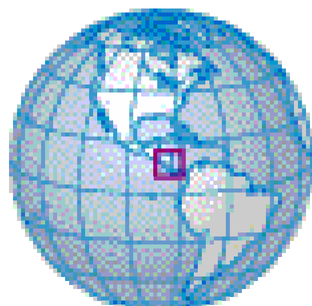
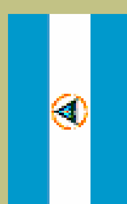
Module 2

Iahm Start Up Project



I.A.H.M.

Nicaragua



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BENEFICIARY COUNTRY - SOUTH AMERICA REGION

1. Introduction

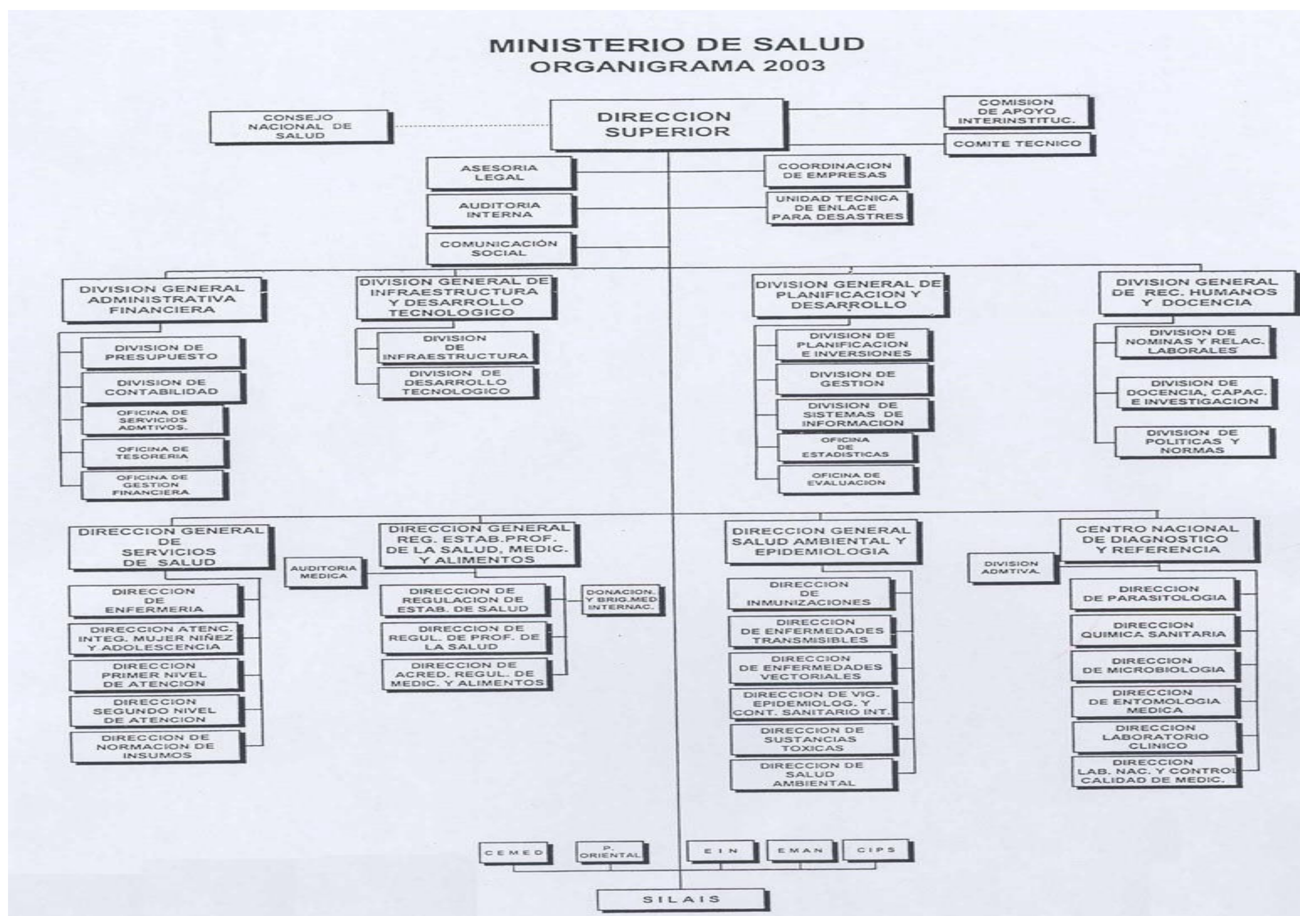
Each journey is a path that unveils itself gradually and surprisingly.
Each journey is an encounter between the other and an unknown self.
Each journey is a map that becomes alive only later: a map that changes just as a canvas is transformed as it fills up with colours, defining live magnetic areas , and areas of blurred shadows. My Nicaragua is a single journey. But this is what the map is for…to allow others to enter this lived-in lived territory in diverse ways and at different depths.

Sara Cereghetti (Associazione Medica Centro America)

Nicaragua is the largest and least densely populated country in Central America (44.5 inhabitants per square km). In 2001 the urban population amounted to 58.3% of the total population, and it has been estimated that in 2015 it will be higher than 65%. According to the most recent estimates provided by UNO, of the countries in the Central American isthmus, Nicaragua is the poorest state in the American continent after Haiti. The country borders with Honduras to the north and Costa Rica to the south and opens onto the Pacific Ocean to the west and the Caribbean Sea to the east (Atlantic Ocean).
There are 5,400,000 inhabitants, of whom 1,000,000 live in the capital, Managua.
The official language is Spanish while Chibcha is commonly spoken by the Amerindians. The vast majority of the population is Catholic.
More than half the population are unemployed and growth and improvement prospects are very low. The country is commonly still associated with the Sandinista revolution, with all its disorder and guerrilla warfare; on the contrary, now that that phase is over, the country is one of the safest and most peaceful in Central America.
Topographically Nicaragua is divided into three regions: Pacific, Atlantic, and Central. The population is distributed unevenly over the territory, the majority (61.5% of the total) being clustered in the Pacific region, which covers 15% of the national territory. The Central region, covering 33.9% of the total area, is inhabited by 32.5% of the population, while the Atlantic region - 50.9% of the national territory - is inhabited by just 5.9% of the local population.
Nicaragua, which has no significant resources, has been subjected to one dictatorship after another, starting with the Spanish domination, and consequently the country is poor, backward, and economically based on farming, an activity that is not sufficient to guarantee food self-sufficiency.
The civil war, which ended over 40 years of dictatorship by the Somoza family, claimed huge losses in human lives, caused considerable damage to the cities (50% were destroyed) and to road infrastructures, and resulted in extremely high borrowing from abroad and in the ruinous collapse of agricultural and livestock production, not to mention the almost complete paralysis of industrial and commercial activities. The years of civil war in Nicaragua damaged the health care system, which offers insufficient and inadequate coverage in many regions. From the economic point of view, the damage caused by the war has inflicted a high cost on the government, aggravating a situation that was already financially compromised.
According to the latest survey (EMNV-2001) by De Nivel de Viola, 45.8% of the total population lives in poverty, with 15% in extreme poverty. In addition, it must be noted that poverty is five times higher in rural areas than in urban areas and that child mortality is three times higher than in more developed

areas.
In the last five years the country's economy has witnessed a transformation process, becoming stabilized in the period 1990-1993 and definitely improving in 1994. The GDP grew by 4.3% each year in the period 1993-2002. The economic and social transformation has also affected the health care sector.

2. Organization of the national health system



In Nicaragua, MINSA (the Ministry of Health) is the main supplier of health services for 60% of the population. The remainder are supported by the Social Security Institute (6%), while 30-35% are left totally left to their own devices.
The health care sector is formed of two sub-sectors:

- Public sector, represented by the Ministry of Health (MINSA), by the Ministry of Government, by the Nicaraguan Institute of Social Security (INSS), and by other state institutions
- Private sector, which is itself also divided into two branches: paid and unpaid (NGO).

MINSA is the institutional provider of health care services for the general population; INSS is the body that deals with the health care insurance of the working population; the Ministry of Government and Defence provides, amongst their other services, also health care for its employees and their families. The Ministry of Health, which is ultimately in charge of the whole sector, collaborates with other government institutions both for the maintenance of hygiene and environmental health and for the definition of strategic action in the event of epidemics.
As part of the ongoing process of modernization of the country, the principal institutions dealing with the health sector are re-examining their strategies with the intention of identifying better answers to the

population's health problems.
The decisive factors affecting the population's health are related to the life-styles and habits of certain sectors of the population. Social and family violence and abuse of alcohol cause accidents and a series of other problems, leading to a high mortality rate. In addition to such socio-cultural problems, there are also inadequate nutrition and a sedentary life-style. In Nicaragua, infantile mortality rate is six times as bad as in the United States, the main causes being respiratory infections, diarrhoea, measles, malaria, and malnutrition. The Ministry of Health has started a process of training for doctors, nurses, and other medial professionals, with the aim of improving diagnoses and the treatment of the above pathologies. A further topic to be highlighted is the case of the Miskito Indian population, in the area of Waspam, who sadly boast the highest mortality rate in the whole country; they live in an secluded and isolated area and have only recently started to benefit from the presence of community groups. These groups are working on improving children's health by encouraging breastfeeding in the first six months of life and as a complementary element to the diet up to two years of age; they are also working on the early identification of disease and attempts to provide preventive treatment.
Since the end of the 1980s, the health care system has progressively deteriorated and health care, which was among the highest priorities of Sandinista government, is one of the main aspects of the population's vulnerability.
Frequent malnutrition, inadequate sewerage systems (for example, in Managua, water from industrial refuse is dumped untreated into Lake Xolotlàn) and drinking water, and the sporadic application of basic measures of public health care have resulted into a national health profile typical of third-world countries. Contaminated water is very common, as also the diseases it can cause, such as dysentery and diarrhoea. In addition, the country's natural resources in rural areas are deteriorating, mainly as a result of the aggressive development of agriculture, deforestation to make way for farming, the lack of legislation on the utilization of the soil and natural resources, and bad farming techniques.
Currently, the mission of the Ministry of Health is to guarantee that the population has access to basic health care services and to promote disease prevention through information, education, and support campaigns aimed at the poorest sections of the population. The greatest challenges faced by the Ministry of Health, in order to ensure the progress of the process of institutional reforms, are the promotion of new organizational and administrational approaches, the acquisition of financial resources, the modernization of hospitals, and the promotion of investments in infrastructures and machinery. The Ministry has identified a basic package of essential services, with priority given to areas and groups deemed to be at high risk - women, children, adolescents, and the elderly.
Great emphasis is given to the health care of women in their fertile years (the average number of children is 4.4 per woman, and is higher in rural areas), and the services on offer focus on family planning: care and prevention during maternity, birth, and puerperium, and the early diagnosis of cervical and uterine cancer and of breast cancer.
Health care for children includes monitoring their growth, development, diet, and nutritional state in relation to their degree of poverty. For teenagers, the Ministry's emphasis is on preventing drug abuse and early pregnancies; for the elderly the focus is on health care prevention, on providing support in the event case of complications caused by diseases, and on ensuring psychological and social support.
Nicaragua's population is mainly young and in terms of life expectancy it has gained 26 years in the last 30 years, with an estimate that by 2015 life expectancy will exceed 70 years of age. This factor, in combination with the strong demographic growth, highlights the need for adapting the health care system, as it will have to respond in future years to a doubled demand in health care services.

The organization of the national health-care system relies on intermediary structures, named SILAIS (Local Integrated Health Systems). These organizations, to be found in each of the 16 country districts, aim to coordinate all the medical structures within their area of responsibility and to respond to the needs of the population in that area, within the context of a structured strategy that has produced positive results, also in relation to the roles and the autonomy of health care professionals and local authorities acting in the territory. The degree of geographical access to health care services in urban areas is acceptable. The situation is radically different in rural areas: 33% of the rural population live more than two hours away on foot to the nearest health care unit.
With regard to medicine, only 45% of the population have access to medicinal materials distributed by

MINSA - mainly children under 5 years of age and pregnant women. The cost of medicines is equivalent to 2 dollars per person.
It is in Nicaragua's poor rural areas that families most suffer diseases - they use health care services less than those in urban areas, also because of the introduction of charges for public services.

a. Public infrastructures

The public structure is made up of a network of 1080 units divided into two levels. Sixty-two point five per cent of hospital structures are clustered in the Pacific region, where 58% of the population live.
The first level is aimed at promotion, prevention, and improvement of basic health care. In the last five years the services available have considerably improved, especially in the mother/child sector through pre-birth check-ups, assistance during birth, paediatric check-ups for children under five years of age, and the prevention of cancer of the uterus. There are 1047 first-level hospital facillities, 178 health centres, of which 26 have beds, 889 "Puestos de salud", which are the first points of contact and assistance - these are often insufficient because of the lack of personnel and medicines. The second level includes the remaining 3% of the Ministry's structures: the hospital organization has 5000 beds and 33 institutes, of which 26 deal with general care and first aid, four with chronic diseases, and one acts as a polyclinic. All hospitals face problems such as shortages in the acquisition of basic products (medicines, materials that have to be substituted regularly, linen and clothing).

PUBLIC HEALTH ASSISTANCE

	1997	2002
FIRST LEVEL OF SERVICE	914	1047
Health Centres with beds	24	26
Health Centres without beds	140	152
Hospitals	750	889
SECOND LEVEL OF SERVICE	30	33
Hospitals for general care and first aid	25	28
Hospitals for chronic diseases	4	4
Polyclinics	1	1
TOTAL	**944**	**1080**

b. SILAIS (Local Integrated Health Systems)

SILAIS represents the Ministry of Health in technical and administrative aspects at a territorial level (departments).
The creation of SILAIS has established the basis for a new model of health organization. They manage health-related activities within a specific territory or autonomous region, organizing services and establishing the necessary conditions for the municipal health services. An important objective of SILAIS is to coordinate the activities of the hospitals and to achieve the necessary coordination between the first and second levels of health service.
In addition, the SILAIS aim to collaborate with the 145 "Municipios", in order to optimize the availability of health-care services across the territory. Currently, the collaboration mechanism is not entirely optimal, inasmuch as assistance is often delayed and not always valid.

c. Private infrastructures

Health services are also offered by private structures, which cover the needs of 4% of the population and are made up of 7 hospitals with 200 beds, 200 hospital facilities, and an unknown number of laboratories and pharmacies. Sixty-six per cent of private structures are clustered in Managua (with 50 units, including hospitals, clinics, and polyclinics); this is followed by Chinandega, with 26 units, Matagalpa, with 25, Estelì, with 19, and Leon, with 14. The majority of these units offer medical services on an outpatient basis, with both general and specialist care.
Private health-care structures have suffered as a result of the country's economic crisis, competition from nonprofit centres, and the development of private services offered by public hospitals. In addition, the lack of organization and national regulations for the supply of private health-care services, of private medical insurance systems, and of pre-paid plans has further aggravated the state of the private system.

d. Human resources

With regard to human resources, the Ministry of Health, MINSA, is performing a significant activity of

education and training of new labour forces both in the medical field and in the nursing and auxiliary field.
In 2002 MINSA had 10,313 first-level employees and 10,600 second-level. There is no information available on human resources working in other government institutions that offer health services to specific groups in the population of Nicaragua (the Army, Government, etc.). In the same way, there are no certain and detailed data on the number of human resources working in the private sector.
In addition, the distribution of human resources (doctors, nurses, auxiliary staff), often working for MINSA, is uneven in the various regions of the country as shown in the table below.

REGION	INHABITANTS/ UNIT	SPECIALISTS PER 10,000 INHABITANTS	GENERAL PRACTITIONERS PER 10,000 INHABITANTS	NURSES PER 10,000 INHABITANTS	AUXILIARIES PER 10,000 INHABITANTS
Pacific	44,787	2	2.6	4.7	7,6
North	23,484	1.2	2.2	1.5	7,9
Centre	9,458	0.4	1.9	0.5	7,6
Atlantic	7,679	0.2	1.7	3.2	13,9
Mid Country	5,207	1.7	2.0	3	7,9

3. Population health status: main pathologies and causes of death

In the 1997-2002 period the principal causes of mortality in the country were linked to chronic diseases, mainly heart diseases, of the circulatory system and cerebrovascular diseases, and tumours, which represented 60,9% of the total; prenatal problems accounted for 13.5%, and violent deaths for 9.5%; infections (EDA-ERA) were responsible for 7% of the total
Although not the main cause of mortality in the country, the phenomena of **maternal mortality** and that of infants have a very strong and real psychological impact on the whole country; for this reason, they have been faced by government institutions and private organizations with a powerful sense of responsibility and a pragmatic approach that have resulted in a substantial reduction in the mortality rate in recent years. Maternal mortality has displayed a marked reduction in the last few years; it has decreased from a rate of 125 deaths per 100,000 live babies recorded in 1996 to 106 in 1998 and to 87 in 2000. More than 50% of the causes of mortality are of an obstetric nature, with a higher occurrence with regard to postpartum haemorrhages. In addition, illiteracy, poverty, malnutrition, and lack of information during pregnancy aggravate the situation. A further cause of maternal mortality is related to inadequate birth and puerperium assistance services, which are particularly deficient in certain regions, such as at Raas, Raan, Rio San Juan, Jinotaga, and Matagalpa. In these SILAIS, the doctor/patient ratio is one per 10,000 inhabitants, which is considerably lower than the national average, and consequently a third of births are assisted by non-specialized personnel. These considerations highlight the fact that a better organization and distribution of health care services across the territory and a higher integration and collaboration with the international organizations could considerably reduce maternal mortality.

MORTALITY CAUSES (%)

	1985	2002
Circulatory	18.92	25.35
Infections	14.51	4.93
Tumours	5.96	11.73
Violence	18.07	13.31
Prenatal	8.65	8.32
Maternal	0.46	0.76
Undefined pathologies	6.54	3.32
Other	26.89	32.48

Infant mortality is linked in great part to the poverty of over half the population. It is related to the prenatal period and conditions affecting mothers - conditions that are not always ideal during pregnancy -

and to women's cultural level, which often hampers correct prevention and adequate care during pregnancy. Infant mortality has been considerably reduced in recent years, from 79.8 per 1000 babies born alive, in the 5-year period 1980-1985 to 35.5 per 1000 babies born alive in the period 2000-2005. Respiratory difficulties and cardiac conditions specific to the pre-natal period represent a third of infant deaths, having replaced gastrointestinal diseases, which in the 1970s were the principal cause of death. Infant mortality is also related to the state of poverty in which the population of Nicaragua lives, as also to illiteracy, especially in rural areas and to maternal malnutrition and lack of monitoring during pregnancy.

The most frequent **paediatric pathologies** in the 0-5 years of age group are related to malnutrition - under-five-year-olds present under-nutrition, especially if born under weight, gastrointestinal diseases, respiratory diseases, and meningitis.
Young adolescents, accounting for 25% of the population, begin their sex life early, especially in rural areas. For this reason, and also because of all the various logistic and cultural disadvantages, young women contribute significantly to the increased maternal mortality in Nicaragua.

With regard to **adults**, the results of ENDESA-2001 indicate that the most frequent causes of disease are those affecting the respiratory system (38.2%), followed by infections (13.2%), diseases of the genitourinary system (8%), and other pathologies (13,9%).

a. Transmissible diseases
In the last five years, there has been a considerable reduction in the number of **malaria** cases, from 34,146 cases in 1998 to 7,773 in 2002. The rate of prevalence per 10,000 inhabitants has dropped from 74.15 (1999) to 43.28 (2002). The personnel involved in anti-malaria programmes fell by 2500 persons in 1992 and by 1000 in 2003. Voluntary aid has also fallen as a result of a lack of MINSA initiatives.

In relation to its severe socio-economic repercussions and the loss of human lives, **simple dengue fever** has been in recent years one of the main health care priorities to monitor. As with malaria, with this pathology there has also been a reduction from a rate of 23.72 per 10,000 inhabitants in 1999 to 14.68 in 2000 and 4.37 in 2001.
With regard to haemorrhagic dengue, on the other hand, the rate has gone from 1.93 per 10,000 inhabitants in 1999 to 0.88 per 10,000 inhabitants in 2001.
The distribution of dengue fever is a consequence of environmental conditions favourable to the vector, *Aedes aegypti*, and to inadequate epidemiological surveillance. The territories of Raas, Raan, Matagalpa, Leòn, Nueva Segovia, and Rivas have the highest risk for this pathology.

Tuberculosis is endemic in the country, although statistical analyses having registered a decreasing trend in the national incidence in the past ten years of more than 50%, from 88 cases per 100,000 inhabitants in 1987 to 42 in 2001. Poorer and rural departments and municipalities are most affected by this pathology.

Sexually transmitted diseases are widespread across Nicaragua: gonorrhoea, condyloma infections, and syphilis are diseases that affect the population between 15 and 24 years of age. Unsafe sexual practices and the low use of contraceptives increase the spread of **AIDS** cases. The transmission of the virus takes place in 89% of cases through sexual relations, of which 32% are homosexual relations, followed by practices related to the use of drugs, and mother-to-child transmission. This last manner of transmission receives great attention and prevention from the health care system since it is here that it is easiest to intervene preventively with results that can be achieved in the short term.

The socio-economic conditions experienced by the country are a cause of **mental health** problems among the population. Neurological problems have been identified in 13% of the population and alcoholism in 5.8%. Among the most frequent causes at the basis of this problem are various types of domestic violence: the most vulnerable groups are principally women, but also adolescents. These factors are related to unemployment, illiteracy, the loss of values resulting from the state of tension during the

war, and drug and alcohol abuse.
Care and prevention activities for this problem are minimal; NGOs and other institutions are creating family education and drug-use prevention programmes.

In Nicaragua, **chagas disease** is endemic and is not included in the national system of epidemiological surveillance owing to difficulties in classifying cases. This disease is linked to the appalling quality of life and the state of poverty in the villages. It is a parasitic infection, mainly to be found in the north of the country.

Food poisoning infections, transmitted through food and drink, are frequent and are caused by polluted food or drink.

Hepatitis A, **typhoid** and **bacillic dysenteries** are also spread across the country.

4. Principal NGOs operating in the territory

MINSA has registered 90 international non-profit-making organizations that supply various forms of health services. Among these, the most active are:

Organization	Field of activities
Acciòm Mèdica Cristiana	General service to community
Alistar	General service to community
Adra	International humanitarian assistance especially
CARE International	International humanitarian assistance
Amigos de las Amèricas	International humanitarian assistance especially
Hope	International humanitarian assistance especially
Save the Children	International humanitarian assistance especially
SI Mujer	Problems linked to sexuality and maternity
Xochiquetzal	Problems linked to sexuality and maternity
CEPS	Problems linked to sexuality and maternity
IXCHEN	Problems linked to sexuality and maternity
Medicine Sans Frontieres	Health care assistance and education
CISAS	Problems linked to sexuality and maternity

It is important to highlight the fact that NGOs (international and national) supply health care services at national level and above all that some of these organizations have covered areas that public services have not always been able to reach.

NGOs and maternity
Maternity and childhood are health care priorities for Nicaragua. For this reason, public and private efforts, also through NGOs, have been decisive both from the financial and organizational point of view.

POFSAPRESER Project

POFSAPRESER is a big project of health care action and education which AMCA (an aid association to Central America) has supported for several years in the northern regions of Nicaragua. Following several meetings with paramedical and midwifery staff across the almost entire territory of the department of Mariz, north of Nicaragua, the technicians involved in the project (nurses, social workers, and territorial technicians) programmed various laboratories and seminars aimed at implementing the centralized training of nurses and midwives. Once this personnel was trained, they rejoined the communities and began to organize awareness and education meetings and conferences. The project has also provided for the organization of various youth days and the supply of minimum health care equipment to the various Health Houses located in the areas furthest away from hospitals, provided support for the children's clinic in Somoto, encouraged the planting of several gardens with medicinal plants, and provided support for the families of single mothers.

The Mothers' Home (Casa Materna)

The Mother's Home was inaugurated at the end of 1987 when AMNLAE activists (a Nicaraguan feminist association) decided to act to lower the high rate of mother-and-child mortality in rural areas, where many women with high-risk pregnancies were not giving birth in hospitals because they had nowhere to stay in the cities. Thanks to a Swedish grant and a building provided by the government of Nicaragua, the Mother's Home has opened its doors to women in difficulty in its two centres: a centre for high-risk pregnancies and a training centre. The centre for high-risk pregnancies takes women from rural areas who have received a pregnancy diagnosis; they are offered a place to stay before they are admitted to hospital a week before the expected date of giving birth. After they have given birth, the women are instructed on how to care for their newborn baby, and during their stay they are given linen and everything that is necessary to them and the baby. Upon departure, everything is returned clean and ready for the next woman. There are no costs for services offered by the Mother's Home, which has 20 beds. The service is offered free of charge and no mother has died during her stay or when giving birth to her baby.
Women classified as being at high risk are either very young or old, women with high blood pressure, those with five or more children already or with twin or triplet pregnancies, and women with a history of repeated abortions.
During pregnancy, women clean, cook, wash, attend to the garden, and also help to adapt the clothes donated from Sweden to the culture and climate of Nicaragua.
The difficulties faced by an institution such as Mother's Home are essentially related to the lack of financial support.

Mother's Home at La Dalia and at Matagalpa

The associations involved in this project aim to implement the necessary operations to prevent the death of women during the period of maternity, bearing in mind that 8 out of 10 deaths are definitely avoidable. The causes that contribute to increase the maternal mortality rate are diverse and are well represented in the region of Matagalpa: difficult geographic accessibility, high number of fertile women, post-war effects, presence of armed groups, extreme poverty, unemployment, low education levels, and limited coverage of the territory by the Ministry of Public Health.
The activities of the Mother's Homes at Matagalpa and La Dalia are particularly aimed at women at High Obstetric Risk (HOR) who live in remote areas far from urban centres and where it is practically impossible to rely on medical personnel or nearby hospital centres.
For several years now, the AMCA organization has been working in support of the Mothers' Homes of Matagalpa and La Dalia, whose objectives are to contribute to reducing maternal mortality through the training of midwives and the gathering of information on births considered at high obstetric risk.
In addition, AMCA is involved in the project run by the Mothers' Home of Quilali (Department of Nueva Segovia), sending funds necessary for the sustenance of pregnant women hosted in the Mothers' Home and for the medical equipment in the delivery room.

SI MUJER

This is a non-profit organization, which operates in the gynaecological and obstetric fields, and is sup-

ported by international donors, by the United Nations, and by its own resources.

5. Research sources

- World Health Organization (WHO)
- Nicaraguan Ministry of Health
- United Nation Development Programme (UNDP)
- Global Geografia
- Human Development Reports
- UNICEF

6. Comparative tables of health and social situation

DEMOGRAPHIC SITUATION AND FORM OF GOVERNMENT										
STATES OF THE WORLD		**POPULATION ESTIMATES**		**TOTAL FERTI-LITY RA-TE**	**LIFE EX-PENTANCY AT BIRTH**	**PROBABILITY OF DYING (per 1000)**				**FORM OF GOVER-NMENT**
		Total popu-lation (000)	**Annual growth rate (%)**			**Under age 5 years**		**Between ages 15 and 59 years**		
					Both sexes	Males	Females	Ma-	Females	
		2002	1992-	2002	2002	2002	2002	2002	2002	
82	**Italy**	57 482	0,1	**1,2**	79,7	5	5	96	49	Parliamentary Repub-lic
84	**Japan**	127 478	0,2	**1,3**	**81,9**	**4**	4	95	**46**	Emperor
9	**Australia**	19 544	1,2	1,7	80,4	6	5	91	52	Federal Republic
14	**Bangladesh**	**143 809**	2,3	3,5	62,6	71	73	251	258	Democratic Socialist State
52	**Egypt**	70 507	1,9	3,3	67,1	38	39	240	157	Federal Republic
88[e]	**Kiribati**	87	1,5	4,1	64,1	80	69	293	190	People's Republic
113	**Moldova**	4 270	-0,2	1,4	67,8	31	23	294	144	Republic
21	**Bolivia**	8 645	2,2	3,9	63,2	78	73	260	209	Republic
124	**Nicaragua**	5 335	2,8	3,8	70,1	38	32	213	143	Republic
153	**Sierra Leone**	4 764	1,5	6,5	34,0	**332**	**303**	682	569	Republic
183	**USA**	291 038	1,1	2,1	77,3	9	7	140	83	Republic
189	**Yemen**	19 315	3,9	7,0	60,4	106	94	286	228	Republic

SOCIAL AND HEALTH SITUATION

STATES OF THE WORLD		HEALTHY LIFE EXPECTANCY					MATERNAL MORTALITY RATIO (per 100,000 live births) [i]	BIRTH ATTENDENDANT
		Total population (years)	Expectation of lost healthy years at birth (years)		Percentage of totla life expentancy lost			
		At birth	Males	Females	Males	Females		
82	**Italy**	72,7	6,0	7,8	**7,8**	**9,5**	7	..
84	**Japan**	**75,0**	6,1	7,5	**7,8**	**8,8**	8	**100**
9	**Australia**	72,6	7,0	8,7	9,0	10,4	...	**100**
14	**Bangladesh**	54,3	7,3	9,3	11,7	14,8	400	**12**
52	**Egypt**	59,0	7,4	8,8	11,4	12,8	80	61
88[e]	**Kiribati**	54,0	9,5	11,0	15,4	16,5	…	…
113	**Moldova**	59,8	6,8	9,2	10,6	12,9	28	99
21	**Bolivia**	54,4	8,2	9,4	13,2	14,6	390	59
124	**Nicaragua**	61,4	8,2	9,3	12,0	12,9	150	65
153	**Sierra Leone**	28,6	5,1	5,8	15,9	16,2	**1,800**	42
183	**USA**	69,3	7,4	8,5	9,9	10,7	8	99
189	**Yemen**	49,3	**10,8**	11,5	**18,4**	**18,5**	350	22

HEALTH PERSONNEL AND HOSPITAL BEDS

STATES OF THE WORLD		HEALTH PERSONNEL per 100.000 people/year										HOSPITAL BEDS (per 1000 people) 1990-1998
		Physicians		Nurses		Midwives		Dentist		Pharmacists		
82	**Italy**	554,0	*1997*	296,0	*1989*	29,2	*1982*	64,4	*1997*	102,0	*1996*	6,5
84	**Japan**	193,2	*1996*	744,9	*1996*	18,9	*1996*	68,6	*1996*	…	…	**16,2**
9	**Australia**	240,0	*1998*	830,0	*1998*	40,0	*1998*	40,0	*1998*	…	…	8,5
52	**Egypt**	202,0	*1996*	233,0	*1996*	..	..	25,0	*1996*	56,0	*1996*	2,0
183	**USA**	279,0	*1995*	972,0	*1996*	…	…	59,8	*1996*	…	…	4,0
14	**Bangladesh**	20,0	*1997*	11,0	*1997*	…	…	…	…	…	…	**0,3**
88	**Kiribati**	29,6	*1998*	235,8	*1998*	…	…	4,9	*1998*	…	…	…
113	**Moldova**	350,0	*1998*	874,0	*1998*	3,6	*1998*	41,2	*1998*	67,5	*1994*	12,1
21	**Bolivia**	129,9	*1997*	69,4	*1997*	…	…	21,1	*1997*	…	…	1,7
153	**Nicaragua**	85,6	*1997*	91,9	*1997*	…	…	18,6	*1997*	…	…	1,5
153	**Sierra Leone**	7,3	*1996*	33,0	*1996*	4,7	*1996*	**0,0**	*1996*	…	…	…
189	**Yemen**	23,0	*1996*	51,0	*1995*	..	..	1,6	*1996*	4,0	*1996*	0,7

SOCIAL AND HEALTH SITUATION							
STATES OF THE WORLD		ONE-YEAR-OLD		POPULATIONS WITH ACCESS TO IMPROVED SANITATION FA-	POPULATION WITH SUSTAINABLE ACCESS TO DRUGS, AFFORDABLE ESSENTIAL%	POPULATION WITH SUSTINABLE ACCESS TO AN IMPROVED WATER	WOH CENTRES
		Against tuberculo-	Against measles %				
82	**Italy**	..	70	..	95-100	..	SI
84	**Japan**	..	96	..	95-100	..	In via di ade-
9	**Australia**	..	93	100	95-100	**100**	
14	**Bangladesh**	94	76	48	50-79	97	SI
52	**Egypt**	98	97	98	80-94	97	
88[e]	**Kiribati**	…	88	…	…	48	
113	**Moldova**	98	81	99	50-79	92	
21	**Bolivia**	94	79	70	50-79	83	
124	**Nicaragua**	98	99	85	**0-49**	77	
153	**Sierra Leone**	74	37	66	**0-49**	57	
183	**USA**	..	91	100	95-100	**100**	
189	**Yemen**	73	79	38	50-79	69	

SUMMARY OF ECONOMIC SITUATION								
STATES OF THE WORLD		PIL		TOTAL PRIVATE HEALTH EXPENDITURE (as % of GDP) 2000	TOTAL PUBLIC HEALTH EXPENDITURE (as % of GDP) 2000	TOTAL PRO CAPITA HEALTH EXPENDITURE (PPP US$) 2000	HUMAN DEVELOPMENT INDEX	
		US$ billions 2001	PPP US$ billions 2001				HDI value	HDI rank
82	**Italy**	1,088.8	1,429.7	5.9	2.1	2,028	0.916	21
84	**Japan**	**4,141.4**	**3,193.0**	5.9	1.8	2,009	0.932	9
9	**Australia**	368.7	491.8	6.0	2.3	2,213	0.939	4
14	**Bangladesh**	98.5	229.4	1.8	2.3	143	0.648	119
52	**Egypt**	**10,065.3**	**9,792.5**	5.8	**7.3**	**4,499**	0.937	7
88[e]	**Kiribati**	46.7	214.1	1.5	2.6	47	0.502	138
113	**Moldova**	…	…	…	…	…	…	…
21	**Bolivia**	1.5	9.2	2.9	0.7	65	0.700	107
124	**Nicaragua**	8.0	19.6	4.3	1.8	145	0.672	113
153	**Sierra Leone**	..	..	2.3	2.1	108	0.643	120
183	**USA**	0.7	2.4	2.0	1.7	24	**0.275**	**174**
189	**Yemen**	9.3	14.3	1.5	3.4	69	0.470	147

ANALYTIC ECONOMIC SITUATION														
STATES OF THE WORLD		PRIVATE HEALTH EXPENDITURE (2001)			PUBLIC HEALTH EXPENDITURE (2001)					PRO CAPITA HELTH EXPENDITURE (2001)				
		Private expenditure on health as % of total expenditure on health	Out-of-Pocket expenditure as % of private expenditure on health	Private Pre-paid plans as % of private expenditure on health	General government expenditure on health as % of total expenditure on health	General government expenditure on health as % of total government expenditure	External resources for health as % of total expenditure on health	Social security expenditure on health as % of general government expenditure on health	Total expenditure on health as % of GDP	Per capita Total expenditure on health at average exchange rate (US$)	Per capita Total expenditure on health at International dollar rate ($)	Per capita Government expenditure on health at average exchange rate (US$)	Per capita Government expenditure on health at International dollar rate ($)
82	**Italy**	1,088.8	1,429.7		5.9					2.1	2,028	0.916	21
84	**Japan**	**4,141.4**	**3,193.0**		5.9					1.8	2,009	0.932	9
9	**Australia**	368.7	491.8		6.0					2.3	2,213	0.939	4
14	**Bangladesh**	98.5	229.4		1.8					2.3	143	0.648	119
52	**Egypt**	**10,065.3**	**9,792.5**		5.8					**7.3**	**4,499**	0.937	7
88[e]	**Kiribati**	46.7	214.1		1.5					2.6	47	0.502	138
113	**Moldova**	…	…		…					…	…	…	…
21	**Bolivia**	1.5	9.2		2.9					0.7	65	0.700	107
124	**Nicaragua**	8.0	19.6		4.3					1.8	145	0.672	113
153	**Sierra Leone**	..	..		2.3					2.1	108	0.643	120
183	**USA**	0.7	2.4		2.0					1.7	24	**0.275**	**174**
189	**Yemen**	9.3	14.3		1.5					3.4	69	0.470	147