



## *FINAL REPORT*

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## INTRODUCCION

### *OBJECTIVES*

The Technical Report on Health Infrastructure aims to : (a) ascertain the dimension of the physical<sup>1</sup> facilities network for the Public, Social Security and Private Sectors; (b) evaluate the current conditions of such networks and identify the needs of coverage expansion and their rehabilitation during the next five-year period, directed by an efficient and feasible strategy within the national context; (c) quantify the required total costs relating them to funds availability; (d) point out the most important constraining factor for the investment program implementation in the premises, and (e) indicate the actions that will require special health care from the responsible incumbents.

The resulting program should be framed within the three main objectives: (1) **to orient the investments to the most needy population sectors**, (2) **recovering first the whole network of facilities and existing equipment and once in acceptable conditions**, (3) **to emphasize programs for permanent preventive maintenance**.

### *METHODOLOGY*

This report is developed within a flexible analytical frame which allows to progressively incorporate further information being collected and processed. It also admits to build up investment's programs for five-year periods that could quantified from the early stages of the ANSAL project. This is only possible if the discussion is kept at the adequate abstraction levels and consistent criteria are applied in the whole range of assumptions<sup>2</sup> and, moreover, they must be based on prolonged observation of the Salvadoran reality.

The data basis for infrastructure component is derived from four primary sources: (a) an inventory of primary health care level facilities of the MSPAS; (b) a sampling of facilities in the second and third health care levels of the MSPAS; (c) the collection of office information at all levels and sectors; and (d) study on the Private Sector.

#### *Inventory of MSPAS's Primary Health Care Facilities*

A very important source of information on the health infrastructure at the Ministry will be two studies which are in process and expected to be finished on April 1994. The first one has been called "Estudio de Microlocalización" [Microlocation Study] (inventory on building field of the MSPAS and its equipment) and the second one, as a complement, is called "Estudio de Microplanificación" [Microplanning Study] (establishing the analysis capacity of the sector to permanently update and evaluate the physical network).

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<sup>1</sup> Civil works, electromechanical equipment and biomedical equipment, and furniture.

<sup>2</sup> Annex 1 contains data from a mixture of information with suitable basis and other product of a set of *assumptions* with the best updated information, discriminating chronology, sources and details discrepancies, and also supplying the absence of information with data from reasoned conclusion.

These studies have been sponsored by the World Bank<sup>3</sup> as an answer to the lack of updated and meaningful information to make investment plans. The coverage of the reports, due to the budget available, had to be limited to about two thirds of the Ministry's network for only the primary health Care.

*Sampling of MSPAS'S second and third level facilities*

On account of the lack of detailed information produced by the **Microlocation** Study for positions and health units, a questionnaire sampling is carried out at the moment<sup>4</sup> in all health centers and hospitals of the MSPAS. Moreover, and as a very selective and limited confirmation a detailed survey will be made on two health centers and one hospital, that is, the most representative ones.

*Collecting office information*

The people in charge and responsible of the technical planning and infrastructure offices of the MSPAS and ISSS for the Public Sector were visited. They furnished data on the dimension of the network, the typology of the facilities and other pertinent information of the areas: costs and future projects. For the Private Sector, information was available at the Council of Public Health, which is not updated and it is incomplete, was used for a first approach on dimensioning the amount and typology of private consult offices, pharmacies, clinical laboratories and drugstores.

*Private Sector Study*

Again, sponsored by the World Bank, there is a census on human resources and facilities being carried out at this time. directed to the Health Sector by private initiative which will be available after the final revision of this Technical Report.

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<sup>3</sup> they are actually resources from a Japanese government donation destined to the social sectors of El Salvador, and managed by the World Bank.

<sup>4</sup> The results are summarized on Annex 2. Its design tried to get in an easy way the best estimate of the actual needs of rehabilitation on civil works and equipment (minor reforms and repairs) from people cognizant of the premises.

## EXECUTIVE SUMMARY

The Health Sector in El Salvador has a network of physical installations which, comparatively, ranks among the highest both in number and accessibility in the Latin American region. Due to the size of the country and its adequate road network, it has an acceptable penetration within the rural context, though it has some concentration within the urban areas and mainly in the Metropolitan Area of San Salvador (MASS). In contrast, however, there is up to 35% of physical deterioration of the buildings and equipment of the MSPAS, which is the largest health service supplier. This situation decidedly contributes to the deficiencies in quality of health services.

Approximately, 4,596 physical installations rendering clinic consultation, hospitalization, diagnosis support and production and distribution of medicine have been identified in the whole country. Out of these, 4,145 are private and little more than 450 are part of the Public Sector infrastructure of which 393 belong to the MSPAS. Though the number of installations in the Public Sector is about one tenth of private facilities, most of the latter are small clinics and pharmacies, one should not lose perspective that a little more than 10% of hospitalization services and nearly 45% of external consultations are given by the Private Sector. *Primary health care* services which are better distributed and typically of rural penetration are given in 49 **dispensaries and community posts**; these are followed, in the rural area and in ascending order of physical complexity, by other 157 **health posts**, all from the MSPAS; and then, in the typical urban condition, by 276 **health units** of which nearly 90 belong to the Private Sector and 2,580 are private clinics. The health services for *second and third levels* are rendered in nearly 100 facilities: 56 **hospitals** (27 private ones) and other 44 **health centers** (17 private ones). These facilities have a total inpatient capacity of almost 8,000 beds, an average of 1.5 beds per 1000 inhabitants which places El Salvador among the countries with higher coverage in Latin America.

There are several interpretations of the data on the size of the network and there is a lack of knowledge on the details of the actual condition of the physical facilities. However, for this report<sup>5</sup> the figures are acceptable.

The most urgent expansion of new installations activities and the rehabilitation of the whole network of existing physical facilities, have been identified for the period 1994-1999, a total requirement<sup>6</sup> of at least US\$215 millions for investments and normal expenses in the whole Sector. Out of that total, a little more than 45% would be destined to the MSPAS. The capital resources estimated are approximately US\$157 millions and more than 80% of that for second and third level of health care. It is very important to highlight that the total, nearly US\$60 millions in normal expenses, would be for the conservation or preventive maintenance of the whole network; and also, **investments could not be justified if they are not ensured in programs and annual financial resources during the next five-year period, in a network which would again be deteriorated.**

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<sup>5</sup> At the moment there is a detailed inventory in process of 2/3 of the facilities for primary health care of the MSPAS which will allow to refine actual estimates derived from former reports from the World Bank, by the author for the FIS, the revision of statistic documents in the ISSS and the records of the Superior Health Council for the appointed facilities of the Private Sector and a sampling by questionnaire verified on the field by prototypes for the installations of the MSPAS at secondary level.

<sup>6</sup> See annex 1.

The objectives required for total investments in the Sector substantially match the results of the home survey of the REACH project. This situation suggests an adequate approximation<sup>7</sup> of the conditions previewed in the main indicators of the infrastructure: Public Sector (MSPAS and ISSS) supplies 89% of hospitalizations and 89% of the investments proposed; and 45% of the market of external consults are furnished by the private Sector (against 42% of the investments proposed).

To summarize, the most outstanding historical constraints for an infrastructure investment program are : (a) lack of consistent prioritization of the works and lack of knowledge of their real scope; (b) Preference of health professionals, politicians and a large part of the donors, for works on second and third level of health care at the expense of first level investments, where service efficiency is higher and where investment and operation cost per patient are lower; (c) Preference for new works rather than of keeping and furnishing what is already there; this fact is reflected in the scant resources used for the preventive and systematic maintenance of the network; and (d) lack of practical interpretation of the physical space requirements and adequate equipment used for a medical services rendered (adjusted to the changeable epidemic and geographic profile), resulting in a lack of objective and realistic investment planning.

The general strategy suggested is founded on three aspects: **(1) destine investments to the most needy sectors of the population, (2) improve the whole network of facilities and existent investments and once in acceptable conditions (3) direct the necessary emphasis to permanent preventive maintenance programs.**

The proposal includes a modest component of coverage expansion and in the case of the MSPAS, detected to primary level health care. It is also based upon the fact that both Social security and the Private Sector get their resources from the productive sector so their financial requirements, though they may have preferential lines, will not be part of an investment plan from the MSPAS. Within this context it was found that for the next five-year period some US\$13 millions will be needed for primary health care at the MSPAS. This amount includes a little more than US\$2 million in normal expenses for a minimum preventive maintenance program. For general and specialized hospitalization, resources of almost US\$84 millions will be required, this amount includes more than US\$24 millions in normal expenses. It is important to underscore that for the latter level **there is no investment for new works proposed.** However, a considerable investment in the recovery of existing physical facilities, electromechanic and biomedic equipment of the hospitals and health centers is suggested. The amount of the investment is estimated in at least US\$42 millions for civil works and a little more than US\$17 millions for furniture and equipment.

It is encouraging to see that in all cases, the projections of investments for the MSPAS<sup>8</sup> are above the needs detected in this report. On account of historical traditions, the MSPAS should carry out a great effort in the next five-year period not directed to increment the infrastructure which is generally not used in full. It is also important that the donors support an investment policy focused on geographic and equal distribution of resources of the Sector. Conclusively, the MSPAS should give the necessary emphasis to complete the inventory in all its facilities and to **make it its own** the task of a physical, systematic, and permanent **microplanning**, to ensure a continuous correlation of offer and demand of its services and to be able to

<sup>7</sup> Taking only in the sense that a healthy investment proposal would reasonably correspond to the general patterns of existing demand.

<sup>8</sup> MSPAS, El Salvador: *Planes de Inversión Pública*, (public investment plans) Unidad de Planificación Financiera, Cuadro Resumen, 1993.

develop the technical capacity needed to make up physical plans of rehabilitation of its facilities, adjusted by the reality of its limited resources available and a renovated "Model of Health care".

## I INFRASTRUCTURE IN THE HEALTH SECTOR

### 1 General overview

The Health Sector in El Salvador has a network of physical installations which, comparatively, ranks among the highest both in number and accessibility in the Latin American region. Due to the size of the country and its adequate road network, it has an acceptable penetration within the rural context, though it has some concentration within the urban areas and mainly in the Metropolitan Area of San Salvador (MASS). In contrast, however, there is up to 35% of physical deterioration of the buildings and equipment of the MSPAS, which is the largest health service supplier, the persistency of such situation decidedly contributes to the increasing deficiencies in quality of health services.

Approximately, 4,596 physical installations rendering clinic consultation, hospitalization, diagnosis support and production and distribution of medicine have been identified in the whole country. Out of these, 4,145 are private and little more than 450 are part of the Public Sector infrastructure of which 393 belong to the MSPAS. Though the number of installations in the Public Sector is about one tenth of private facilities, most of the latter are small clinics and pharmacies, one should not lose perspective that a little more than 10% of hospitalization services and nearly 45% of external consultations are given by the Private Sector. *Primary health care* services which are better distributed and typically of rural penetration are given in 49 **dispensaries and community posts**; these are followed, in the rural area and in ascending order of physical complexity, by other 157 **health posts**, all from the MSPAS; and then, in the typical urban condition, by 276 **health units** of which nearly 90 belong to the Private Sector and 2,580 are private clinics. The health services for *second and third levels* are rendered by nearly 100 facilities: 56 **hospitals** (27 private) and other 44 **health centers** (17 private). These facilities have a total inward patient capacity of almost 8,000 beds, an average of 1.5 beds per 1000 inhabitants which places El Salvador among the countries with higher coverage in Latin America.

### 2 Infrastructure for primary health care

The physical and human resources structure of the network of MSPAS facilities for the primary health care begins with the dispensary which is a small room of about 16 m<sup>2</sup> located in far places where a person, on a part-time basis, supplies medicine. The **community post** is next in the scale, and it comprises a couple of rooms of almost 30 m<sup>2</sup>, in private houses of small towns lent by the community. A health promoter usually has his headquarters in this location, and it is periodically visited by medical personnel during specific campaigns. According to the current model of services, the prototype **health post** renders health care to geographic sectors of up to 10,000 inhabitants, whose facilities are more formal; they have an average surface of some 190 m<sup>2</sup>, which are distributed in two or three consult offices, a pharmacy, a post for the health inspector and some capacity of food storage. It is directed by a full time auxiliary nurse and, up to three times a week, by a mobile equipment that includes a graduated physician. The most complete facilities from this level, are the health units, which serve populations of up to 30,000 inhabitants with areas built with a rate of approximately 250 m<sup>2</sup> for the inner units, to 700 m<sup>2</sup> in the units of the AMSS. These units have approximately 4 medical consulting offices, odontological consulting offices, laboratory, small surgery room for emergencies, pharmacy, administrative offices and food storage. The personnel works full time, they are physicians, graduated and auxiliary nurses, health inspectors and of administrative support. The services offered in the infrastructure of the Social Security and in the Private Sector for such level are similar to that of the MSPAS, although in higher scale in the first one and much smaller in the second one. Moreover, being widely distributed in the urban areas of the country and with a concentration of more than the 80% in the Metropolitan Area of San Salvador, the private initiative has consulting offices (of 40 m<sup>2</sup> in average); clinical

laboratories and X-rays for the diagnostic support (of some 80 m<sup>2</sup> in average); pharmacies (of some 50 m<sup>2</sup> in average) and drug factories for the production of medicines (of some 500 m<sup>2</sup> in average). The latter ones also support the second and third levels of health care.

### **3 Infrastructure for hospitalization**

The facilities of the MSPAS for the second level of health care are the **Health Centers** which have a capacity of 30 to 80 beds, an average surface of 4.000 m<sup>2</sup>, and services in the four basic clinics for populations of more than 30.000 inhabitants. Also in the main cities, there are 9 regional hospitals with capacities of 100 beds and 600 beds (the lower limit located in Chalatenango, and the higher limit located in Santa Ana) with average built areas of almost 11.000 m<sup>2</sup> with variations between 4.300 m<sup>2</sup> (Hospital in Ahuachapan) and 25.000 m<sup>2</sup> (Hospital in Santa Ana). The third level of the MSPAS is made up of 5 specialized hospitals, which are all in the AMSS, including the most commonly known as Hospital Rosales, Benjamin Bloom and Maternity.

With a total built surface of almost 130.000 m<sup>2</sup>, the Social Security concentrates 10 of its 14 hospitals in the AMSS, 6 of them highly specialized and include the "Hospital de Especialidades" (specialties hospital) of 20.000 m<sup>2</sup> that the ISSS rents to the MSPAS. The availability of 2.3 beds per thousand of its beneficiaries indicates a coverage that outnumbers in one bed to that of the MSPAS.

There is very little information on the centers and hospitals of the Private Sector. The capacity of hospitalization of 16 beds average, shows relatively small units and most of them have been improvised in buildings designed for other purposes, therefore, there are great deficiencies in the development of the health services.

## II ANALYSIS OF INFORMATION

The constraints in information on infrastructure shown in the Methodological frame are useful to emphasize the same constraints in the findings of this section. The deficiencies in the records in all levels has produced, even in the same sources, many contradictions in the dimensioning of the network. This is evidenced even more in the lack of knowledge of the detail of the state of conservation of the physical plant. However, for the effects of this first approximation, the sums are adequately enough to indicate the differences, tendencies and a meaningful order of magnitude.

### 1 The dimensioning of the network

The data about the number of facilities varies in each report, even in the same institution. The ambiguity of the figures is due to different interpretations of the typology; to the absence of mechanisms of permanent updating; to quotations made in different periods of time, and to the different levels of compilation of some data against others. The dimensioning of the network of the Public Sector is at the moment reliable. It is not so for the Private Sector, as there is only 6 year old sample data, and also incomplete and outdated lists in the Public Health Council. However, this data is the most reliable by now. It is expected that the Study of the Private Health Sector, which is being developed now and financed by the World Bank, will give the most recent data on this network.

The built areas documented by type of establishment, or else, the number of facilities by typology and the average surface of the prototypes indicates the total square meters. These areas multiplied by current labor costs for different levels of complexity, efficiency observed and degree of complexity available for the different sectors and levels of health care, render the actual value of the civil works in the health infrastructure. The current value of the equipment has been computed as a standard rate of the labor cost, also variable by level of health care and by Subsector. The current total value of the network is about US\$475 million, from which almost 3/4 parts equivalent to about US\$350 correspond to the level of hospitalization, out of which 92% correspond to the Public Sector.

### 2 Perspectives of expansion of coverage and of rehabilitation

The growth of the network in new works that expand the capacity of coverage has focused in base to the primary objectives of equity and efficiency, signed at in the beginning, and also of opportunities of the respective levels. Thus, for the primary level of health care only a moderate growth is anticipated in the facilities of the MSPAS; a growth of the 40%, accumulated in five years, for the Social Security<sup>9</sup> and, a variable growth per type of facility in the Private Sector ( 40% in "health units" for the influence of the NGO's in expansion and only a stagnant growth in the other types). For the level of hospitalization of the Ministry, a zero growth is considered for the capacity of increasing the productivity of its hospitals (60% current average in the area of hospitalization and 67% in the area of external consultation<sup>10</sup>) to near the 80%

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<sup>9</sup> The ISSS estimates in an 11% the expansion of average year coverage, which is equivalent to the growth of the economy together with its natural growth. The growth of the resulting 87% has reduced to a 40% for the possible growth of privatized services.

<sup>10</sup> According to statistic records of MSPAS.

which are the acceptable levels of utilization; this would be equivalent to increasing about 1/3 its current capacity of health care if it were possible to improve the administration of the network of hospitals, deriving patients to those not overcrowded. It is expected that the Social Security/Insurance and the Private Sector increase their facilities in about 40% for the current depressed condition.

For the rehabilitation of the whole network, not only public but also private and at all levels of health care, the primary objectives are similarly followed. The rehabilitation includes repairs and minor adaptations of civil works and its equipment with values that have been estimated recognizing the variable levels of conservation by Sector and by Level. In the ambulatory level, a necessity of investing over the current value of the infrastructure has been estimated 35%, 7.5% and 5% for the MSPAS, the Social Security/Insurance and the Private Sector, respectively; these rates reflect the degrees of deterioration observed and in some cases documented. For the second and specialized level only the percentage applied to the MSPAS varies to a little more than 27% debt to the most frequent and major investments traditional in the hospitals.

### **III NEEDS FOR HEALTH INFRASTRUCTURE**

Following the structure of the networks of infrastructure in health and the outlines stated in the previous Chapter, the financing demands for investment and common expenses per level of health care and per subsector of services are estimated as follows.

#### **I Five-year term finance demands in investment and operation**

For the most necessary actions of expansion of new facilities and of rehabilitation of the complete network of existing physical facilities, a total necessity of at least US\$215 million for investments and common expenses in the whole Sector has been identified for the five-year period 1994-1999. From this total, a little more than 45% would be destined to the MSPAS. The resources of capital estimated are close to the US\$156 millions with more than 80% of the same for the second and third levels of health care. It is important to highlight that from the additional US\$60 millions in common expenses that would be demanded for the conservation or preventive maintenance of the whole network and that if they cannot be secured/insurance in programs and year finance availability during the five-year period the investments could not be justified in a network that would deteriorate again. Chart No 1 summarizes an average of requirements of financing resources for all the Sector.

Chart No.1

## TOTAL INFRASTRUCTURE FINANCIAL DEMANDS IN THE HEALTH SECTOR FOR 1994-1999

(Figures in millions US\$<sup>1</sup>)

Health Care Levels and Sectors	INVESTMENT						COMMON					
	Works New	Rehab	Fur.&Eq New	Rehab	Sub Total	%	Work Costs	Prev. Fu&Eq	Sub Total	TOTAL		
FIRST LEVEL							31.1	20			10.5	41.6
MSPAS	1.8	7.5	0.4	1.5	11.2	36	1.1	0.9	2.0	13.2		
Social Security	4.8	0.7	1.2	0.2	6.9	22	0.9	0.6	1.5	8.4		
Private	7.2	3.7	1.4	0.7	13.0	42	3.9	3.1	7.0	19.9		
SECOND AND THIRD							124.4	80			48.5	173.0
MSPAS	0.0	42.3	0.0	17.3	59.6	48	7.5	16.5	24.0	83.6		
Social Security	30.0	5.6	13.5	2.5	51.7	42	6.7	14.2	20.9	72.6		
Private	8.7	1.1	3.0	0.4	13.2	11	1.3	2.3	3.6	16.8		
TOTALS							155.6				59.0	215.0

<sup>1</sup> Exchange Rate US \$1 : SA ₧8.70

The required estimate for the total investments in the Sector is reflected in the rates shown in the chart above, are fundamentally match to those of the home survey of the REACH project, this results suggests an adequate estimate<sup>11</sup> of the conditions assumed in the infrastructure main indicators: the Public Sector (MSPAS and the Social Security) render 89% of hospitalizations as well as 89% of the proposed investment, and 45% of external consultations are rendered by the Private Sector (against the 42% of the investment proposed).

## 2 Standard considerations

In general, the epidemiological profile in El Salvador, although with slight variations by society "modernization", is visualized as very stable. Showing that the "model of health care" in force will incorporate, and only due to pathologies, very slight changes; therefore, in the context of health facilities, no meaningful variations will be anticipated in the new constructions or in the rehabilitations. However, feasible simplifications of space and area reductions are proposed by the current model of assistance for typology of facilities, to improve functional efficiency of the medical activities, mainly for the **health posts** and in minor scale for the **health units**. On the other hand, hospitals in El Salvador have achieved a very high space efficiency (in average with less than 60 m<sup>2</sup>/bed), so the changes suggested are only for very old ward facilities.

Since the scale of investments projected in the infrastructure of the Health Sector is substantial, it should be highly necessary to have a controlled standard, which would be useful and suitable not only for the Public Sector but also for the Private Sector. At moment, there is only a diversity of prototypes, product of activities scattered in time and carried out by many actors. Recently the FIS<sup>12</sup> originated an effort, discontinued at the moment, which can be used as a basis for the future actions. The interpretation of the model of health care ought to be improved beyond collected data included in it as the "*Medical-architectonic Program*" and from the "*Physical infrastructure standards for health posts and units*" and produce an architectonic program that reflects the productivity and the minimum space demands of the human resources rendering the services.

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<sup>11</sup> Taken only in the sense that a sound proposal of investments must respond to the general patterns of demand.

<sup>12</sup> Simon Feld and others, *Mejoramiento de Procedimientos del FIS y del MSPAS en Proyectos de Salud* (Improvement of Procedures of the FIS and of the MSPAS in Health Projects), sponsored by BID, El Salvador, February of 1993.

## IV SOCIO-POLITICAL CONTEXT

The most significant historic constraints for an investment program in infrastructure could be summarized in: (a) the lack of a consistent prioritization of the works and lack of knowledge of their real magnitude (b) the preferences of health professionals politicians and some donors for works at second and third level of assistance at the expense of investments on the primary level, where the efficiency in services is higher and where the investment and operation costs by patient is lower, and where the programs from recent governments have given more attention (although more by word than by real results in the capital expenses); (c) the preference to perform new works and very limited institutional priority to preserve or furnish what already exists; with the consequent frugality of resources in ordinary expenses for the preventive and systematic maintenance of the network; and (d) the lack of practical interpretation of the requirements of physical space and appropriate equipment as a result of the medical services rendered (adapted to changeable situations of the epidemiology and geographical profile), resulting in the lack of objective and realist investment plans.

### 1 Constraints of proposals for physical investment

The lack of clear ideas of **what to do** is more evident every day, for both civil works and equipment. The engineering department of the Public Sector usually pursue political priorities where usually what is "urgent" has priority upon what is important, obviating very simple and acceptable methodological procedures for the physical planing, for instance, updated inventories, application of the regulation, formulation and budgeting of main proposals (against measurable criteria that could be derived from the primary objectives for the Sector development). For example, for the las two decades there has not been a consensus about **what to do** about Rosales Hospital in San Salvador. Likewise in the Private Sector, where a historic poor capacity to formulate feasible and efficient plans and projects can be seen, beyond its continuous improvisations.<sup>13</sup>

### 2 Preference for investments on hospitalization levels

The government establishes, in many of its reports, that its priority is for the needy majorities<sup>14</sup>. The MSPAS specifically defines its priorities for preventive health care activities. This does is not actually carried out because the expenses in health from the Public and Private Sector are for the urban areas, mainly for the AMSS and frequently it is spent in projects where there is neither the most needy nor the majority of the populations as it is the case of the specialties hospital.

These priorities are being projected in practice, aside from the meager works from FIS<sup>15</sup> and a very modest but regular investment program from the MSPAS, for instance, the latter is discussed in three proposals: the

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<sup>13</sup> For instance, Lamatepec Hospital was closed for more than five years and now only in part of the facilities is in use; and the Emergency and Diagnostic Hospital, where it is necessary to follow an arrow marked on the floor to find the reception of patients, and Hospital de la Mujer where it is not possible to help a inward patient in the shower because there is no room for two people in the bathroom.

<sup>14</sup> Ministry of Planning, Social and Economic Development Plan, 1989-1994

<sup>15</sup> US\$1.5 million for equipment and works of MSPAS and NGO's both finished and in process.

first one, is whether to a US\$30 million financing from BCIE for a new hospital in Sonsonate; the second one is whether to accept a donation of US\$9 million from the government of Japan, also for a new hospital in the same city, which, once started, will require other US\$20 million to be finished, and the third one is whether to accept the financing of US\$10 million from the CEE to rehabilitate the actual hospital, instead of the two first proposals given above.

According to the statistics from the MSPAS, the investments in infrastructure has been US\$1.3 million for installations of primary attention and US\$82.2 million in hospitals between 1990 and 1993, that is, 63 times greater. An investment, of a similar amount to the one mentioned at the level of hospitalization, is proposed later in this report; even though there seems to be a contradiction in this section, it would be highly desirable **to recover** an existing network that renders an obvious service, as long as **necessary resources be available** for the necessary investments in the primary level, which is still the priority.

### 3 Preference for new works

With complete knowledge from the authorities at all level from the MSPAS of the deteriorating conditions of all its installations and inoperativeness of a large part of its equipment (except brand new installations) the budgets for "corrective" and "preventive" maintenance are not possible to identify because they are immersed in operation expenses along with medicines, for example, and all the officers agree that is very little what is destined for these purposes.

### 4 Absence of an institutionalized physical planning capacity in the Sector

The Planning Direction of the MSPAS has a unit of "Investment and Projects" which, at the moment, has not been able carry out the planning function of the sectorial physical planning. Both the quantitative definition of the network of the sector by type of establishment and the objective qualitative situation of the installations that render health services. There is no coordination between the Social Security and the Private Sector. The MSPAS, as a normative entity, does not evaluate the offer and demand of services nor its space consequences for the different sub sectors.

## V SYSTEM OF PROPOSALS AND PRIORITIES

The social, political and economic perspectives for the next five-year period are very positive. First of all, because of the contrasting recuperation that unavoidably followed a twelve-year depression period, and then, for the magnitude of the challenge for works of infrastructure that faces is in scales and technical manageable complexities and with promissory impacts in the main objectives.

### 1 Investment priorities

The suggested general strategy is based on three aspects: (1) **leading the investments to the sectors where the population is in greatest need**, (2) **recovering all the network of existing facilities and equipment**; and (3) once in acceptable conditions, **to give the proper emphasis to permanent preventive maintenance programs**. The proposal includes, however, a modest coverage expansion component for the MSPAS, directed mainly to the primary level of health care. It is based, similarly, in the fact that the ISSS and the Private Sector receive their resources from the Productive Sector in the proportion that the economy of free market encourages those investments. The requirements of financing of the Private Sector, though it might have preference, will not be part of a plan of investments of the Ministry. The figures estimated for these are included in Annex 1.

In this context, it is estimated that US\$13 millions will be needed for the health care of the primary health care level of the MSPAS for the next year. This amount includes more than US\$2 million for common expenses for a minimal program of preventive maintenance. For the levels of general and specialized hospitalization, that ought not be set aside, resources of at least US\$84 million including more than US\$24 millions for common expenses will be needed. It is important to highlight that for this latter level **no investment in new works is proposed** for the coverage expansion. However, a considerable investment is suggested in the recuperation of the building and the equipment of the existing hospitals and health centers. An investment of more than US\$42 millions for the civil works and more than US\$17 millions for equipment are estimated.

If the investments of US\$83.5 millions of the MSPAS up to 1993 are compared to the above estimations, they are similar. Also, the technical complexity degree of the investment programs proposed here, fundamentally committed to the recovery of an existing network, is lower, and it should be managed by a relatively small group of technicians and with no extraordinary training. Major problems can be anticipated for the common expenses programs suggested here. In fact, a lost mysticism must be developed and some resources, although limited, ought to be assigned are not a consequence of the assignments with historical backgrounds.

### 2 Projected availability of financial resources

It is very encouraging to observe that, in all the cases, the projections of investments for the MSPAS is higher to the necessities detected in this report; for example, an assignment of US\$12,6 millions is being projected for the next five-year term for the primary levels against US\$13 millions estimated here. For the second and third levels, an availability of more than US\$73 millions is projected, also exceeding the proposed US\$60 millions. The financial requirements for the 1994-1995 period of about US\$2 millions for the preventive maintenance of the facilities of the primary level, as seen in the paragraph above, would be covered with the resources that the MSPAS has projected for this level. On the other hand, the demands for the maintenance of the hospitals and health centers of the MSPAS, estimated in at least US\$24 millions, are comparatively low. It is expected to get them, with no difficulties, from the resources projected by the Ministry in the regular programs, because, if the necessities of investment are covered by DONANTES, the required common

expenses represent only 2% from these. This is an advantage, because the MSPAS has projected an assignment for investments in the health area of the order of the 10% of the Annual Regular budget.

For the evidences of the above paragraph are possible, for the next five-year term, the MSPAS has to do a great effort that avoids to increase, in the hospitalization level, an infrastructure that generally is under-utilized and which current levels of average productivity, a little higher than 60%, indicate a capacity of health care additional of at least 30% about the present demand. Not only will have to be rejected the temptations of taking back the Hospital of Specialties, now rented by the ISSS, because the operative budget would absorb significative amounts of the ordinary budget of the MSPAS ; on the contrary, the MSPAS, has to look for the most adequate mechanism for a permanent conveyance. It will be very important that the donors support a policy of investments in the Sector toward the geographic and equitable distribution of the resources and not only for some favorite facilities. The program of investments in health at the MSPAS must be carried out by a technical unit modernized and simplified with only the necessary personnel whose main function will be to manage, coordinate and evaluate the services of inventory, design, oversight, construction and preventive maintenance that they contract, when possible, from the private initiative.

### 3 The preventive maintenance

The most depressed actions, in all the Public Sector and where the MSPAS does not escape, are those related to the preventive maintenance programs. The negligence to keep in good operative state the physical facilities and its equipments is reflected in deterioration levels of up to 35% in primary level facilities of health care and 28% in hospitalization facilities (see Annex 2). The future investments in the Sector, and particularly in the MSPAS, must be conditioned by the same functionaries responsible for the programs to be examined and strengthened for such objectives. GTZ and OPS have been lending worthy assistance to the Ministry for the maintenance of the biomedic equipment, especially for the second level of health care. Also, for the primary level, with the Rehabilitation of the Social Sector Project, with finance of the World Bank, has leaned on a strategy of preventive maintenance of the infrastructure of the 78 municipalities included in the program. These endeavors have been applied to a very reduced scale and suffer from an extended, systematic and persistent implementation that has the common expenses levels suggested in this work and indicated in detail in Annex 1. The most important element for the efforts in this area will be **the political resolution of permanently compromising the resources in underscored common expenses**. In Annex 3, a content of the most important actions and elements in a program design is suggested for the preventive maintenance of health facilities.

### 4 Microplanning in the Sector

Finally, the MSPAS will try to complete the inventory of all its facilities and **make its own** the task of a physical, systematic and permanent **microplanning** to ensure a continuous correlation of offer and demand of its services and to be able to develop the technical capacity needed to make up physical plans of rehabilitation of its facilities, adjusted by the reality of its limited resources available and a renovated "Model of Health care". This topic is timely, because local consultants are producing a "model" of analysis and its consequences of human and material resources, in the line outs of the "Study of Microplanning" that pretends to be finished in the first quarter of 1994. With this work, the basis for the physical-sector planning will be set, and it will be very important to **institutionalize** its proposals<sup>18</sup>.

# ANNEXES

## Infraestructura del Sector Salud Anexo 1

COMUNIDAD DE ESTADÍSTICAS Y SUPUESTOS (CIES) del MINED  
por Arq. Alberto Zuraga Wager

Tipo de Atención y Subsector	Número Unidades	Categoría	Tipo	PROYECCIONES DE DEMANDAS PRELIMINARES 1994-1999										GASTOS CORRIENTES						TOTAL US\$M						
				ALCOFI PRESENTE MED		OBRAS CIVILES (CC)		MOBILIARIO/EQUIPO (MEq)		TOTAL		CC (Med Final)		MEq (Med Final)		TOTAL										
				U	MEDq	Nuevas	Rehabilitadas	Nuevo	Rehabilitado	U	US\$M	U	US\$M	U	US\$M		U	US\$M								
<b>PRIMARIA</b>	4406	x	x	37796	x	100	x	21.4	x	13.8	x	11.9	x	30.1	x	2.42	31.14	20	100	5.47	0.4	4.28	0.3	10.48	41.8	
MSPAS	36.9	x	x	34322	x	21.8	20	4.36	x	1.3	x	7.52	x	0.36	x	1.5	11.18	30.9	1	1.09	0	1	0.04	2.042	13.2	
Dispensario	3	x	1b	56	210	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Puesto Común	4.3	x	2.2	176	210	0.29	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Puesto Salud	10.9	x	1.9b	30210	240	7.25	1.45	0.15	1.09	35	2.54	15	0.22	35	0.51	0	0.14	35	1	0	0	0	0	0	0	
Unidad Salud	155	x	x	52700	270	14.2	2.85	0.3	0.71	35	4.68	0	0.14	35	1	0	0	0	0	0	0	0	0	0	0	
SEGES	3.2	x	x	34432	280	8.04	2.5	2.41	x	4.82	x	0.72	x	1.21	x	0.18	6.929	22.3	1.5	0.72	0.2	4	0.48	0.12	1.506	8.44
Unidad Salud	3.2	x	107b	34432	280	8.04	2.5	2.41	x	4.82	x	0.72	x	1.21	x	0.18	6.929	22.3	1.5	0.72	0.2	4	0.48	0.12	1.506	8.44
PRIVADO	110.1	x	x	28876	x	7.52	20	14.6	x	7.2	x	3.66	x	1.44	x	0.73	13.03	41.8	1	3.66	0.2	4	2.93	0.14	6.61	19.9
Unidad Salud	8.9	x	2.5b	22.50	240	5.34	1.07	4.0	2.14	5	0.27	4.0	0.43	5	0.05	0	0	0	0	0	0	0	0	0	0	
Consultorio	10.3	x	4.2	10946	240	2.6	5.1	3.5	0.61	5	1.3	3.5	0.18	5	0.26	0	0	0	0	0	0	0	0	0	0	
Lab Clínico	15.3	x	5.0	10940	300	7.96	1.6	3.5	0.26	5	0.4	3.5	0.06	5	0.08	0	0	0	0	0	0	0	0	0	0	
Farmacia	99.2	x	5.0	4900	210	10.4	2.06	3.5	0.30	5	0.92	3.5	0.07	5	0.1	0	0	0	0	0	0	0	0	0	0	
Dispensario	10.4	x	5.0b	12000	450	25.4	4.64	1.5	3.51	5	1.17	1.5	0.7	5	0.23	0	0	0	0	0	0	0	0	0	0	
<b>2da NIVEL</b>	10.0	799b	x	400.44	x	247	x	10.1	x	38.7	x	49	x	16.5	x	20.2	124.4	80	100	14.2	1.3	30.2	2.74	48.54	173	
MSPAS	5.0	5517	x	27754	x	100	40	60.1	0	0	42.3	0	0	17.3	59.55	47.9	1	7.51	0	5.5	16.5	0	24.33	83.6		
Centro Salud	1.5	590	344b	31587	500	25.9	40	10.3	0	0	27	6.97	0	0	27	2.83	0	0	0	0	0	0	0	0	0	
Hospital	1.5	4527	1000b	226157	550	124	40	49.5	0	0	28	35.3	0	0	29	14.4	0	0	0	0	0	0	0	0	0	
SEGES	2.9	1757	x	125540	580	75	45	33.8	40	30	7.5	5.63	40	13.5	7.5	2.53	51.67	41.5	1.5	5.63	1.1	7	11.8	2.36	20.93	72.6
Centro Salud	1.2																									
Hospital	1.4																									
PRIVADO	4.4	714	50	43140	500	21.7	35	7.6	40	6.64	5	1.09	40	3.04	5	0.38	13.16	10.6	1	1.09	0.2	5	1.9	0.38	3.044	16.8
Centro Salud	1.7																									
Hospital	2.7																									
<b>TOTAL</b>	1546	799b	x	223134	352	123	52.5	80.9	19.5	22.6	155.6	100	19.7	1.7	34.5	5.04	59	215								

NOTAS: (1) (2)

- a) 6000 médicos x 60% activos x 70% con oficina propia
- b) 64 unidades x 250 m<sup>2</sup> mas 45 unidades x 400 m<sup>2</sup> mas 16 unidades x 700 m<sup>2</sup>.
- c) Fronteo de m<sup>2</sup> en "Ciclo Atención de Infancia" presentado por Unidad de Infraestructura y Conservación, ISSS, 1993
- d) En ISSS: 20 pupas @ 1482 m<sup>2</sup> c/u + 12 unidades @ 450 m<sup>2</sup> c/u
- e) Como crecimiento porcentual de la red actual
- f) Interpolado de Informe Fiscal "Diferencialmente" y programa de Inversiones Fiscales FIS/BID para el MINED y el MSPAS por Arq. Alberto Zuraga Wager, Noviembre de 1992, y
- g) Como % sobre valor presente

Nota General: Las cifras del cuadro responden a la información de las 5 años más reciente. Fuente específica sobre general y detalle sobre datos globales

ANNEX I

## ANNEX 2

RESULTADOS DE LA ENCUESTA DE HOSPITALES Y CENTROS DE SALUD DEL MSPA													
(Requisitos de Rehabilitación. Cifras en Porcentajes)													
Componentes Subcomponentes Acciones	OBRA CIVIL					EQUIPAMIENTO						Subtot	
	Obra Exter		Edificio		%	Mob&EqEIM's		Eq Biomed		InstrumMéd			%
	Subs	Repa	Subs	Repa		Subs	Repa	Subs	Repa	Subs	Repa		
	(a) %												
(b) %	50	25	50	25		100	25	100	25	100	25		
		0.12		0.88	1		0.24		0.12		0.04	0.4	
<b>HOSPITALES</b>						<b>28.38</b>							<b>28.99</b>
1	F. M. Ahuachapán	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
2	S.J. de D. Santa Ana	1.5	0.75	13.2	5.5	20.95	16.8	1.8	10.8	0.15	4	0	33.55
3	S.J. de D. Sonsonato	6	0	35.2	17.6	58.8	21.6	0.6	8.4	0.9	3.2	0.2	34.9
4	L.F.V. Chalatenango	3.6	0.9	22	11	37.5	24	0	9.6	0.6	2.6	0.45	37.25
5	S.R. Santa Tecla	3.6	1.8	1.32	11	17.72	9.6	3.6	1.8	0.75	1.8	0.25	17.8
6	S.T. Zacatecoluca	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
7	S.G. San Vicente	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
8	S.P. Usulután	3	1.5	13.2	6.6	24.3	12	3	9	0.75	2.4	0.4	27.55
9	S.J. de D. San Miguel	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
10	Rosales	5.7	2.55	22	17.6	47.85	19.2	1.2	9.6	0.6	3.6	0.1	34.3
11	Benjamín Bloom	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
12	Maternidad	0.6	0.3	22	11	33.9	14.4	2.4	7.2	0.6	4	0	28.6
13	Psiquiátrico	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
14	Neumológico	1.2	0	13.2	0	14.4	24	0	12	0	4	0	40
15	Zacamil	0	0	0	0	0	2.4	0	1.2	0	3.4	0	7
<b>CENTROS DE SALUD</b>						<b>26.97</b>							<b>27.35</b>
1	Metapán	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
2	Chalchuapa	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
3	Nueva Concepción	1.8	2.4	13.2	6.6	24	9.6	1.8	8.4	0.6	3	0	23.4
4	Suchitoto	3.6	0.9	22	6.6	33.1	22.8	0.3	11.4	0.15	4	0	38.65
5	Cojutepeque	0.78	0	24.2	6.6	31.58	18	1.8	7.2	1.2	2.4	0.4	31
6	Ilobasco	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
7	Sonsuntepeque	0	0	0	1.1	1.1	4.8	2.4	3.6	0.9	2.8	0.2	14.7
8	Santiago de María	5.4	2.7	22	11	41.1	24	0	9	0.75	2	0.5	36.25
9	Jiquilisco	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
10	Ciudad Barrios	1.2	0.6	22	11	34.8	12	1.2	9.6	0.6	4	0	27.4
11	Nueva Guadalupe	1.2	0.06	13.2	0.44	14.9	5.28	0.3	5.16	0.09	1.64	0.02	12.49
12	San Francisco Gotera	nr	nr	nr	nr	0	nr	nr	nr	nr	nr	nr	0
13	La Unión	6	3	22	22	53	21.6	0.6	12	0	4	0	38.2
14	Santa Rosa de Lirio	1.8	0.9	13.2	6.6	22.5	12	3	12	0	3.2	0.2	30.4
15	San Bartolo	0.3	0.15	13.2	0	13.65	13	1.5	6	0.3	0.28	0.01	21.05
(a)	Valor ponderado del esfuerzo comparado a la unidad nueva de "Acciones" de rehabilitación; y												
(b)	Valor relativo de "Subcomponentes" comparado a la unidad y mostrados como fracción.												
nr	No respondió												

Annex 3

DESIGN OF A PREVENTIVE MAINTENANCE PROGRAM, GENERAL CONTENTS

Introduction

- 1 It would be necessary for MSPAS to develop a preventive maintenance program for it to be considered an investment support program in the Health Sector, and also to assign the necessary financial resources that will assure an adequate performance of the building and its equipment.
- 2 The preventive maintenance program must be different from those of "corrective maintenance"; first of all, because other programs will cover the needs of network restoration (repairing, adjustments, expansions and substitutions); and also because the design of a program indicates how to keep a good performance of the network with its current condition is entirely independent, and it should again be secluded from any inventory of the building.

Contents

- 3 A "matrix" of actions or tasks should be designed, from the most simple to the most complex, in a format like this:

MATRIX OF TASKS ACCORDING TO LEVEL OF COMPLEXITY

	MINIMUM (With the communities participation)	INTERMEDIATE (Polyvalent Technician)	HIGH (Specialist)
CIVIL WORKS	Lists (e.g.:sweeping, rainwater channel cleaning,excavated slopes,plastering,)	Lists (e.g. change of faucet gaskets, lights, etc.)	Lists (e.g.:water pump trical instalations)
FURNITURE	Lists (e.g.:place loose screws, etc.)	Lists (e.g.:change of simple pieces,etc)	Lists (e.g.:weldings,etc)
EQUIPMENT	Lists (e.g.:cleaning)	Lists (e.g.:calibrate scales)	Lists(e.g.:change of autoclave resistance.)

- 4 The needs will be identified in:
  - a. recurring period of each task
  - b. Human resources to carry these out;
  - c. Necessary training for the human resources and frequencies;

- d. Material resources (wearable, vehicles, tools, infrastructure, etc)
  - e. Performance organization, supervision and monitoring; and
  - f. Costs, financial resources and their sources.
- 5 Practical and financial convenience of subrogating services to a third parties should be evaluated.

## Annex 4

## SCOPE OF MICROLOCATION STUDY

- 1 One of the elements that has been identified as necessary to strengthen the sectorial planning capacity in the MSPAS is the knowledge of the location in the geographic space (microlocation) of the service offer and demand inventory. Due to the current lack of information or the documentation's coincidence on network facilities (its location, typology, physical condition, etc.): the not-so-clear demand perception (where they are and how many are the service beneficiaries) and the documents and authors' propagation without the methodological concurrence nor recording opportunities, all this becomes more necessary.
- 2 The **microlocation** is the first step towards **microplanning**; whose group of proposals constitute the basis of the Sector's physical planning.

## OBJECTIVES

- 3 Three are the main objectives of microlocation.
  - a. To document in a dynamic and constant way for the health sector the physical network facilities where the services are provided, detailing their principal characteristics;
  - b. To assist the **microplanning** and sectorial planning needs with truthful and timely information about service networks and its physical condition and,
  - c. to contribute to the decision capacity and the design of investment programs in the current network rehabilitation as coverage expansion in the areas of social and program priority.

## STUDY OF MAIN TASKS

- 4 Six are the main tasks to be developed during the microlocation study.
  - a. **Description of the current network by establishment typology, in geographic terms and by the main characteristics of the physical facilities , including their modifications.** The result will be a complete description of the establishment by type (concentrating in the primary health care centers) with name, address, code number, space number (e.g.: number of doctor's offices, stores,etc.), exterior works, available public services, and a sketch (a formal topographic survey is not needed at this time) of his path into the property and thus, appreciate the prospect of future increase; if these were necessities.
  - b. **Documentation of the buildings condition (preservation state) its furniture and equipment as well as the architectural and medical appropriate performance needs, including detailed costs.** This task prepares complete technical dossiers to identify a recuperate and repairing program for furniture and bio-medical equipment, or else, bidding within another program for rehabilitation of physical facilities. The number of projects will be indicated in detail, by budgeted items (e.g.: roofs, substitution of 10m<sup>2</sup> metal sheets made of standard channeled cement-fiber). Also included will be the needs for substitution and/or

fitting of inadequate physical space that did not meet the minimum operating standards (e.g. improvised healings in rooms of homes where the minimum hygiene conditions are not met, improvements in ventilation and illumination).

**c. Space administration relations(model of health care or others) and the operating reference systems.** When setting limits for similar geographic zones and their access, topography and service availability, the relationship among the establishments in terms of operating hierarchy (e.g.: various health posts flow towards one health unit and many of these towards a health center) and/or administration and supervision routines. The object of these tasks is to identify where there is a lack or excess of services due to operational aspects, topographic barriers, normativeness, or public service deficiencies (e.g.: paths).

**d. Available human resources by budget category and by level of training.** It is true that departments have their established procedures for the systematic recollection of information regarding personnel, the object here is to take advantage of visits made by people taking polls, strangers to the routine, to verify its trustability.

**e. Geographic and social relationship of the demand, and needs of expansion coverage of the service according to efficiency, equity, and Sector quality criteria.** With the information of the current network, obtained through the above mentioned tasks where the offers' quality and magnitude can be seen, it can now be put in space terms where the "demand" is found. Here you can see where the "clients" that make use of the service and its magnitude, then enabling to compare them with the installed capacity and to determine the needs of coverage expansion in the geographic space or the measures of efficiency required (e.g.: shift extension, etc.). The interpretation of census data and registers by the centers will be the principal source of information.

**f. Permanent Updating mechanisms.** Finally based on the technological advances in electronic computing and of graphic element files with optical scanners, for example, a registry , analysis and permanent updating system of information resulting from this study of microlocation study can be developed. The necessary software and hardware would be purchased, including identification and training of personnel required for permanent updating of this study.

## FINISHED PRODUCT

5. It is hoped that at the end of the microlocation study complete technical procedures<sup>16</sup> will be available for 100% of repairing needs of each establishment and the base to design substitutions and expansions. All the inventory should be consolidated, codified, and captured in a computerized data base and put on scaled geographical reports and a convenient detailed level. Also available will be the proposals of the administrative unit for the continuation within the adequate institutional organization, who would be in charge of permanently updating the information. a third party should be evaluated.

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<sup>16</sup> It refers to the series of technical documents with which a public bidding can be arranged for the execution of projects and includes: (1) general information about the building such as typology, occupants, etc.; (2) location map(the current building relating to routes, cardinal, rivers and other important topography, population, etc.); (3) project site with current projects to adequate scale (usually 1:200 and pointing out divisions, topography and other public service aspects, if any); (4) architectural project of post or unity(usually at a 1:50 scale); and (5) number of projects to be done detailed by surroundings and budgeted items (roofs, ceilings, walls, hydraulic networks, etc.)

## Annex 5

**PRELIMINARY REPORT REVISION****Introduction**

The Health Sector Analysis of El Salvador (ANSAL) was conceived as part of the efforts geared towards expediting the social and economic development of the country. The analysis of the organization and operation of the sector's institutions should result in the identification of obstacles that once overcome could allow an improvement in the sector and in the population's health and well being.

Generally, projects focusing on economic and social development are conceived and designed by technical experts. They provide professional knowledge and expertise to identify problems, select potential solutions and design project components. Usually, the exchange of opinions in this process is restricted to those who have leadership positions within the sector and society. The potential user and personnel directly involved in the goods or services analyzed are not frequently included in this consultation process. Resulting projects do not benefit from the accrued experience of those on the front line, and consequently can be seen as foreign by the benefitted community.

**Procedures**

ANSAL's terms of reference established an expanded consultation process to avoid these limitations. The goal was that the participative process would have the same level of importance as the analysis. In order to achieve this, ANSAL's preliminary results, compiled in nine draft technical reports, were distributed among institutions and experts from the health sector to be reviewed and commented on. This approach included:

1. Written comments. Approximately 100 institutions and experts in the health field were invited to write comments on:
  - the reliability and integrity of the data presented;
  - the logic of the analysis; and
  - the feasibility of the recommendations.
2. Meetings with health care personnel and community members. Ten meetings were held in different parts of the country, with the participation of health personnel at all levels (health promoters, midwives, physicians, and pharmacists), community leaders (mayors, members of the MOH's support commissions and/or community health boards, members of the community education associations or EDUCO schools, and local community leaders) as well as MOH officials and regional and local authorities.
3. Working days with sector leaders. Two working days with public institution leaders (MOH, MIPLAN and ISSS), NGO leaders, medical association representatives, and health leaders of political parties. The Dean of the School of Medicine of the National University of El Salvador was invited but did not attend.

## Results

Enthusiastic participation proved useful to validate or reject ANSAL's preliminary results.

Written comments from 30 institutions were received, including the main public sector organizations (MOH and MIPLAN) and the most important NGOs.

Approximately 250 persons representing the health sector attended community meetings. Community leaders were the least well represented.

Twelve of the thirteen leaders invited to the work days participated and attendees stayed during the whole exercise.

A general consensus was reached regarding the main problems faced by the sector and the most effective ways to solve them. Some MOH Department and Regional Program Directors objected to some of ANSAL's findings. Some of these specific comments are summarized in each one of the technical reports.

### Written comments received

As mentioned, the draft of this report, as well as the other technical reports,<sup>17</sup> were broadly distributed in order to gather reactions. Written comments were received from individuals and public and private institutions. Of these, the following apply most directly to this report:

Highly useful and brief comments on the final draft of this report have been incorporated into the text of the report. In general, some may be called form or detailed observations, others are topic observations. The first ones refer to the dimension of the network and the area of the facilities of the Public Sector, it may be stated, after reviewing and conciliating the different interpretations, that they have very little variation; for example, it was said that the MSPAS had 157 health posts and 148 units, which now has been changed to 159 and 155, respectively. Variations have been due to closed or not utilized facilities. As for topic observations we wish to express that:

1. There seems to be an **apparent** contradiction in proposing on the one hand, 80% of the investment program for the second and third level sector, and on the other hand, to advocate a strategy of investments *prioritizing* primary health care. The key to discerning this dichotomy is the **abundance of feasible resources** to be destined to activities identified as necessary for the main priority, that is, a moderate growth in the network and its complete rehabilitation (this would take 20% of the total investment requirements). Furthermore, financial resources may be found to recuperate (not to increase) the hospital network, it would require the remaining 80% of the total of investment required. Within the strategy proposed it is also important to recover the **WHOLE** network, because hospital services will remain being a fundamental part of health services in the sector;

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<sup>17</sup> These are: Health Status; Maternal-Child Health; Pharmaceutical Products; Organization and Operation of the Health System; Health Service Financing; Health Human Resources; Health Sector Infrastructure and Investment; Community Health Demand and Perception; Environmental Health.

- 2 The concept of *physical rehabilitation* of the network should be clarified: it refers to **all the necessary activities to bring all the existing buildings, equipment and landscape to a satisfactory performance for the exclusive benefit of the services rendered there**. Complementary rehabilitation activities are *the coverage expansion* and the capacity of the facilities. That is why as in some cases, the case of Sonsonate's hospital, the degree of deterioration is such that nothing may be used and everything should be substituted, this activity would be considered part of the rehabilitation proposed in this report and enough financial resources would be available to build a brand new hospital; and
- 3 We wish to emphasize now, even though it has not been commented, the proposal for a **systematic and permanent** task of physical planning within the institution managing national health. For example, at the moment a microlocation /microplanning study is in its final stage and it has begun to generate an enormous amount of information over primary health care networks and about analysis procedures, even though on account of the well known constraints the MSPAS has not yet incorporated to the team formed to give it a permanent follow up.