- Draft Background Paper 27 -

Impact of long term policies based on social determinants of health:

The Costa Rican experience

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Executive Summary

The consolidation of Democracy and the abolition of the army in Costa Rica at the end of the 1950s, instituted in the Political Constitution, led to the decision to prioritize the investment of public resources in the social sector as a strategy to advance towards the development of the country. The creation of a solid legal framework, the absence of a rigid stratification connected to a hierarchy of power that generates different access to resources, the implementation of democratic elections with high participation, and the development of public infrastructure have been essential factors in assuring access to education, access to water and basic sanitation as well as to access to health, and social security.

Between 1950 and 1980, Costa Rica increased public social spending from 8.6% to 23.6% of the GDP, demonstrating the political will to invest in social determinants, in order to universalize access to education, safe water for consumption, basic sanitation, and primary health care. During this period the illiteracy rate was reduced from 21% to 10%, the average number of years of study increased and the level of education of the economically active population improved. Access to drinking water increased from 53% to 86% and coverage of the population's health services and social security increased from 8 to 75%. Poverty, measured by level home income, declined from 50% in 1960 to 25% at the beginning of the 1980s.

The decline in infant mortality during the period 1960-1980 showed that the least the educational level of mothers, the greater the increase in the probability of surviving, showing a positive effect of public policies and access to education in most secluded populations. At the national level, between 1970 and 1980 infant mortality was reduced from 68.4 to 18.1 x 1000 live births achieving a rate of 9.2 in 2010. Fertility declined from 4.8 to 1.8 and life expectancy increased from 65.8 to 79.2 years, reaching a total of 81.9 years in women in 2010.

At the end of the 1980s in the middle of a global economic crisis, Costa Rica implemented a Health Sector Reform process that led to the adaptation of a model of care and delivery of services under the Costa Rican Social Security Fund, strengthening the leading role of the Ministry of Health as a guarantor

for the well-being of the population. The key strategy has been to advance toward health promotion by addressing its determinants to reduce the social gaps.

The case of Costa Rica demonstrates that sustained public investment in the social sector with a long-term vision has generated a redistributive effect of resources through interventions targeted to address the social determinants. The increase in the educational status and participation of women in the work force and in the political area has been a determinant associated with the improvement of the health indicators. Monitoring and evaluating, transparency, accountability and management, are key factors that have facilitated greater social development.

The Issue

In the middle of the last century, 50% of the population of Costa Rica lived under the poverty line, illiteracy rate was approximately 21% and access to safe water and public health services was very limited (53% and 8% respectively), with an infant mortality rate of 95 per 1000 live births and an estimated life expectancy at birth at 57 years (Figure 1).

Aware of this challenge, Costa Rica made the decision to implement a social policy with a long-term vision, a strategy aimed at reducing social inequities and enhancing development. The political will was defined further in the 1949 Constitution of the Republic, upon abolishing the army and creating a Democracy that prioritized social investment as the strategy that would allow generating a redistributive effect of resources and reduce the social gaps.

The goal was to increase public spending to provide universal access to social services and create a legal and institutional framework to reduce inequalities through the implementation of social programs targeting most vulnerable populations. Thus, the percentage GDP assigned to the social sector was increased from 8.6% in the1960s to 16.4% in the1970s and 23.6% in the1980s.

This investment improved the public infrastructure and the implementation of universal policies, strengthening programs aimed at reducing the social gaps. As a result Costa Rica saw an increased access to drinking water services, the rate of literacy and the coverage of social security increased and the poverty level decreased from 50% to 25% at the beginning of the 1980s (Table 1).

The State has been instrumental in enhancing social development by prioritizing education, basic sanitation, health, and social security as key areas of intervention that would allow moving forward and gradually facilitated greater welfare. The implementation of these strategies have required collaboration with all entities of the government as well as the participation of civil society.

The objective of this case study is to analyze social policies as of the 1950s until 2010, their impact on access to education, health, and sanitation, and their effect on infant mortality rate as well as the probability of survival at birth, which in turn has reduced inequalities and facilitated greater well-being of Costa Rica's population.

Figure 1. Life expectancy at birth by sex and child mortality rate by period. Costa Rica, 1950 to 2010

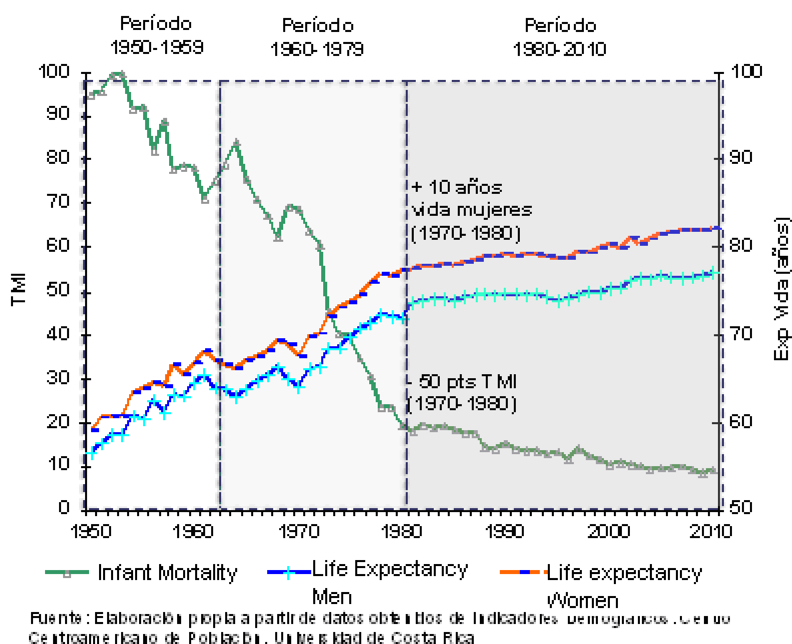


Table 1. Evolution of social indicators. Costa Rica 1950-2010

Indicador	1950	1960	1970	1980	1990	2000	2010
Population	887,8	1.276,6	1.779,6	2.315,7	3.057,1	3.929,2	4.581,3
% poor households	nd	50	29	25	27	21	21
Literacy rate (%)	21	16	13	10	7	6	3
Population with public water (%)	53	65	75	86	94	94	98
Social security coverage (%)	8	15	39	75	82	86	92
Public expenditure (GDP)							
Social	8,6	8,7	16,4	23,6	16,1	17,3	19,4
Education	1,5	2,6	5,2	6,2	3,7	4,7	5,8
Health	6,5	4,9	6,1	8,7	4,8	5,0	7,1
IDH	nd	nd	nd	0,599	0,639	0,684	0,725

Source: Ministry of Health, CCP, INEC, UNEP

Context

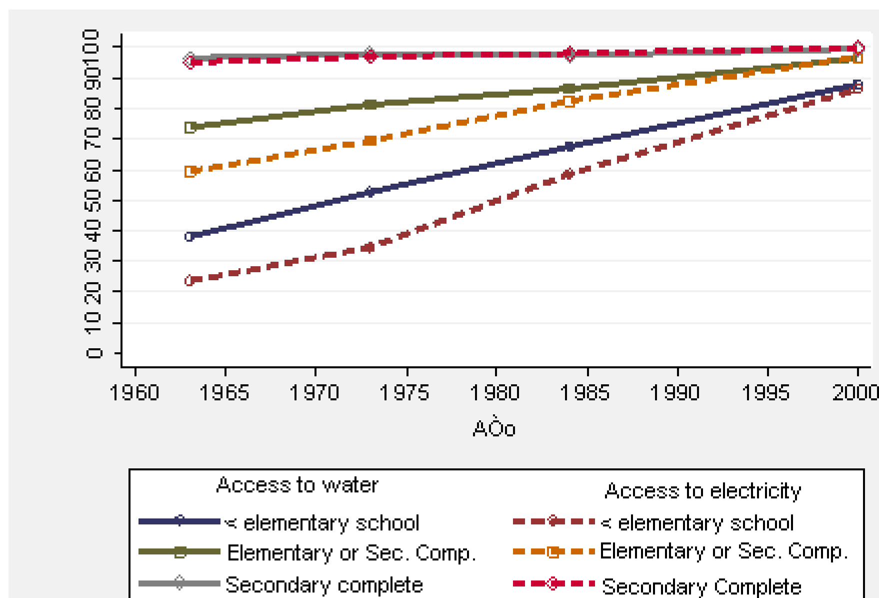
In the middle of the 20th century, Costa Rica experienced enormous social gaps and challenges in access to water, sanitation and electricity. The role of the State as a 'guarantor' to ensure access to education, water, electricity, basic sanitation, and employment was considered as an essential strategy to improve health conditions.

Showing those gaps and taking into account the public policies addressing the social determinants of health, Figure 2 shows a consistent increase in access to water, electricity and education (Figure 2). Although all population groups experienced increased access to services, the increase was significant in the population with 3 or less years of studies, increasing access to water and electricity by as much as 25% and 40% during the 1960s reaching 90% for both services in the year 2000.

In the area of infant mortality, maternal education was also identified as a determinant that would allow the prevention of deaths. The infant mortality reduction concurred with the increase of women's education particularly with an increase in women who attained access to secondary school. Among women aged 15 to 24 years in 1973 only one third had attended secondary education for one year or more. According to the last population census almost 60% of women in that age-group completed one year or more of secondary education. (Figure 3)

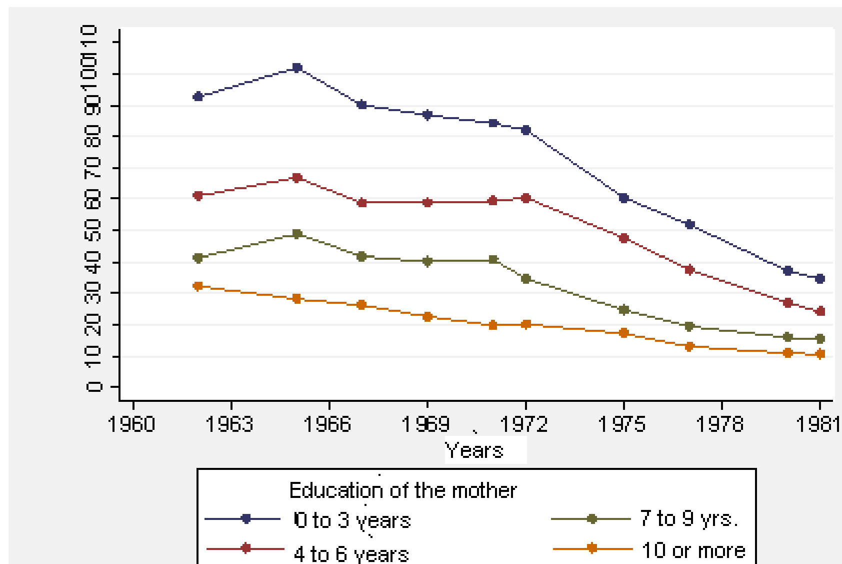
Public policies in Costa Rica complemented with the general approach of access to services as well as programs specifically addressing vulnerable populations contributed to the creation of a more integrated nation socially and politically. Thus, ensuring democratization and transparent political elections, can enhance sustainability and social development.

Figure 2. Percentage of people over 12 years old with access to water or electricity, according to education level, Costa Rica, 1960-2000



Source: Own elaboration parting from census of 1967, 1973, 1984, 2000 at www.ccp.ucrac.cr

Figure 3. Infant mortality rate according to years of education of the mother. Costa Rica, 1960-1981



Source: Hugo Behm, et al. 1986

Planning

For the purpose of systematizing the case experience of Costa Rica, three periods of the process of planning and implementation of public policies were identified:

> **Period 1920-1959:** Establishment of Social Democracy
>
> **Period 1960-1979:** General policies with extended coverage and selective programs to promote better distribution of income
>
> **Period 1980-2011:** Crisis of the 80s, structural adjustment, and Health Sector Reform

The first period encompasses the first half of the 20th century up to beginning of the 1960s and in it the pillars of the Democracy were established. Those were decades of debate and confrontation regarding the vision of the country that was to be built, for which reason, many political and social

conflicts occurred. This phase incorporates as a historical milestone the promulgation of the Constitution of 1949 and the emergence of the Second Republic of Costa Rica. The formulation of the country's vision, permitted 'institutionality', which the country had built until the middle of the century including:

- The creation of the Ministry of Health and Protection in 1927
- The creation of the Costa Rican Social Security Fund in 1941
- The promulgation of Social Guarantees in 1942
- The approval of the Code of Work in 1943
- The formulation of the General Plan of Electrification in 1948'

The second period covers the 1960s and 1970s, where the emphasis on policies and plans was aimed at achieving coverage and to implement specific programs promoting better allocation of resources. That is how the National Service of Water Supply and Sewerage Systems was established in 1961, in order to increase the coverage with emphasis on the most forgotten communities.

The establishment of a secondary education reform in 1963, which incorporated within its goals the extension of coverage for preschool, elementary school and adult education, was complemented with other options through entities such as the National Institute of Learning in 1965, directed to boost the Costa Rican population’s capacity and ability to access the workforce.

To promote income generation in the economically active population, institutions to develop agricultural activity were created, and the Fund for Social Development and Family Allowances was created (FODESAF) under the Ministry of Labor and Social Security in 1974. A Plan to Fight Poverty was formulated and the Institute of Social Assistance (IMAS) was created, equipped with tools to identify low-income families and individuals living in poverty that would qualify for financial support under various programs.

In the health sector, the National Plan of Health was created in 1971, which accelerated the process of extension of primary care, under of the Ministry of Health, delegating the Costa Rican Social Security (CCSS) the delivery of health care services and transferring the network of public hospital

services. The Law of Universalization of Social Security in the year 1971 and the General Law of Health of 1973 are still effective in the current context, and during the last decades these advanced towards the extension of coverage and adaptation strategy in relation to changes in the health conditions.

The third period started with the crisis of the 1980s, which led to the implementation of reforms and structural adjustments whose great challenge was to maintain, on the one hand, consistency with the vision of historical development of the country, and on the other, continue progress towards the common well-being in a national and global context of financial constraints and the needs of State reforms. Parting from the sectorial reform, the country decided to transfer to the CCSS all rural and community primary care services, which up to that time had been carried out by the Ministry of Health.

The transfer of services to the CCSS included a process of adaptation of the model of care prevailing at that moment, which created the modality of Basic Health Care Teams (EBAIS) aimed to cover 100% of the population. The strategy to extend primary care coverage was to start at the most scattered areas towards the most concentrated ones, from the more neglected populations to the higher-level of social development, parting from a strategy of regionalization of the network for health services, which coordinated the establishments of the various levels of management through a referral and cross-referral system. Financing of the health services network was carried out under a tripartite scheme with collective contributions from the worker, the employer, and the State.

From this point, the Ministry of Health was defined as the head entity responsible for addressing the social determinants of health to achieve greater well-being using a multidisciplinary, intersectoral and participatory approach. The functions through which it exercised leadership were the Political Directorate, Finance Modulation, and Harmonization of the Provision of Health Services, Regulatory, Marketing, Monitoring, Strategic Planning and Impact Assessment for Actions in Health.

The development of a national model of planning and evaluation, supported by a system of vital statistics and systematic surveys with multiple, solid, and reliable purposes, has been an essential condition for the monitoring, adjustment, and evaluation of progress towards the ultimate goals.

Implementation

With the publication of the Political Constitution, the role of the State was defined as the promoter of development. With this, the Costa Rican society established the regulations of the Powers of the Republic and agreed to abolish the Army, stressing the importance of public policies and social investment as instruments of development. The priority of education has been evident since 1957, in the Fundamental Law of Education and the Organic Law of the Ministry of Public Education (MEP), which established education as universal, free, obligatory and as a right of the entire population, allocating public resources required to achieve this goal.

Throughout history, Costa Rica managed to maintain the State presence in the areas of education, basic sanitation, and health. Of great importance was the creation of a group of institutions responsible for promoting production, territorial integration, and support for emerging productive groups as a strategy to generate greater economic resources, modernize, and diversify the economy of the country.

The creation of the Supreme Tribunal Elections and fusion of Registries of Civil State and Electoral in the Civil Registry provided the country with a transparent mechanism in order to maintain the 'institutionality' and thus guarantee free elections and continuity of the various political cycles. The creation of the National Statistics Institute and Census, as an entity devoted to the generation of demographic, social and economic information has been of great importance to rely on current and objective data for the processes of planning, monitoring and evaluating the effect of the interventions.

At the beginning of the 1970s Costa Rica was a pioneer in adopting the Declaration of Alma-Ata and implementing the strategy of primary care under the Ministry of Health. This allowed Costa Rica to address communities of lower socioeconomic level through the creation of Health Posts and Health Centers in order to facilitate access to populations without access to social security services.

Based on that strategy and complimentary to the work of the Ministry of Health, the CCSS made important efforts to provide general access to medical services and patient health care, so as to expand the system allowances for Disability, Old age, and Death, which included a noncontributory

pension system for the population in poverty. Thus, despite the crises of the 1980s, the coverage of the Regimen of Disease and Maternity of the CCSS went from 8% to 86% in 1980.

In addition to the progress made in the universalization of primary and secondary education, the creation of public and private universities, as well as technological training institutions was of great importance in order to facilitate the population's access to more skilled work.

The creation of institutions to focus on the populations with a higher level of poverty, like FODESAF and IMAS, facilitated the reduction of the gaps in sanitation, upon granting resources for the construction of rural water supply systems and programs of latrine building, providing supplementary food and child care to families of greater social risk, carrying out transfers conditioned to reduce the risk of excluding children and adolescents from the educational system, protecting older adults in state of abandonment and poverty.

The crisis of the 1980s put the model of development to test. During those years, the rates of unemployment and underemployment doubled, which deteriorated even more with the drastic reduction of purchasing power from wages, elevating the percentage of homes in poverty conditions to 50% in 1982.

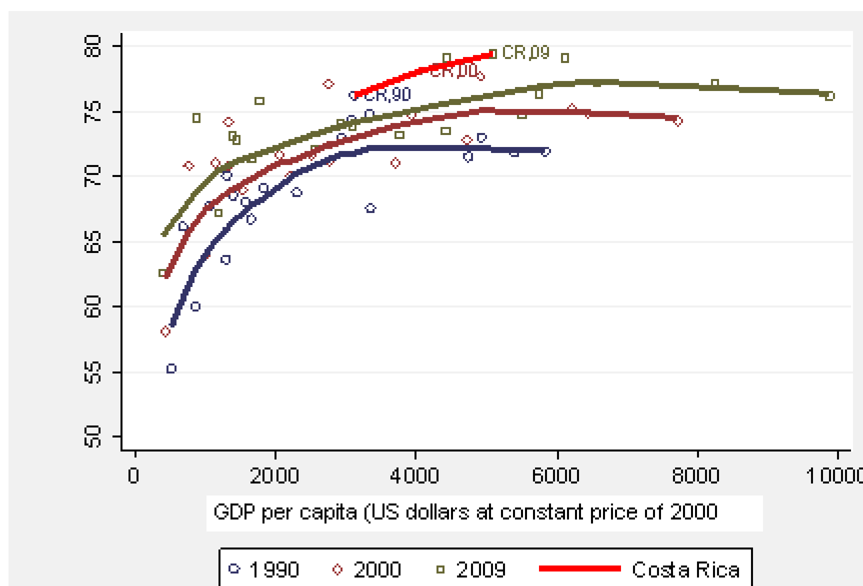
In this context, the social policy suffered the effect of the decline in public finances and the fiscal deficit, since the public spending was reduced by nearly 25% in only two years. The priority to invest in the social sector, which had characterized the country, permitted to protect the implementation of the public policies and maintain the stability of the achievements, although the investment in the infrastructure, which the country had maintained to that moment, was sacrificed.

The crisis, evidence of fragile finances and the need for ensuring a greater efficiency in the public investment, forced the rethinking of the development model. However, the country managed to maintain the public 'institutionality' principles based on equity and solidarity, despite thoughts of privatization and neo liberal thinking that aimed at reducing the State apparatus. In light of that critical situation, the policies of economic stabilization were implemented to reverse the effects of the crisis, reduce the poverty level, and recover the access to employment and wages, recovering the levels of social investment and macro-economic indicators at the end of the 1980s.

Framed in that international economic crisis and given the need for readjusting the model of organization of public health services, the country implemented a process of Health Sector Reform that led to the adaptation of the model of care and delivery of disease care services in charge of the Costa Rican Social Security Fund and to the strengthening of the leading role of the Ministry of Health as guarantor of the health of the population. The process of reform included the decentralization of the CCSS's service delivery system, incorporating citizens' participation through Health Boards.

The performance of the social policies in search of a redistributive effect of the social spending is compared in figure 4. Since the 1990s, life expectancy at birth in Costa Rica is higher than that reported by other countries in the Americas with various income levels, being greater if compared with populations with similar per capita GDP or even higher than the years of life expectancy by the population in countries of higher income.

Figure 4. GDP per capita and life expectancy at birth in Latin America, 1990, 2000, 2009



Source: Own elaboration parting from CEPAL, CEPALSTAT & CELADE

Evaluation of results and impacts, including on social determinants and health inequities

The progressive trends in the improvement of access to education services, water, and environmental sanitation, contributed to the reduction of infant mortality gaps upon implementing a set of policies and decisions during the 1970s. These policies were directed to extend the coverage of rural and community health programs to the districts where infant mortality had not declined during the 1960s.

The rapid reduction in mortality starting in the decade of the 1970s was achieved as a result of a sustained effort to expand the basic services coverage to the population, such as access to water, environmental sanitation and networks of communication (roads and telephones). This increase in coverage enhanced the achievement of results upon extending rural and community health programs.

Another significant change also associated with the increase in coverage and access to services was the rapid decline of fertility. Costa Rica saw a total fertility rate of 7.1 children per women at the beginning of the 1960s to a total fertility rate of 3.5 at the beginning of the 1980s. The decrease in fertility extended rapidly from the most educated women of urban areas to women of more remote areas. Research has in addition shown that the health workers played an important role in the dissemination of family planning methods.

As a result the change can be documented in the analysis of a number of indicators related to health care. For example indicators such as adequate prenatal control and child delivery care showed no significant gaps according to education of women, nor by urban or rural areas.

The decline in fertility resulted not only from the access to health services and methods of family planning, but from the improvement in educational status, participation in the work force and empowerment of women. It is for this reason that the reduction of fertility occurred from women of higher educational level in the urban areas to women with lower educational level living in the rural areas.

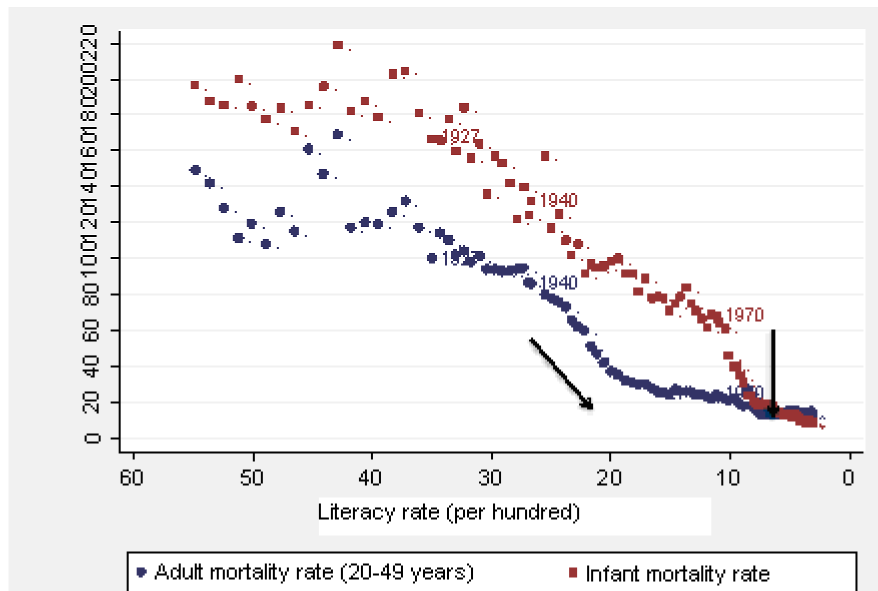
The progressive reduction in fertility that reached a global rate of 1.8 children per woman in 2010 increased the life expectancy at birth, reduced the infant mortality rate, increased the percentage of

births with medical care, and reduced rates of malnutrition. Thus, the expansion of education corresponds with the decline in mortality of both children and adults (Figure 5).

With the improvement in the social indicators there was an increase in life expectancy of the population which increased the life expectancy in women by 10 years and infant mortality rate was reduced in almost 50 points upon going from 68.4 per 1000 LB in 1970 to 18.1 in 1980 (Figure 1). As a result of that process, for the year 2010, 99% of live births survive until 15 years, and of the population that reaches 15 years, 83% of men and 90% of women survive until 65 years (Figure 6).

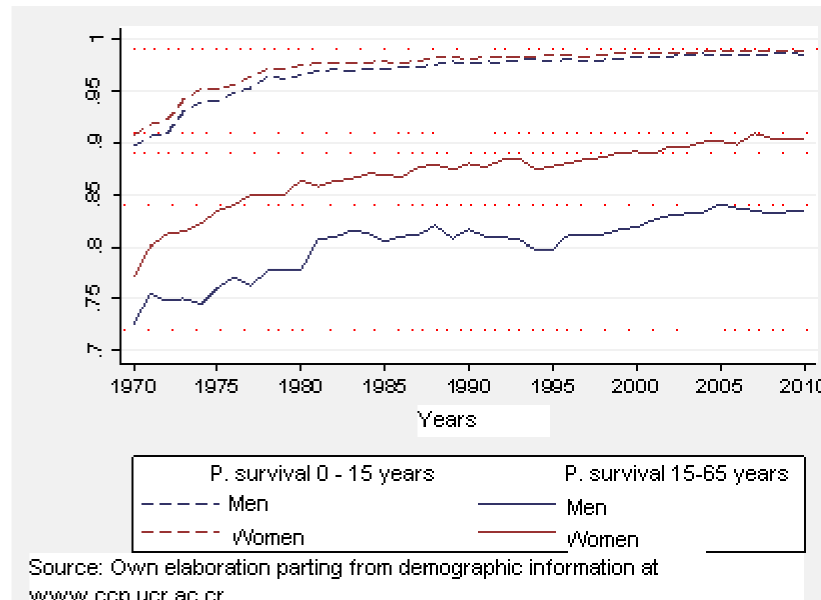
The reduction of mortality expressed by a decline in infant mortality and a sustained increase of life expectancy illustrates very significant achievements in a middle-income country. Since 1970 up to now, Costa Rica has achieved the greatest life expectancy in comparison to other countries in the Americas.

Figure 5. Infant, Adult Mortality Evolution, according to illiteracy rate, Costa Rica , 1910-210



Source: Own elaboration parting from Rosero, 1986 ad demographic information at www.ccp.ucr.ac.cr

Figure 6. Probability of survival from 0 to 15 years and from15 to 65 years according to sex. Costa Rica, 1970-2010



Source: Own elaboration parting from demographic information at www.ccp.ucr.ac.cr

Follow-up and lessons learned

Some elements of the historical analysis of the experience of Costa Rica pose challenges to the sustainability and progress with regard to social development. The inherent weaknesses in the productive structure of the country that showed the fragility of the Costa Rican economy given the crisis of the beginning of the 80 is one key point.

Another key element was the political will and the commitment of Costa Rican society in maintaining the long-term vision of social policies despite financial constraints. The achievements in health indicators are a reason for pride for Costa Rican society and it has shown signs of maintaining the commitment of the collective contribution to maintain the universal coverage of services and the targeted programs to bridge the gaps in health.

The challenges that the demographic transition and the aging process propose, in a population with high life expectancy, indicate that efforts should be strengthened to address the determinants of health. The differences in the years of life expectancy according to sex illustrates the need to address the determinants associated with violence, drug addiction and marginalized populations. Otherwise, the burden and costs of chronic diseases and pathologies associated with aging will be untenable for the health system.

The 'institutionality' created for the implementation of public policies is an achievement, but there are challenges regarding limitations in the definition of competencies and a need for a greater articulation of the common objectives and achievements.

The leading role of the health sector and the inherent complexity in the articulation of the mandates and functions of other institutions, the promotion of citizen participation in decision-making as well as resource mobilization remain major challenges. But it also represents an opportunity to document the effect of the implementation of policies, as well as the application of methods and innovative tools to put into practice the framework of the social determinants of health directing the social investment and the policies of State towards the most vulnerable groups.

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