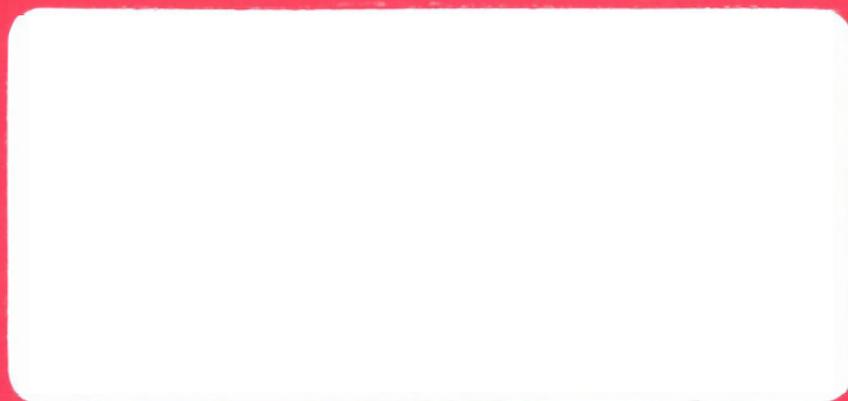




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**THE RIGHT TO CHILD HEALTH:  
THE DEVELOPMENT OF PRIMARY HEALTH SERVICES  
IN CHILE AND THAILAND**

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## EXECUTIVE SUMMARY

As States Parties begin to implement the United Nations Convention on the Rights of the Child (CRC), it has become increasingly important to set standards for assessing degrees of compliance with relevant CRC articles. In terms of the child's right to health, States Parties have the obligation to achieve "progressively" the "highest attainable standard of health" (Article 24), but to take appropriate measures only "to the maximum extent of their available resources" (Article 4). Those concerned with interpreting these phrases, including the relevant United Nations Committee, have a number of options in terms of standard-setting. One approach is to compare various social indicators of countries with similar levels of per capita income. A second approach, attempted in this paper, is to analyse particular country experiences over time.

Historically, the right to health has been fragmented in space, in time, by type, by age-group and by technological or organizational level. Choices made in favour of one group have excluded others, raising some ethical, legal and practical questions. Studies in Chile and in Thailand illustrate certain advantages in preferring prioritization by technological level or primary health care (PHC). The studies show how an acceleration of service delivery can progressively lead to the improved fulfilment of rights, and how cost-effective and participatory systems can be developed to overcome resource constraints.

In the post-Second World War period, Chile began defining a PHC type of approach to health. It created a pyramid-shaped health delivery system with a base formed by auxiliary nurses who assured wide geographic coverage and the permanency of health services at the community level. During the socialist presidency of Dr. S. Allende (1970-1973), public expenditure on health was greatly increased and the health personnel of the National Health Service (NHS) reinforced. Cutbacks were severe after the 1973 military takeover.

In 1980, the military government privatized the NHS, reorganizing it into 27 autonomous regional units, which were not allotted a budget but reimbursed for services rendered. This system has consolidated regional differences, to the disadvantage of poorer units. Market demand, not need or right, now regulates the financing and operation of public health services.

Besides an initial emphasis on the PHC level, Chile has over the years given priority to the "right to life" of infants, with less attention paid to the health and developmental needs of older children. Because of this sequencing by age-group, infant mortality dropped from 210 to 14.6 per 1,000 live births between 1937 and 1991, historically one of the sharpest declines ever recorded. In contrast, new monitoring techniques show that 40 per cent of the child (0-6 years) population are at high risk of malnutrition and environmentally related diseases.

Like Chile, Thailand has been torn by civil strife during the past two decades. However, despite shortcomings in other areas of human rights, the Government has adopted policies protecting the rights of children and women. In 1987-1991, the highest-ever share of budget was allocated to social development, including increases to education and health.

Thailand has also embraced PHC, emphasizing 'basic minimum needs' rather than sophisticated medical interventions. The country's underlying Buddhist ethics has facilitated the establishment of a public health delivery system that relies heavily on volunteers. Village health volunteers are responsible for administering the village revolving drug funds which give the community permanent, on-site access to essential, low-cost medical drugs. They receive a stable earning from this activity, enabling them to dedicate themselves to PHC. Higher levels of medical care are available at the sub-district, district, provincial and regional levels. The PHC approach has guaranteed access for all to effective and low-cost care. Infant mortality has fallen from 1965 levels of 84.3 per 1,000 to 26 per 1,000 in 1990; and the severe forms of malnutrition have been almost completely eradicated.

Both case studies show that the transformation of the public's awareness of needs into political demand is perhaps the strongest mechanism to ensure the fulfilment of rights. This transformation depends fundamentally on people's participation and organization.



## I. INTRODUCTION

How should the international human rights community, including the United Nations Committee on the Rights of the Child, approach the complex subject of determining the obligations of the nations that have ratified the Convention on the Rights of the Child (CRC) in terms of the child's right to health, as embodied especially in Article 24 of the Convention? The language of that article, though more detailed than many provisions of the CRC, nevertheless leaves much to be interpreted now that the difficult stage of implementation has begun. Two important provisos, relating to "highest attainable" standards of health and to "progressively" achieving the fulfilment of this right, are of central importance and relevance for policy. As other papers in this series have stressed,<sup>1</sup> Article 4 of the CRC is also of considerable significance with respect to effective implementation, requiring that States Parties shall take "all appropriate legislative, administrative, and other measures...to the maximum extent of their available resources" to ensure the fulfilment of health, nutrition, education and other economic and social rights. Attention has been called to the danger that the "available resources" provision could be used as an excuse for less-than-adequate performance in implementing the CRC. This concern has made it increasingly important to assess and disseminate the results of the numerous examples which do exist of countries having overcome resource constraints to meet the basic health, nutrition and other needs of children.

In interpreting key phrases in the CRC such as "highest attainable standard" and "the maximum extent of available resources", the relevant United Nations Committee, UNICEF, the World Health Organization (WHO) and other concerned agencies, including non-governmental organizations (NGOs), have a number of options in terms of standard-setting and assessing degrees of compliance with the relevant articles of the CRC. One approach, used frequently by UNICEF in its global advocacy for children, is to compare child health and other aspects of the performance of a country with that of other nations with similar levels of per capita income, as measured by the gross national product (GNP). A recent refinement of this approach now appears in what will be an annual series of UNICEF reports entitled the *Progress of Nations*. In that report, "national performance gaps" are calculated for all countries for which relevant data are available, indicating the difference between a country's actual level of progress (for instance, in reducing under-five mortality rates or the percentage of children under five years who are underweight) and the "expected level" for

its per capita GNP.<sup>2</sup> This approach has the advantage of simplicity, often important for advocacy and generating political commitment for change. Its admitted shortcomings, however, are also significant, including the weakness of many of the statistical series, the problems of using per capita GNP as a proxy for a country's level of resource availability, and the fact that national averages blur gross inequities on both the available resources and the social indicator side of the "performance gaps" to be measured.

As an additional approach, complementing the one described above, there is considerable knowledge to be gained from more historical and analytical analyses of particular country experiences over time. It is especially important to assess the actual experiences of developing countries that have been reasonably successful in meeting the standards implied by the CRC and other international commitments, such as those of the 1990 World Summit for Children and the subsequently approved National Programmes of Action for children during the 1990s.<sup>3</sup>

This paper represents an attempt to illustrate this more historical approach by assessing the experiences relating especially to children's health in Chile and Thailand. Though progress is still lagging in some fields and geographic areas of these two countries, both have made commendable progress in recent decades, especially in reducing child mortality rates. Both countries, moreover, have successfully applied many of the basic tenets of the primary health care strategy (PHC), which in itself is one element of compliance with the CRC, as provided in Article 24 (2.b): "To ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care".

Before turning to the cases studies, however, it may be useful to outline a number of basic concepts relating to needs, rights and issues of prioritization in the field of child health.

## II. FRAMEWORK

### "The Highest Attainable Standard of Health"

Article 24 of the CRC recognizes the child's right to "the enjoyment of the **highest attainable** standard of health".<sup>4</sup> How should we determine what standard of children's health is in fact

the highest attainable? Over what sort of time period should it be required that this standard be met? These questions are complicated by the WHO definition of 'health'; that is, "...a state of complete physical, mental and social well-being", and not just the absence of illness. This definition is so broad that some have called it the definition of 'happiness' rather than of health. It is also an essentially static definition because it adopts the highest possible value, or 'norm', as the standard to be used. This approach, in practice, is a poor guide to health policy. The world's best performance in terms of under-five mortality rates, for example, is that of Sweden: only 5 deaths per 1,000 live births. The world average, however, is 97, and the highest rate is over 300. The key to good action-oriented planning is to set standards in such a way that, if all available resources are mobilized, a credible performance can be achieved over time. Determining what constitutes a 'credible performance' will inevitably be a somewhat subjective assessment. But the best performance, over a reasonable time span, among countries facing similar resource constraints offers one reasonable criterion.

**Needs** and **rights** are often seen as two sides of the same coin, and the terms are sometimes used interchangeably. There is, however, a major difference between these two concepts. While needs—which may be defined in terms of the interrelationship between the individual and the environment—remain a biological and social issue, **rights** stem importantly from legal and political power, and fulfilment is affected by whatever group controls a particular society. Even assuming there is some commitment to established rights, such a group will inevitably decide on the priorities—that is, the sequence to be followed in fulfilling a right, according to the group's own particular agenda. This process is amply documented in the following case studies on Chile and Thailand. The Chile study, in particular, shows that significant regressions **can** occur and that power groups in command **can** choose to disregard previously acquired rights. What is more comforting is that, in the Chilean case, a mature civil society was, in part, able to weather political moves contrary to the fulfilment of certain rights and maintain some of the established priorities despite the turbulent succession of governments and set-backs in terms of many human rights.

Consequently, it is every community's duty—and right—to be **aware** of its own needs and take measures to satisfy them while fully respecting the needs and rights of other communities. It is also every society's duty to recognize which **needs** are legislated as **rights** (a status often conferred by constitutional legal status and thus committing society as a whole to their fulfilment). A function of human rights advocacy is to **narrow** the gap between **acknowledged** needs and **declared** rights, thereby limiting the scope for ambiguity and

inequities. But its function is also to **expand** the horizon of 'needs'; to recognize, for instance, the special needs of severely disadvantaged categories such as street children and child workers and to protect them with a 'mantle' of rights through improved legislation and the enforcement capability of the law.

The advancement of human rights can be viewed as a steady conversion of basic needs (starting with requirements for sheer survival) into normative rights. It could also be said that **standard** needs would thus become **normative** rights. In other words, what is **desirable** becomes **obligatory** on legal as well as ethical grounds. While what is desirable can often be determined by scientific knowledge, what is obligatory falls more in the realm of ethics, politics and the prevailing legal culture. As public awareness of needs mounts so does demand: not just for their conversion into legal rights but also for effective fulfilment or enforcement, eventually to the point that the denial of rights becomes impossible. **The transformation of the awareness of needs into political demand is perhaps the strongest mechanism to ensure the fulfilment of rights. This transformation depends fundamentally on people's organization and participation.**

### **The Concept of Basic Health**

A prevalent misconception in health planning is that the expansion of types and volume of health services alone will produce a healthy society. This is a blind alley. Health is not reducible to services. The limitless packaging of medical tasks and actions into services merely expands the work that can be handled—and, like any other kind of merchandise, marketed—by professionals. It also creates a strong dependency on **delivery** and a concomitant reduction in the ability of individuals to take both specific actions and overall responsibility for their own health. The result is a steadily increasing amount of resources **needed** from the society, thus making full coverage (especially the satisfaction of the needs of underserved segments of the population) less, rather than more, likely over time.

At the international conference sponsored by WHO and UNICEF at Alma-Ata (former-USSR) in 1978, a revolutionary concept of health was promoted. In essence, health was no longer considered a technically complex medical matter, but rather a daily concern which individuals could, and should, face themselves. Difficult cases—the exception rather than the rule—would require a referral system, which could also train support personnel and monitor people's health. The concept of **primary health care** was thus officially launched.

PHC brought medical specialists and communities into a new interface, requiring not only a redefinition of roles but also the mobilization of human, financial and organizational resources. Intersectoral coordination and community participation were an integral part of PHC<sup>5</sup>, and become, as well, a stepping stone to social development of a more general nature.

Alma-Ata also initiated the era of the **health package**. Never again would it be possible to speak about health without speaking of its components, whether they be 8, 11 or 100. With time, however, this trend has eclipsed the social dimensions that were the major conceptual contribution of PHC.<sup>6</sup> Those dimensions, such as community participation, need to be rescued in the current search for the fulfilment of rights for many reasons—including because they encompass a powerful capacity for resource mobilization essential for the implementation of the CRC.

The most critical of these issues is the recognition of the fundamental role of individuals and communities in caring for their own health. This is indispensable for fulfilling the child's right to "the enjoyment of the highest attainable standard of health" because, unlike sickness, health is a **daily** concern, and continuous care is only possible if individuals have the key role. It therefore follows that the transformation of that care into 'packages' of actions, geared largely to the delivery of services (often only available at considerable distance), should be kept to a minimum.

An example may help to illustrate this concept. It is more cost-effective and efficient for women to learn self-examination of the breast to screen nodules than it is to set up a complex system of cancer-screening involving nurses, doctors, scanners, and so forth. Only women with confirmed nodules would require follow-up. This would mean that, instead of millions of 'examinations' (services), improved coverage would become possible as fewer resources are needed to screen confirmed cases. This organizational rearrangement implies increased responsibilities (behavioural change) and education (another 'right') of the beneficiaries of intended services, who become 'volunteers' and actors in their own right.

### **On the Prioritization of the Right to Health**

It is important to consider the degree to which the child's right to health is implemented, whether intentionally or not, by the social segmentation, prioritization or sequencing of interventions over some relevant time span. In other words, the issue at hand is not whether to fragment the right to health, but rather **how** to do it, and in **what sequence**, over **what**

**period of time.** Article 24 (4) foresees such sequencing by setting a goal of "achieving progressively the full realization" of the right to health.

The complex delivery system, on the comprehensiveness of which 'health' relies, cannot be assembled, disassembled or reformed however one pleases. Certain sequences offer a 'strategical trajectory' in which almost every step enables the following one to be taken. Forms that have no cumulative effect might even arrest the process of needs' satisfaction.

Interventions can be segmented by targeting specific **geographic areas** (for instance, rural rather than urban); they can emphasize one **technological or organizational level** over another (such as primary health care rather than sophisticated curative care); or they can aim to reach certain **target groups**, including age-groups, within the population (infants rather than adolescents). A corollary is that, whichever the priority chosen (for example, an intervention benefiting only children living in rural areas), services will eventually have to be expanded to the components initially excluded (in this case, children in urban and other non-rural areas) if the rights of all children to health are to be fulfilled.

The following case studies illustrate certain advantages in preferring prioritization by **technological level** (PHC). In both Chile and Thailand, an attempt has been made to satisfy needs at **their** level of complexity rather than at a **higher** level. (A simple example of this principle is that a headache should first be treated with over-the-counter remedies such as aspirin; only if the headache persists or recurs should the opinion of a neurologist be sought.) The two studies were also chosen to document how an acceleration of service delivery can lead to the improved fulfilment of rights, in a generally 'progressive' manner over time.

From the post-Second World War period to 1973, Chileans were in the process of defining a PHC type of approach to health care; in Thailand, the PHC movement has only gained momentum since the 1980s. In both countries, a 'pyramid' was formed, with a comparatively small number of highly specialized health personnel occupying its top echelons and para-professionals forming its base. In Chile, these para-professionals ('auxiliary nurses') were required to have only primary-level schooling and a year's training. In Thailand, 'village health workers and communicators' needed just four to five years of schooling and a few weeks of training. These were important 'new' or 'non-traditional' resources mobilized to extend the coverage of scarce medical professionals. Thailand, with a less strong professional tradition than Chile and a much larger population, developed the participatory component to a greater extent. It was facilitated in this task by the society's

underlying Buddhist ethics. In both countries, PHC has proven to be a cost-effective and efficient system, developed rapidly, and a generator of significant multiplier effects.

The example of Chile is less 'pure' than Thailand. Since 1980, Chile has reorganized its National Health Service (NHS), adopting principles contrary not only to those of PHC but also to what had been practised in the country during the preceding 25 years. Moreover, over the years, policy decisions in favour of infants (0-12 months of age) have succeeded in improving the situation of this age-group, whereas significantly less attention has been paid to assuring the health right of those **same** children once they survived their first year of life. This segmentation by **age-group** raises important ethical as well as practical questions. What considerations should govern the discrimination in favour of infants to the detriment of older children? Does it become more difficult to meet the developmental needs of older children because of the emphasis placed on the needs of the under-one age-group?

Comparisons of countries as different as Chile and Thailand must be viewed with great caution (Table 1). For our purposes, however, it is relevant, first of all, that both countries are States Parties to the CRC. In the social realm, both have achieved female literacy rates of over 90 per cent; and both have relatively low total fertility rates (2.7 and 2.3 respectively) and maternal mortality rates (67 and 50 per 100,000 live births respectively). Chile ranks better than South American averages for most indicators. It has the region's lowest percentage of underweight under-five children (3 per cent compared with a regional average of 8 per cent); 93 per cent of its children are immunized against measles, compared with its regional average of 80 per cent; and 75 per cent reach grade five of primary

Table 1: MAIN CHARACTERISTICS OF CHILE AND THAILAND  
(1992 c.)

	Population (millions)	Main Religion	Political System	% Children Reaching Grade 5	% Under-5 Underweight	Under-5 Mortality*	GNP p.c. (US\$)
Chile	13.8	Catholic	Republic	75	3	20	2160
Thailand	54.5	Buddhist	Monarchy	63	26	35	1580

Source: United Nations Children's Fund, *The Progress of Nations* 1993, UNICEF, New York, 1993.

\* per 1,000 live births.

education, well above the regional average of 48 per cent. In Thailand, 26 per cent of under-five children are estimated to be underweight (the same as the average for East Asia and Pacific), but only 79 per cent are immunized against measles (compared with its regional average of 89), and 63 per cent reach grade five of primary education (compared with a regional average of 83 per cent).<sup>7</sup> Violent political uprisings have changed the course of recent history in both countries; and, by coincidence, both emerged from a military regime in the late 1980s/early-1990s.

### **III. CHILE: ACHIEVING CHILDREN'S RIGHT TO HEALTH**

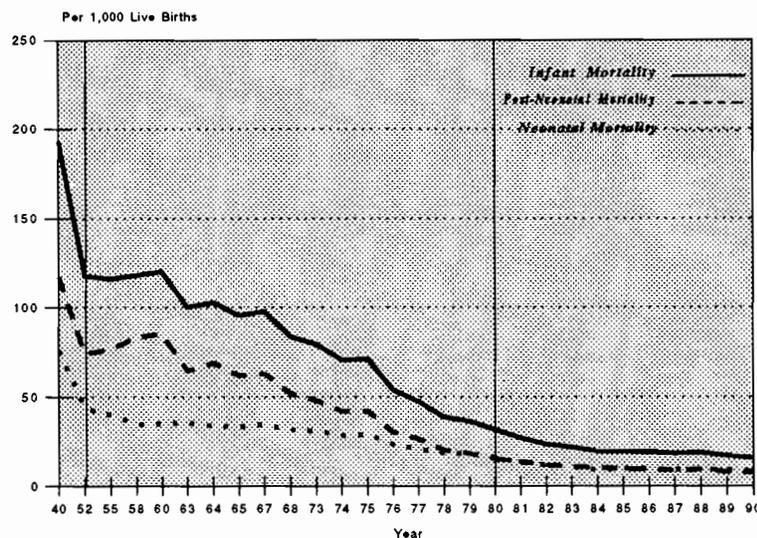
#### **Background**

Between 1940 and 1991, the population of Chile grew from little more than 5 million to 13.8 million; the number of births per year rose from 172,500 (1943) to almost 300,000; and the infant mortality rate (IMR) fell from 210 (1937) to 14.6 (Figure 1), historically one of the sharpest declines ever recorded. The present IMR level reflects the social, economic, behavioural and political changes that have transformed the country during the past 50 years. These changes have occurred at an uneven pace, with progressive eras, characterized by the massive convergence of social forces, followed by periods of stagnation.

The first major decline in infant mortality in Chile occurred between 1937 and 1943 when IMR fell from the extremely high rate of 252 per 1,000 live births to 194 per 1,000, or an average yearly decline of 5.5 per cent. Chile began to industrialize during the Second World War to compensate for restricted imports from the United States and Europe whose economies had been converted to war production. A 1938 coalition government set the basis of the country's industrial strength. Important gains were also made in education and health policies (notably the 1937 law for the Protection of the Mother and the Child). The spirit of the era can be summarized by the motto of President Aguirre Cerda (1938-1943): "To govern is to educate and give health to the people".

In 1939, Dr. Salvador Allende, then Minister of Health, voiced this new concern for health in a proposal for "a unified Service of National Health for more than 4 million people (80 per cent of population) [namely] all salaried employees and their families".<sup>8</sup> This proposal would only become a reality in 1952 when the NHS was created, following the highest-ever

Figure 1: TRENDS IN INFANT MORTALITY  
(Chile, 1940-1990)



Source: Mockenberg, F. et al., 'Evolution of Malnutrition and Infant Mortality in Chile in the Last 20 Years', CRECES, 1983.

IMR reduction in Chilean history. From 1944 to 1951, in fact, IMR had plunged 76 points, an average yearly decline of 9.5 per cent. During these eight years, international trade had been eased and antibiotics had become commonly available. Neonatal mortality (under 1 month of age) had declined much faster than post-neonatal mortality (1-12 months of age), mainly because of the impressive increases in hospital deliveries.<sup>9</sup>

### National Health System (NHS) and its Era: 1952-1980

1. **Difficult beginnings: 1952-1967.** The NHS and the National Order of Physicians, both created in the early-1950s, were expressions of a heightened public awareness about health and other social and political issues. The Central Union of Workers, formed in 1953, advocated improvements in the status of children and women; that same year, the union obtained important social security gains in the form of family benefits, with similar treatment of blue- and white-collar workers.

The general economic crisis of 1957 and accompanying unemployment and food shortages halted progress in IMR reduction. Between 1952 and 1967, IMR stagnated, dropping from 117.8 to 97.7 per 1,000 live births, an average yearly decline of only 1.3 per

cent. This poor performance occurred despite substantial increases in public expenditure on health (especially after 1964), environmental improvements (safe water, better clothing), social gains (higher female literacy) and an upturn in the economy.

Although the 1960s were disappointing in terms of IMR reduction, these years laid the foundation for future progress in child survival and health. Political processes initiated in the mid-1960s were especially important because they gave real dignity to the less-privileged in terms of employment, social benefits and social status.

During the first three-year presidential term of the Christian Democrat Eduardo Frei Montalva (1964-1967), a 'Revolution in Freedom' was begun, recognizing the rights of peasants, urban squatters and other hitherto 'second class' citizens. Trade unions became more powerful, the copper industry was 'chileanized' (51 per cent ownership), and reforms benefiting the poor through improvements in employment, salaries, education and social security were put in place. The influence of the so-called 'social doctrine' of the Catholic Church was profound.

Civic associations proliferated at this time. Centres for Mothers increasingly dotted the horizon and eventually were federated and administered at the national level; their activities included training, child-care units, fund-raising, community development, public health campaigns, village social centres and political activism. Rural syndicalism broke the peasants' isolation and individualism, while modern associative and consumer-oriented lifestyles permeated into every corner of the country.

This intense social mobilization had multiple and particularly powerful consequences, especially in the area of human rights. Parent-teacher associations, community health centre committees, development committees, consumer protection committees, among others, were formed to give voice to social needs at all political and administrative levels. New initiatives and organizations grew out of such informal groups. These new structures, in one way or another and in the midst of organizational and partisan rifts, helped to expand **nationwide** the services available for children and to protect their rights.

2. **Height of NHS capacity: 1968-1976.** By the early 1970s, the economic situation in Chile was promising. Unemployment had decreased sharply, giving rise to increased consumer demand and higher production levels (Table 2). The expansion of manufacturing, the greater availability of goods and services, and improvements in salaries and hence in purchasing power permitted many, and especially the two lowest socio-economic groups, to

Table 2: CONSUMPTION AND PRODUCTION  
(Chile, 1969-1978)

	1969	1970	1971	1972	1973	1974	1975	1976	1978
Salaries as a percentage of GDP <sup>a</sup>	-	52.3	-	62.8	47.2	42.2	41.9	41.1	-
Index of salaries <sup>b</sup>	-	100	126	118	52	68	63	71	87.2
Consumer Price Index (%) (inflation) <sup>c</sup>	-	34.9	34.5	216	508	376	341	174	30.3
Unemployment (%) <sup>d</sup>	-	6.1	4.8	3.2	-	9.4	13.4	16.3	13.9
Consumption by socio-economic group: <sup>e</sup>									
- Poorest 20%	7.7		-	9.5		-	-	-	5.2
- Next-poorest 20%	11.8	(19.5)		14.6	(24.1)	-	-	-	9.3
- Richest 20%	44.5		-	34.1		-	-	-	51.0
Capacity utilization (%) (manufacturing) <sup>f</sup>	67.2	66.6	75.6	77.0	73.1	-	-	56.0	-
Index of industrial production	100	-	-	117.6	110	111	85	95.4	113.3
Index of goods and services availability <sup>g</sup>	-	100	107.5	106.7	98.5	94.5	73.6	72.5	87.8

Sources:<sup>a, b, c</sup> and <sup>g</sup>, Bitar, S. Economic Documentation, Rome, Italy, 1981, based on Ochoa, F., 'Public Health in Chile 1958-1976', University of Chile, 1978;<sup>c</sup> NHS, 'Health Situation, Activities and Resources: Chile in Recent Years', in Planning Bulletin, Vol. IV, Planning Directorate, NHS, 1971 (for 1964-1969) and Morales, Eduardo, 'Modernization (in Chile): Health', in CHILE-AMERICA, No. 74-75, 1981 (for 1970-1973 and 1975);<sup>d</sup> and <sup>e</sup>, National Order of Physicians, 'Some Considerations on Health in Chile Today', 1983; <sup>f</sup> ACHIP, V.A. and F. Agüero, 'Militarization, Armaments and Development' in Chile-America, No. 80-81, 1982.

upgrade their living conditions in terms of housing, household appliances and even clothing.

The 1968-1976 period was characterized by three different social and political ideologies: it includes the second three-year term of the Christian Democrat Frei (1968-1970); the experimental Socialist presidency of Allende (1970-1973), which ended in a violent coup d'état in September 1973; and the beginning of a military regime, headed by General A. Pinochet, which was to last for 17 years.

A physician and former Minister of Health, Allende was ethically committed to improving the health status of the nation, and especially of its children. In his 1970 electoral platform he declared, "...the child is the only privileged citizen in this country".<sup>10</sup> During his presidency, the growth of the NHS was impressive.<sup>11</sup>

Deriving 30-40 per cent of its budget from social security revenues and the rest from the national budget as established by the 1952 law, the NHS provided effective coverage to 75 per cent of the population by 1973. It planned and delivered preventive, promotive and curative services, analysing and taking into account social and physiological 'needs' by age-group.<sup>12</sup> Thus, rights rather than demand determined the supply of health services. The NHS was also largely responsible for the training of health professionals: with two exceptions, all

Table 3: HEALTH SERVICES  
(Chile, 1954-1978)

	1954	1967	1968	1970	1971	1973	1975	1978
Medical consultations* (thousands) <sup>a</sup>	-	10,726	-	10,782	<b>12,747</b>	<b>11,679</b>	<b>11,715</b>	<b>14,042</b>
Total NHS personnel (thousands) <sup>b</sup>	-	47.0	-	55.2	<b>56.6</b>	<b>68.6</b>	<b>68.0</b>	62.8
Number of physicians <sup>c</sup>	2,645	3,150	-	3,858	3,485	-	4,348	-
Number of auxiliary nurses <sup>d</sup>	5,467	14,000	-	16,597	-	18,179	22,719	26,000
Salaries as a percentage of total NHS expenditure <sup>e</sup>	-	-	57.6	66.5	-	-	41	-

Sources: <sup>a</sup> to <sup>c</sup> and <sup>f</sup> Morales, E. 'Modernization (in Chile): Health', in *Chile-America*, No. 74-75, 1981; <sup>d</sup> and <sup>e</sup> NHS, 'Health Situation, Activities and Resources: Chile in Recent Years', in *Planning Bulletin*, Vol. IV, *Planning Directorate*, NHS, 1971 (for 1967 and 1970); and Mardones Restat, Francisco and Osorio, E., 'Recent Evolution of Infant Mortality in Chile 1970-1985', mimeo, 1988.

\* Includes emergencies.

of the more than 20 university hospitals were NHS hospitals under contract. NHS staff expanded from end-1967 levels of 47,000 employees to 68,600 in 1973,<sup>13</sup> an increase of almost 50 per cent (Table 3). For each NHS paediatric (medical) hour devoted to ward work, there were five covered by registered nurses and 15 by 'auxiliary nurses'.

Auxiliary nurses were a 'new' resource 'invented' in the 1950s to replace traditional practitioners. Initially, they only had primary-level schooling and one year of training. Requirements became more stringent as literacy, especially women's literacy, improved. By the same token, physicians were scarce in the 1950s but gradually became more available with the technological advances of the 1960s. However, manpower expansion was mainly in the intermediate levels—nurses, midwives, nutritionists and technologists, rather than highly specialized medical personnel.

The proportion of auxiliary nurses to physicians increased progressively over the period: in 1967, there were 3,150 physicians to 14,000 auxiliary nurses; by 1975, the ratio had become 4,348 to 22,719.<sup>14</sup> Thus, a pyramid was built with physicians occupying a directive role in the multidisciplinary health team while less costly and culturally 'alien' personnel formed its base. Wide geographic coverage and the permanency of health services were thereby assured since locally recruited auxiliary nurses were likely to remain at the service of the community throughout their career, unlike physicians who tended to move every three to five years.

Additional services were provided thanks to the introduction, in the early 1960s, of general-practitioner posts for newly graduated physicians: 705 general practitioners were under contract by mid-1972, up from 605 in 1971.<sup>15</sup> This represented an additional 1 million hours per year nationwide, largely available in rural areas and mostly devoted to paediatric work; it also reflected the prevailing policy of full employment for all qualified physicians. In 1972, this policy was also extended to nurses, midwives, dentists, pharmacists, technicians, nutritionists and social workers.

**Consumption and expenditure.** Table 2 has shown that salaries as a percentage of GDP rose from 52.3 to 62.8 per cent between 1970 and 1972 while unemployment decreased from 6.1 to 3.2 per cent. Consumption by the poorest 40 per cent of the population increased from 19.5 to 24.1 per cent during roughly the same period. As stated, these factors—and others such as low-interest credit—contributed to the enormous expansion of domestic demand. The accumulation of durable goods (from clothing to appliances to housing) would have a **delayed effect**, lasting well into the early 1980s.

**Social expenditure.** Although part of a historical trend, increases in health expenditure during Allende's presidency were particularly sharp, especially in 1971 (75 per cent over 1968 figures) and 1972 (nearly 100 per cent more) (Table 4). The abrupt decline in figures for 1973, the year the government fell to the military, is an expression not only of the disorders of the period but also of the failure to complete implementation during that year. Per capita public expenditure in health more than doubled between 1964 and 1972.

Table 4: HEALTH EXPENDITURE  
(Chile, 1964-1976)

	1964	1968	1969	1970	1971	1972	1973	1974	1975	1976
Public expenditure in health (current US\$ million) <sup>a</sup>	91	135	144	178	236	268	181	233	217	238
Public expenditure in health (1976 US\$ million) <sup>b</sup>	179	245	252	300	384	418	249	269	230	238
Population (millions) <sup>c</sup>	8.4	9.4	9.6	9.4	9.5	-	9.8	-	10.2	-
Per capita health expenditure (1976 US\$) <sup>d</sup>	21	26	26	32	40	43	25	27	22	23
Percentage of GDP <sup>e</sup>	-	-	-	3.4	4.0	4.4	2.7	2.8	2.8	2.7
Percentage of national budget <sup>f</sup>	-	-	7.9	-	7.9	-	-	7.5	-	-

Sources: <sup>a</sup> and <sup>b</sup> Morales, E. 'Modernization (in Chile): Health', in *Chile-America* No. 74-75, Centre of Studies and Documentation, Rome, Italy, 1981, based on Ochoa, F., 'Public Health in Chile 1958-1976', University of Chile, 1978; <sup>c</sup> NHS, 'Health Situation, Activities and Resources: Chile in Recent Years', in *Planning Bulletin*, Vol. IV, *Planning Directorate*, NHS, 1971 (for 1964-1969 and Morales, op. cit. (for 1970-1973 and 1975);<sup>d</sup> and <sup>e</sup>, National Order of Physicians, 'Some Considerations on Health in Chile Today', 1983; <sup>f</sup> Achip, V.A. and Aguero, F., 'Militarization, Armaments and Development' in *Chile-America* No. 80-81, 1982.

Table 5: SOCIAL EXPENDITURE  
(Chile, 1965-1976)

	1965	1970	1971	1972	1973	1974	1975	1976	1978
Inflation (%)	-	34.9	34.5	216	508	376	341	174	30.3
GDP per capita (US\$ 1970) <sup>a</sup>	-	850	900	883	837	870	759	780	879
GDP per capita (US\$ 1976) <sup>b</sup>	-	939	1010	990	941	960	805	856	-
Social expenditure per capita (US\$) <sup>b</sup>	-	91	138	143	-	-	68	70	78
	1965-1970		1971-1973		1974-1976				
Social expenditure per capita (US\$) <sup>c</sup>	79.1		119.2		(51)				
- Health	15.7		22.7		(45)				
- Education	32.0		41.8		(31)				
- Housing	11.4		22.0		(93)				
- Social security	20.0		32.7		(63)				
Social expenditure as a percentage of end-of-period GDP <sup>d</sup>	9.3		14.2		(53)				
					9.7				
					(-32)				

Sources: <sup>a</sup> Pinto, A., 'The Orthodox Model and National Development' in *Chile-America* No. 74-75, Centre of Studies and Documentation, Rome, Italy, 1981; <sup>b</sup> and <sup>c</sup> Guardia, A., 'Monetary Policy', in *Chile-America* No. 72-73, Centre of Studies and Documentation, Rome, Italy, 1980; <sup>d</sup> Bitar, S., 'Economic Freedom and Political Dictatorship', Chile 1973-1978' in *Chile-America* No. 56-57, Centre of Studies and Documentation, Rome, Italy, 1979 and Bitar, S., 'Chile 1973-1980: Economic Policy for a New Domination Mode' in *Chile-America* No. 56-57, Centre of Studies and Documentation, Rome, Italy, 1980.

The comparison of figures for 1969-1970 and 1974 (that is, before and after the coup) suggest a stagnant situation. However, these same figures reveal a type of social accumulator: even though GDP augmented only slightly during these three years, social expenditure grew by a minimum of 31 per cent (education) and a maximum of 93 per cent (housing) (Table 5). All social sectors, including the health sector, stockpiled resources, which would also contribute to the 'delayed effect' of this accumulator-like social mechanism. From 1974 to 1976 trends, however, were completely reversed.

**Service provision.** In the health sector, increases in manpower and financial resources supported the progressive expansion of services in, among other areas, family planning, prenatal care and delivery assistance, immunization, supplementary nutrition, and disease control.<sup>16</sup>

—**Family planning services.** Fertility patterns were influenced by the Family Planning Programme launched in 1964, whose purpose was to reduce maternal risk rather than achieve

demographic control. By 1975, the programme, facilitated by the great expansion of female literacy, had contributed to the following:

- the absolute number of newborns had declined, and the birth rate had been reduced from 36.3 to 25.0, despite increases in the number of women in their reproductive years (between the ages of 15 and 44) (Table 6);<sup>17</sup>
- the target of contraceptive utilization among 20 per cent of women in this age-group was reached in 1974;<sup>18</sup>
- abortion-related maternal mortality had declined from 1965 levels of 9.9 per 1,000 to 6.6 per 1,000;
- the total number of children per woman had decreased from 4.7 in 1960 to 3.0;<sup>19</sup>
- births of fourth or higher birth order (which can have up to 50 per cent greater risk of mortality) had been reduced from 34.6 per cent of all births in 1969 to only 25 per cent; and
- births to mothers over 35 years of age (also at-risk) had declined from 17.3 per cent of all births in 1964 to 11.6 per cent in 1974.

—**Prenatal care and delivery assistance.** By 1967-1976, approximately 75 per cent of a total of 1.5 million women of reproductive age were under public-sector care. On average, prenatal visits per pregnant woman quadrupled between 1967 and 1976—from three to 12 (once a month until the sixth month and then twice a month, as per NHS standards). Increases in the number of prenatal visits can be partly traced to a 1971 policy which included pregnant women among beneficiaries of milk distribution schemes (see next page).

Table 6: CRUDE BIRTH RATE AND FERTILITY  
(Chile, 1965 and 1975)

	1965	1975
Number of women of reproductive age	1,878,787	2,537,390
Number of live births	308,014	256,543
Crude birth rate	36.3	25.0
Fertility rate	163.9	110.4

Source: Rosselot, Jorge and Mardones Restat, Francisco, 'A Human Right and a Social Priority: Family Health and Responsible Parenthood, Chile, 1965-1988', CRECES, 1989.

Births were largely attended by registered midwives and obstetricians. By 1976, these professionals had effectively supplanted traditional birth attendants, whose share of total deliveries was a mere 5 per cent (and almost exclusively in rural areas), down from 33 per cent in 1945 and 75 per cent in 1925. Because of the urbanization of services, hospital deliveries had risen to 86.5 per cent by 1975, again a significant change over earlier figures (for instance, 40 per cent in 1952).<sup>20</sup>

—**Immunization campaigns.** In 1971, 450,000 children were vaccinated against measles and 2,900,000 against polio.<sup>21</sup> Coverage rates would reach 98-100 per cent by 1979, well ahead of the 1990 targets for universal child immunization set by UNICEF and WHO.

—**Nutrition interventions.** In 1968, an average of 11.7 kg of powdered milk per infant were distributed free of charge; by 1975, the amount had increased by almost 70 per cent to 19.8 kg.<sup>22</sup> School feeding programmes were significantly incremented between 1971 and 1973; however, from the 1972 high of 2.3 million children under the age of 14 years, coverage fell to only 1.1 million children under 6 years in 1976.<sup>23</sup> Data for 1967-1976 show that total distribution expanded from 8 million to 30 million kg. In 1971, the Socialist government widened the original target—children under 2 years of age and nursing mothers—to include all children under the age of 14 years and pregnant women. This 'saturation' measure, which had immediate as well as **delayed** benefits, was adopted after field research had shown that mothers tended to divide the milk received among all offspring, thus literally diluting its effect. Studies have documented that utilization of health services increased with the expanded programme of milk distribution.

—**Campaigns to control acute respiratory infections and diarrhoeal diseases.** Between 1968 and 1975, extensive campaigns were undertaken to control acute respiratory infection (through the use of benzathin penicillin) and diarrhoeal diseases (through rehydration).

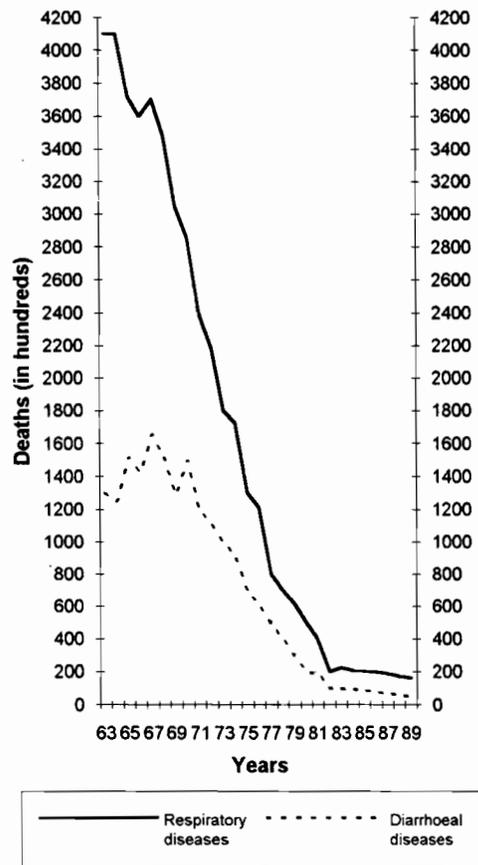
**Health Outcomes.** In terms of the "right to life", IMR reductions were quite significant between 1968 and 1975. A better-informed and better-educated public took full advantage of the family-planning, immunization, disease-control, and other services provided by health centres and polyclinics. Infant mortality declined at an average of 4.7 per cent per year, reaching 54.0 per 1,000 by 1976. Regression analysis has shown that the combination of these factors—namely maternal literacy/education (24 per cent) and maternal age and birth order—account for 30 per cent of the reduction in IMR.<sup>24</sup>

The campaigns to control respiratory and diarrhoeal diseases also had particularly impressive results. Between 1968 and 1976, infant mortality resulting from these two diseases experienced unprecedented declines (Figure 2). Reductions were especially notable in 1971 and contributed to the steep fall in IMR that year—from 79.3 to 70.5 per 1,000 live births. Mortality from acute respiratory infections, 30 per 1,000 in 1968, had fallen to 13 per 1,000 by 1976. Similarly, mortality from diarrhoeal diseases had dropped from 15 to 7 per 1,000. Together, these declines accounted for 28 of the 40 points in IMR reduction and preceded by a decade the 'child survival and development' revolution launched by UNICEF in the mid-1980s.

Dr. Francisco Mardones Restat, former Executive Director of the NHS, identified a number of factors facilitating IMR reduction during this period. First on his list was the very existence of the NHS, followed by the appropriate distribution of health professionals, an adequate network of roads,

the urban-mining demographic concentration (peculiar to Chile), the efforts of international agencies (such as the Food and Agriculture Organization, UNICEF and WHO), the establishment of both programmatic and administrative standards, and the existence of a coherent national 'school of thought' on public health. This last factor was especially important because it meant that processes and programmes were applied regardless of the changing political situation. Medical professionals (apart from political and military appointees)—whether bureaucrats working at the Ministry of Health in Santiago or practitioners in remote desert areas in the north or semi-antarctic regions in the south—would perform their tasks with the same 'schooling', values and motivation, thus

Figure 2: INFANT MORTALITY DUE TO RESPIRATORY AND DIARRHOEAL DISEASES (Chile, 1962-1989)



Source: *Informe Anual 1990*, Ministry of Health, Santiago, 1990, p. 12.

guaranteeing an adequate level of health care. Not even the cut-back in resources beginning in 1973 could arrest a process by then fixed in the minds of a determined health leadership as well as a better-educated population.<sup>25</sup>

In terms of the "right to **health**", outcomes are not as easy to document. Data relating to nutritional status are scarce, especially prior to 1976. One of the only nutrition studies available, undertaken in the Curico province in 1968,<sup>26</sup> concluded that 27 per cent of the infants in urban areas and 28 per cent in rural communities ranked below the third quintile of the Iowa standard for weight for age, and 32 and 24 per cent respectively for height for age. By 1975, 15.9 per cent of children under-five in the sample had some degree of malnutrition, a figure which would drop to 8.8 per cent by 1982.

The extensive coverage against measles and polio led to historically low mortality rates due to vaccine-preventable diseases as early as 1972. Polio incidence dropped to 1.6 per 100,000 population.

3. **Decline of the NHS (1977-1980).** The solid professional base built up by the NHS by 1973 was weakened after the military takeover, when many physicians and other health professionals went into exile. Further depletions of manpower were apparent during 1977-1980, although the core professional component was progressively strengthened.<sup>27</sup> The increase in the number of medical school graduates (from only 350 in 1971 to more than 600 by 1978) was partly responsible for these gains. However, although the overall numbers of physicians grew, the numbers of those employed by the NHS, particularly paediatricians (who accounted for 14-16 per cent of the total medical manpower in 1968-1972), grew at a much slower pace. Between 1970 and end-1980, coverage of NHS 'ward' physicians rose from 3.0 to 3.2 hours/10,000 inhabitants, while outpatient coverage dropped from 2.5 to 2.3 hours. Overall administrative support improved marginally. The previous 'full' recruitment policy was reversed in 1978 when NHS posts were awarded to only 238 of the 575 medical school graduates. The recruitment of general practitioners was especially affected.

Recruitment cutbacks were even more significant in the other health professions. The NHS employed only 123 of the 578 graduate nurses, 54 of the 437 certified midwives, 54 of the 233 newly qualified technicians and 34 of the 195 graduate nutritionists. Moreover, between 1976 and 1980, only 100 auxiliary nurses were employed per year, about one tenth of the rate of recruitment of previous years. Similarly, hiring patterns for social workers were radically altered.

—**Social disinvestment.** Between 1971/1972 and 1976, social expenditure was reduced by 29 per cent, a retrenchment that eroded most of the progress (51 per cent over the 1965 base year) made in 1971-1972 (Table 7). The largest cutbacks were in health expenditure (65 per cent): the 45 per cent gain made between 1965 and 1972 was more than annulled and allotments to health dropped to pre-1965 levels. In 1974, for example, the government spent roughly 35 per cent less on health than it did in 1972: US\$269 million (at the 1976 exchange rate) or approximately US\$27 per person compared with US\$418 million or US\$43 per person. As this reduction became unsustainable, health expenditures then began to increase again, though sporadically, with significant transfers to the private sector.

Allotments to education quickly recovered the 13 per cent lost in 1971-1976, increasing by 33 per cent between 1976 and 1982. Except for the 23 per cent jump in expenditure in 1981, yearly variations were slight. Similarly, social security expenditure climbed 70 per cent between 1976 and 1982; these latter gains should be largely interpreted as transfers to the private sector, regressively affecting the poorer strata. In contrast, the share allotted to public housing, which had already lost 53 per cent by 1976, was reduced by a further 36 per cent. The improvements of 1971-1972 were erased, although there was a delayed effect evident in the improved shelter and reduced environmental risk for homeowners who had been able to benefit from the earlier policies. New opportunities to gain access to the housing market were, however, sharply reduced. Although by about 1982 social expenditure would partially

Table 7: SOCIAL EXPENDITURE  
(Chile, 1965-1982)

	Variation %		Variation %				Variation %			Vari- ation %
	65/70 to 71/72	71/72 to 76	77	78	79	80	81	82	76- 82	
Social Expenditure p.c.	51	-29	12	2	7	2	4	12	45	
· Health	45	-65	15	16	1	1	7	4	52	
· Education	31	-13	8	7	4	-8	23	-2	33	
· Housing	93	-53	27	-23	4	4	-5	-38	36	
· Social Security	63	-28	12	6	12	6	-5	27	70	
% Social Expend./GDP	53	-32	18	-3	3	8	10	9	33	
· Absolute %	9.3	14.2	9.7							
% Health Expend./GDP	3.4	4.4	2.7	3.0	3.0	3.3	3.1	3.1	3.5	

Source: Castañeda, Tarsicio, *Socio-economic Context and IMR Reduction in Chile*, University of Chile, Department of Economics, 1984. (Reprocessed ad hoc; variations on previous year quoted.)

recover from the 'shock treatment' of 1975-1976, it remained below 1971-1972 levels in all sectors except education.

In the early-1980s, an acute recession compounded the effects of the 1974-1975 crisis, wiping out all gains obtained, including those made from 1977 onwards on the basis of foreign loans, which had increased from US\$4 billion in 1973 to US\$20 billion in 1984. High levels of inflation, rising unemployment, lower wages and reduced purchasing power brought about declines in the demand for social services. Thus, the poorest 40 per cent of the population, which had a 24.1 per cent participation in consumption in 1972, accounted for only 14.5 per cent in 1978 (as shown in Table 2). Again, the 'accumulation' process of 1971-1972 was halted, giving way to social disinvestment.

**Health Outcomes.** If improvements in health are measured solely by the decline of infant mortality, the 'balance sheet' for the late 1970s is positive. By 1979, IMR had reached 36.6 per 1,000. The two components of IMR—neonatal and post-neonatal mortality—had equal shares for the first time (Table 8). However, it must be realized that two additional and 'non-conventional' factors contributed to this IMR reduction: the first was the drawing down of previously accumulated resources; the second was a greater reliance on self-care, possible because a better-educated population was more receptive to primary and secondary prevention. Moreover, the decline in infant mortality reflected only part of the situation: progress was sustained in terms of the right to survival, but not necessarily in terms of the right to health. Strain was evident as market forces progressively caused economic demand to replace 'right' and 'need' as the basis of the delivery mechanism. The abrupt shift of responsibility for health-care expenditures to the individual jeopardized the 'quality of life'

Table 8: INFANT MORTALITY  
(Chile, 1952-1990)

	1952	1964	1970	1972	1979	1984	1988	1990
Infant Mortality (IMR)	117.8	102	79.3	71.1	36.6	19.6	18.9	16.0
Neonatal Mortality (NNM)	43.7	34.0	31.3	29.0	18.3	9.2	9.5	8.5
Post-Neonatal Mortality	74.1	68.9	48.0	42.1	18.3	10.4	9.4	7.5
Ratio NNM/IMR (%)	37.1	33.0	39.5	40.1	50	46.9	50.2	53.1

Sources: Monckeberg F. et al., 'Evolution of Malnutrition and Infant Mortality in Chile during the Last 20 Years', in *CRECES*, 1983; and Taucher, Erika, figures for 1990, personal communication 1992.

Table 9: EPIDEMIOLOGICAL HEALTH RISK  
(Chile, 1970-1982)

	1970	1973	1976	1977	1978	1979	1980	1981	1982
Typhoid Fever (000s)	5,344	3,688	6,180	11,533	13,114	10,760	10,872	10,789	12,726
· % South America	15	10	15	23	27	21	17	-	-
· Incidence	55	36	59	108	121	99	98	96	111
Tuberculosis	8,216	8,528	9,462	9,312	8,257	8,105	NA	NA	NA
Syphilis	1,464	2,691	5,722	6,858	10,248	8,393	8,100	10,039	8,325
· Incidence	15	26	55	64	94	73	74	89	76
Environmentally related diseases	8,281	9,597	12,825	2,259	20,571	18,125	16,046	21,574	21,907
· Incidence	85	97	123	209	189	166	145	191	181
Vaccine-preventable diseases	25,055	8,234	13,701	11,781	16,812	35,180	7,122	8,815	10,038
· Incidence	258	83	131	111	155	322	64	78	87
Subtotal Incidence (except typhoid)	348	206	309	384	458	560	283	358	353

Source: National Order of Physicians, *Some Considerations on Health in Chile Today*, NOH, Chile, 1983.  
· Incidence per 100,000 persons

of vulnerable groups. A regression to former levels of health risk was particularly evident by 1978-1979 (Table 9). With less than 5 per cent of the population of South America, Chile produced 27 per cent of the subcontinental cases of typhoid fever. Increments were also apparent for vaccine-preventable diseases. In other words, even though the mortality risk subsided, the risk of illness increased during the period.

Thus, while infant mortality declined, the health status of the population at large deteriorated. In a climate of fear caused by civil strife, economic recession and environmental deterioration, the health of children over 12 months of age was increasingly at risk and would continue to be so during the following years.<sup>28</sup>

#### National Health Services System (NHSS): 1980 to the Present.

For over 25 years, the NHS had been instrumental in providing centrally planned and cost-effective health services, fully realizing the 'multiplier' effect that good organization can provide. However, even though it had been introduced in 1952 during a conservative populist regime 18 years **before** the first socialist government, the NHS was viewed by the military government as the most visible expression of 'socialization'.

The NHS organization did not fit in with the new privatization drive. Moreover, a rift between the Government and the National Order of Physicians had been created, which made it politically expedient to find new ways of operating. This decision would eventually cost the Order its privilege of controlling the medical profession: a change in regulations, in fact, made a degree in medicine the sole qualification needed to practise medicine, which meant that membership in the Order ceased to be legally binding.

By government decree, the NHS was radically reorganized in 1980 as follows:

- The NHS was divided into 27 autonomous regional units, thus creating a 'system': the NHSS. Each unit had its own executive officer, appointed directly by the President.
- At the 'primary level', approximately 400 health centres, representing 35 per cent of the total, were initially transferred to municipalities.
- A national health fund (FONASA) was created in 1981, which became the major source of state financing. However, instead of allotting a budget to each of the 27 new regional units, FONASA reimbursed them for services rendered, according to an established schedule of rates. Market demand, not need or right, now regulated the financing and operation of health services. The differences in resource endowment and purchasing power of the clientele of each regional unit were permanently consolidated, to the disadvantage of the poorer units. As social security was privatized, individuals paid FONASA directly, at a rate of 9 per cent of their salaries. The only alternative was to rely on private health insurance provided by the Institutes of Health Security (ISAPRES).
- ISAPRES were launched in mid-1981 to finance private health services by establishing independent contracts with individuals or entities. ISAPRES could screen prospective clients by age, family size or health 'risk' and had the right not to renew yearly policies on expiration. Once again, the market substituted both need and right in regulating health service delivery, provoking 'fresh new problems', as pointed out in the World Bank's *World Development Report 1993*.<sup>29</sup>

The repercussions of this reorganization were enormous. The poorer segments of the population could not afford ISAPRES and had to resort to FONASA which, given its financial base, could not or did not finance capital investment. Public hospitals steadily deteriorated, while the more affluent ISAPRES—allied with major financial groups—built their own

ultramodern hospitals, only accessible to the élite. A two-track system emerged. Physicians and other health professions increasingly opted for private practice, providing token services, or none at all, to public hospitals. Only theoretically did the population as a whole have a right to committed and technically qualified health professionals and modern health care. The 'ethics' of 'first call' for children was all but lost. Health was no longer a right, but a 'commodity'.<sup>30</sup>

The drive to privatize health services effectively contributed to the retrenchment of public health expenditure (Table 10). The financial strength of the NHSS dwindled to between two thirds and three fourths of the health system's 1972-1973 peak. This decline determined a higher level of unmet health risk and restricted coverage of the population, as the redistributive role of the NHS faded.

On a per capita basis, there was a yearly decrease in health expenditure over 1974 levels of between 6.2 and 19.6 per cent, which meant that the per capita share fell below US\$25. Salaries, representing 66.5 per cent of NHS expenditure in 1970, had been reduced to 40 per cent by 1974, indirectly because of inflation (over 300 per cent); by 1983, salaries represented only 35 per cent of health expenditure, partly because, by that year, the NHSS had shed approximately 15,000 health workers.

The largest loss was in capital expenditure which precipitated from a maximum of 12.0 per cent in 1974 to 1 per cent (of a far lower budget) in 1983. Today, this hiatus in investment has resulted in old buildings, obsolete equipment, and, in the case of the less-endowed autonomous regional units, even absolute deprivation.

Table 10: HEALTH EXPENDITURE  
(Chile, 1974-1983, in Chilean \$ millions)

	%	1974	1977	1979	1980	1981	1982	1983	%
Public Health Expenditure		13,170	11,657	13,208	13,841	14,758	14,226	12,497	
· Salaries	40	5,301	4,676	5,046	5,040	5,014	4,542	4,396	35
· Goods & services	26	3,386	2,490	2,940	3,183	2,922	3,504	2,776	22
· Transferences	22	2,900	4,155	4,702	5,035	5,945	5,610	5,186	41
· Investment	12	1,583	336	520	583	877	570	139	1
· Direct	-	1,580	219	362	400	567	509	139	-
· Indirect	-	3	117	158	183	310	61	-	-
Population (millions)	-	10.0	10.6	11.0	11.2	11.4	11.6	11.8	-
Health Expenditure p.c.	-	1,317	1,100	1,200	1,236	1,318	1,226	1,059	-
· Variation over 1974 (%)	-	-	-17.5	-8.9	-6.2	0.0	-7	-19.6	-

Source: Castañeda, Tarsicio, *Socio-economic Context and IMR Reduction in Chile*, University of Chile, Department of Economics, 1984.

On the other hand, capital 'liberated' from public use converged to create market-oriented, technologically sophisticated clinics catering to a minority of the population. This model, attractive to many, nevertheless syphoned off additional funds from the general population through high fees. Given the poor quality of public health services, at times only private clinics could provide the required care. The 'organizational multiplier' of the NHS no longer operated, and reductions in health-care expenditure increasingly had a negative impact on the poorest segments of the population.

**Trends in consumption and social expenditure.** The profound socio-economic changes that began in the late-1970s not only affected the 'social stock' of the majority of the population but also their cash flows and purchasing power, determining further declines in consumption and a reduction of public expenditure (Table 11).

Figures for 1981 are similar to the ones for 1970 but vary sharply for education (132 per cent) and housing (40 per cent). In all cases except education, the 1972 figures are much better than those of either 1970 or 1981. From 1981 to 1989 a constant deteriorating trend is evident, even for housing and social security. The positive redistributive role of the State had weakened considerably: whereas social expenditure in 1970 was over 14 per cent of GDP, by 1989 it had shrunk to less than 9 per cent. In health, the 1989 index value falls to about 60 per cent of 1970, a measure of the reduced stature of the once-powerful NHS.

The impact of the state retrenchment was compounded by a deterioration in the purchasing power of the majority of the civil society, beginning in the late 1970s and continuing until 1988. By then, the wealthiest 20 per cent of the population controlled 60 per cent of GDP while the poorest 40 per cent shared a mere 11.8 per cent. This situation

Table 11: SOCIAL EXPENDITURE  
(Chile, 1972-1989)

	65-70	72	81*	82	83	84	85	86	87	88	89
Social Expenditure p.c.	100	151	117=100	106	99	106	103	103	95	96	89
·Health	100	145	108=100	95	76	73	65	59	58	59	58
·Education	100	131	132=100	102	85	85	83	81	73	68	68
·Housing	100	193	40=100	36	67	102	114	114	131	184	125
·Social Security	100	163	89=100	126	143	123	111	89	71	56	45

Sources: Rosselot, Jorge and Mardones Restat, Francisco, 'Survival, Protection and Development of the Child in Chile, CRECES, 1991; and \* Castañeda, Tarsicio, *Socio-economic Context and IMR Reduction in Chile*, University of Chile, Department of Economics, 1984.

contributed to the phenomenon of 'extreme poverty',<sup>31</sup> which is likely to persist beyond the year 2000 and which has triggered a search for new ways of measuring health status rather than just mere survival.

Beginning in 1989, economic constraints began to slacken; 1989 also marked a major turning-point in the long process leading to the restoration of democracy in Chile. A coalition of Christian Democrats and former Popular Unity parties were voted into power, bringing the military regime to an end. The new Government has adopted centrist policies, firmly linked to a market economy. (At final editing of this paper in 1994, a new civilian president has just been sworn in. He is Eduardo Frei Ruizt, the son and namesake of the former Chilean president, Eduardo Frei Montalvo.)

**Public-health programmes.** Food supplementation programmes were incremented during this period. Compared with 1970, there was a 253 per cent increase in the quantity of dietary supplements distributed, which contributed to the 5.8 per cent reduction in the percentage of malnourished children 0-6 years (Table 12). These gains were facilitated by inherited factors such as organizational strength and the improved dietary value of the food distributed. Water and sanitation coverage, which had already improved notably by 1979, reached coverage of 98 and 79 per cent respectively in 1986-1987.<sup>32</sup> The number of prenatal controls continued to rise as did the share of in-hospital deliveries, which grew from 87.4 per cent in 1975 to 97.8 per cent in 1987.<sup>33</sup> Immunization coverage during the 1980s was always over 84 per cent, and often over 90 per cent, for all antigens.<sup>34</sup> Nonetheless, a serious outbreak of measles occurred in 1988, triggering a second large vaccination campaign.

Table 12: SUPPLEMENTARY FEEDING AND THE REDUCTION OF MALNUTRITION  
(Chile, 1970-1986)

	1970	1973	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
a. Dietary Supplements	12.7	21.3	36.9	29.8	28.7	29.2	29.8	30.3	22.0	27.8	30.3	32.1
b. Index	100	168	291	235	226	230	235	239	173	219	238	253
c. % Malnourished Children (0-6 years)	-	-	14.9	13.1	12.2	11.5	9.9	8.8	9.8	8.4	6.7	9.1

Sources: a + b 1970-1982, Castañeda, Tarsicio, *Socio-economic Context and IMR Reduction in Chile*, University of Chile, Department of Economics, 1984; a + b 1983-1986 and c, Rosselot, Jorge and Mardones Restat, Francisco, 'Survival, Protection and Development of the Child in Chile, CRECES, 1991.

**NGO health-care initiatives.** One significant NGO effort was the experimental project initiated in 1975 by the Corporation for Infant Nutrition (CONIN). The project was financed privately and had a budget of US\$9 million for its first three years. Some 30 centres (about 1,500 beds) were opened in all major cities for the treatment of children affected by severe forms of malnutrition and associated infections. By 1983, according to one study,<sup>35</sup> NHSS covered 80 per cent of the centres' operating costs while CONIN was responsible for service delivery. The average age at admission was 5 months. The cost per child per day, in 1983, was approximately US\$6.30. Full treatment was estimated to cost about US\$600 per child, based on an average stay of 90 days (compared with an average hospitalization of less than 10 days). From almost 100 per cent, mortality rates for children with severe malnutrition plummeted to 2 per cent. A 1992 evaluation found that approximately 50,000 children had been treated at these centres in little over 12 years, representing a total cost of US\$25 million.<sup>36</sup> CONIN now has a staff of 1,400 and can count on 2,300 volunteers.

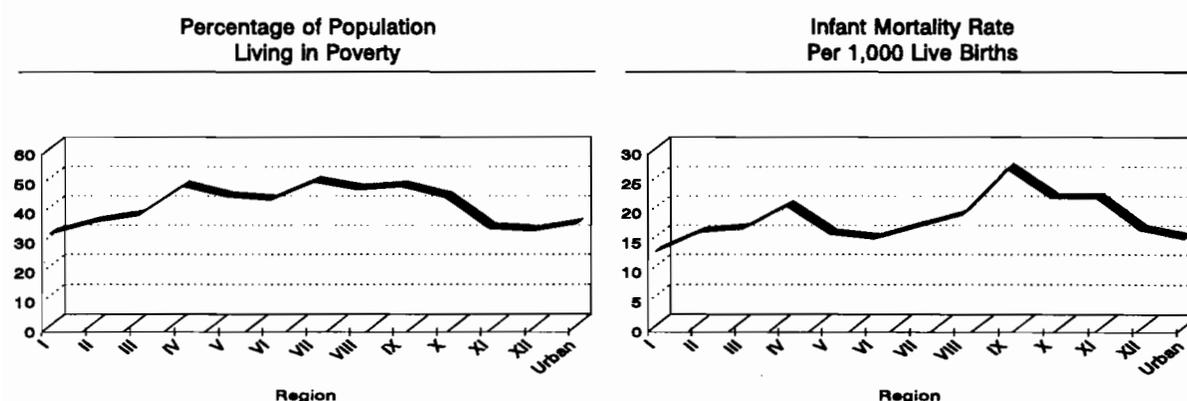
Other NGOs tackled malnutrition through widespread media campaigns encouraging breastfeeding as an effective way of limiting the risk of infection, diarrhoea, dehydration and death. By 1992, 52 per cent of all new mothers breastfed their children for three months or more, compared with only 19 per cent in 1974.

**Health Outcomes.** Although the downward trend in infant mortality continued during this period, the pace was much slower, mainly because of the low risk rates already attained. IMR dropped from 31.8 per 1,000 live births in 1980 to 14.6 in 1991, a 54 per cent reduction in 12 years or an average yearly reduction of 4.5 per cent. Major declines occurred at the beginning of the period, whereas from 1984 to 1988 IMR hovered between a high of 19.6 and a low of 18.5. This impasse was broken in 1989 when regressive policies started to relax.

Regional disparities in IMR are notable. Regions V, VIII, IX and X and urban areas, considered together, accounted for over 3,200 infant deaths in 1990, or 60 per cent of the total. The different regions are oriented from north to south and thus also provide a geographical profile of risk rating. There is a close correlation between the percentage of population living in poverty and IMR (Figure 3).

From 1970 to 1985, infant deaths attributable to acute respiratory infections and diarrhoea diseases were reduced by 88 per cent and 95 per cent respectively (Table 13). In spite of this enormous progress, further reduction is still possible, especially with regard to

Figure 3: INFANT MORTALITY BY REGION  
(Chile, 1990)



Mardones Restat, Francisco and Diaz, M., *A Proposal for Classification of the Country (Chile) by District*, UNICEF, Santiago, 1990.

respiratory disorders which require both at-home preventive care—as in the case of physical obstruction—and medical attention. Neonatal mortality now forms the largest share of IMR, indicating a shift to congenital rather than environmental causes of infant mortality.

In terms of nutrition risk, between 1977 and 1985, the share of malnourished children 0-6 years of age was reduced from 14.9 to 6.7 per cent; in 1986, figures again rose to 9.1.

Table 13: MAIN CAUSES OF INFANT MORTALITY\*  
(Chile, 1970-1985)

	1970	%V	1982	1983	1984	1985	%V	%R
Acute respiratory infections	28.9	35.1	2.9	3.3	3.4	3.4	17.4	-88.3
Diarrhoeal diseases	15.3	18.6	1.2	1.1	0.9	0.7	3.6	-95.4
Pregnancy/delivery complications	11.3	13.7	7.7	7.8	6.5	5.0	25.6	-55.8
Ill-defined and others	10.6	12.9	5.6	4.1	3.5	3.7	19.0	-65.1
Low birth weight	3.2	3.9	0.4	0.4	0.4	1.5	7.7	-53.2
Congenital anomalies and other non-reducible causes	3.6	4.4	4.1	3.7	3.7	3.9	20.0	+8.3
Sub-total	**	88.6					93.3	
Total IMR	82.2	100.0	23.6	21.9	19.5	19.5	100.0	-76.3

Source: Abstracted from Vargas, N. and Quezada, L., 'Infant Mortality: Recent Trends and Identification of Regions and Causes of Higher Risk', *Chilean Pediatrics Magazine*, Vol. 59 (2); p. 122-128.

\* Rate per 1,000 live births. \*\* At variance because of difference sources and calculation procedures (NHS, not NHSS).

Malnutrition remained virtually at that level until 1990 when it fell to 7.4 per cent.<sup>37</sup> That improvement can be partly attributed to reforms undertaken by the new civilian government, including the reinstatement of free services targeting mothers and children according to 'need' and the decentralization of the NHSS to the municipal level. Further progress was made in 1991 when the supplementary feeding programme for children under two years of age and pregnant mothers was restored on the basis of new resources made available by the Tax Reform Law enacted that year.<sup>38</sup>

A recent nutrition study (Table 14) shows a steady decline in malnutrition between 1960 and 1989. Severe malnutrition, already only 0.2 per cent in 1980, decreased to 0.1 per cent in 1989. In 1990, it was estimated that 57.3 per cent of all malnourished children were in the 2-5 years age-group; in other words, they were born during the 1986-1988 period when regressive policies reached their apex. Children aged 12-23 months accounted for only 17.2 per cent of malnourished children, and infants for 18.3 per cent.

### New Monitoring Indicators

In a statement that should apply to every child who has been given the right to life, Mardones Restat has recently stated:

There is reason to recognize that a community that has successfully treated a child or prevented his or her death acquires a new commitment towards that child—that is to provide the child with living conditions that will support his or her full human development.<sup>39</sup>

Table 14: MALNUTRITION AMONG CHILDREN 0-6 YEARS OF AGE  
(Chile, 1960-1989)

	1960	1970	1980	Variation 1970-1980 (%)	1989
Mild	31.1	15.8	10.0	(37)	7.9
Moderate	4.1	2.5	1.4	(44)	0.5
Severe	1.8	1.0	0.2	(80)	0.1
Total	37.0	19.3	11.6	(40)	8.5

Source: Monckeberg, F., 'Integrating National Food, Nutrition and Health Policy: the Chilean Experience' in Kotlev, N. (ed), *Frontiers on Nutrition and Food Security*, Smithsonian Institute, 1992.

Yet the struggle to ensure the right of survival to as many children as possible often overshadows this broader issue, which is the need for the community to acknowledge the child's right to health and to an adequate quality of life.

1. **Child health vulnerability.** Because morbidity risks have persisted after IMR decline while public expenditure has diminished, more accurate planning according to need is necessary to achieve a cost-effective allocation of scarce health resources. One special technique developed to determine child health vulnerability involves geographical differentiation by **biomedical** and **socioeconomic** risk.<sup>40</sup> The former is appraised through three variables:

- low birth weight;
- inadequate weight gains; and
- malnutrition.

Seven variables are used to define socio-economic risk at district level:

- percentage of mothers with low level of schooling at child's birth;
- percentage of mothers with low level of schooling when child enters first grade;
- global district illiteracy;
- percentage of children in first grade benefiting from scholastic supplementary feeding programmes;
- percentage of children in first grade with low height for age;
- percentage of district's population living in extreme poverty; and
- percentage of children aged 0-5 years in the district.

Together, biomedical and socio-economic factors account for 65.3 per cent of the risk variance (14.5 and 50.8 per cent respectively)—that is, vulnerability to factors that impair child health.

Through the use of this technique it was found that a startling 218, or 71 per cent, of all districts of the country presented high or very high socio-economic risk; at the other extreme, only 51, or 17 per cent, of the country's districts had low or very low vulnerability levels. The high-risk categories include 40 per cent of the population under 6 years of age. When, despite an average national IMR of 14.6 per 1,000 live births, 40 per cent of children in the 0-6 years age-group are **not** protected from high vulnerability, it could be considered that their right to health is far from being fulfilled.

In six out of 13 regions (Coquimbo, O'Higgins, Manle, Bio-Bio, Araucania, Aysen) vulnerability was high for 40 per cent of the children in at least 80 per cent of the locations. One region, Araucania (named after its predominately aboriginal population) was found to be 100 per cent unsafe. In 76 districts, mainly in the capital region, the biomedical risk was much lower than the socio-economic risk, which signified that the quality of care partially offset the environment. Conversely, in 91 districts biomedical risk was higher than socio-economic risk, possibly because of deficiencies in the now-impooverished health services.

Utilizing different variables but arriving at a similar ranking, another study found that 57 per cent of the regions were characterized by social well-being and 43 per cent by severe social fragility.<sup>41</sup> Again, Region IX - Araucania - was identified as the area whose population was at highest risk.

2. —**Child growth failure:** Although the statistical record is unbroken from 1975, it is centered on early **detection** rather than **prediction** of growth failure. A computer-based methodology has been developed which has shown that growth failure can be predicted from as early as 3 months of age.<sup>42</sup> Risk-prediction variables are divided by 'biomedical risk' (including such factors as inadequate weight-for-age at 90 days, maternal height below 150 cm or maternal age below 18-years-old) and social-economic indicators (such as standard of housing or kind of fuel used).

3. **School failure and supplementary feeding.** Efforts have been made to identify indicators that would facilitate monitoring the evolution of the surviving newborn. One method links school failure and stunted physical growth.<sup>43</sup> As the correction of food intake is known to improve both physical indicators **and** learning achievement, food supplements are allocated to schools with large concentrations of shorter-than-average young children.

The targeting of especially vulnerable schools for supplementary feeding programmes has also been facilitated by the so-called LOGIT ('logistic regression') system, introduced in 1989. The variables of the LOGIT technique include:

- percentage of mothers with less than 8 years of schooling;
- percentage of pupils in double shifts;
- percentage of fourth-graders below standard height per age;
- percentage of students under the age of 7 years in first grade; and
- school in rural or semi-rural area.

Teachers, who are in a better position to know the needs of their pupils, are given responsibility for identifying individual beneficiaries. As a result of the LOGIT procedure, about 527,000 daily rations had been distributed by 1991. A new ethics has therefore emerged, which requires that the everyone's basic needs be fulfilled, but that more be given to those most in need.<sup>44</sup>

Health is a daily affair. The measurement of recurrent 'departures' from that state into the realm of ill-health and outright disease requires updated techniques. However, except for a few 'communicable' diseases, records of morbidity episodes are nonexistent. It is very difficult, therefore, to determine how much healthier children have become over time. Complementary research is required, which might help to measure, among many other factors, school absenteeism, daily well-being and 'non-disease'. This would reflect the true value of the 'right to health', not to speak of human development in its larger significance of maximizing human potential in terms of physical strength, intellectual outreach and emotional enhancement. This knowledge might lead to improved behavioural patterns and originate, sooner rather than later, an ethos of 'Children First'.

#### IV. THAILAND: CHILD HEALTH AND THE DEVELOPMENT OF COMMUNITY-BASED HEALTH SERVICES

##### Introduction

The progressive fulfilment of children's right to health—and to life—in Thailand is the expression of a culture characterized by a holistic way of thinking. The sectoral and specialized approach typical of Western thought has little prominence in Thailand. Individuals and communities are in harmony with their environment and, indeed, with a more transcendental and spiritual realm, including in terms of the after-life. The Thai approach to both child care and health is rooted in this tradition, even though tenets of modern medicine are progressively being adopted. A uniquely Thai synthesis has ensued, which provides a good example of the sequencing of the right to health by **organizational level** to the benefit of the majority.

What perhaps could be considered the beginning of this synthesis were the several attempts at testing forms of expanded service delivery at the local level initiated in the mid-1960s. As one key actor analysed in 1980:

While the Ministry of Public Health (MoPH) was aware of the problems, a greater emphasis on the expansion of health services system by itself could do little to improve the situation. There was no concept of a 'multisectoral' approach at that time. The things that the Government could do were: to establish more health centres at *tamboon* (subdistrict); to establish more district hospitals; to establish more posts for doctors or health personnel in rural areas; to readjust the budget in favour of health centres and district hospitals; and to give special incentives to doctors to work in rural areas. Since the MoPH share of the national budget was so low (about 2-3 per cent; now it is about 4 per cent), these new activities made very slow progress.<sup>45</sup>

In the 1960s, the MoPH initiated several experimental projects, which rapidly demonstrated that inadequate community participation was a limiting factor. Subsequently, to test different aspects of community-based health services, projects were started—by the government alone or in partnership with WHO and the United States Agency for International Development—at Pitsahulokke (1966), Saraphi (1968), Korat,<sup>46</sup> Sa-Merng, Lampang (1974) and Mae-Hong Sorn (1977), among others. Given the still-high fertility levels in Thailand, the child component was paramount in all of these projects. Thus, by the time primary health care made its official debut at the 1978 Alma-Ata meeting, the Thai experience had much to offer. In fact, the Lampang project was among the projects reviewed in the basic world survey of innovative health interventions carried out prior to the meeting.<sup>47</sup>

It was, however, the Saraphi project that proved to be the most fruitful, as it tested, in separate villages, the concept of both village health workers and village health communicators. These volunteers would form the cornerstone of the future PHC system of Thailand. In contrast, the *wechakorn* concept tested at Lampang—that is, a registered nurse with an additional two years of training in pathology diagnosis and treatment—was never fully replicated. With six years of university training, a *wechakorn* differed only marginally from a physician in terms of length and cost of education, but was all too similar in terms of social aspirations and likely migration patterns.

Mo (Dr.) Pricha, successively Project Manager of the Saraphi, Lampang and Mae-Hong Sorn projects, became the first PHC Director-General when the post was created in 1981. High infant mortality was part of the rationale for undertaking PHC experimentation. In 1965, Thailand's IMR was 84.3 per 1,000 live births. By 1981, it had become 41, and by 1992,

27 per 1,000, representing an average 2.8 per cent reduction per year.<sup>48</sup> Mild malnutrition of children under-5 years of age also dropped, from 51 to 26 per cent between 1982 and 1992.

These impressive achievements reflect steady improvements in the quality of life. Life expectancy at birth has risen, from 52 in 1960 to 69.0 in 1992.<sup>49</sup> Progress in reducing regional disparities has also been made, although child mortality remains higher in the north, north-east and south than in the central region. Rural-urban differentials are still great. In fact, data show that IMR is directly correlated with distance from urban centres, notably from the Bangkok Metropolitan Area (BMA), located in the central region.

Perinatal problems remain major killers, with gross disparities between rural areas, at 2.96 deaths per 100 births, and urban ones, at 0.34 per 100. The main neonatal disorders among Thai infants are congenital anomalies. Nationwide, post-neonatal mortality and morbidity are largely due to diarrhoeal diseases, whereas pneumonia accounts for 30-40 per cent of out-patient visits at general hospitals. Both diseases can be prevented through greater emphasis on safe water, sanitation, the promotion of maternal and child care, and health education.

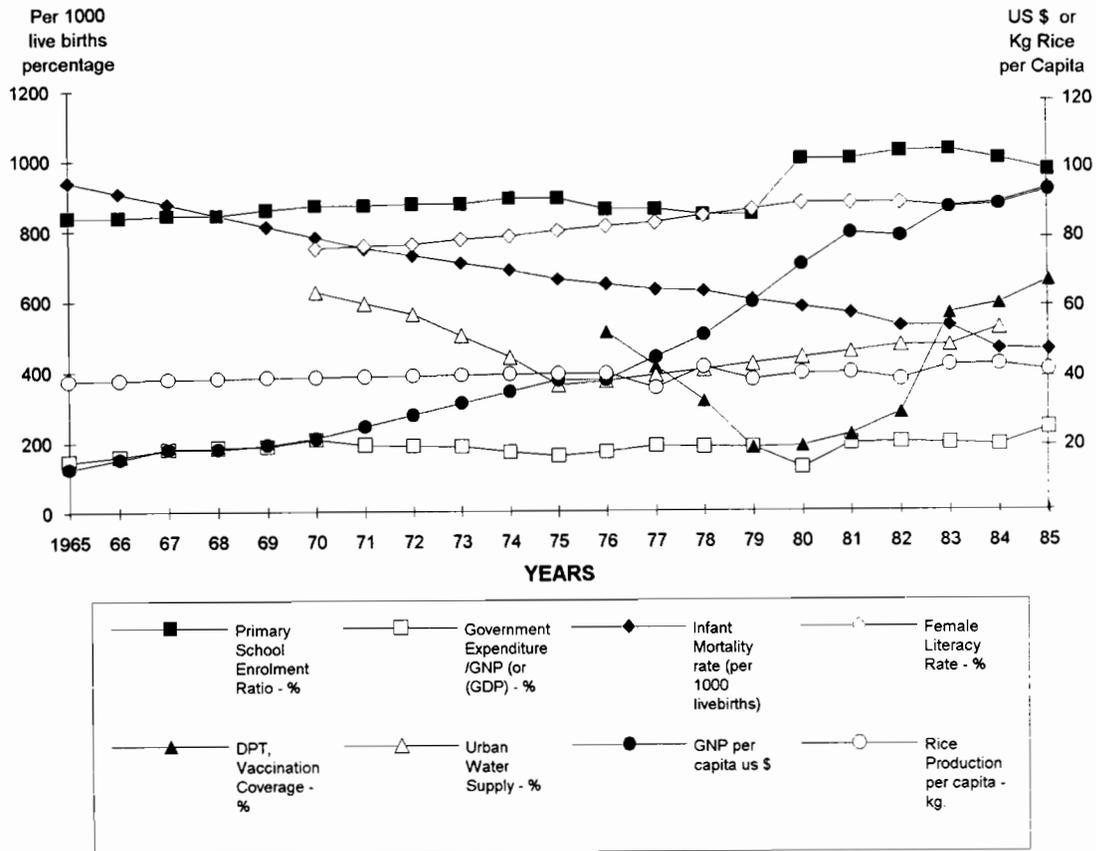
Figure 4 summarizes Thailand's development situation. It can be observed that IMR and gross national product (GNP) curves crossed in 1979, roughly at levels of 65 per 1,000 live births and US\$ 650 per capita.

### **An Overview**

1. **Economic Trends.** Thailand is currently one of the fastest-growing economies in South-East Asia. It achieved two-digit growth rates during the late-1980s and a real GDP growth of 8.1 per cent in 1992. During the 1980s, sufficient resources were generated to permit increases in public health expenditure and the promotion of the social policies contributing to the steep fall in infant mortality.

The fifth National Economic and Social Development (NESD) Plan (1982-1986) adopted a full-scale structural adjustment programme to reverse macroeconomic imbalances such as budget and trade deficits. Changes in the world economy (notably the decline in oil prices), heavy foreign investment in terms of capital and technology, and the availability of skilled and inexpensive manpower were among the forces enabling Thailand to increase its international competitiveness, boost its exports, and achieve a 10 per cent annual growth by

Figure 4: DEVELOPMENT INDEX GRAPH (DIG)  
(Thailand, 1988)



Source: UNICEF/ESCAP, Bangkok, 1988 *Asian and Pacific Atlas of Children in National Development*.

1988. The Thai Baht has remained, with minor fluctuations, tagged to the dollar at US\$1 to Bht 25 since the late-1970s, a rare case of stable parity.

Although tourism has been important for Thailand's economic growth, and the agricultural sector has recuperated ground thanks to increases in the prices of several commodities, the most significant contributor to GDP has been the industrial sector. Textiles, jewelry, integrated circuits, canned food and other manufactured goods were largely responsible for doubling exports between 1985 and 1988 and now account for 50 per cent of total exports. Manufacturing, however, represents only 10 per cent of formal employment.

Investment remains concentrated in the central region, mostly in BMA, a bias that has generated two economies within the country: one based on agriculture, whose most

significant contribution is as the nation's main employer; and a fast-growing, dynamic, exports-led manufacturing economy, which pushed per capita GDP to US\$1,840 in 1992, for a country of 57 million inhabitants.

Since the 1970s, Thailand has combined economic growth with a focus on social development, which was initially expected to result from the 'trickle-down' effect. However, by the 1980s, a greater emphasis was placed on the reallocation of social expenditure and better targeting of the poor, within a framework of market liberalization.

Although the services sector has increased in size and importance, Thailand remains predominantly rural, with 67 per cent of its labour force employed in rural areas. This means that a large proportion of the population—notably women and children—remain dependent on seasonal labour, with semi-idle periods at certain times of the year.

Some workers migrate to cities in search of work in the vast informal sector. In fact, the powerful informal economy was responsible, together with tourism and an active services sector, for the impressive decline in urban poverty, which plunged from 12.5 per cent in 1975/1976 to 5.9 per cent in 1985/1986. Overall poverty, on the other hand, did not decline during that period and even experienced a slight increase prior to 1980/1981, reflecting the growing numbers of rural poor.

## **2. Sociocultural context.**

— **Buddhist ethics.** Buddhism is practised by 95 per cent of the population (there is a small Moslem minority in the five southernmost provinces) and is a fundamental part of daily life in Thailand. Buddhist principles, which emphasize self-denial and compassion, define the individual's approach to all aspects of life and give him or her a sense of belonging to the community and a feeling of solidarity with others. The four main needs recognized by Buddhism are food, shelter, education and the provision of health services.

Every male is expected to spend a minimum of three months of adult life in monkhood. Monks play a leading role in village life. Temples are present throughout the country, village by village, and have always been the centre of all collective activities. They serve, among other purposes, as a place for rest and prayer, as a shelter for the abandoned and the ill, as schools, as informal law courts where the poor can obtain help in settling disputes, and as community centres. The Hinayana (or 'small vehicle') Buddhism practised in Thailand emphasizes action rather than contemplation. Thus, ethical principles are practised daily, by giving alms to monks, showing solidarity with others and keeping to the

'middle path' of the 'four noble truths'.<sup>50</sup> These values provide a widespread, centuries-old mechanism to support and stimulate solidarity and community involvement.

— **A monarchic tradition.** Thailand inherited the hierarchical structure of Indian society. The smallest unit of this structure is naturally the family. The child is brought up in an environment that emphasizes authority, responsibility and the respect of elders. These principles are mirrored at all subsequent levels of society, thus forming a cohesive structure. The King is the ultimate authority, a role created by 200 years of dynastic tradition, the last 40 of which corresponding to the reign of His Majesty Bhumibol Adulyadej, the ninth in the dynasty. The King inspires the respect of his subjects through his own good example and sense of responsibility towards his people. The son of a physician and a registered nurse, he has long promoted community health, lending invaluable support to advocacy efforts; an engineer by profession, educated in Switzerland, he has 'crown' development projects throughout the country, which he, the Queen, or the Crown Prince and Princesses monitor continuously.

The pattern of respect is repeated at the local level, where people trust their community leaders, who are thus capable of rallying community resources and inspiring efforts on behalf of the collectivity.

—**A sense of community.** The population of Thailand remains mostly rural. Although attached to tradition and, especially in villages, part of a social network that revolves around the extended family, Thais have modernized all aspects of their lives. In a curious reversal of patterns prevalent in other countries, the urban culture (with its emphasis on entertainment, clothing, marketing, social relations and other non-traditional values) has invaded the countryside. This process of modernization has helped to stabilize the rural population by checking indiscriminate rural-urban migration (except for the unarrestable flux of migrants to Bangkok). The rural population has represented more than 80 per cent of the total population for the past 25 years: 87 per cent in 1965; 82 per cent in 1985;<sup>51</sup> and only slightly less (81 per cent) in 1990.

These factors have contributed to perpetuating a highly organic society whose members place the community at the centre of their individual priorities and responsibilities. There are many opportunities for participation in community life through the Village Development Council sub-committees (on women, children or drug cooperatives, for example).

—**Social stratification.** Thailand's population of 57 million is 82 per cent ethnic Thai. Minority groups include Malays (3.7 per cent), Chinese (5.7 per cent), several nomadic groups (hill tribes, 0.9 per cent) as well as the token presence of Indians, Lao, Mon and Burmese.

Four main geographic regions have uneven population shares: one third of Thailand's inhabitants live in the north-east; one fifth in the northern region; one eighth in the southern region; and a final one third is concentrated in the central region.

In 1985/1986, the proportion of poor in the country reached 29.5 per cent.<sup>52</sup> Studies undertaken at that time showed that the richest 20 per cent of the population controlled 55.6 per cent of the national income,<sup>53</sup> and that income disparities were widening.

—**Geographical disparities.** The majority of the Thai people live in small rural villages of about 80 to 100 households each. Two thirds of the urban population live in BMA, a distribution that clearly attests to past biases in development policies and uneven opportunity-creation. Indeed, resources have been concentrated in BMA and the central region to the detriment of the rest of the country. Although only accounting for 15.5 per cent of the population, BMA produces 45.5 per cent of the country's GDP and contains 75 per cent of its manufacturing capacity. The north-eastern region remains the poorest, with a per capita GDP 7.3 times lower than that of BMA, despite its 34.9 per cent share of population. This region's inhabitants form a subculture, with their own dialect. The Muslim groups of the southern provinces and the hill tribes of the north are minorities, which are clearly less well-served and slower to modernize, even if parallel—but simultaneous—schooling in their own languages is permitted, if not encouraged.

Rural-urban disparities remain notable. According to 1985/1986 studies, 'three times as many rural as urban under-fives died from diarrhoeal diseases, haemorrhagic fever and heart disease, and twice as many died from acute respiratory infections, accidents and injuries'.<sup>54</sup> Given the accelerated pace of IMR declines in the last five years, these disparities may have been somewhat attenuated.

The sixth NESD Plan (1987-1991) made a systematic effort to redress imbalances by directing resources away from BMA and towards the rural areas. Recent budget allocations show this effort, including in the social services, most notably health.

—**The politics of 'military coups' and the emergence of democracy.** Thailand's political evolution, as well as its image, is marked by a distinct military seal, which often obscures the 'real' interplay of social actors that have led to a particular trajectory. Between 1932, when the Constitutional Monarchy was established, and 1957, 10 military uprisings took

place: four successful 'coups' and six aborted attempts, or 'rebellions'.<sup>55</sup> Two military dictatorships followed, brought to an end only in 1973 by the most widespread of all uprisings to date, led by university students. Political analysts attribute this event to the emergence of a 'true' middle class — whose origins are traced back to the reformist efforts in the late-1940s of another military ruler. In 1973, this middle class triumphed over the military and its closest ally, the bureaucracy, the two bulwarks of traditional power in Thai society. Civilian rule lasted until 1976, when a new 'reactionary' coup took place, followed by coups and rebellions in 1977, 1981, 1985, 1991 and 1992. Some analysts have concluded that the only deterrent to additional violence in the intervening periods has been the lack of unity among the military, rather than the increasing awareness of the middle class, at least until 1992, when civilians opposed another twist of the 'demi-democracy'<sup>56</sup> and stopped the take-over of a non-elected military Prime Minister.

This digression into political analysis is pertinent here because of the divergence between the above events and the evolution of development planning, which was initiated in 1962 during military rule and included the social development policies of the fourth NESD Plan (1977-1981), drawn up and initiated in the interim between the two ideologically opposed coups of 1976 and 1977. Residents of Thailand at the time could not help but wonder how the bureaucratic system and the civil society managed to remain immune to this turmoil. Paradoxically, many of the most innovative measures of PHC were approved after the 1978 Alma-Ata Conference, in a context where human rights were flagrantly being violated. And yet, the seeds of structural respect for those rights—especially the rights of children and including their right to health—were planted at this time **without opposition**. The 'basic minimum needs' approach was quickly approved by the NESD Bureau and the outcome of the Social Development Project submitted for approval to a Prime Minister and cabinet who were representatives of the same military that had violently usurped the government. The void between the realm of opportunistic, non-democratic power and the steady progress of the civil society—based on education, transcendental values and the traditional concepts of solidarity—seems to have created a major opportunity for the fulfilment of certain rights. This strategic juncture needs to be duly valued, as it seems to point to the existence of an 'ethos' that is strong enough to override even the most severe forms of social violence.

**3. The impact of development plans (1962-1987).** The first two plans (1962-1966 and 1967-1971), called 'National Development Plans' and drawn up under military rule but in the absence of turmoil, gave full priority to economic growth. Policy-making and investment were directed towards improving Thailand's productive capacity through infrastructural development, incentives for industrial expansion, urbanization and the provision of social services. Some results were obtained: per capita GNP, for example, climbed from US\$120 to US\$200; and family planning was started in 1970.

Faced, however, with insufficient improvements in the living standards of the majority of the population, decision makers opted for a balanced growth strategy, focusing simultaneously on income generation and income distribution.

The third NESD Plan (1972-1976), also framed under military rule, thus included social development as both a goal and a means of economic growth. The corresponding budget allocation jumped from the 43 per cent approved in the second National Development Plan to 55.2 per cent, with specific emphasis on health and education. By 1976, per capita GNP had risen to US\$390.

In addition to the negative consequences of the civil turmoil within its boundaries, Thailand faced economic difficulties because of the 1973 world economic crisis. During the drafting phases of the fourth NESD Plan (1977-1981), a strong right-wing contingent succeeded in cutting allocations for social development back to 49.4 per cent. Actual implementation was, however, rather different. By 1981, per capita GNP had increased to US\$526, causing substantial declines in the numbers of people living in extreme poverty and consequently in infant mortality, which decreased from 60.1 per 1,000 live births in 1976 to 53.1.<sup>57</sup> However, the gap between rural and urban incomes was still wide in 1980: US\$450 a year compared with an average of US\$1,200 for the population as a whole.<sup>58</sup>

The fifth NESD Plan (1982-1986) added the Social Development Project. Based on a 'basic minimum needs' approach, it put in place a series of policies benefiting children through the eradication of rural poverty, the promotion of community participation, and the reallocation of development resources to the most disadvantaged. The Plan included a special section for promoting women's development,<sup>59</sup> which stressed women's important economic contribution and maintained that development measures would yield positive results in terms of the health of both women and children. During this period, the National Rural Development Plan (NRDP) was articulated, targeting 286 of the poorest rural *amphorn*

(districts). Poverty alleviation programmes emphasized job creation, village activities and basic services.<sup>60</sup>

The NRDP made it possible to monitor and coordinate all resources (private and public) destined for rural areas. Its work was carried out under the direct responsibility of the Prime Minister and in close intersectoral cooperation with the Ministries of the Interior, Agriculture, Education and Public Health. By 1986, poverty had declined in 12,562 villages. Progress was also made in checking population growth, which fell from an annual rate of 2.1 per cent in 1971 to 1.7 per cent in 1986.

The sixth NESD Plan (1987-1991) allocated the highest-ever share of the budget to social development (56.2 per cent), increasing amounts for education by 8 per cent and for health by 13 per cent.

A detailed National Child and Youth Development Plan analysed national trends and problems, suggested courses of action and gave specific targets by age-group (0-5, 6-14 and 15-25 years). The Plan is under the responsibility of the National Youth Bureau (NYB), which, although attached to the Prime Minister's Office, has no say in budget allocations.

### **Health Services Delivery System and PHC**

1. **The system.** Health care delivery in Thailand can be divided into three main groups: public health services under the MoPH responsibility; other public services supported by non-MoPH funds; and private-sector services:

— **Public health services under the responsibility of the MoPH.** The formal public health system forms a pyramid with wide base at the sub-district level, which progressively narrows at the district, provincial and regional levels:

- **Sub-District (*Tamboon*) Level** (7,465 health centres in 1986 for 6,283 *tamboons*, and close to 25,000 drug cooperatives). Health centres are staffed by a midwife and a person in charge of sanitation; both often own motorbikes which extend their outreach considerably. One health centre is responsible for an average of 3 to 10 villages, and often includes a community-run pharmacy. By 1990, there were 7,874 health centres, surpassing the number of subdistricts which stood at 7,005.
- **District Level** (509 district hospitals in 1986). A district, formed by 7-10 *tamboons*, usually has a hospital with 20 to 30 beds and one doctor to service an average of 50,000 people. In 1986, there were hospitals in 86 per cent of the country's districts;

by 1990, they numbered 680.<sup>61</sup> The expansion of district hospitals was financed in the late-1970s by community contributions made as a gift for the wedding of the Crown Prince. Health centres and district hospitals refer the more complicated cases to the provincial level.

- **Provincial Level** (72 provincial hospitals in 1986). Each of the 72 provinces has a provincial hospital which includes laboratory facilities, at least four main medical specializations and often several sub-specializations as well.
- **Regional Level** (17 regional hospitals in 1986). Each regional hospital has an average capacity of 500 to 1,000 beds.

The health centres link up with a volunteer system at village level formed by village health volunteers who man health posts and village health communicators in charge of 'communication rooms'. The ratio of village health volunteers to communicators is approximately 1 to 10. By 1989, 62,000 health volunteers and 589,000 health communicators had been trained.<sup>62</sup>

A parallel system of sanitary 'districts' looks after environmental health components.

— **Other public services supported by non-MoPH funds.** Other public agencies, including the university system and various ministries, have health facilities geared to the needs of their own employees but which also offer some services to the general public.

— **Private-sector services.** During the past decade, improved standards of living have led to increased demand for private health care, but mainly in urban areas. Large private companies paying for their employees' health care (third-party payments) represent less than 1 per cent of total health expenditure.<sup>63</sup> Private household expenditure accounts for two thirds of total health care expenditure in the country, mostly in the form of purchase of over-the-counter drugs. By 1990, there were 2,679 physicians and 1,827 midwives in private practice nationwide as well as 9,251 pharmacies, about 40 per cent of which had a resident pharmacist.<sup>64</sup>

Between 1970 and 1985, changes were evident in the patterns of use of health facilities: 32.5 per cent of the population utilized public hospitals in 1985, compared with 11.1 in 1970; and 14.7 per cent utilized health centres, up from 4.4 per cent. In contrast, only 21.8 per cent utilized private hospitals, less than the 1970 share of 22.7.<sup>65</sup> During the same period, the incidence of self-treatment fell from 51.4 to 28.6 per cent of the population.

**Resource distribution for health.** Health expenditure accounted for 10-12 per cent of the national budget throughout 1970-1990 (12.1 per cent in 1990).<sup>66</sup> Although oscillating over those two decades, public health expenditure averaged about one third of total health expenditure and was clearly surpassed by private household expenditure, which fluctuated between 66 and 73 per cent of the total. The MoPH share of the national budget, which was 20 per cent in 1978, had shrunk to 14 per cent by 1987. Other government sources covered about 11 per cent in both years. On a per capita basis, public expenditure in health jumped from US\$1.40 in 1970 to US\$9.30 in 1985.<sup>67</sup>

In spite of increased budget allocations to the MoPH, its share in total expenditure continues to diminish. This phenomenon is attributed to rising standards of living which have caused household health expenditure to grow at a faster rate than household income.<sup>68</sup> It is likely that these trends have translated into increased demand for selected private, and more expensive, services and contributed to the boom in per capita pharmaceutical expenditure which rose from US\$8 in 1976 to US\$13 in 1982.<sup>69</sup>

The MoPH has 10 programmes, the three largest of which account for 87.5 per cent of the total budget, with a predominance of curative medicine. By far the largest programme is clinical medical care (which receives 50 per cent of the total budget), followed by health promotion and communicable disease control.<sup>70</sup> This financial structure may be necessary to permit adequate referral and keep pace with technological progress.

Coinciding with the poverty alleviation efforts being made primarily in rural areas, health resources have been more evenly distributed. Health centres and primary health care staff, for example, have been concentrated in rural rather than urban areas. Nonetheless, the population-personnel ratios (Table 15) have not experienced major changes, even if the still-remarkable disparities between BMA and the rest of the nation have definitely narrowed.<sup>74</sup>

The relative stability of these ratios is indicative of the impact that village health workers and communicators have had as a well-distributed and cost-effective human resource, which complements and often compensates for more academically qualified personnel.

Using another indicator—hospital beds per population—studies have shown that the distribution of **district hospital** beds closely parallels population distribution. This is not the case for **provincial hospital** beds, 74 per cent of which are concentrated in the central region. Moreover, as provincial hospitals employ 49 per cent of the nation's physicians and nursing staff, the central region also has a disproportionate share of medical professionals. Aggregate

Table 15: RATIO OF POPULATION TO HEALTH PERSONNEL  
(Thailand, 1977 and 1984, By Province)

Ratio	Thailand		BMA		Other Provinces	
	1977	1984	1977	1984	1977	1984
Population/medical doctor	7,503	6,254	1,289	1,512	17,117	10,740
Population/nurse	2,852	1,583	564	501	5,405	2,224
Population/midwife	5,842	5,878	8,098	7,536	5,658	5,711

Source: Kiranandana, Thienchai and Tontisirin, Kraissid, 'Eradicating Child Malnutrition: Thailand's Health, Nutrition and Poverty Alleviation Policy in the 1980s', *Innocenti Occasional Paper*, EPS 23, UNICEF International Child Development Centre, Florence, Italy, 1992.

data for all hospitals indicate improvements in the ratio of hospital beds to population: from one bed every 1,067 inhabitants in 1977 to one every 879 in 1984, even if, in this case, the ratios are more favourable in the other provinces (1:354) than in BMA (1:749).

A major effort to redress these imbalances is represented by the Free Medical Care Programme. Through this programme, budget allocations are made to all government health units in different ministries and municipalities to finance free medical services for the poorest 20 per cent of the population.

**The position of children in service delivery.** Because of steep declines in fertility between 1970 and 1990, the percentage of children aged 0-15 years in the total population fell from 45 to 33 per cent. Moreover, improvements were notable in child morbidity. In 1970, children aged 0-6 years accounted for 26 per cent of the country's morbidity, even though they constituted only 16 per cent of the population. Crude (overall) morbidity rates for this age-group were 3,000 per 1,000, but could reach 3,550 per 1,000 for children under-six in the urban north-east; they compared unfavourably with rates for the total population, which were only 2,000 per 1,000 but still much lower than the maximum of 6,000 per 1,000 reached for inhabitants of the rural central region over 65 years of age.<sup>72</sup>

Institutional records show that the main causes of morbidity among children aged 0-6 years in 1973 were acute respiratory infections (77.3 per 1,000), malaria (67.8 per 1,000), bronchitis (43.9 per 1,000), haemorrhagic fever (40.8 per 1,000) and unspecified wounds (31.3 per 1,000). Diarrhoeal diseases represented 15.5 per 1,000,<sup>73</sup> and were clearly underestimated as most episodes did not reach institutional care. Morbidity rates among this same age-group for vaccine-preventable diseases were 8.5 per 1,000 for tetanus, 9.4 per 1,000 for measles, 8.6 per 1,000 for diphtheria and 3.1 per 1,000 for polio. In 1986, the morbidity rate for tetanus

was still 8.6 per 1,000 for tetanus, but only 2.9 per 1,000 for diphtheria.<sup>74</sup> The incidence of diarrhoeal diseases had increased to 35.7 (from 15.5 in 1970), but this probably reflected the availability of much-improved statistical records.

Child-related health services include the prenatal care of mothers, professionally attended deliveries, immunizations, growth monitoring, well-baby clinics, morbidity treatment and school health services.

By 1986, an average of 83 per cent of all pregnant women nationwide received some form of prenatal care.<sup>75</sup> Maternal mortality had declined to 0.3 (from 4.2 per 1,000 live births in 1960), with a range from 0.7 in the southern region to 0.5 in the northern region.

Substantial progress towards guaranteeing children's right to survival and health has therefore been made. Children benefit directly from PHC services available at the local level. Moreover, morbidity can be treated almost totally at this level, with guaranteed referral to the next levels of health care when needed.

Given a situation of relatively scarce resources and the felt responsibility to satisfy the minimum needs of the majority, the PHC approach has allowed the MoPH to guarantee access for all to effective and low-cost care.

**2. Policy change and PHC.** Building on the social and political importance of the community in Thailand, the Government has, since the early 1960s, relied on community participation to make fullest use of local potential for the generation and provision of health services in rural areas. As discussed, several PHC pilot projects served as the basis for the national health policy. The main principle adhered to was community mobilization for health care, starting at the household level where household members were given the means and information to undertake self-health care.

**a) PHC and the 'quality of life'.** The application of PHC in Thailand forms the basis of the 'basic minimum needs' movement and can be summarized as follows:

- PHC is a system of health delivery that links the public health system with the community at village level. The system must be built up under the responsibility of the community and with its cooperation; in essence, it is health services by the community for the community. The Government provides technical and some budgetary support, but is limited to 'enabling' participation and securing adequate referral;

- PHC starts from a community that recognizes and identifies the problems to be tackled and has decided to act with self-reliance, through participation and cooperation;
- Informed community involvement is the key factor. The community should have permanent access to health information and education. Community participation may take the form of labour, money, or other forms of cooperation;
- Good health is related to factors that determine overall living conditions. Therefore, PHC must be integrated with development activities aimed at improving the quality of life;
- For the poor to attain an acceptable quality of life, basic minimum needs—food, clothing, shelter and environment, health, education and information, security of life and means to livelihood—must be met;
- The implementation of PHC must be consonant with local institutions and the daily life of the community. For this reason, the role of the village health worker changes from village to village as does the application of appropriate technology;
- The technical elements of PHC include: health education; proper nutrition; maternal and child health; water and sanitation; immunization; prevention and control of endemic diseases; accident prevention; and provision of essential household drugs.

b) **The MoPH and the four 'prime movers' of the village 'basic minimum needs' movement.** In 1981, as the PHC movement acquired momentum in Thailand, the Planning (NESD) Board decided to involve the Ministries of Agriculture and Cooperatives, Education, the Interior, and Health (the four 'prime movers') in coordinated action through a project based on a 'basic minimum needs' approach. In fact, this would also facilitate a multisectoral approach to the problems of illiteracy, lack of health and overall poverty. This was the beginning of the National Social Development Project, undertaken by the NESD Board. WHO co-sponsored the initiative and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) provided advisory services.<sup>76</sup>

The ESCAP/UNICEF role evolved as a result of the third PHC five-week seminar, held in 1980 at the request of the Government and entirely devoted to the subject of the provision of basic community services in Thailand. The seminar's composition was multisectoral and multilevel (from villagers to director-generals).<sup>77</sup> The concepts developed at this Seminar were later adopted by the NESD Project in a document entitled

'Characteristics of Thai Society and Ideal Persons; Basic Needs of the Thai People; Targets for the Year 2002 and Indicators'. This document is remarkable on many accounts. For one, it starts with a defined 'vision' of the Thai society. This includes: meeting basic needs with self-reliance; being loyal to the King and believing in democracy; believing in justice and equality; and respecting the rights and freedom of others.<sup>78</sup> Thereafter, the document enumerates the basic needs, suggests indicators and sets targets for the year 2002. Among the latter, item 13 states, "Both youth and adults understand the Lord Buddha's teachings, adhere to the four noble truths ... and follow them".

The above steps were developed into a nationwide campaign (1985-1987) promoting the 'quality of life', defined by the same indicators of basic minimum needs that later became the social development targets of the sixth NESD Plan (1987-1991).

A 1985 assessment paper<sup>79</sup> listed the following aspects for successful community involvement: social structure; leadership; organization; managerial skills; resources; enthusiasm; training; and the 'spirit' of both the community and the government officials. This policy approach influenced all levels of public administration, starting with the village level where there was permanent monitoring of the intersectoral development goals by the Village Development Council, using the 32 indicators of basic minimum needs, half of which are directly related to mothers and children. In 1987, 5,787 villages were rated as 'backward' areas (or far from meeting targets), 35,514 as 'intermediate' areas and 11,621 as 'advanced' areas.<sup>80</sup>

By 1989, through the efforts of nearly 600,000 village health communicators and 62,000 village health workers as well as 8,193 health centres (almost twice as many as in 1980), 98 per cent of the country's 53,000 villages had access to some form of PHC services.

c) **Budget re-allocation.** The national emphasis on rural poverty alleviation was articulated in the fifth NESD Plan (1982-1986). Two major allocation policies were followed. The first was to reorient health expenditure towards PHC and away from curative care. Variations in the MoPH budget by programme attested to this new emphasis: the budgets for disease control and health promotion were increased by 1 and 2 percentage points respectively during the duration of the Plan whereas the budget for medical care was cut back by almost 3 percentage points.<sup>81</sup> Similarly, between 1980 and 1986, the budget share for PHC grew from 27 to 39 per cent. The second policy was to concentrate health resources in rural areas to meet the pressing health needs of the rural poor. Rural areas, which had

received 41 per cent of the health budget in 1981, were allocated 56 per cent in 1985,<sup>82</sup> while BMA received only 7 per cent.

It has been estimated that, between 1976 and 1984, government expenditure on health (not only MoPH) was about 6 per cent of the national budget;<sup>83</sup> this represented almost a threefold increase in government spending on health during the period. The ratio of revenue to GDP increased from 13 to 17 per cent between 1972 and 1988, but the latter increased, on a per capita basis, almost eightfold in roughly the same period.

This budget shift, which also made PHC possible, has been attributed to an increase of 3 percentage points in the tax-to-GDP ratio between 1981 and 1989, currently standing at 18 per cent. This translated into a full percentage point increase in the share the health and social services had in government expenditures, in turn giving a 52 per cent increase in absolute public health expenditure between 1982 and 1989.<sup>84</sup>

### **Successful Initiatives within the PHC Approach**

1. **Village health volunteers and communicators.** The decision to rely on volunteers as key agents in the promotion of PHC and the dissemination of health education and information was well grounded in Thai tradition.

Village health volunteers have well-defined responsibilities, which include: weighing, on a quarterly basis, all children under the age of five in the village; distributing supplementary food to children; mobilizing for immunization; providing family-planning education and supplies; and providing first aid and basic medication. They also share responsibility for administering the village's revolving drug funds, for which they receive a remuneration in recognition of their work vis-a-vis the community.

It has been estimated that these services cover about 65 per cent of the villagers' health needs. The first task of village health volunteers is to promote health. Because they have only basic health knowledge, they are not expected to substitute the health system, but rather to facilitate early case detection and linkage with the system.<sup>85</sup>

Village health communicators play a complementary role. The majority are women, chosen from within the community using sociogram techniques<sup>86</sup> developed by the Saraphi Project in the late-1960s. Trained to be the contact point of each village, each communicator is responsible for 10 to 15 families.

Village health volunteers and communicators are given a number of incentives: free hospital services; blue uniforms; a bicycle and a radio for the 'health post' (a room in their home); and a training certificate. Initially, they receive seven days of training and a small training allowance (estimated at US\$1 per day in 1980). They are supervised by the staff of the health centre.<sup>87</sup>

These health workers enjoy the respect of community members both because of the specialized knowledge they have acquired through training and because they were chosen from among the villagers and so are one of 'their own'. They can therefore serve as a bridge between the community and the health services, facilitating two-way communication. Village health volunteers and communicators constitute the largest and most widespread health manpower resource in Thailand and the principal agents in the multiplier process that enables communities to master their simpler health problems. In addition, they represent an enormous savings to Thai society in terms of their value-equivalent; that is, if compared with the cost of the professional training and employment they have, *de facto*, multiplied.

From a modest 1,900 village health volunteers and 16,700 communicators trained in 1977, their numbers grew to 11,700 and 113,000 respectively by the end of 1979, and to nearly 60,000 and 600,000 respectively by 1990. Studies by provincial and district hospitals show that these health workers have been able to redistribute demand, as revealed by the increase in the utilization rates of health centres mentioned earlier. This redistribution in itself reduces wastage, since the same service has different, and usually lower, costs the further down the ladder of referral it is provided.

Apart from its utility for health mobilization and despite high turnover rates, this health network has also served to open up social positions in the villages by enhancing the volunteers' self-respect and prestige.

**2. Revolving drug funds.** These funds represent the self-managed mobilization of community resources to finance PHC. They give the community permanent on-site access to essential medical drugs at lower-than-market prices and provide village health volunteers with stable earnings enabling them to dedicate themselves to PHC. The funds are especially important because of the wide disparities in drug prices. Sepúlveda et al.<sup>88</sup> have reported differentials between maximum and minimum prices, from 500 per cent for aspirin and 600 per cent for meprobamate, to 6,667 per cent for paracetamol and 1,000 per cent for penicillin.

The use of generic rather than branded drugs solves this problem to the communities' advantage.

Community revolving funds are common in Thailand; they have also been set up for sanitation and nutrition, even though, in those areas, their development has been slower. The drug funds were started as a governmental initiative in 1978. The MoPH provides the initial stock of drugs and remains closely linked to the local fund managers and coordinators through *tamboon* health volunteers and district hospital personnel. The drug stock is replenished through the health system.

Village health volunteers, village heads and other prominent community members, such as monks, school teachers and members of the leading families, form the management committee. Committee members are not directly remunerated for participating in the fund's management, although as shareholders they are entitled to a portion of the profits.

The capital for the fund is raised by selling shares to village households. They may pay in cash or in exchange for labour, or buy on credit. In the case of successful funds, the resources raised greatly exceed the value of the initial inventory within two or three years. Shares are bought by 30 to 100 per cent of the village households. It is interesting that villagers are generally motivated to participate in the fund not so much by the promise of profits or the prospect of savings on drug purchases, but rather by a desire to improve the village or to express solidarity with others. There are, in fact, many cases of funds set up only through the donations of all households.

This attitude may be attributed to Buddhist principles which recognize the provision of health services, including drugs, as the fourth fundamental need. The funds have been more enduring and successful in villages with high degrees of social cohesion and a fairly equitable distribution of wealth and land ownership. Moreover, the smaller the village and the more distant it is from other drug and medical suppliers, the more likely it is that the fund will prosper.

Successful revolving funds usually diversify their surplus into the sale of non-pharmaceutical products, including basic consumer goods. In these cases, the drug fund is transformed into a multipurpose fund offering an ample array of goods connected with other aspects of PHC and rural development in general (for example, fertilizers, latrine materials and gasoline). Small, short-term credits may also be offered. Cases of funds selling luxury consumer goods (such as alcohol) and services (for instance, barber shops) have also occurred.

After the initial MoPH-provided inventory, the funds are self-sustaining and have no need for further public financing. Although the expansion of the programme may have required a substantial government outlay, expenditure is low if compared with other options for providing PHC services and essential drugs.

By 1992, there were 32,463 active drug cooperatives, out of 42,119 registered, with a total capital of US\$ 2.4 million.<sup>89</sup> A 1985 report<sup>90</sup> estimated that roughly one third of those cooperatives were fully successful, one third broke even and one third did not function at all. The failure rate seems to be about 25 per cent in 1992. In addition, there were 19,000 sanitation cooperatives and close to 15,000 nutrition cooperatives. An estimated 9,000 had graduated into Village Development Cooperatives, an organization averaging 1.5 cooperatives per village; in other words, many villages have from two to three units, which bears witness to both their spirit of solidarity and management capability.

About 7,000 villages were involved in a programme named 'Technical Cooperation among Development Villages'. This concept, analogous to the UNDP concept of technical cooperation among developing countries (TCDC), recognizes that knowledge is worthy of being disseminated because it enables both 'village experts' and audiences to share the same culture and daily concerns.

**3. The Health Card Programme.** The Health Card insurance scheme, launched by MoPH in 1983, aims to make health services available to individuals who cannot afford them, do not have health insurance, and do not qualify for the 'Free Medical Care Programme' (the poorest 20 per cent of the population): in other words, the slightly better-off.

The health card is a subsidized pre-payment entitling the holder to a limited number of health visits/interventions per year. Special 'blue' cards are issued for pregnant women and mothers to encourage them to participate in preventive care and to benefit from a professionally attended delivery; 'green' cards insure up to five **family members** for a maximum of six episodes of ill-health; and 'red' cards insure **individuals** for up to four episodes of ill-health. Treatment and services for chronic diseases were not originally included in the scheme, but are now also covered. The cards are not valid for treatment at health centres, but can represent savings of between 40 and 90 per cent at district or provincial hospitals.<sup>91</sup>

Because of limited cash flow, the poor often cannot handle the cost of emergency health problems, may fall prey to usurers and may even be forced to sell assets to meet

health expenses. Responding to this situation, the Health Card Programme distributes the risk of high-cost emergency treatment among the villagers. At the same time, it subsidizes health care in poor households through family cards, reducing the household's yearly health expenditure from an average of at least 5 per cent of its income to 1.25 per cent.

Although the MoPH has given priority to coverage expansion and has stated that cost recovery is not yet an issue, it may eventually become one. In areas where the Health Card Programme is operative, health centres are reported to have recovered 10 per cent of their costs; moreover, one provincial hospital in 1987/1988 recorded a 39 per cent cost recovery, including salaries.<sup>92</sup>

#### **4. Service provision: family planning, nutrition, sanitation and immunization.**

— **Family planning.** Fertility-reduction policies in Thailand have been strikingly successful. National average population growth fell from 3 per cent in 1970 to 1.5 per cent in 1990. At present, 64 per cent of Thai couples practise family planning. The family planning initiative **predated** PHC and was probably a powerful organizational device in its own right. The total fertility rate dropped from 6.5 births per woman in 1962 to 2.2 in 1991, a 66 per cent reduction in one generation, one of the fastest rates of decline in the world.<sup>93</sup>

Fertility has also been influenced by marked improvements in child health leading to significant reductions in child mortality; literacy improvements, especially among women; and improvements in women's status, reflected in their increasing participation in the industrial labour force.

Government involvement and support has proven to be of key importance to the family planning programme. Mobilization and advocacy for family planning was carried out at the highest level; its effectiveness can be measured by the trends in national health budget allocations for the programme. From only 16.3 per cent of the total programme allocations during the third NESD Plan (1972-1976), allocations spiralled to 52 per cent in the fifth NESD Plan (1982-1986) and now, along with national NGOs, covers almost 100 per cent of costs.

The effectiveness of the policy derived from its focus on three principle objectives:

- to provide education and information, especially to women in reproductive age;
- to provide family-planning services even in the most remote rural areas; and
- to tie the family-planning services to maternal and child health in order to gain in efficiency and effectiveness.

Thus, all medical and paramedical personnel, including auxiliary midwives, village health volunteers and communicators, have received training in family planning, while the latter also distribute contraceptives and provide family planning education.

**Immunization.** By the end of the worldwide UCI campaign, Thailand had reached most of the 1990 targets of 80 per cent immunization. Vaccination levels for DPT3 (three doses of combined diphtheria/pertussis/tetanus vaccine) and OPV3 (three doses of oral poliomyelitis vaccine) had reached 93 per cent; BCG (anti-tuberculosis vaccine), 96 per cent; and measles immunization, 80 per cent.<sup>94</sup> Only TT-2 (two doses of tetanus toxoid vaccine) coverage remained slightly below target, at 75.6 per cent. The immunization programme was actually launched in 1978 when extremely low immunization levels prevailed. By 1985, the year the UCI drive was initiated, coverage still stood at 62 per cent for OPV3 and DPT3, 48 per cent for TT-2, and 26 per cent for measles (measles immunization had only been initiated the previous year).

The speed with which full coverage was subsequently attained attests to the capable and extended network, from doctors to village health communicators, described above. An implementation plan was drawn up, and 20 indicators established to monitor action at four levels. Among the indicators at each level were:

- **at the managerial level:** the priority given to the expanded programme of immunization (EPI) (second, after the family planning programme);
- **at the service-delivery level:** proper assignment of responsibility, with more than 20 per cent of time devoted to EPI;
- **at the community level:** regular monitoring and rewards utilized; and
- **at the household level:** school children used as EPI motivators.<sup>95</sup>

Naturally, with increased vaccination coverage, morbidity incidence declined, as shown in Table 16.

—**Nutrition.** Rice, a staple of the Thai diet, is one of the first foods introduced during weaning. Unfortunately, however, "...the problem of too early introduction of semi-solid, bulky, sticky rice to infants as young as a few days ... interferes with breastfeeding and is the likely cause of protein-energy malnutrition in early infancy (0-6 months)."<sup>96</sup> As a result of this and other nutritional problems, 53 per cent of preschoolers in 1980 were malnourished, and, of those, 59.3 per cent lived in the north-eastern region.<sup>97</sup>

Table 16: REDUCTIONS IN THE INCIDENCE OF MORBIDITY  
(Thailand, 1980-1989, per 100,000)

Incidence	1980 c.	1989
Diphtheria	4.67	0.17
Whooping cough	7.93	1.90
Polio	1.06	0.03
Measles	57.11	21.31
Neonatal Tetanus	62.94	31.07

Source: United Nations Children's Fund, Bangkok, *Children in Thailand, A Situation Analysis*, UNICEF, Bangkok, 1989.

To help address this situation, the Institute of Nutrition, Mahidol University, developed six mixtures of weaning foods based on roasted beans, rice, ground nuts and sesame; these mixtures are easily prepared as all ingredients are readily available in most villages. After pilot testing in 1981-1982, utilization of such weaning mixtures was extended under the fifth NESD Plan (1982-1986). Village processing of supplementary food became an important component of nutrition in PHC, together with growth monitoring and nutrition education.

MoH data show that between 1979/1982 and late-1984, the share of preschool children with normal nutritional status rose from an average of 49 to 70 per cent. Regional disparities were wide, with only 62 per cent of the children in the north-east having normal status, compared with 83 per cent in the central region. On the basis of growth-monitoring data provided by village health volunteers relating to 1.5 million children, it is estimated that, during the same period, third-degree malnutrition (the most severe) declined from 2.13 to 0.27 per cent, again with highest levels (0.44 per cent) reached in the north-east.<sup>98</sup> By the end of 1985, that figure had fallen to 0.14 per cent.<sup>99</sup> By 1990, 81 per cent of the children had normal nutritional status; 18 per cent had first-degree malnutrition; 0.8 per cent had second-degree malnutrition (down from 13 per cent in 1982); and third-degree malnutrition had ceased to be a statistical entity.<sup>100</sup>

Thus, the success of this nutrition intervention was massive and fast. In less than a decade, serious malnutrition (second and third degree) had been practically eradicated.

Nutrition education has played a major part in obtaining these impressive results. Psychosocial components have been introduced in nutrition education, through specially tested video programmes, aiming at a 'total child' strategy counteracting negative traditional behaviours of child-minders, ranging from the lack of mother-infant interaction to such

superstitions as tying a thread around an infant's wrist—a symbolic link to the family—to prevent spirits from taking the child away.<sup>101</sup>

—**Water and sanitation.** Improvements in this area have also been notable. By 1990, 73.8 per cent of the population had access to latrines and 74.4 to safe drinking water, up from 41 and 32 per cent respectively in 1980.<sup>102</sup> In both areas, the application of appropriate technology and the mobilization of the community have been remarkable. For example, improvements in the storage of rainwater—available for eight to nine months a year in the rainier regions, but far less frequently in the north-east—have been made possible by the development of a system of collection consisting in huge, locally-made ceramic containers that permit storage without contamination, safe conduit from clean roofs to the container, and taps on the bottom of the container to avoid the water being contaminated by the introduction of utensils. In the area of sanitation, the technique of producing cement slabs for improved latrines has been taught to villagers by health centre sanitation personnel, with technical backup provided by District Sanitary Training Centres. The so-called 'VIP latrine' has also become widespread. Village health volunteers and communicators complement the work of the sanitation personnel by providing sanitation education and instructions for the use and maintenance of simple water pumps.

Although, statistically, there appears to be a higher incidence of water-borne diseases, care must be taken in assessing the situation. Improved data collection (again possible because of the active participation of village health volunteers and communicators) has led to greater statistical accuracy, one success that is probably masking another—actual progress in morbidity control.

### Conclusions

In 1965, the beginning of the period under study, Thailand was a predominantly rural country which had insufficient health manpower and financial resources to meet the health needs of its large and widely dispersed population. The country could, however, count on other resources: a strong tradition of community organization and solidarity, grounded in a well-structured social organization; a deeply felt recognition of human rights, including those of the child; and an emerging leadership prepared to fight for democracy and an enhanced quality of life.

The path chosen was coverage first (quantity) rather than sophisticated technology (quality). The latter would have been accessible only to few and would have required a tremendous and, at that time, unaffordable social investment.

Under those conditions, as health needs were part of the daily reality in every single family in the country, they had to be met wherever they presented themselves. The first step taken in this direction was to create a new resource: the village health volunteers and communicators. These health workers were where the needs were and therefore always accessible. The creation of these new roles also gave impetus to increased social prestige at the local level and may even have helped to slow down rural-urban migration.

The second step was to strengthen credibility. Village health volunteers and communicators were duly trained—in the initial programme phases, both received the same training; subsequently, their training was differentiated—so that they could act and, by so doing, be respected by their communities for the results they were able to attain.

This, however, was not enough. The means, chiefly medicines, had to be available when needed and **through** the village health volunteers, thus enhancing their credibility even further. The drug cooperatives and other forms of village associations have generally been successful, both socially and economically, and have, therefore, contributed to economic progress as well as health development. Child malnutrition, morbidity and mortality have fallen sharply.

In addition, through the Health Card Programme, a safety net has been created for a social group—the less well-off—whose comparative disadvantages are not adequately addressed by other parts of the health system. Finally, the spreading of the process through the 'Technical Cooperation among Development Villages' programme ensures sustainability.

A number of factors have helped this phenomenon to mature in the course of less than fifteen years of actual implementation and after a number of false starts:

- **societal values already incorporating the will to implement recognized rights.** What was missing was the technological know-how and the social mechanisms to do so, which is what the PHC approach could provide;
- **disinterested and public-spirited physicians and other professionals in related fields.** These professionals provided public health knowledge without laying claim to privileges or expanded roles in return. Among their leaders were the late Dr. Pricha Deesawadi and, the former Permanent Secretary for Health, Dr. Amorn Nondhasutha, recipient of the WHO Sazakawa Award for his contributions to PHC;

- **pathbreaking family-planning work.** Family planning helped to improve both maternal and child health and to reduce the pool of newborns whose needs would have to be met. Because they were fewer, children received better care. Maternal energy was also liberated and resources were released which otherwise would have been needed to cater to an unending expansion of programmes;
- **full literacy.** High literacy rates ensured the availability of the knowledgeable parents required for better and self-reliant home care and the skilled managers required for the newly organized system;
- **a high-quality and committed leadership and the lack of intersectoral rivalry.** The managers' ability to secure intersectoral cooperation, regardless of sectoral preeminence, was the 'engine' of the whole process.

Because of these factors, Thailand was able to avoid being trapped into a sophisticated health system, serving only a minority while draining important resources from other sectors. Although disparities remain, and in some cases may even have widened, Thailand has flourished—in spite of political turmoil. And it has ensured that the poor have the means or the mechanisms to satisfy their basic needs and thereby fulfil their rights and those of their children.

The experience described thus far has also segmented the **right to health and to life** on the one hand, and the right to **recover from illness** on the other. Medical services are becoming increasingly more sophisticated and so progressively guaranteeing the fulfilment of that right as well. It is hoped that the extreme marketing practices accompanying sophisticated technology elsewhere can be avoided: they would reintroduce disparities that would threaten the wide accessibility to health services that Thais have achieved today.

The Thai experience is explicitly based on the satisfaction of basic needs. This approach originated in the health sector but affected all of the country's developmental approach. From the standpoint of the CRC, Thailand has made important inroads in implementing not only Article 24, which recognizes the child's right "to the highest attainable standard of health", but also many of the other CRC articles. The potential for the expansion of rights' fulfilment is large. A wide array of opportunities for mobilizing human and organizational as well as financial resources has been developed, including the extensive use of multiplier organizations. The Thai approach provides valuable lessons to countries still

looking for efficient and affordable ways to fulfil their children's right to health. It deserves to be monitored closely and carefully studied.

## V. LESSONS FOR THE FULFILMENT OF RIGHTS AND THE SATISFACTION OF BASIC NEEDS

In the preceding analysis of the progress made thus far in Chile and Thailand in implementing children's right to health, it has been shown that this right has always been fragmented and sometimes considered synonymous with the **right to life** (and measured by mortality rates). Implementation in many other countries has been slower than in Chile and Thailand, especially if one considers the **full** implication of the concept of health, as discussed at the beginning of this paper. Poorer societies have had to face especially difficult choices in determining what to do first and, in the process, fragment the right, more recently into minimum packages varying in size and shape from one country to another. The analysis of historical experiences strongly suggests that the issue is not whether to fragment the right to health, but rather **how** to do it, and in **what sequence**, over **what period of time**.

The insufficient fulfilment of most rights implies suffering (including, and often mainly, the severe suffering of children); if only because of this fact, the fulfilment of children's rights must be a priority in the present and not just an aspiration for some vaguely defined future. As the baseline in most countries is highly unsatisfactory, the pace at which rights are implemented **must** be accelerated. The two case studies summarized in this paper illustrate how an acceleration of service delivery, within a reasonable though far from perfect PHC strategy, can lead to significant improvements in the fulfilment of children's rights.

The scope for the delivery of health services is wide and ever-expanding. This trend often has troublesome resource implications, as noted earlier. But new opportunities for service-delivery can be converted into more cost-effective and participatory systems, as the Thai case illustrates well.

Take, for example, the extraordinary developments in family planning during the past 35 years. A full new set of services has emerged, the availability of and need for which was made evident by both scientific knowledge and dramatic attitudinal changes. It is a truism that every service can be translated into a resource equivalent, which in turn, can be translated into financial requirements. Therefore, new services compete with older ones

which may or may not have reached adequate coverage. Because services tend to converge in a restricted number of strata and locations, a minority of the population typically enjoys the right to the whole spectrum of services, while the majority is often denied its equal right to these services. This does not only depend on the concentration of assets but also on certain intrinsic characteristics of both the technology and the service. Traditional (and rather ineffective) contraceptive methods, for instance, are 'distributed' equally among all, yet oral contraceptives, and even more so, injectable ones, depend on technicians, not only because they have to be purchased but also because there are professional restrictions to their delivery. If these restrictions are too numerous, they will act as additional barriers to the satisfaction of needs and the fulfilment of rights.

The Thai case, however, provides a number of examples of less-restrictive outcomes: Thais can buy many drugs over-the-counter without the excessive involvement of medical doctors typical of many countries. Most importantly, however, highly cost-effective health workers, well distributed over the national territory so that technical accessibility does not constitute an additional barrier, can prescribe medicines and treat basic ailments with considerable success.

Several lessons can be drawn from the experiences analysed in this paper. First, if a need, or part of a need (as in the case of health education), is technically simple to satisfy, the community itself should be able to do so directly. To discourage or remove this capacity from the community amounts to: (a) fostering sophisticated services requiring major resource investments; (b) creating barriers that inhibit adequate coverage; (c) denying the members of the community a possibility of participation; and (d) making them much more dependent in every respect. 'Devolution' to people is not so much a transfer of authority as it is a sign of respect for the integrity of human aspirations and behaviour.

A second lesson is the importance of recognizing that some services can be more easily distributed than others and have multiplier effects of their own. In the case of breastfeeding, for example, 'distribution' is built in with motherhood. To have transformed this gift of nature into a poorly distributed 'canned' service—and so creating millions of malnourished children worldwide over half a century and precluding breastfeeding's multiplier effects in terms of child stimulation and bonding, among others—is a technical and social error of historical proportions and an example of gross social misuse of access to new knowledge.

Another case in point is prenatal care. Its influence in reducing infant mortality is notable, as seen in the Chilean case. However, if prenatal care is fully entrusted to institutions, it requires enormous amounts of human resources and supplies. A mixed approach, with community-based services as in Thailand, is equally effective and far less expensive. Prenatal care has a number of multiplier effects for maternal and child care, including detection of cancer, immunizations, adequate nutrition and health education.

A third lesson highlighted by the case studies is the importance of mobilizing 'non-traditional' resources. Both countries have expanded coverage, guaranteed a more equitable distribution of health services and multiplied the efficiency of medical professionals through the use of para-professionals. The sustainability of these 'auxiliary troops' was assured differently in each country. In Chile, auxiliary nurses were employees of the National Health System; in Thailand, village health workers are volunteers, but can earn money through the revolving drug funds.

Finally, both case studies show that the fulfilment of children's right to health is accelerated by increased awareness of community needs, translated into a demand that forces political leaders to recognize this 'right' and provide adequate budgetary allocations for its fulfilment. Because extensive resources are needed for service delivery, community participation, in the simpler forms of health care and service delivery, ensures that available resources are organized and utilized as cost-effectively as possible. By producing maximum results in the shortest time, this approach will assure that the majority of children enjoy the right to health—and points the way to the eventual realization of this right for all children, as provided in the United Nations Convention on the Rights of the Child.

## ENDNOTES

- <sup>1</sup> CRS Nos. 2-6. See final page of this publication for a complete list of *Innocenti Occasional Papers* thus far issued in this Child Rights Series.
- <sup>2</sup> United Nations Children Fund, *The Progress of Nations 1993*, UNICEF, New York, 1993.
- <sup>3</sup> Ledogar, R.J., 'Implementing the Convention on the Rights of the Child through National Programmes of Action for Children', *The International Journal of Children's Rights*, Vol. I, No. 3, 1993.
- <sup>4</sup> Emphasis added. The full text of Article 24 is as follows:  
1. "States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.  
2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures: (a) to diminish infant and child mortality; (b) to ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care; (c) to combat disease and malnutrition including within the framework of primary health care, through, *inter alia*, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution; (d) to ensure appropriate prenatal and postnatal health care for mothers; (e) to ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents; (f) to develop preventive health care, guidance for parents and family planning education and services.  
3. States Parties shall take all effective and appropriate measures with a view to abolishing traditional practices prejudicial to the health of children.  
4. States Parties undertake to promote and encourage international cooperation with a view to achieving progressively the full realization of the right recognized in the present article. In this regard, particular account shall be taken of the needs of developing countries."
- <sup>5</sup> Tejada de Rivero, D. (WHO Assistant Director-General), 'PHC: A World Strategy', keynote address at the Third Congress of the World Federation of Public Health Associations, Calcutta, 1981.
- <sup>6</sup> Matus, C., *Strategy and Plan* (in Spanish), Siglo XXI, Editorial University Publishers, Santiago, 1972.
- <sup>7</sup> See note 2, *supra*.
- <sup>8</sup> Allende Gossens, Salvador, *The Chilean Medical and Social Reality*, Lathrop Publishers, Santiago, 1939.

- <sup>9</sup> As discussed by Behm, Hugo, *Infant Mortality and Living Standards*, University of Chile, 1962. See also Behm, Hugo et al., 'IMR in Chile: Recent Trends', in *Medical Social Notebooks*, Vol. XI, No. 3, National Order of Physicians, September 1970.
- <sup>10</sup> Popular Unity electoral manifesto, 1969. See also Quiroga P., ed., *S. Allende, Chosen Works 1933-1948*, Gutenberg Publishers, Santiago, 1990.
- <sup>11</sup> Rosselot, Jorge and Mardones Restat, Francisco, 'A Human Right and a Social Priority: Family Health and Responsible Parenthood, Chile 1965-1988', in *CRECES*, 1989.
- <sup>12</sup> Sepúlveda, Claudio, et al., 'Current Planning Trends in the National Health Service', in *Medical Social Notebooks*, Vol. XII, No. 1, National Order of Physicians, March 1971.
- <sup>13</sup> Morales, Eduardo: 'Modernization (in Chile): Health', in *CHILE-AMERICA*, nos. 74-75 (Centre of Studies and Documentation, Rome, Italy), 1981.
- <sup>14</sup> National Health Service, 'Health Situation, Activities and Resources: Chile in Recent Years', in *Planning Bulletin*, Vol. IV, Planning Directorate, NHS, Chile (Sepúlveda, Claudio, Director), 1971; and Mardones Restat, Francisco and Osorio, E., 'Recent Evolution of Infant Mortality in Chile 1970-1985', mimeo, 1988.
- <sup>15</sup> Sepúlveda, Claudio et al., 'Medical Manpower Distribution in Chile, in *Medical-Social Notebooks*, Vol. XIII, No. 3, (National Order of Physicians), September 1972.
- <sup>16</sup> The overall social expenditure for the period 1968-1976 was reconstituted on the basis of data provided in the following studies: (a) Bitar, Sergio, 'Economic Freedom and Political Dictatorship: Chile 1973-1978', in *CHILE-AMERICA*, No. 56-57, 1979; (b) Bitar, Sergio, 'Chile 1973-1980: Economic Policy for a New Domination Mode', in *CHILE-AMERICA*, No. 64-65, 1980; and (c) Guardia, Alexis, 'Monetary Policy', in *CHILE-AMERICA*, No. 72-73, 1981.
- <sup>17</sup> Taucher, Erika, 'Fertility and Mother and Child Health', in *Bulletin of the Chilean Society for the Protection of the Family*, Vol. XXII, Nos. 7-12, July-December 1986. Similar data published in Puffer, Ruth and Serrano, Carlos, *Patterns of Mortality in Childhood*, PAHO/WHO, Scientific Publication No. 262, 1973.
- <sup>18</sup> Monckeberg, F. et al., 'Evolution of Malnutrition and Infant Mortality in Chile during the Last 20 Years', in *CRECES*, 1983.
- <sup>19</sup> See note 11 *supra*.
- <sup>20</sup> Mardones-Restat, Francisco, 'Mother and Child Health: The Last 30 Years of Medical Services', in Winter, A., Puentes, R. (eds.), *Child Medicine*, Vol. I, Santiago, Chile, 1991.
- <sup>21</sup> UNICEF-Chile, Annex to 'The National Vaccination Programme in Chile', 1987.
- <sup>22</sup> Taucher, Erika, 'Infant Mortality in Chile', in *Population Notes*, No. 20, CELADE, Latin American Demographic Review, 1979.

57 See note 51 *supra*

58 National Economic Development Board (NESDB), Thailand, *From the First to the Fifth Development Plan*, 1989.

59 National Economic and Social Development Board, *Development Plan for Women 1982-86*, NESDB, Bangkok, 1979.

60 See note 58 *supra*.

61 See note 52 *supra*.

62 Kiranandana, Thienchai and Tontisirin, Kraisid, 'Eradicating Child Malnutrition: Thailand's Health, Nutrition and Poverty Alleviation Policy in the 1980s', *Innocenti Occasional Paper*, EPS 23, UNICEF International Child Development Centre, Florence, Italy, 1992.

63 *Ibid.*

64 Ministry of Public Health, Thailand, *Health in Thailand*, MoPH, Bangkok, 1991.

65 See note 62 *supra*.

66 *Ibid.*

67 See note 51 *supra*.

68 Myers, C.N., Mongkolsai, D. and Causino, N., *Financing Health Services and Medical Care in Thailand*, mimeo, United States Agency for International Development, Bangkok, 1985.

69 See note 59 *supra*.

70 See note 68 *supra*.

71 See note 62 *supra*.

72 Hutangura, Pradist and Sepúlveda, Claudio, *The Pharmaceutical Industry in ASEAN Countries, Thailand*, UNAPDI/ESCAP and Mahidol University, 1979. See also Sepúlveda, Claudio and Meneses, E., *The Pharmaceutical Industry in ASEAN Countries (Final Report)*, UNAPDI/ESCAP and UNIDO, 1980; and Sepúlveda, Claudio, 'In Search of Pharmaceutical Health: The Case of Thailand' in *Development Dialogue*, No. 1985:2, Dag Hammarskjöld Foundation, Uppsala, 1985.

73 *Ibid.*

74 See note 52 *supra*.

- 75 *Ibid.*
- 76 ESCAP was represented by Claudio Sepúlveda, a UNICEF staff member seconded to the Commission. Members of the Coordination Committee included Dr. Amorn Noudasulha (Health), Dr. Saisuree Chutikul (Education), Khun Thamrarat Kampisri (NESDB), Khun Pornpit Dulayapat (Agriculture) and Dr. Sepúlveda.
- 77 ESCAP/UNAPDI and UNICEF for the Government of Thailand, *Development of Basic Community Services Through PHC*, Third Seminar (C. Sepúlveda, Seminar Director), Bangkok, 1980.
- 78 National Social Development Board Project (NESDB), 'Characteristics of Thai Society and Ideal Persons; Basic Needs of Thai People; Target by Year 2002 and Indicators' (in Thai, unofficial English title), Doc. No. 32, 1983.
- 79 Pricha, Deesawadi, Dr. (Chief Medical Officer, MoPH), 'Community Involvement for Health Development in Thailand', mimeo, 1985.
- 80 See note 62 *supra*.
- 81 See note 68 *supra*.
- 82 *Ibid.*
- 83 Porapakkam, Yaowarat, 'Levels and Trends of Mortality in Thailand', *Asian Population Study Series*, No. 77, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, 1986. Kiranandana (see note 62 *supra*), instead, citing the Budget Bureau, Office of the Prime Minister, maintains that the percentage never fell below 10 per cent. The difference may derive from the fact that Kiranandana includes capital expenditure as well.
- 84 See note 62 *supra*.
- 85 For a detailed discussion see Damrong, Boonynen, Dr., *Village-Based Social Development Planning: Role of Bureaucracy for Attaining Health for All and BMN*, Health Planning Division, MoPH, 1985.
- 86 A technique which charts relationship patterns, especially association preferences.
- 87 See note 45 *supra*.
- 88 Sepúlveda, C., Kaosard, M. and Dhanatrakul, T., *Price Differentials of Selected Pharmaceutical Products in Thailand*, Vol. I of 2, ESCAP, Bangkok, 1984.
- 89 United Nations Children's Fund, Turkey, and Government of Turkey, *Thailand Mission Report on Drugs Cooperatives*, UNICEF, Ankara, 1992.
- 90 See note 68 *supra*.
- 91 See note 53 *supra*.

- <sup>92</sup> Ministry of Public Health, Thailand, *Health Card Programme - HCP: Chiang Mai Pilot Project 1985-88*, MoPH, Bangkok, 1989.
- <sup>93</sup> United Nations Economic Commission for Asia and the Pacific, Bangkok, 'Multivariate Area Analysis of the Efficiency of Family Planning Programme and its Impact on Fertility in Thailand', *Asian Population Studies Series*, No. 68, ESCAP, 1986. See also note 2 *supra*.
- <sup>94</sup> See note 52 *supra*.
- <sup>95</sup> Vichit, Mathaurosapas, 'Factors Associated with High and Low EPI Coverage in Thailand, 1985-86', mimeo, United Nations Children's Fund, Bangkok, 1987.
- <sup>96</sup> Nitthaya, Kotchabhakdi, *The Integration of Psychosocial Components in Nutrition Education in Northeastern Thai Villages*, Faculty of Medicine, Ramathai Bodi Hospital, 1987.
- <sup>97</sup> Aree, Valyasevi and Sakhom, Dhanamitta, *Development of Supplementary Food at the Home and Community Level*, Institute of Nutrition, Mahidol University, 1984.
- <sup>98</sup> *Ibid.*
- <sup>99</sup> Ministry of Public Health, Thailand, 'Nutrition Surveillance Report', No. 04/29, Division of Nutrition, 1987 (with an analysis of historical trends by the East Asia and Pacific Regional Office, Planning Section, UNICEF, Bangkok).
- <sup>100</sup> See note 52 *supra*.
- <sup>101</sup> See note 96 *supra*.
- <sup>102</sup> See note 52 *supra*.



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