Health and Economic Growth Phase II: 2001-2002

Background

At PAHO we recognized that a better health of the population has its own merit, from a moral and humanitarian perspective of social justice. However, we consider that it is important to promote the discussion and dissemination of information about other dimension of this debate: the contribution of the investments in health and health status of the population on country's economic growth and social development (reduction of poverty and inequalities).

During the nineties there has been a significant development in the conceptualization of the impact of changes in the health status of the population on demographic changes and long term economic performance. Similarly, significant progress has been made in documenting the empirical evidence on the long lasting positive effect of changes in health status of the population on economic performance. Significant part of these advances is reflected in the work of the Commission on Macroeconomics and Health and the studies developed under Phase I of the Health and Growth Project.

Yet, more need to be done. Most of this new knowledge is not a central part of mainstream policymakers' thinking about health and economic development. Recent advances in economic growth theories exploring the relationships between health, human capital and long-term economic growth, as well as the emerging empirical evidence on the role of health of the population - quality and longevity of human capital, are not an integral part of national development strategies.

Project Objectives:

The main objective of the Health and Economic Growth Phase II project is to further our knowledge and understanding of the relationships between the health status of...
the population - quality and longevity of the human capital- and the process of economic growth and social development. The project will promote further incorporation of current developments about the relationships between health variables in the current way of thinking about economic growth and development. It will promote the incorporation of health based indicators within a comprehensive economic growth and development framework to discuss economic and social aspects of economic growth and social development performance.

**Project Components and Activities:**

**Health and Economic Growth Phase II**

The project includes development of activities in the area of analytical and applied research and dissemination of information. Activities will be carried-out by a leading specialist in the field of economic growth and social development, and leading health economics academic and research institutions in countries of the Latin American and Caribbean region. The Health and Economic Growth Phase II project is organized around three components and activities:

**I. Analytical and Conceptual Frameworks**

**On Health, Human Capital and Economic Growth and Social Development: Poverty and Inequality.**

The analytical papers to be developed in this component will be covering topics that have not yet received a proper treatment by the specialized literature on health and economic growth. The papers will explore the mechanisms by which health status of the population may impact on countries' economic performance in terms of economic growth and social development. Analytical papers will analyze, explicitly, the critical role of investments in improving the quality and longevity of human capital for ensuring the sustainability of economic growth and poverty alleviation programs.

**a) Health, Demographic Changes and Economic Growth: the impact of changes in the quality and longevity of human capital on economic growth.**

The paper will present an analytical framework explaining the mechanisms by which changes in the quality and longevity of human capital, associated to improvement in health status of the population, have an impact on the rate of growth of the economies. The paper will discuss the policy implications, derived from the theory and historical analysis, economic growth, for developing countries.

Researcher: Professor Robert W. Fogel; University of Chicago.
Expected Completion date: July 2001. Completed.

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2 Areas of research discussed and recommended at the meeting on “Areas of Research on Health and Economic Growth” held at PAHO headquarters, October 29, 2000. Participants: Dr. George Alleyne, Dr. Juan Antonio Casas, Dr. Cesar Vieira; José Luis Estrada; David Mayer; Raúl Molina; Rubén Suárez.
b) *Health, accumulation of human capital, distribution and economic growth: A health generated poverty trap.*

Aimed to a general audience, the paper will discuss the implications of differences in the initial endowments of health status or quality of human capital for the dynamic evolution of the accumulation of human capital, the distribution of income and wealth, and the overall rate of economic growth and social development. The paper will analyze the role of health and demographic factors in explaining the vicious circle of poverty and inequality characterizing many economies of the developing world.

Researchers: Professors Oded Galor and David Mayer; Brown University, Boston, MA.
Expected Completion date: First draft (July 2002).

II. **Applied Research: On Health, Human Capital and Economic Growth and Social Development: Poverty and Inequality**

Studies of this component will focus on assessing the relationships between changes in the health status, demographic changes and countries' economic performance, and on developing an operational health status based indicators for measuring the social and economic rates of return of investments in health ("a vulgar metric of health"). The studies will explore the use of health status variables to assess the quality, quantity and longevity of human capital, and it relationships with countries' overall economic performance: productivity, economic growth and social development. It will include an analysis of the empirical evidence, from an economic and historical perspective, of the way in which health status of the population or the quality and longevity of human capital may have affected country's economic performance in terms of economic growth and social development. The studies will include an analysis of the ways in which public policies or society and government responses to health and educational issues may have affected country's long-term economic performance and current level of social and economic development.

a) **Studies on Health, Human Capital and Economic Growth: Country/Regional Experiences**

Four (4) country case studies will analyze the impact of differences in the health status of the population, measured in terms of nutritional status, Body Mass Index (BMI) and other health status indicators, on the accumulation of human capital and long-term economic growth. Studies document the empirical evidence of major changes in health status indicators over long periods of time - longitudinal studies, as well as the differences in these health status indicators among different income groups at a given point in time - cross sectional studies. The case studies will analyze the likely impact of differences in the health status on the accumulation of human capital on income inequalities and long-term economic growth. They will explore the impact of these differentials in the health status on the rate of depreciation of human capital over the life cycle of different socioeconomic groups. The researcher will discuss the type of health interventions more likely to have produced long-lasting effects in reducing the rate of depreciation of the stock of human
capital of the country and different socioeconomic groups. The studies will discuss the implications of findings for sustainability of poverty alleviation programs as well as on the hypothesis of income convergence/non-convergence in endogenous economic growth models. The four country case studies will cover countries of the Latin American and Caribbean grouped by sub-region: Mercosur, Andean Countries, Mexico and Central America and the Caribbean.

b) **A health-based indicators of the quality of human capital and social well being**

Measuring the health of the population. The study will focus on developing health status indicators that are operational for measuring the social and economic rates of return of investments in health ("a vulgar metric of health"). It will explore the significance of different health status indicators -including nutritional status, BMI and other summary indicators, for assessing biological and social risk factors associated to differences in the incidence and prevalence of infectious and chronic diseases affecting the rate of depreciation and accumulation of human capital. It will summarize pros and cons of different health status indicators as well as the empirical evidence on the relevance of these indicators for measuring the rate of depreciation and accumulation of human capital among countries and between different socioeconomic groups. The paper will provide recommendations on the type of variables that could be included in existing data collection instruments for a better assessment of the contribution of health to improvements in the quality and longevity of human capital and on long-term economic growth. It will provide some guidelines for including health variables in the estimation of Human Resources National Accounts.

Researchers: TBI
Expected Completion Date: November/December 2002

III. Dissemination of information

This component includes dissemination of information activities including regional prizes for best thesis and professional papers on health and economic growth, the organization of a regional senior policy seminar, and publication of documents on conceptual frameworks, methodological issues and empirical evidence on the relationships between health and economic growth.

a) **Regional Prizes for best thesis and papers Health, Human Capital and Economic Growth**

*Graduate Thesis on Health and Economic Growth (2)*
Two (2) grants will be provided to support to graduate thesis on health and economic growth. Prizes to be awarded in collaboration with national health economics, public health, and leading academic institutions.

*Two (2) Prizes, to best papers on Health and Economic Growth, presented at specialized regional professional associations meeting (2).*
One (1) prize to the best paper presented at the meetings of the Health and Economic Growth sessions of the Global Development Network:
Global Development Network -GDN: [www.gdnet.org](http://www.gdnet.org)
One (1) prize to the best paper presented at one of the regional meetings of the Professional regional economics associations:
Latin American and Caribbean Economic Association; 2002 Annual Meeting (1)
http://lacea.org/annualmeetings.htm;

The Selection Committee of corresponding regional associations will submit the best papers to a PAHO Research Advisory Group on Health and Economic and Financing.

b) **Senior Policy Seminar: On Health, Human Capital and Economic Growth and Social Development: Issues and Policies (1)**

Senior Policy Seminar on Health, Human Capital and Economic Growth in Latin America and the Caribbean: Joint Seminar(s), PAHO/IADB. To promote the incorporation in the policy debate on economic growth and social development the policy implications of the new theory of endogenous economic growth as well as the most recent empirical evidence on the role of nutrition and health in explaining long term economic growth. A two (2) - day Seminar will include:

- **A Round table/Special Session on Health, Human Capital and Economic Growth: Theory and Evidence:** Leading academic experts in the area of human capital and economic growth theory.
- **Studies on Health, Human Capital and Economic Growth: Country Experiences.** Leading researcher from Latin America and the Caribbean. Presentation and discussion of results from country experiences, sub-regional and regional studies.

Place: Washington, D.C.
Date: October 3 - 4, 2002
Target Audience: Policy-makers and Ministers or high level officials from the Ministry of Health, Ministers of Finance, Economic Planning Social Development, Economic Development, Central Bank's Research Departments, professionals from leading academic and research institutions from the Americas.

c) **Publication & PAHO's Web page on Health, Human Capital and Economic Growth and Social Development: Inequality and Poverty**

The results of the studies and papers related to this project will be disseminated in a special PAHO's Series of working documents on Health, Human Capital and Economic Growth. In addition they will be electronically disseminated through PAHO’s Web page.

(i) Web page; preparation and up-dating (twice a year)
(ii) Editing, printing and distributing project related documents; Health and Economic Growth working documents Series, a PAHO Scientific Publication with selected papers on Health and Economic Growth.
Contact Information:

For more information regarding its components or activities or any other further question please feel free to contact us at:

**Ruben Suarez**  
*Economic Advisor*  
*Regional Advisor in Health Economics and Financing*  
Public Policy and Health Program (HDP)  
Division of Health and Human Development (HDD)  
Pan American Health Organization (PAHO)/World Health Organization (WHO)  
525 23rd Street, N. W,  
Washington, D.C. 20037-2895  
United States

Phone: 202 974 3482  
Fax: 202 974 3675  
E-mail: suarezru@paho.org

Or

**Fernando Montenegro T.**  
HDP/HDD  
PAHO/WHO  
525 23rd St. NW  
Washington DC 20037  
United States

Phone: (202) 974 3216  
Fax: (202) 974 3675  
E-mail: montenef@paho.org

You can also visit us at PAHO’s website:  
[www.paho.org](http://www.paho.org)

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4 Specific terms of reference will be defined based on a Workshop on research on Health and Economic Growth to be held at the initiation of the project. After the initial workshop researchers will be invited to present a research proposal. Research proposals will include a summary of database and sources of information to be used for developing the research project.