the Chronic Undernourishment

Source: MSPAS

As mentioned in “Health Strategic lines”, MSPAS starts to reform its organization; especially remarkable change is the creation of the post of vice-ministry in charge of hospital. Department of Hospital (Dirección Hospitales) is a department under the direct control of the Vice Minister, and its tasks are supervising hospital network and coordination in each region, and quality improvement of hospital service. In this department, eight (8) regional coordinators are appointed to supervise hospital management. Before this system has not existed, central control by MSPAS was just for form and did

not reach in rural hospitals. At present, each coordinator has responsibility to deliver the results. So that the coordinator goes round hospitals frequently, hears their problems and leads the solution. All those issues are reported to the Vice Minister through Department of Hospital.

2.2 Health Institutions

2.2.1 Referral System and Health Facilities

MSPAS is the main publicly funded health care provider. It operates through 26 area health departments, which supervise the operation of 43 hospitals, 281 health centers, and 926 health posts (see Annex 1). Recently 26 health departments were integrated into 8 regions in order to strengthen the health network. The IGSS, a semiautonomous entity, serves affiliated workers, their dependents and retirees. The IGSS administers 24 hospitals, 35 physicians' offices, 2 peripheral clinics, and 6 health posts. There are other public sector entities that provide health services to specific populations, but their coverage is rather limited.

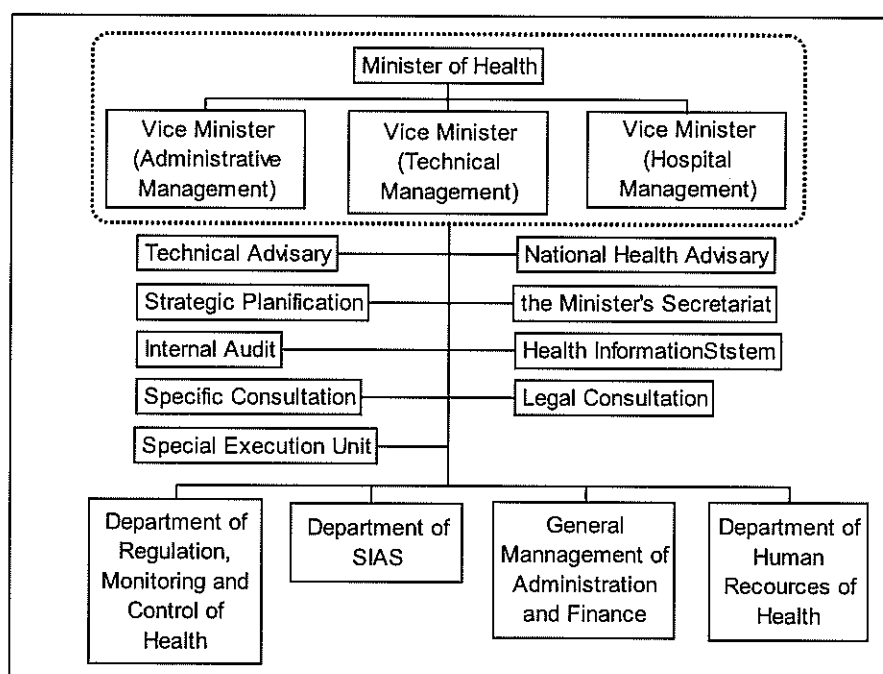


Figure 1 Organization of MSPAS

Source: MSPAS

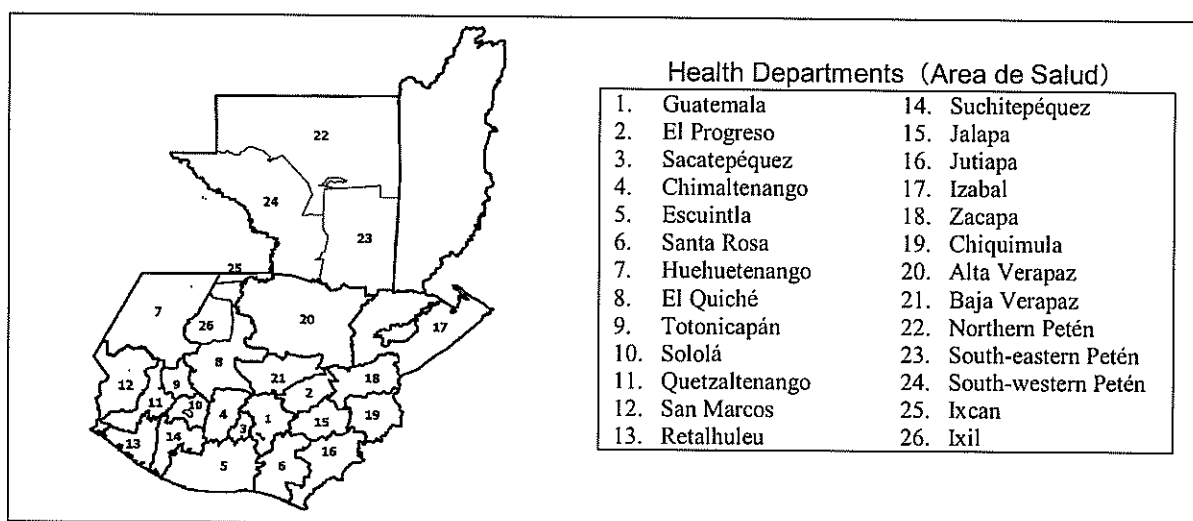


Figure 2 Health Departments in Guatemala

Source: MSPAS

Table 3 8 Regions for Health Departments

No.	Region	Health Departments
1	Metropolitan	Guatemala
2	North	Alta Verapaz, Baja Verapaz
3	North-East	El Progreso, Izabal, Zacapa, Chiquimula
4	South-East	Santa Rosa, Jalapa, Jutiapa
5	Central	Sacatepéquez, Chimaltenango, Escuintla
6	South-West	Totonicapán, Sololá, Quetzaltenango, San Marcos, Retalhuleu
7	North-West	Huehuetenango, El Quiché, Suchitepéquez
8	Petén	Northern Petén, South-eastern Petén, South-western Petén, Ixcán, Ixil

Source: MSPAS

2.2.2 Profile of Diseases

Guatemala continues to have a morbidity and mortality profile in which infectious diseases and illnesses related to nutritional deficiencies have greater importance than chronic and degenerative diseases. The leading causes of illness and death are still upper respiratory infections, various perinatal disorders, and diarrheal diseases. This profile is a logical consequence of the poverty that affects many Guatemalan families and other related determinants, such as illiteracy, inadequate sanitary infrastructure, and limited access to health services.

Government efforts have expanded the coverage of immunization programs in the rural areas, but the percentage of children without access to any form of immunization is still higher among indigenous and rural communities than it is for urban population. The level of utilization of family planning methods is also significantly lower among the indigenous and rural populations. Educational level influences most of the gaps between the social groups. Utilization of prenatal services, medical care at delivery and family planning increase accordingly with higher level of education. These services reach

a very small percentage of rural and indigenous women, because their educational level tends to be very low. The lack of the access to education and health services increases the risks of illness and death in rural and indigenous communities. This is evident when data about HIV/AIDS are compared among women from different socioeconomic groups. Rural and indigenous women clearly know less about the disease and about the ways to protect themselves.

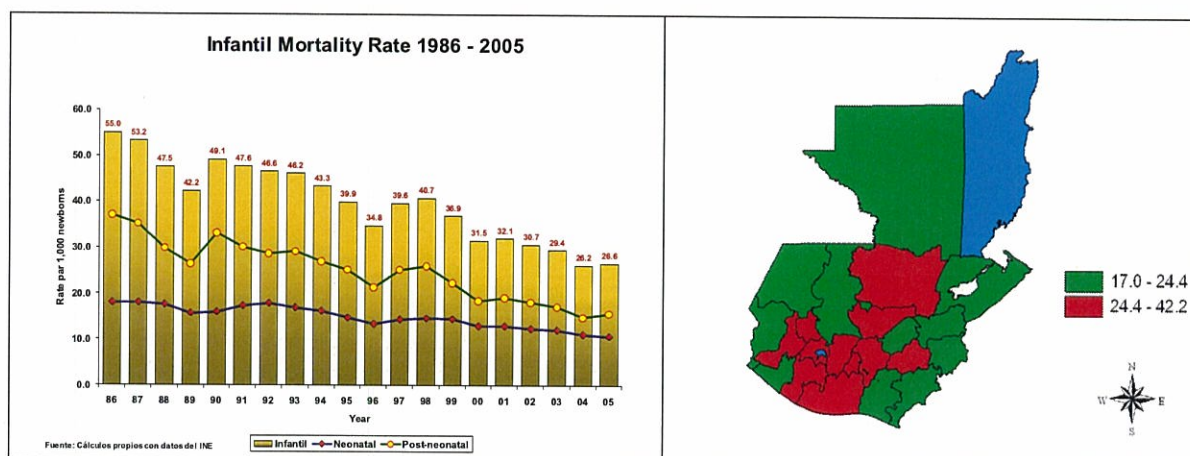


Figure 3 Infant Mortality Rate in 1986-2005

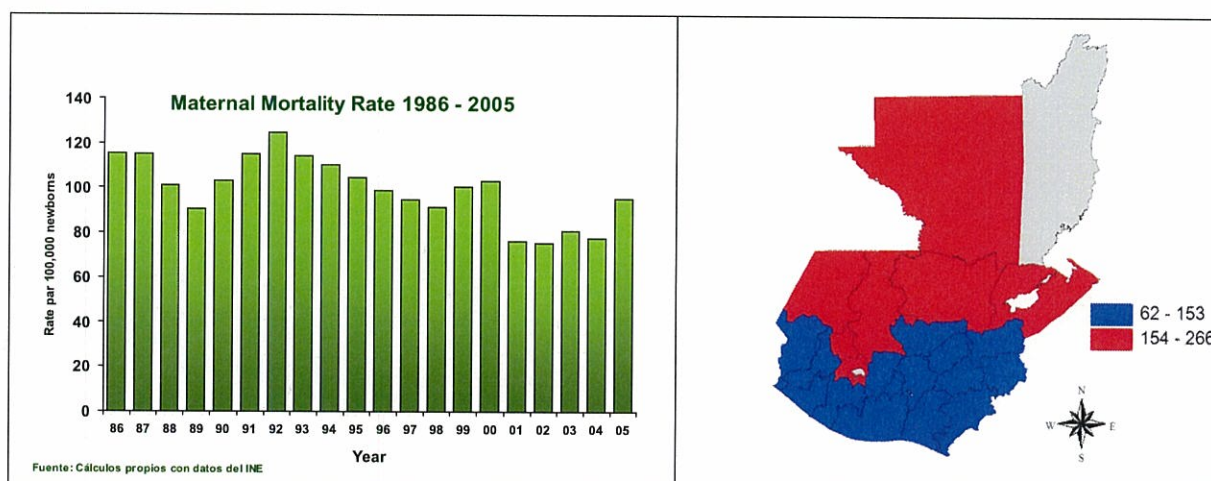


Figure 4 Maternal Mortality Rate in 1986-2005

Source: MSPAS

Mortality rates of neonatal, infant, and child are notably higher in rural areas and among indigenous populations. There is a more or less fluid scale that goes from the most favorable conditions (in urban areas) to the worst conditions (among the indigenous population). Within this spectrum, indicators for the non-indigenous population are better than those for the rural population. Although these categories are not mutually exclusive, indigenous people are majority in rural areas, whereas non-indigenous people are majority in urban areas. Inequalities between urban, rural, indigenous, and non-indigenous populations follow the indicated pattern when other indicators related to health are examined. Poverty rates, for example, display the same pattern: the urban population has the lowest rates and the

indigenous population has the highest rates. To examine the distribution of disease and death in the country, morbidity information by department was analyzed in relation to a number of social variables. The main findings of this exercise were the following:

- The maternal mortality rate tended to be higher in departments with a high incidence of illiteracy, which is more common among the low-income, indigenous, and rural populations.
- Child mortality rates were higher in departments with large proportions of indigenous population and in departments with high percentages of rural poverty.
- The percentage of death due to respiratory diseases tended to be higher in departments with predominantly low-income and rural populations as well as in those with large proportions of indigenous population.
- These findings confirm that the risk of illness and death is greater in poor, rural, and indigenous communities. This situation reflects the living conditions of poor families and their limited access to educational and health services.

2.2.3 Health Finance

The level of health expenditures in Guatemala is quite low compared with other countries, and in recent years it has declined as a percentage of national GDP. The low level of expenditures reflects the limited development of the health care infrastructure, the moderate growth of the health market, and the concentration of resources in the Guatemala City area.

The government, international development organizations, private companies, and individual households provide the financial resources for the health care. The government allocates between 8% and 10% of its budget to health expenditures; international development organizations provide loans and grants; private companies contribute to the social security regime and purchase private insurance for their employees; and households finance health care directly (through the purchase of goods and services) and indirectly (through contributions to the social security system). Intermediary Agents within the public sector, MSPAS and the IGSS manage most financial resources for the health care. MSPAS receives funds from the government and international development organizations, whereas the IGSS is funded through mandatory contributions from employers and employees in the formal sector. Both institutions then distribute resources among different health care providers. Private resources for health care are managed by insurance companies and “second tier” NGOs. Insurance companies receive funds from households and firms in the form of premiums and other charges, which are then transferred to health care providers in the form of payments for the services rendered. Second tier NGOs are those that obtain resources from different sources and distribute them to other NGOs that provide services directly. MSPAS and the IGSS manage similar amounts of resources; each

accounts for approximately 30% of national health expenditure. The IGSS, however, covers a smaller population (formal-sector workers). NGOs and insurance companies together account for 8% of national health expenditures. The contribution of households is significant, accounting for more than 30% of total health expenditures.

Table 4 Health Expenditure (Year of 2002)

Indicator	The mean of Low income countries	Guatemala	The mean of Middle income countries	The mean of Latin America & Caribbean countries
Total expenditure on health as percentage of gross domestic product	5.5%	4.8%	6.0%	6.8%
General government expenditure on health as percentage of gross domestic product	1.5%	2.3%	2.7%	2.7%
General government expenditure on health as percentage of total expenditure on health	27.5%	47.5%	45.3%	45.3%
Per capita total expenditure on health	29.4US\$	93.0US\$	73.4US\$	73.4 US\$

Source: World Bank

Table 5 Budget of MSPAS in Government

(Unit : Million Q)

Year	2000	2001	2002	2003	2004
Government Budget	24,850	30,039	26,542	27,700	25,634
MSPAS Budget	1,248	1,523	1,544	1,690	1,628
%	5.02%	5.07%	5.82%	6.10%	6.35%

Source: MSPAS

The social security system is financed by contributions of formal-sector employers and workers in amounts that are proportional to wages. A recent study showed that the expenditures of the Guatemalan Social Security Institute on health care represent 5% of GDP and 30% of national health expenditures. However, the IGSS serves the families of only one-fourth of all Guatemalan workers (those employed in the formal sector). The services of the IGSS reach only a very small proportion of indigenous and rural families. The government is required by the Constitution to contribute to the social security system, but it has not done so, for more than a decade. Payment of the cumulative debt would benefit formal sector workers but not the poorest and most unprotected workers in rural areas and in the urban informal sector.

2.2.4 Problem of Overconcentration of Patients in the Tertiary Hospitals

As mentioned above, relatively good accessibility from rural area to the tertiary hospital in Guatemala City is the cause of the big inflow of the low-income, insolvent patients to the tertiary hospital, thus, increasing the payment default rate. Following figure shows the financial burden to the tertiary hospital, National Reference Hospitals (San Juan de Dios and Roosevelt). The tertiary hospitals have

five (5) times large numbers of beds, however, the hospital activities are more than 10 times than regional hospitals per month.

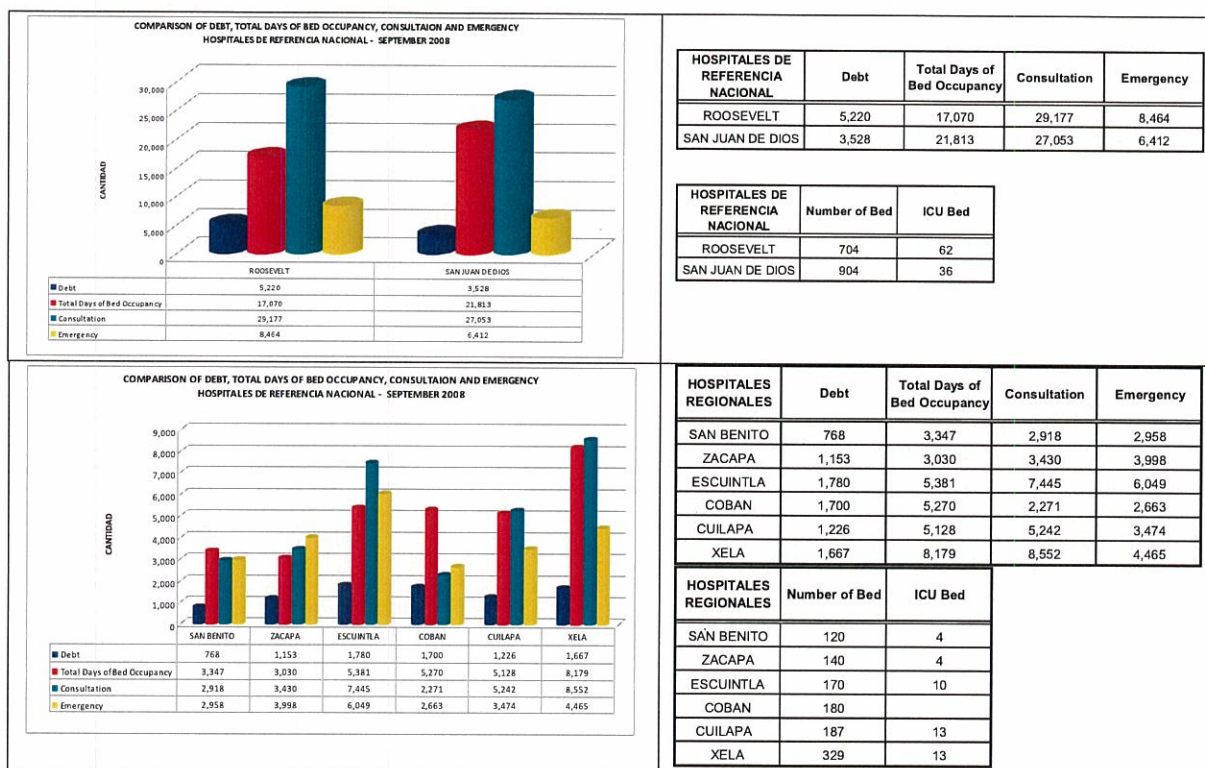


Figure 5 Activities of Tertiary Hospital in September 2008

Source: MSPAS

CHAPTER 3. HUMAN RESOURCES IN HEALTH SECTOR

3.1 Medical Education System

Most of medical education links to the higher education. National medical school is present only in University of San Carlos; therefore the university has rigid standard and requirements on accreditation. There is no national examination and students gain license to practice medicine with graduation examination. To be a specialist, there are 25 residency programs, and its duration is normally 3-4 years after undergraduate education. Clinical education starts from 4th grade of undergraduate education. To deal with around 500-600 medical students per year, nine (9) regional or department hospitals accept them as teaching hospital. However, insufficient numbers of specialists and short working time, attendings are not experienced specialists but young residents.

The serious skill gap between professional nurse and auxiliary nurse has not filled yet. Like in other Latin American countries, average salary per month for nurses is US\$ 200-300, while it is 30% less for nursing auxiliaries, though the majority of nurses expect social and salary benefits; such as medical insurance and different kinds of incentives depending on disadvantaged geographical areas, risky or dangerous work, age, professional qualifications and others. The university level is probably the most homogenous, with two or three separate programs: a degree, which confers a higher education qualification (4-5 years); Diploma (2 and 1/2-3 years) and technical-level nursing (2-years). Many nursing programs are still based on the biomedical model; although not many years ago, the curricula began to change to include important public health and social science components, and put emphasis on nursing care. In general, the university teaching staff at the majority of schools has no post-graduate training. The obstacles to the academic modernization of curricula are difficulties in accessing updated bibliographies and indexed magazines.

Table 6 Nurses and physicians per 1,000 inhabitants

Central America	Population (millions)	Nurses/ 1,000 inhabitants	Doctors/ 1,000 inhabitants	Births attended by specialized staff (%)	Hospital beds/ 1,000 inhabitants
Costa Rica	4.173	0.32	1.27	98	1.6
El Salvador	6.638	0.81	1.26	90	0.8
Guatemala	12.347	0.41	1.09	41	0.5
Honduras	6.941	0.32	0.87	56	4.1
Nicaragua	5.466	0.33	0.62	67	1
Panama	3.120	1.08	1.21	90	2.1

Source: Overview of the nursing workforce in Latin America, PAHO 2005

Table 7 Institutions of Medical Personnel

Course	Name of School	Q'ty
Doctor	University of San Carlos, Facility of Medicine, Guatemala City	1
Doctor	University of San Carlos, Facility of Medicine, Quetzaltenango	1
Doctor	University of Francisco Marroquin, Facility of Medicine (Private)	1
Doctor	University of Mariano Gálvez de Guatemala, Facility of Medicine (Private)	1
Auxiliary Nurse	Private Auxiliary Nurse School	3
Auxiliary Nurse	National Auxiliary Nurse School	3
Nurse	National Professional Nurse School	5
Paramedical	University of San Carlos, Facility of Pharmacy	1
Paramedical	National Clinical Laboratory Technician School	1
Paramedical	Private Clinical Laboratory Technician School	1
Paramedical	National Respiratory Therapy Technician School	1
Paramedical	National Physical Therapy Technician School	2
Paramedical	National Radiology Technician School	10
Paramedical	Regional Exfoliative Cytology School	1
Rural health Worker	INDAPS	1
Rural health Worker	Course for Environmental Health Inspector	3
Rural health Worker	Course for TSR (Rural Health Technician)	2
Rural health Worker	Training Institute of Rural Health Worker, Las Berapaces	1

3.2 Medical Personnel

Distribution of medical personnel is still unbalanced as well as in other countries, due to the preference of medical workers to stay in metropolitan area and in large hospitals. According to the regulation, hospitals can afford to recruit doctors whereas health post has only 1 or 2 Auxiliary Nurses.

Table 8 Distribution of Medical Personnel (2007)

Region	Population (%)	Doctor (%)	Pare-medicals (%)
Metropolitan	22	47	33
North	9	4	6
North-East	8	7	9
South-East	8	7	8
Central	11	9	10
South-West	24	19	21
North-West	14	5	9
Petén	4	2	4
Total	100	100	100

Source: MSPAS

3.3 Problem of Medical Education in Clinical Training

The private health sector includes for-profit establishments, NGOs, and other informal providers. The for-profit sector provides services through insurance companies, prepaid medical services, medical centers or hospitals, and clinics and doctors' offices in Guatemala City and other urban areas. Deterioration in the quality of health care provided by the public sector (particularly during the crisis

of the 1980s and the early 1990s) resulted in private establishments boom, mainly in the capital city. These establishments often recruited poorly paid public employees who were happy to supplement their income in the private sector, which led to widespread side job by health care professionals.

Informal health care providers cover major segment of the country's rural and low-income population. Most of the health care providers engage in traditional health care practices and are unregistered, unregulated, and subject to all the drawbacks associated with practicing outside the formal health structure.

CHAPTER 4. SOCIO-ECOMONICAL SITUATION

4.1 Ethnic Composition

Guatemala has a population of 12,730,000 (2007). The majority of the population is Ladino, also called Mestizo (mixed indigenous and Spanish), and Caucasian (primarily of Spanish, but also those of German, English, Italian, and Scandinavian descent), they make up a combined total of 59.4%. Indigenous population includes the K'iche 9.1%, Kaqchikel 8.4%, Mam 7.9%, Q'eqchi 6.3%, "other Mayan" 8.6%, indigenous non-Mayan 0.2%, and others is 0.1%. There are also smaller communities such as "The Garífuna", descendants of African slaves who live mainly in Livingston and Puerto Barrios and other black and mulatto communities. Other small communities are Arabs, descendants of Lebanese and, Syrians and Asians mainly from Chinese ethnical background. At last, but not least, there is growing Korean community in Guatemala City and in nearby Mexico, currently numbering about 10,000.

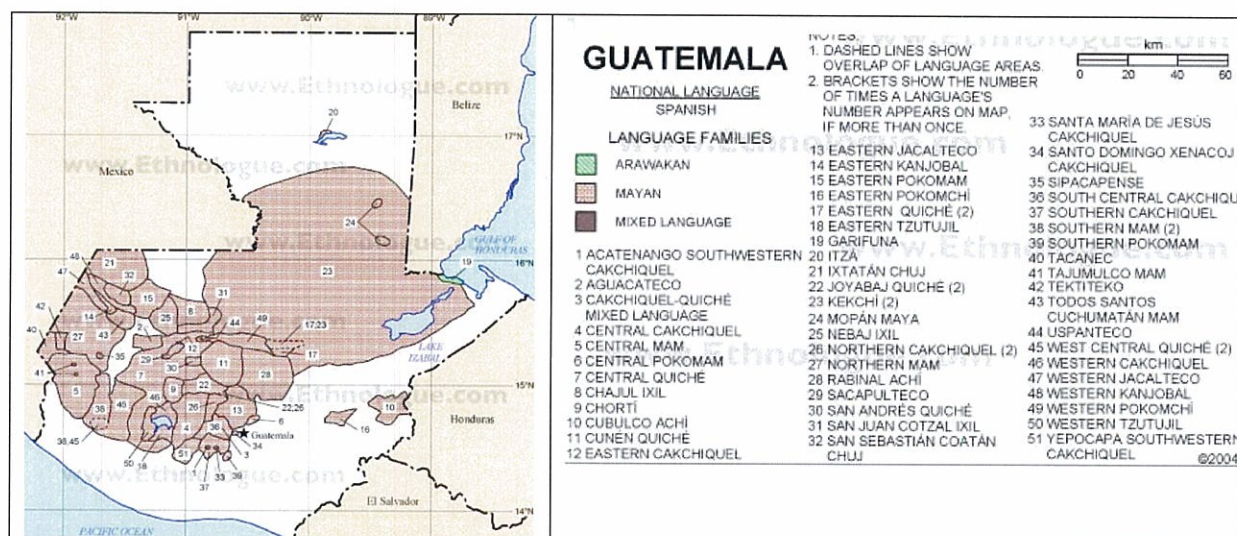


Figure 6 Ethnicity of Guatemala

Source: <http://www.ethnologue.com>

4.2 Poverty Gap

Guatemala's ethnic diversity has unfortunately been accompanied by a pattern of conflict and exclusion since colonial times. Despite the progress made on consolidating democratic institutions, poverty and inequality remain high and social indicators (health, nutrition, education) are low compared to other countries of similar income levels. The government has highlighted its commitment to making economic growth more culturally/inclusive and to address the country's high levels of poverty and inequality. The government has placed particular emphasis on governance, transparency,

and social cohesion through providing basic services for poverty reduction (education, healthcare, nutrition, culture and development, etc). The strategy has been applauded in Guatemala as it attempts to address the poverty in the country, particularly in the rural areas with high presence of indigenous population, where recent improvements in overall economic growth have not made significant inroads. However, new challenges have arisen, particularly related to high food and oil prices and downturn in the global economy, which have negative impacts, especially on the low-income population.

Table 9 Incidence of Poverty and Extreme Poverty in Region (1998-1999)

Region	Department	% of General Poor	% of Extremely Poor
North-East	Quiché, Huehuetenango	79.2	37.0
North	Alta Verapaz, Baja Verapaz	75.3	35.3
South-East	Quetzaltenango, Sololá, San Marcos, Totonicapán, Retalhuleu, Suchitepéquez,	72.1	37.6
South -West	Jutiapa, Santa Rosa, Jalapa	65.5	24.2
Petén	Petén	59.3	22.2
North-East	Zacapa, Chiquimula, Izabal, El Progreso	49.9	15.2
Central	Sacatepéquez, Escuintla, Chimaltenango	43.1	7.7
Metropolitan	Guatemala	11.7	1.3
	Total	54.3	22.8

Source: "Mapa Probabilístico de Pobreza en Guatemala". Febrero de 2001

4.3 Health Impact from Ethnicity

Health expenditures by households vary according to the income and the residence. Among low-income population residing in rural areas, more than 50% of health spending is accounted for remedies and drugs, whereas the figure for the non-poor urban residents is only 20%. On the other hand, spending on hospitalization and diagnosis is greater for groups that have better physical and economic access to health services: more than 50% of the expenditures of the non-poor in urban areas fall into this category, whereas the proportion for the rural poor is scarcely 10%. Health expenditures represent between 2% and 5% of total household expenditures and between 3% and 11% of current expenditures (for basic goods and services). The proportion of both kinds of expenditure is greater for the population with better access to health services; the non-poor and urban population. Poor families (predominantly members of indigenous communities living in rural areas) spend a smaller proportion of their income on health care than the non-poor do. Low-income individuals are less likely to seek professional medical help respectively most commonly they resort to self-medication. Financial constraints force low-income population to restrict the utilization of health services and to rely on less effective therapies. This in turn prolongs periods of non-working, due to illness, with the consequent loss of income.

A survey carried out in a region with a predominantly rural, indigenous, and low-income population found that 24% had perceived a health problem within the past 30 days, and that the percentage of people who sought medical care increased with income. The same survey showed that self-medication is frequent, particularly among lower income groups, and that it is ineffective. The data indicate that 84% of individuals who took home remedies and 89% of those who took medicines purchased without prescription were unable to solve their health problems and had to seek for alternatives. The incidence of diarrheal diseases does not show important differences between socioeconomic and ethnic groups. However, rural and indigenous children seek medical care less frequently and fight diarrhea by reducing the intake of liquids and food, during the episodes of diarrhea. This fact suggests that their parents lack the necessary information to manage the disease at home.

The high risk of dying at early age in rural and indigenous communities, as a consequence of preventable or easily treatable diseases, calls for reallocation of the public resources. Investments in health care should target the most neglected departments and municipalities through interventions with the greatest potential impact. However, the evidence presented in the study demonstrates that budgetary allocations for health care are inversely related to the health needs of the targeted population. The indigenous populations in rural areas receive a smaller proportion of public resources than the non indigenous population in urban areas.

CHAPTER 5. OUTLINES OF HOSPITALS

The purpose of ECFA mission is to formulate project and its preliminary study through co-working with the MSPAS staff concerned and coordinating meetings with other related government authorities. According to the discussion with MSPAS, among 43 hospitals, only several ones were selected as priority facilities for the project. Selection criteria were as follows:

Criteria-1: Hospitals can reduce the overconcentration of patients in National Reference Hospitals.

These are urgent needs to reduce overcrowdings in metropolitan hospitals in order to strengthen the referral system. Our mission is to select adequate hospitals and to devise the plan how to improve and restore reputation of the hospitals and trust of the patients in order to attract them. However, simply constructing new facility and supplying modern medical equipment will not restore hospitals' reputation and patients' trust. The most difficult part is recruiting medical professionals from quality and quantity point of view. Without skilled medical professionals, medical equipment is not used, and medical facility is just a hostel. Generally, skilled medical professionals do not want to work in rural areas for the same salary and less opportunity of advancement in career and technique; though, if the terms and conditions are satisfying, medical workers, especially doctors, are willing to work given the hospital is in the commutable area. Therefore, the key to recruit medical professionals is to target sub-urban hospitals that are located in 1 to 1.5-hour commutable area.

Criteria-2: Hospitals have urgent needs of the human security concept.

The concept of human security places individual human beings at its core, seeking to defend them from fear and want: fear of things like conflict, terrorism, disaster, environmental destruction, and infectious disease, and want in the face of poverty and in social services and infrastructure. By building up people's abilities to address these issues themselves, this approach aims to build societies in which they can live with dignity. In order to defend the weakest members of society from these various threats, JICA will support efforts to bolster social and institutional capacity and to increase people's ability to deal with threats themselves.

Under the Millennium Development Goals, mother and child health indicator have been focused as a top priority goals. MCH indicator is important for global health; however, some kind of health topics, such as mental health and chronic diseases, were neglected even from populations. Due to the long civil conflicts, violence and drugs are still social problems in Guatemala. Because of the impact that violence and drugs have on mental health, integrated health service should be considered to be provided along with other MCH problems.

Criteria-3: Hospitals should develop medical human resources.

In order to strengthen the referral system, hospitals should have medical services activities on

adequate level. Primary level facilities such as health centers and health posts do not have enough medical professionals and medical equipment in Guatemala; therefore, they can provide only minimum medical services. On the other hand, secondary level facilities such as district, department and regional hospitals, do have facilities, but they too, do not have enough professionals and medical equipment. Therefore, these factors give patients an incentive to go directly to central tertiary hospital, especially when their health condition severs. Reforms to strengthen the secondary level facilities to reduce overconcentration of patients in metropolitan hospitals are needed. As the first step, secondary hospitals should improve the hospital activities. Teaching hospital is one of the good pilot projects to restore the trust of the patients by increasing the number of qualified medical workers including medical students and resident doctors as well as basic clinical service provision. Through such reforms, we can also expect improvement of the quality of medical education.

5.1 National Mental Health Hospital: Criteria-2: in aspect from humanitarian threats

5.1.1 Overviews

People with mental disorders are some of the most neglected people in the world. In many communities, mental illness is not considered as a real medical condition, but viewed as a weakness of character or as a punishment for immoral behavior. Even when people with mental disorders are recognized as having a medical condition, the treatment they receive is often less than humane. Mental health has not been given high priority in Guatemala, but recently a group of governmental and nongovernmental agencies has called attention to the problem and to promotion of development of a national mental health program.

MSPAS has a 350-bed national psychiatric reference hospital that offers outpatient consultation as well as daytime hospitalization. MSPAS has outpatient psychiatric clinics in three of its national level hospitals located in Guatemala City. There are 10 psychologists in the metropolitan area who provide services in health centers and peripheral polyclinics. Besides, the IGSS has a 25-bed psychiatric unit to which cases from its affiliates are referred: it also offers outpatient consultation, and 10 IGSS' psychologists in the metropolitan area.

As in many countries, in Guatemala, when a person is sentenced to a prison term, and if it was proven that such person has a psychiatric impairment, the measures or ruling of court is to confine the person in a health facility and not in jail. The hospital cares not only about criminal mental disorders and drug dependences but also about congenital mental retardations, mental deficiencies and senile dementia of Alzheimer type. The hospital faces the difficulty of daily life care because of the superannuated infrastructure; the buildings are former military barracks made of concrete and were chosen for their

flat one-story block complex structure. Unfortunately, the disadvantage of the simple and minimum structure of military block affects patients' life. Due to the safety, disabled patients are restricted to wear extra clothing, consequently, they walk bare foot on the concrete floor. The water supply is not appropriate, and patients can not take hot shower though they can not move their bodies. Beds are rigid of standard type and are too hard for physically handicapped patients to stay and arise from.

From the human right and security of life aspect, the hospital should not no more neglect the Millennium Development Goals. The present situation shows why persons with disabilities are not perceived as those who have rights, this mainly happens because society has prejudice to mentally disordered people and set up stigma against them. They are undervalued, made invisible, and outcasted from society.

5.1.2 Organization and Activities

In 1890, the "Lunatic Asylum" operation was conducted through General Hospital San Juan de Dios to take the responsibility of the mental health of the country. In 1983, National Hospital of Mental Health was established and its principle is the rehabilitation of the mentally disordered patient. The present hospital is located in Guatemala City, Zone 18.

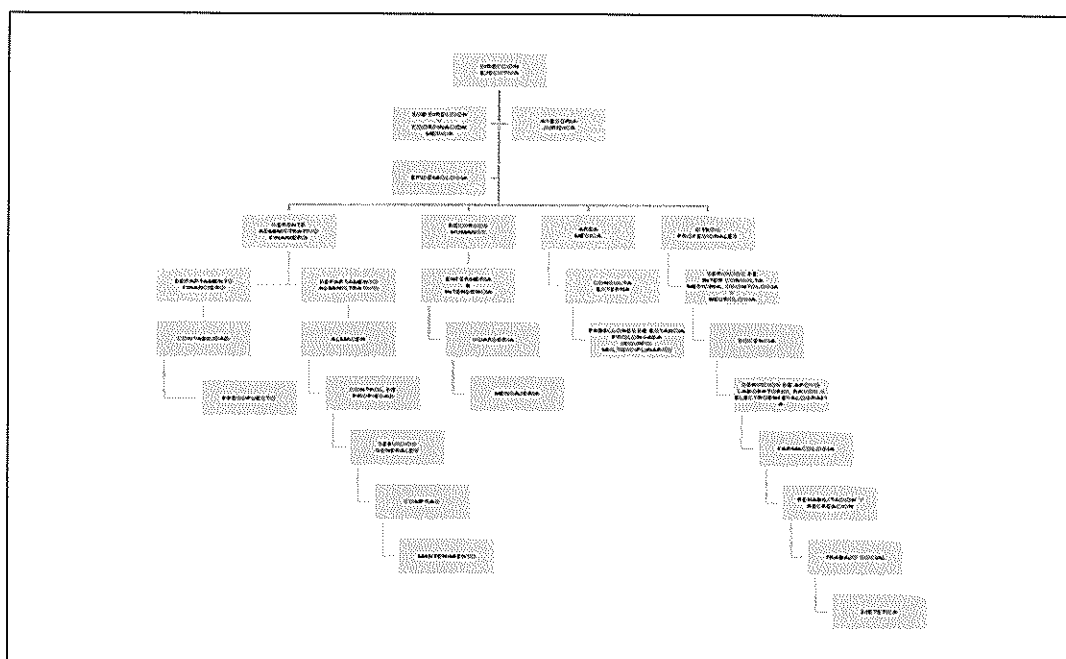


Figure 7 Organization of the Hospital

Source: National Mental Health Hospital

The hospital has relatively enough number of medical workers due to its difficult treatment of patients. However, related to the deteriorating security of the city, the number of consultation of outpatients and emergency cases are increasing significantly. Many cases are referred from Jurisdictional Institutes

and National Reference Hospitals due to the lack of specialists.

Table 10 Human Resources National Mental Health Hospital

	Regulation	Part time	Full time	vacancy
Doctor	38	27	8	2
Nurse	30	27		3
Assistant Nurse	140	115		25
X-ray Technician	1		1	
Labo. Technician	4		4	
Administration	8		8	

Source: National Mental Health Hospital

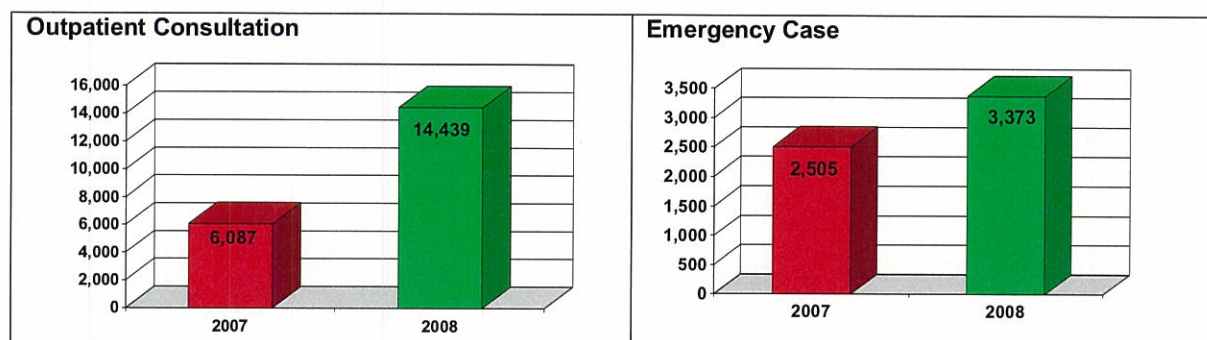


Figure 8 Comparison of Outpatient Consultation and Emergency Case in 2007-2008

Source: National Mental Health Hospital

The hospital does not need much sophisticated medical equipment, but fundamental examination function to keep patients safe in their daily life. Incident rate of HIV/AIDS is increasing in Guatemala synchronizing with the increasing rate of intravenous drug abuse. The problem becomes more alarming because the Hospital does not have sufficient resources to spot sexually transmitted diseases that may be transmitted to the hospital residents and hospital personal. On the other hand, to take care of the disability group, who can not express the symptoms and seizure, X-ray is a fundamental medical equipment to diagnose, for example, bone fracture. In reality, however, the equipment is broken and is not replaced.

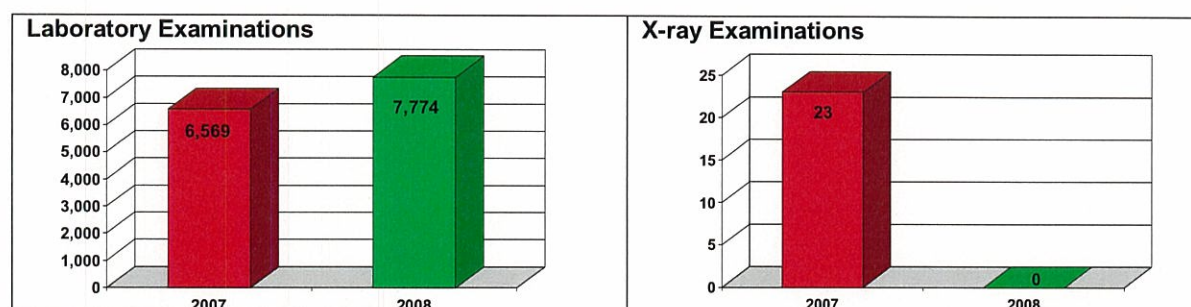


Figure 9 Comparison of the Diagnosis Functions of the Hospital in 2007-2008

Source: National Mental Health Hospital

The hospital has the 100% bed occupancy and this is the highest rate among specialized hospital. The hospital plays a role of a nursing home, thus, the hospital has responsibility to take care of patients

throughout their lives, in some cases from child age to the elderly age.

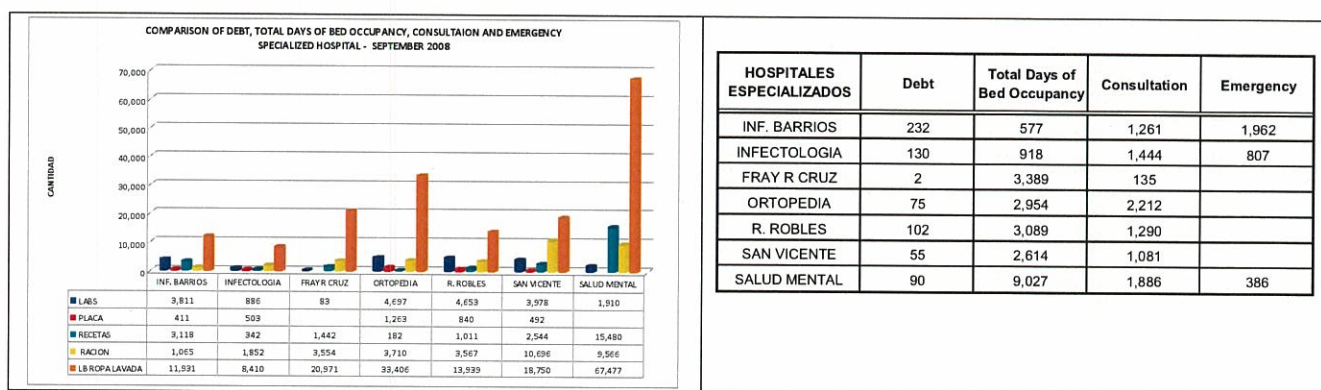


Figure 10 Comparison of the Activities among Specialized Hospital in September 2008

Source: MSPAS

5.2 National Hospital La Tinta: Criteria-2: isolated hospital in remote area

5.2.1 Overviews

National Hospital La Tinta is located in the Department of Alta Verapaz, with a high indigenous resident area and a town in a remote mountain area with population of 960,000 habitants. Land elevation varies from 300 to 2,800 meters. Alta Verapaz has been coffee product area since 19th century and its inhabitants worked in the agriculture. The infrastructure is not well developed; the road condition is mainly unpaved and non-passable especially in rainy season. There is only regional hospital in Coban in Alta Verapaz department, and no department hospital. It takes 3 hours crossing the mountains to get from Regional hospital in Coban to La Tinta District and impossible to refer a patient in severe condition. Only farm trucks with powerful engines, can pass unpaved road, however, ordinary inhabitants ride on horse or motorbike. There is a limited public transportation to Coban City available only on light motor vehicles and only in days when weather is good.

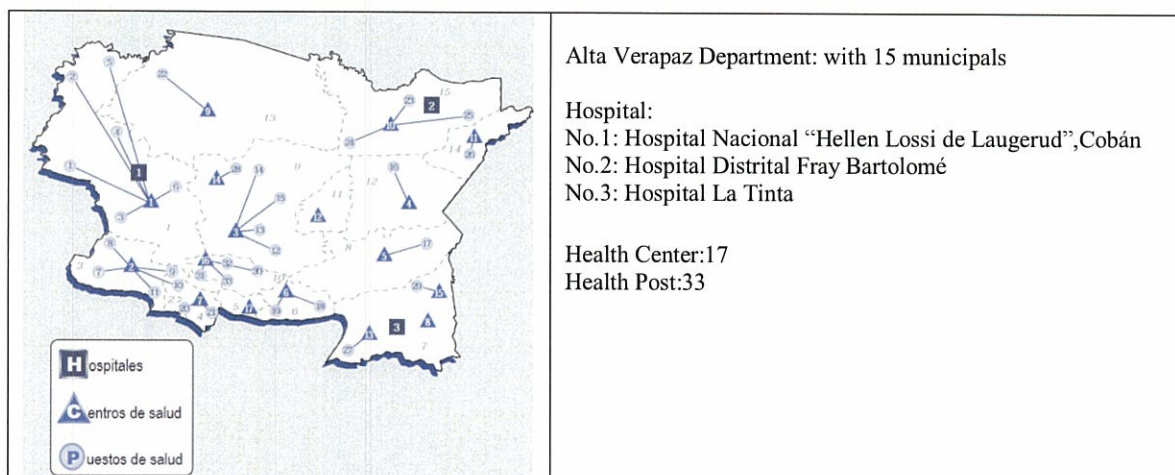


Figure 11 Location of National Hospital La Tinta

Source: MSPAS

The government promised to develop infrastructure, water, electric supply and road pavement. The plan was approved and the construction will start in 2009 by IBD loan. However, tropical climate induces malaria infection, water vector diseases and high maternal mortality caused by anemia. The top cause of mortality is pneumonia, not only for infants but also for adults the second being diarrhea. Both rates account almost for 50% of death.

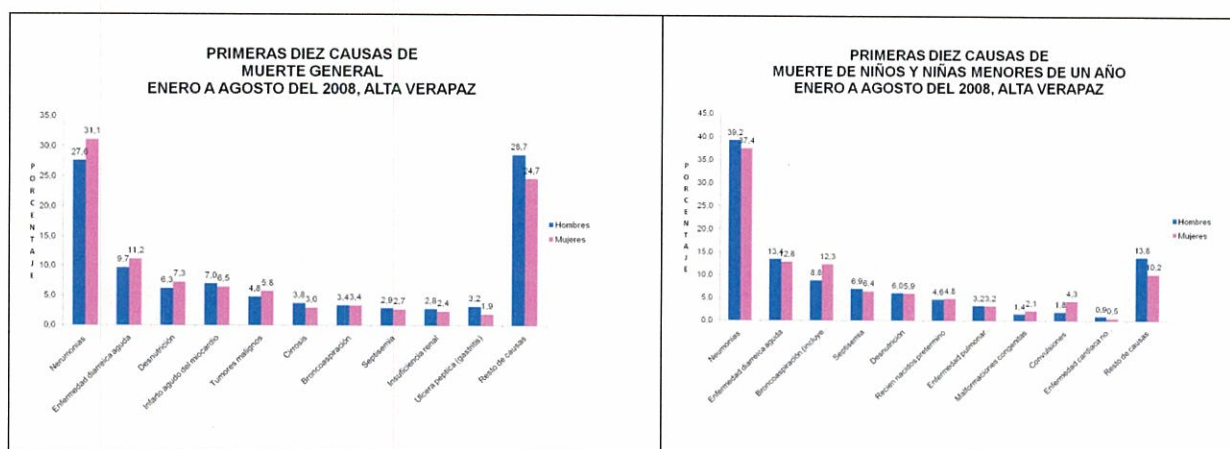


Figure 12 Cause of Death in General (left) and Cause of Death of Infant (right)

Source: Health Department of Alta Verapaz

The top cause of maternal mortality is placental retention and the second one is eclampsia. La Tinta is one of the highest maternal mortality areas. There is only one (1) Guatemalan doctor in the district hospital, and rest of doctors is Cuban volunteers. Water resource is contaminated by industrial pollution of a river and safe water is brought from Coban City.

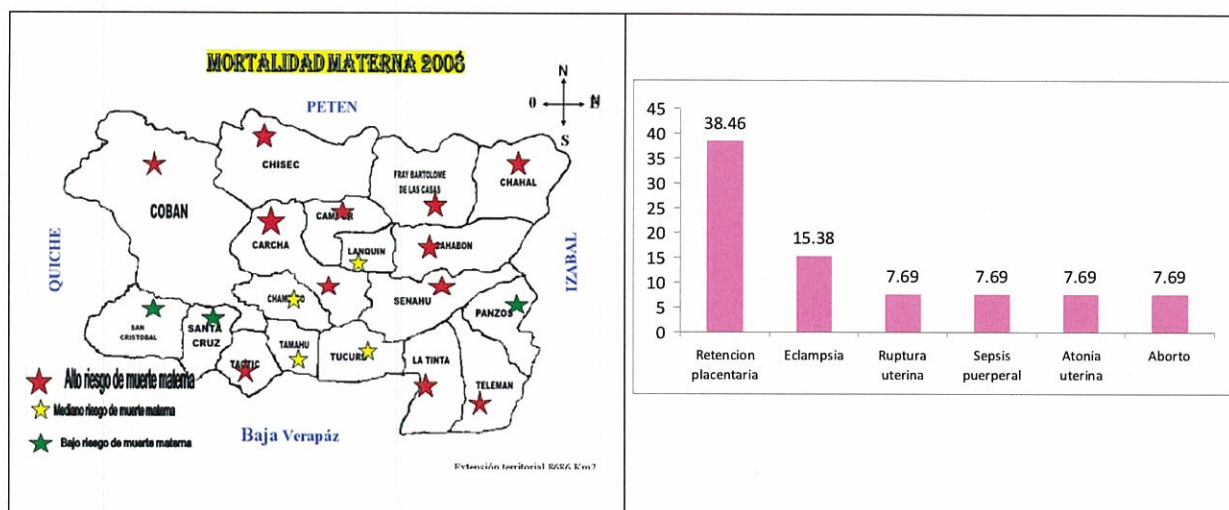


Figure 13 High Maternal Mortality Area and Cause of MMR in Alta Verapaz

Source: Health Department of Alta Verapaz

5.2.2 Organization and Activities

La Tinta hospital was established in 1983, upgraded to District hospital in 1999, and became National hospital in 2002. The hospital has 40 beds, 108 staffs and comprehensively supported by Cuban medical team, 8 doctors, 1 nurse, 1 anesthesia technician, 1 laboratory technician and 1 statistician. This hospital is under the contract with the Government of Cuba, young medical personnel come for regional health training each 2 years. Hospital has 2 operation rooms, Laboratory, X-ray, Ultrasound apparatus for treatment and diagnosis.

Consequently, the performance of hospital service is relatively high comparing to medical equipment they have; hospital is popular among inhabitants and most of medical workers work full time, which is rarely seen in Guatemala. There was clear demarcation between health center and hospital, though the health center stands in the same site with hospital. This means that the management of hospital and health department work well and residents are well informed about health information. This kind of hospital activities and its integrations in the community promotes many health activities in the communities such as emergency evacuation and health promotion by community leaders.



Figure 14 Community Development in the Health Sector

However, activities aside, the building was established more than 25 years ago and medical equipment is obsolete and in many cases can not be used. Cuban medical team brought a lot of medical equipment starting from biochemical analyzer used in laboratory and ending with ultrasound apparatus. Due to the good maintenance, which is performed by foreign doctors, equipment is well operated and Guatemalan staff follows to maintain it. One of the reasons why it was difficult to transport medical consumables to the hospital from urban area is poor road conditions. Therefore, the distribution system will be improved once the new road plan is implemented. This hospital has a high potential attributed to its highly motivated medical staff, though infrastructure needs to be improved to have a better access to the hospital. The hospital has satisfied the selection criteria from poverty aspect, covering indigenous inhabitants, and accessibility to health services which they have not had before.

Table 11 Hospital Service of National Hospital La Tinta in 2008

	Regional	District
Service	Coban Hospital	La Tinta Hospital
Admission of hospital	58108	11031
Out patient	28120	21090
Emergency	27679	6062
Psychology	1136	-
Operation (interventional)	4260	356
Anesthesiology	4256	382
Labor and delivery	10808	1475
Laboratory	256606	14231
Blood transfusion	1931	-
Electrocardiogram (ECG)	1148	-
X-ray	36588	6174
Ultrasound echogram	1534	
Pharmacy	88312	14287
Social Insurance	35338	-
Nutrition consultation	39693	6219

Source: MSPAS

5.3 National Hospital Amatitlan: Criteria-1/ -3: potential for strengthening secondary level

5.3.1 Overviews

Recently, Amatitlan municipality has been developing as an industrial area through attracting sewing manufacturing company from foreign countries. Its close location to Guatemala City is an advantage, as well as geographical favorable conditions such as water resources and partial flatlands at 1248 meters above sea level. Moreover, local economic development is more stable than the regions that mainly rely on agriculture. The population in the area between Amatitalan and the Guatemala City is increasing. The main increase in population can be seen in upper middle classes, largely because leaving in Guatemala City is getting dangerous, such migration and wealthy demographics are especially promising for medical services and will also increase of income tax budget and remuneration for treatment from patients.

Amatitalan Hospital covers suburban area between Guatemala City and Sacatepéquez department. Therefore, the referral system is not only directed to Guatemala City but also to Escuintla Regional Hospital, because of the strong ties with it. Not long time ago Amatitalan Hospital was upgraded from health center to a hospital due to the economic and population growth of the town. Thus, it was not enough time to upgrade the facility to meet the hospital standards, and facilities and equipment must be upgraded.

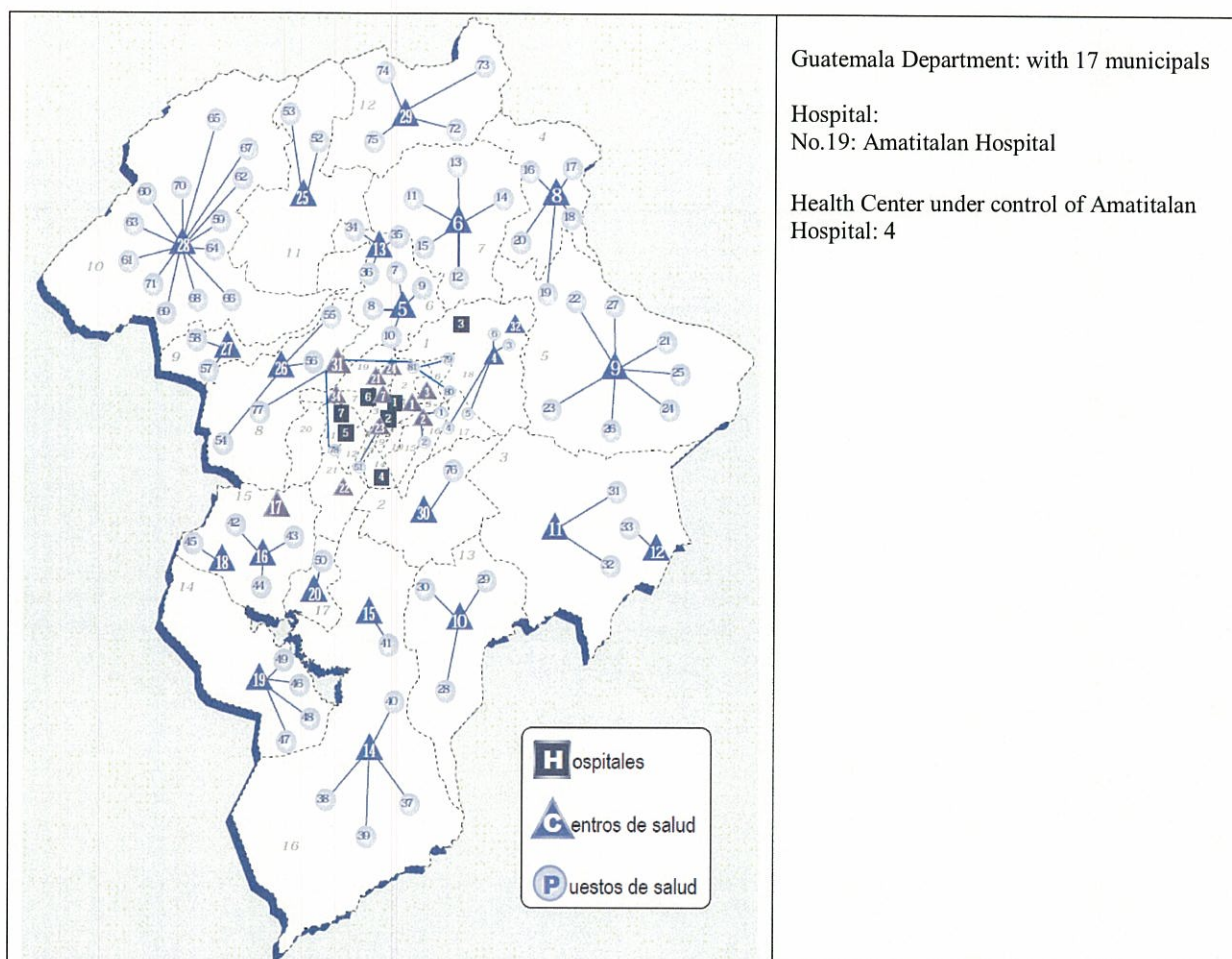


Figure 15 Location of National Hospital Amatitalan

Source: MSPAS

5.3.2 Organization and Activities

The Amatitlan Hospital was established in 1862. It has 170 beds, 66 doctors, 127 Auxiliary Nurses, 9 laboratory technicians, 6 X-ray technicians, and 2 rehabilitation therapists. It is functioning as a maternal referral hospital, hence, the abnormal delivery cases are carried from outside. For 19 years, Amatitlan hospital has been accepting medical students and serving as teaching hospital for basic four (4) departments (internal medicine, surgery, pediatrics and Ob/Gyn). However, because of the shortage of university budget, hospital has no medical students this year.

The Amatitlan Hospital shows one of the highest hospital activities among all other district hospitals. In 2007, there were 3380 operations performed (54% is emergency, 46% is elective), 2482 deliveries, and 1260 cesarean cases. This means that it has not only good management but also good reputation and trusted from patients. In fact, the hospital contracts medical equipment company to rent CT scanner instead of buying expensive equipment. Unfortunately, most of medical staffs are part-time workers with reduced afternoon activities. However, even with reduced work load, comparing with other hospitals, emergency activity in Amatitlan Hospital is quite high.

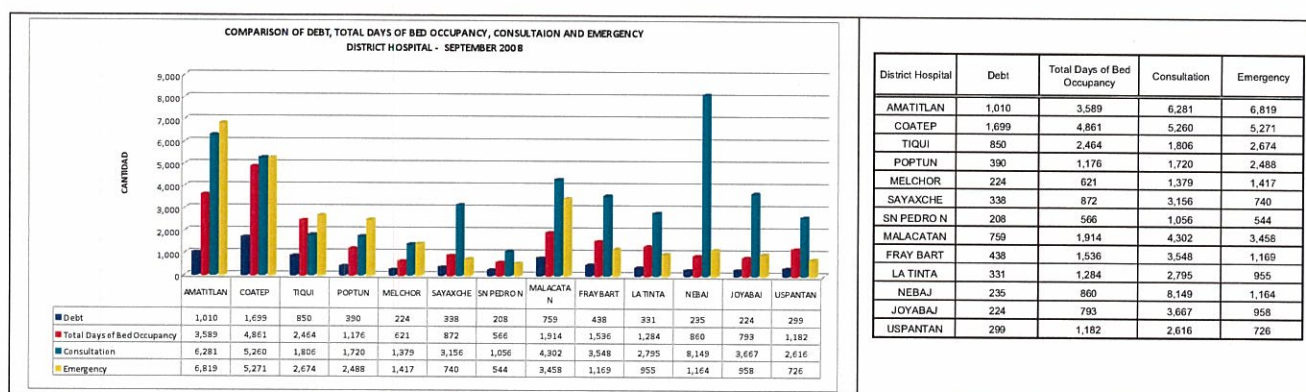


Figure 16 Comparison of the District Hospital Activities in September 2008

Source: MSPAS

5.4 National Hospital El Progreso: Criteria-1: potential for strengthening secondary level

5.4.1 Overviews

National Hospital El Progreso was established in 1982, and called Guastatoya Integrated Health Center, and now upgraded to a national hospital. Therefore, the hospital facilities do not meet to the hospital standards. Moreover, water system is in bad condition and does not function properly badly impacting the patients. Advantage of this hospital is its location, which is besides the trunk road that leads to the Caribbean Sea, thus, having a good access to the rural area of the department and to the Guatemala City. The population is growing and most of the medical professionals are coming from the City everyday so that the distribution of staff is satisfying under the MSPAS plan.

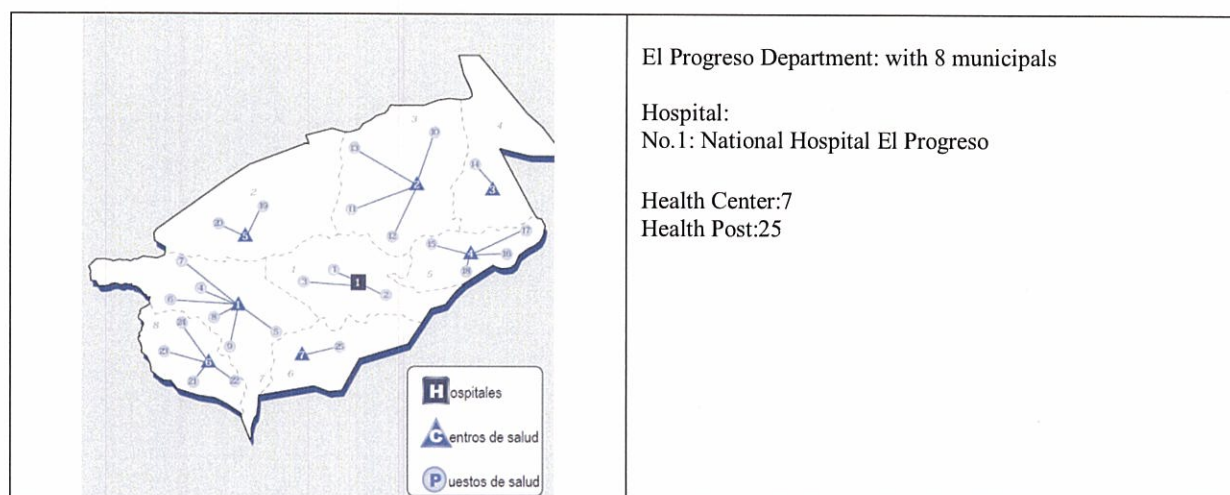


Figure 17 Location of National Hospital El Progreso

Source: MSPAS

5.4.2 Organization and Activities

As a national hospital it has an operation and emergency rooms, laboratory, X-ray, ultrasound apparatus, but no ICU. Medical equipment is quite limited but regional coordinator works by renting equipment from other hospital in the same region. The facility is getting damaged, and quality of water is bad containing salt, therefore, not only facility but also equipment is easily superannuated.

The hospital activity is not busy, however, average of emergency cases per day is 40-50, and outpatients are 2,000 per month. Main operation performed in the hospital is cesarean, trauma caused by accidents, enterogastritis, and hysterotomia.

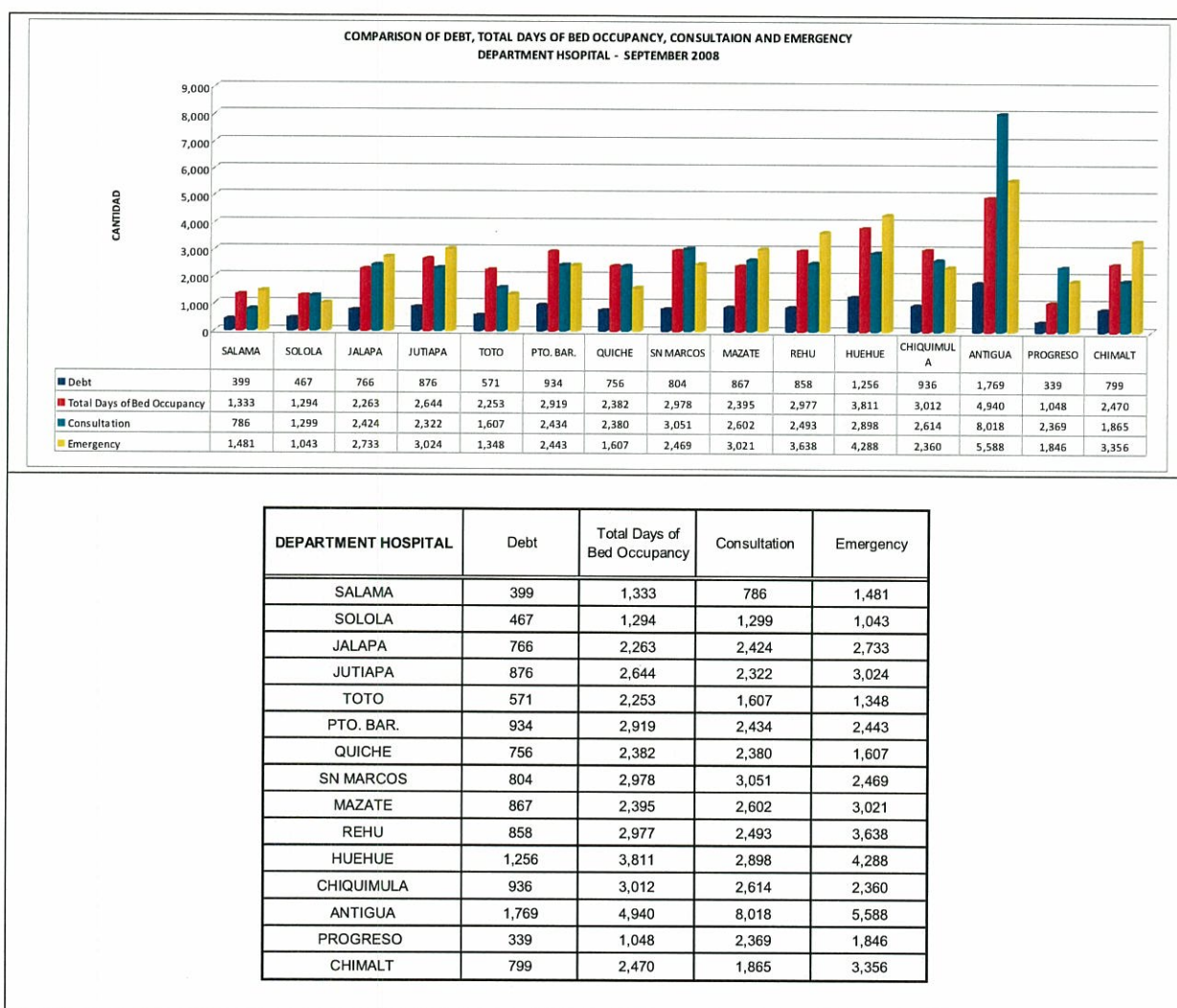


Figure 18 Comparison of the Department Hospital Activities in September 2008

Source: MSPAS

This hospital has a good potential and will be in higher demand because of growing population, which will reduce overconcentration of the patients from north east regions of the Guatemala City. It also has sufficient medical staff, which is the key for its sustainability. However, the facility and medical equipment need to be improved significantly.

CHAPTER 6. PROPOSED PROJECT DESIGN

6.1 Objectives Area and Goal of the Proposed Project

6.1.1 Objectives Area

The objective areas of the proposed project are Department of Guatemala, El Progreso and Alta Verapaz in the Republic of Guatemala.

6.1.2 Goal of the Project

The goal of the proposed project is to strengthen the hospital network, improving the second level hospitals in the aspect of human security, integrated capacity building of medical workers, and medical service provision.

The purpose of the proposed project aims at:

- reducing the overconcentration of patients in National Reference Hospitals
- improving priority hospitals which have urgent needs of the human security concept
- strengthening the hospital network, develop medical human resources

6.2 Scope of Work of the Proposed Project

Proposed project title is proposed as the Project of Improvement of Second Level Hospital in the Aspect of Human Security, Republic of Guatemala. It is proposed to carry out in two (2) phases. The scope of work of the respective phase will be, but not be limited to the following:

(1) Phase I: Feasibility Study

1) Supplemental survey and analysis necessary for the feasibility study of the health sector and target hospitals (data collection, analysis, review)

- National health policy, Health Indicator, financial evaluation, etc.
- Topography and climate; topography, water resources, climate characteristics
- Natural environment

2) Facility Planning

- Land use plan
- Infrastructure planning; water supply and sewerage, sanitation, drainage, roads
- Facility designing

3) Equipment Planning

- Selection of equipment

- Cost estimation
 - Specification
 - Layout plan
- 4) Cost Estimations
 - Project cost
 - Maintenance cost
 - 5) Medical Training Planning
 - Selection of trainees and curriculum planning
 - Selection of teaching hospital
 - Cost estimation
 - 6) Disbursement schedule
 - 7) Loan agreement
 - 8) Detailed design
 - 9) Tendering
 - 10) Supervisory work

(2) Phase II: Feasibility Study for expansion of the continuous project formation

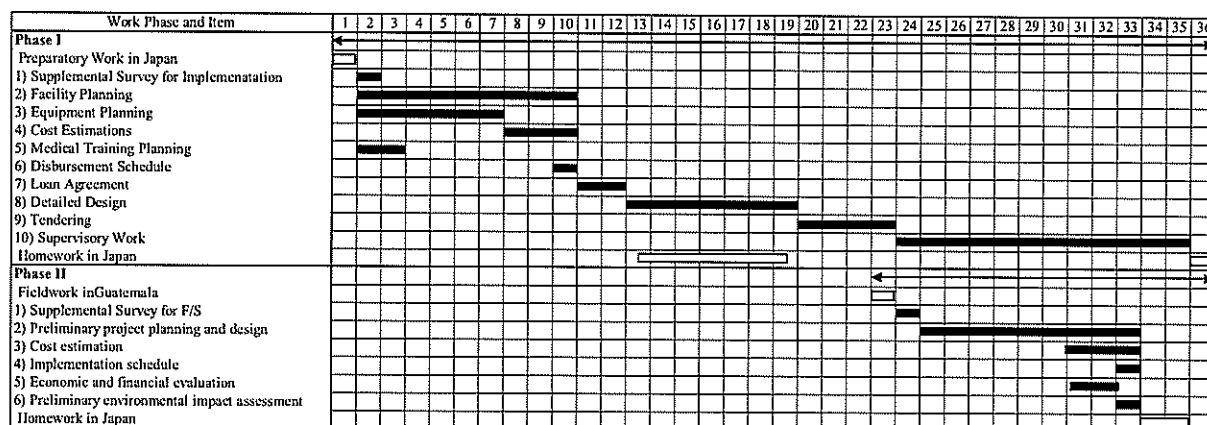
The Phase I results in a priority project which requires an urgent implementation to meet acute insufficiency and/or demand. It is proposed to carry out a pre-feasibility study for such priority project to assess its technical feasibility and financial viability to other areas in Guatemala adopting the same procedure. The Phase II will therefore will include, but not be limited to the following:

- 1) Supplemental survey and analysis necessary for the feasibility study
- 2) Preliminary project planning and design
- 3) Cost estimation
- 4) Implementation schedule
- 5) Economic and financial evaluation
- 6) Preliminary environmental impact assessment

6.3 Implementation Schedule

It is estimated that the Study will require a period of 36 months. A tentative schedule is as shown in following figure.

Figure 19 Implementation Schedule



6.4 Organization for Implementation of the Proposed Project

The Study will involve various ministries and organizations of Government of Guatemala, not only MSPAS and Ministry of Finance but also other local administration of the targeted areas. It is therefore most desirable that the Study will be executed under well coordinated structure, which will be represented by all the stakeholders concerned.

カラー用紙（区切り）

Annex 1 Numbers of Health Facilities in Guatemala

Region	Health Department	Hospital	Integrated Health Center	Periferal Center	Maternal Center	Health Center-A	Health Center-B	Health Post
Metropolitan	Guatemala	7	0	3	5	3	29	81
North-East	El Progreso	1	0	0	0	1	6	25
	Izabal	2	0	0	0	3	5	32
	Zacapa	1	0	0	0	2	8	30
	Chiquimula	1	0	0	0	2	9	26
Central	Sacatepéquez	2	0	0	0	0	3	17
	Chimaltenango	1	0	0	0	0	12	57
	Escuintla	2	0	0	0	1	14	36
South-East	Santa Rosa	1	0	0	1	2	12	55
	Jalapa	1	0	0	5	1	6	22
	Jutiapa	1	0	0	1	3	11	49
South-West	Sololá	1	0	0	1	0	10	33
	Totonicapán	1	0	0	1	0	9	22
	Quetzaltenango	3	0	0	0	1	15	56
	Retalhuleu	1	0	0	0	0	6	23
	San Marcos	2	0	0	0	0	20	84
North-West	Suchitepéquez	1	0	0	0	0	12	27
	Huehuetenango	2	0	0	0	4	15	71
	Quiché	4	0	0	1	0	17	78
North	Baja Verapaz	1	0	0	0	1	7	26
	Alta Verapaz	3	0	0	1	6	11	33
Petén	Ixcán	0	32	0	0	1	2	12
	Petén Norte	2	0	0	0	0	3	15
	Petén Suroccidental	1	0	0	0	0	3	7
	Petén Suroriental	1	0	0	0	1	4	9
Total		43	32	3	16	32	249	926

Annex 2 Forty-Three (43) Hospitals in Guatemala

	Name of Hospital	Area	Region	Category
1	Hospital General San Juan de Dios	Guatemala	Guatemala	National
5	Hospital Roosevelt	Guatemala	Guatemala	National
2	Hospital Nacional de Ortopedia y Rehabilitación de Lisiados "Dr. Jorge Von	Guatemala	Guatemala	Special
3	Hospital de Salud Mental, "Drs. Carlos F. Mora y F. Molina"	Guatemala	Guatemala	Special
6	Hospital Infantil de Infectología y Rehabilitación	Guatemala	Guatemala	Special
7	Sanatorio Antituberculosis "San Vicente"	Guatemala	Guatemala	Special
4	Hospital Nacional de Amatitlán	Guatemala	Guatemala	District
9	Hospital Nacional "Pedro de Bethancourt"	Sacatepéquez	Central	Department
10	Hogar de Ancianos "Fray Rodrigo de la Cruz"	Sacatepéquez	Central	Special
11	Hospital Nacional de Chimaltenango	Chimaltenango	Central	Department
12	Hospital Regional de Escuintla	Escuintla	Central	Regional
13	Hospital Distrital de Tiquisate "Ramiro de León Carpio"	Escuintla	Central	District
14	Hospital Nacional de Cuilapa	Santa Rosa	South-East	Regional
15	Hospital Nacional "Juan de Dios Rodas"	Sololá	South-West	Department
16	Hospital Nacional "Dr. José Felipe Flores"	Totonicapán	South-West	Department
17	Hospital Regional de Occidente "San Juan de Dios"	Quetzaltenang	South-West	Regional
18	Hospital Antituberculoso "Rodolfo Robles Valverde"	Quetzaltenang	South-West	Special
19	Hospital Nacional "Dr. Juan José Ortega" Coatepeque	Quetzaltenang	South-West	District
21	Hospital Nacional de Retalhuleu	Retalhuleu	South-West	Department
22	Hospital Nacional de San Marcos	San Marcos	South-West	Department
23	Hospital de Malacatán	San Marcos	South-West	District
20	Hospital Nacional de Mazatenango,	Suchitepéquez	North-West	Department
24	Hospital Nacional de Huehuetenango	Huehuetenang	North-West	Department
25	Hospital de Distrito San Pedro Nectá	Huehuetenang	North-West	District
26	Hospital Nacional Santa Elena de la Cruz	Quiché	North-West	Department
27	Hospital de Nebaj	Quiché	North-West	District
28	Hospital de Joyabaj	Quiché	North-West	District
29	Hospital de Uspantán	Quiché	North-West	District
30	Hospital Nacional de Salamá	Baja Verapaz	North	Department
31	Hospital Nacional "Hellen Lossi de Laugerud", Cobán	Alta Verapaz	North	Regional
32	Hospital Distrital Fray Bartolomé	Alta Verapaz	North	District
33	Hospital La Tinta	Alta Verapaz	North	District
35	Hospital Nacional de San Benito	Petén	Petén	Regional
34	Hospital Nacional de Melchor de Mencos	Petén	Petén	District
36	Hospital de Sayaxché	Petén	Petén	District
37	Hospital Integrado de Poptún	Petén	Petén	District
40	Hospital Regional de Zacapa	Zacapa	North-East	Regional
39	Hospital Infantil "Elisa Martínez"	Izabal	North-East	Special
8	Hospital Integrado	El Progreso	North-East	Department
38	Hospital Nacional "Kiell Eugenio Laugerud G."	Izabal	North-East	Department
41	Hospital Modular "Carlos Arana Osorio"	Chiquimula	North-East	Department
42	Hospital Nacional "Nicolasa Cruz"	Jalapa	South-East	Department
43	Hospital Nacional "Ernestina vda. de Recinos"	Jutiapa	South-East	Department

人間の安全保障に係わる保健医療環境整備および人材育成計画予備調査

和文要約

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1. 調査の背景と目的

現在、グアの国立病院は全国に43施設あるが、首都圏の7つの国立病院と地方の国立病院との医療サービス環境の格差が大きな問題となっている。その要因として、①地方病院の施設・機材の老朽化、②地方病院の医療従事者の技術レベルの低さ、③地方でも1日あれば首都圏の国立総合病院・専門病院へ到達できること、が挙げられる。従って、首都圏の国立病院への患者が集中し、首都圏自体の貧困層の人口増加も相乗して、本来高次医療機関である首都圏の国立総合病院が1～3次全レベルの患者を受け入れている状況である。このような地方患者の首都圏への集中を防ぐためには、医療サービス環境を整備することによって、中央と地方間の地域間格差の改善を図り、中央病院への集中を緩和するべく地方病院をハード・ソフト両面から拡充することが優先課題であり、その解決策を事業化することを目的とする。

2. 病院網整備に関するグアテマラ政府の方針

グアテマラ政府は、国家保健計画「政策指針（Lineamientos Estratégicos para la Salud 2008 - 2012）」にて9カ条の指針を示しており、「統合保健サービス（SIAS）の提供による医療サービスの拡大」として医療サービスの提供と「医療人材の状況分析による改善と管理強化」による医療従事者の適正配置・能力強化を目指している。とりわけ、活動計画の具体的な優先課題6項目として「保健医療制度強化」「保健医療組織強化」「保健サービス網の全国カバー」が挙げられており、施設設備・人材・運営面で充実した医療施設の整備が活動計画のトップに設定されている。

3. 対象病院選定の主な課題

レファラルシステムの改善の一環として、首都圏高次医療施設への患者集中を首都外環の2次病院が対応できるよう、2次病院の強化を図る際、2次病院が充分潜在能力を持っていることが肝要である。選定に当たってのクライテリアとして、①首都から車で1～1.5時間の通勤圏内にあること、②患者利用の潜在能力が高いこと（教育病院である、医療従事者の勤務態度・能力が認められる等）、③他ドナー等が着手しておらず、施設・機材の老朽化が認められ、施設改修・機材調達の必要性があること等が挙げられる。

他方、人間の安全保障の観点から、これまでミレニアム開発目標の影で着目されなかった医療施設は、グアテマラ政府にとってドナーが着手しなかったものの、国民にとって充分な裨益と医療サービスの拡大といった国家保健計画のビジョンから優先度が高い。このような施設は今後も他ドナーが支援し難い反面、借款で同国が優先性に鑑みて決断できるものと考えられる。

4. 提案する調査

事業実施に結び付けるために、次の調査・設計、計画の実施を提案する。

調査名：人間の安全保障に係わる保健医療環境整備および人材育成計画

目的:	-パイロット病院の基本設計と計画実施 -次期優先病院について、フィージビリティ調査の実施
主な内容	フェーズ1：フィージビリティ調査（SAPROF） ① データ・情報の収集、分析、レビュー ② 施設計画策定 ③ 機材計画策定

	<ul style="list-style-type: none"> ④ 医療従事者研修計画策定 ⑤ 概算事業費の算定 ⑥ 工程表策定 ⑦ 借款協定締結 ⑧ 詳細設計 ⑨ 入札業務 ⑩ 調達・施工監理 <p>フェーズ2：フィージビリティ調査</p> <ul style="list-style-type: none"> ①フィージビリティ調査のためのフェーズ1の評価調査と現状分析 ② 事業計画・設計 ③ 概算事業費の算定 ④ 実施プログラム策定 ⑤ 経済財務分析 ⑥ 予備的環境影響評価
調査期間:	36ヶ月