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**GLOBAL ACCELERATION AND DISPOSSESSION:
Regression in the Right to Life and Public Health during Ecuador's
Neoliberal Decades**

**Jaime Breilh Paz y Miño
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2008

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Recognition

The authors express their gratitude to the Globalization Knowledge Network for their help on this project. We would especially like to thank Doctors Ron Labonte and Ted Schrecker at the University of Ottawa for their valuable comments and guidance.

Acknowledgements

The authors recognize the comments provided by our colleagues at the Simón Bolívar Andean University: Carlos Larrea and Juan Fernando Terán, whose knowledge and experience allowed us to enrich our research sources.

Also the authors express their sincere recognition to the translator Daniel Denvir and to Erika Arteaga for her translation of the Introduction.

We also thank Juan Gabriel Piñeros of the Interdepartmental Doctorate in Public Health at the National University of Colombia. We offer our appreciation and gratitude for his helpful and selfless collaboration.

“With the invisible violence of the market, diversity is the enemy of profitability and uniformity rules. Serial production, at a gigantic scale, imposes its obligatory guidelines of consumption. This dictatorship of obligatory homogenization is more devastating than any one party dictatorship; it imposes a way of life on the entire world that reproduces human beings like photocopies of the exemplary consumer.”

Eduardo Galeano (“The Empire of Consumption”)

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(Based on original Spanish edition Publisher by Universidad Andina, Ecuador)

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Quito, 2008

Cover: María José Breilh

Edition: Abya Yala

English language edition:

Translators: Daniel Denvir
and Erika Arteaga

ISBN Universidad Andina Simón Bolívar
Author rights of English edition: Jaime Breilh and Ylonka Tillería

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Printer:
Editorial supervision:
Texts:

By Way of Introduction: Understanding the Current Scientific Dissent About Public Health in Ecuador.....	7
Part I.....	10
ACCELERATION OF THE ECONOMY AND THE WITHDRAWAL OF LIFE	10
<i>Acceleration, Dispossession and Shock Suffocate Life</i>	13
SUMAK KAWSAY (HEALTHY WAYS OF LIVING) AND DEMEDICALIZING HEALTH: TOWARDS A TRULY INTERCULTURAL AND TRANSDISCIPLINARY PARADIGM	15
<i>Key Processes and Categories for the Study of the Social Determinants of Health (Conceptual and Methodological Approximation)</i>	21
THE URGENT CHALLENGE TO RECOVER THE RIGHT TO HEALTH (Renovate Ideas and Dismiss Functionalism)	26
Part II.....	29
THE ONSET OF DISPOSSESSION AND GLOBAL ACCELERATION IN ECUADOR	29
<i>Global Acceleration, Increased Inequity and Social Exclusion in Ecuador Since 1985</i>	30
<i>The destructurement of small rural economies and familial production..</i>	45
<i>Labour deregulation and flexibilization as determinants of the deterioration of working conditions</i>	49
<i>Neoliberal globalization and the loss of collective support mechanisms</i>	55
<i>Agro-industrial mechanisms for the loss of community and family supports</i>	57
<i>The New Face of Hunger: Cultural Globalization and Unhealthy Ways of Eating</i>	83
Part III.....	88
EPIDEMIOLOGICAL AND ECOLOGICAL DETERIORATION UNDER GLOBAL ACCELERATION	88
<i>Recapitulation: Social Determinants of Health and Ecosystems in Latin America Under Neoliberalism</i>	89
<i>Illustrative Cases of the Impact in Latin America</i>	93
<i>The Ecuadorian Case: Regression in Health During the Neoliberal Years, 1990-2007</i>	104
FINAL REFLECTION: CHALLENGES FACING THE RIGHT TO HEALTH	126
BIBLIOGRAFIA	130

By Way of Introduction: Understanding the Current Scientific Dissent About Public Health in Ecuador

The interpretation of social reality can begin from different perspectives or paradigms that condense ways of thinking and explaining facts. These frameworks hold beliefs and values that guide scientific reasoning.

The applied epistemology of scientific knowledge has demonstrated that even technical ideas, which apparently cling to “objective” disciplines, are profoundly influenced by the dominant cultural and ideological context.³ Such knowledge either forms a part of either hegemonic visions, tied to power structures, or to critical and liberating perspectives.

Despite what one might think, scientific paradigms and models are not the mere result of specialists’ free will and autonomous technical decision-making. Rather, paradigms are constituted at the interrelation of ideas, said specialists’ individual actions and the forces, rules, abilities and obstacles that govern every society and its institutions—the power structure dynamics that construct knowledge. This complex determination powerfully marks the development of the health sciences, which become “as well as other operations that manage symbols: an expression that is transformed or transfigured by, subordinated to, and at times unrecognizable as part of a society’s power relations.”⁴

We should then not be surprised by the discrepancies between scientific models or between technical visions, coming across society’s political universe. In fields like that of public health—and its “diagnostic” arm, epidemiology—the oppositions become especially obvious. The same is true for environmental science, given that its results constitute a thermometer that measures the degree to which a society protects life and people’s wellbeing. These are also essential measures of political and economic powers’ performance and success.

Such scientific disagreements are frequently made public in Latin America. They are especially visible when they are related to issues that prioritize business or institutional interests over those of the communities affected by economic projects or official policies. And we are also seeing an increasing concern over these sorts of public health debate in the developed world. While these certainly

³ From the essays of Michel Foucault (“Las Palabras y las Cosas/ The Order of Things”. México: Siglo XXI, 1978, to the most recent studies of Venezuelan Alejandro Moreno (“El Haro y la Trama”. Caracas: Centro de Investigaciones Populares, 1995), to the most recent by Edgar Morin (“Ciência com Conciencia”. Rio de Janeiro: Bertrand Brasil, 1996) or of Boaventura Santos (Introdução a uma Ciência Posmoderna. Porto: Ediciones Afrontamento, 1995)

⁴ Bourdieu, Pierre. O Poder Simbólico. Rio de Janeiro: Bertrand Brasil, 1998

reflect technical assessment perspectives, they also unequivocally reflect actors' social and political perspectives.

For example, a current publication by European scientists⁵ has received a great deal of attention in recent years. Recognizing the increasing discrepancies of studies on economic and political projects' impacts on health and the environment, they decided to systematize and evaluate the frameworks employed over the past ten years so as to distil basic lessons for the future. In short, the European scientists consulted used a wealth of examples to explain the distortions of the "official" arguments." They confirmed the clear gap between scientific and technical models that are applied, and the negative collective effects in populations affected. They also reaffirmed the loss of direction in public health policy, including the negative effects of a vision that forces corporation impunity, conceals entrepreneurial irresponsibility, granting favour to the justifications offered by certain experts, that contradict entire populations' arguments and testimonies. The authors call into question a vertical decision making model, one which is supposedly "based in hard science", but imposes a biased outlook by minimizing or silencing the opinions of communities and of researchers and experts tied to their problems. Such approach ends up reinforcing a unilateral vision, which time and time again leads to bad policy decisions and allows for economic investments and projects that are detrimental to collective health.

In countries like Ecuador, positioned in the periphery of the international economic system, the phenomenon that we have named *global acceleration* - further explained throughout this text-, occurs within the frameworks of economic neoliberalism and ideological neoconservatism. It has to do with the consolidation of the fast track mechanisms of big business, and its capacity to accelerate and globalize economic flows conducted to speed up monopolies. These mechanisms, intended to accelerate wealth concentration, have been unleashed alongside unequal methods of development, processes of social exclusion and the loss of rights, the deterioration of the quality of life in the cities and countryside, and the resulting regression in the right to health. It is paradoxical that at the very moment when an objective and sovereign scientific approach is most necessary to evaluate the net effects of this development model, we observe a weakening of the critical role of universities and centres of thought, and a resurgence of *neofunctionalism*⁶ in technical scenarios.

Positioning itself in this social and cultural panorama of dissent, the present study attempts to inscribe itself in a particular scientific debate, of great importance to health. This debate arises from opposing answers to the following question:
Public health in Ecuador under the most aggressive policies of neoliberal

⁵ Guimaraes, A and Guedes, Sofia (Editors). *Interface Between Science and Society*. Ghimpenham: Greenleaf Publishing, 2006.

⁶ Neofunctionalism resurrects Talcott Parsons' ahistorical framework of systematic analysis and its structural functionalism, a theory that locates stability and equilibrium as the foundation of social functions.

adjustment—1990 to 2005—followed a “normal” tendency, similar to the previous decade’s inertia in economic growth? Or, on the contrary, did it suffer setbacks and deterioration? To put it another way: were the country’s health and related policies upheld by technical criteria independent of the privatization strategies and neoliberal counter-reform applied over these years? Or, on the other hand, did they serve as a tool to regress public policy and to abet losses in the right to health?

The positions of some Ecuadorian experts, directly or indirectly bound to public administration during those years (especially those supported by World Bank Project funds) is that the policies and reality of the past 15 years of health programs and services are the positive results of a necessary process of modernization. On the opposing side, those of us who have persistently denounced the regressive tendencies that have accompanied the neoliberal era and regression in health rights, argue that privatizing mechanisms and the veiled commodification of public services and programs, have worsened inequality and unleashed processes that diminish rights. These same processes engorge a cumbersome and illegitimate external debt in the healthcare field.

The present essay’s central argument or hypothesis is, consequently, that the mechanisms accelerating a wealth concentrating and exclusionary economy centred on the benefit and overprotection of big business—with a corresponding plundering of resources that are vital for life—generated forms of loss and regression in the right to healthcare and the dismantling of institutional protections. These are all expressed in indicators from 1990-2005, which point not only to the deterioration of healthcare programs and services but also to the undermining of the general conditions of life (social reproduction) and, in contrast to the reports and predictions of the era’s governments, a stagnation or deterioration in health indicators, especially for those most sensitive to the crisis.

It is important to clarify that our argument should not be reduced to a moral critique of this period’s public administration and middle managers, although some functionaries took advantage of privileges during the World Bank era. It is true that certain experts and administrators were also victims of said policies, which ended up disfiguring their humanist training and placing their technical experience at the service of the privatization project. In this case, the natural question is: why do so many experts that live on a State salary, that self-identify as “public servants” and that are in most cases not dishonest people, end up serving the interests of the powerful? “Corruption” is the usual response to this perennial worry. But to frame members of the government apparatus’ tendentious conduct exclusively in terms of ethics would be to ignore the complex web of pressure and influence that turn governments into instruments of the business sector and large corporations. The State and its executive apparatus, the government, responds to an agenda imposed by power, and this agenda is the product of ideas and technical operations conceived of both consciously and unconsciously within a constructed cultural and political environment to reproduce dominant social relations. For this

reason, reducing the myopia of public servants facing collective necessities to a simple ethical problem could impede our understanding of the most fundamental web of determinations that takes place within the State, even in technical fields ostensibly separated from direct policy debates.

The present study's argument is linked together across distinct chapters. First, we undertake the necessary clarification of the *categories* central to the understanding of a complex issue; clarifying the concept of health itself and its determinants, emphasizing the necessity of taking on an integral understanding as a fundamental prerequisite to unravelling what documents and reports from this era either leave unsaid or distort. Based on that analysis, we will explain the harmful effects of global economic acceleration, the monopolization and pillaging of strategic healthcare goods; not only those which directly place obstacles on the access to health services, but also those like the destructuration of small economies, linked to the impoverishment and worsening of living modes. Thinking epidemiologically, we intend to show signs of the deterioration of broad collectivities' ways of life as a result of the mechanisms of acceleration and pillage. We will then collect disparate evidence of the deterioration of human health and ecosystems to, finally, establish the most urgent conclusions about this unfortunate period of our social and medical history.

To rethink fields like development economics, social inclusion, health and environmental protection, we must open our minds to a new reality and also focus our analysis on neoliberalism's mechanisms and the harm they have produced. The present is a moment of promise. Ecuador's new constitution recognizes the notion of "good, healthy living" that was proposed both from academic and indigenous nucleuses. In fact, the notion of *healthy modes of living* introduced by critical epidemiology, and the notion of *sumak kawsay* of the highland Andean indigenous Kichwa cosmology, both state the need for good, dignified, creative, fulfilling and therefore healthy living, becoming a central category for social and public health assessment.

The Ecuadorian people will have to decide whether or not to ratify this sort of principles of the new constitution. Good quality and socially responsible research will undoubtedly play an important role in the face of that challenge.

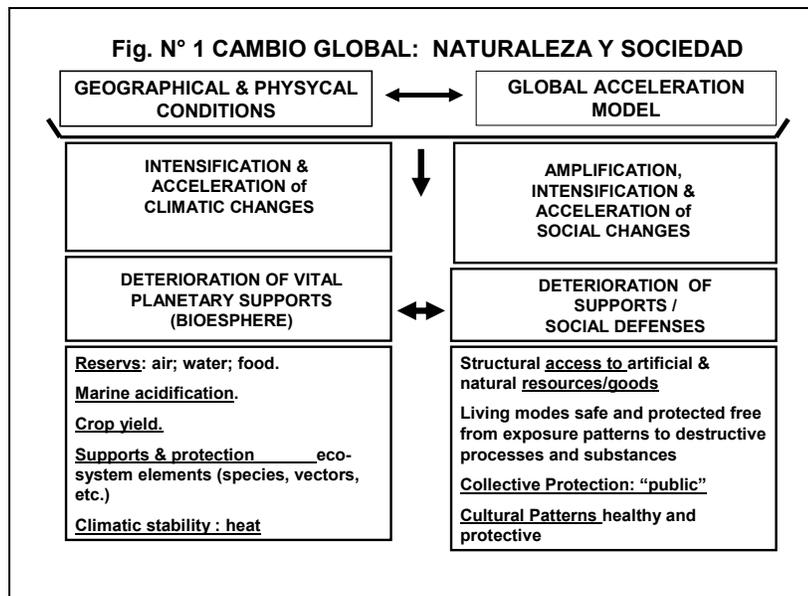
Part I

ACCELERATION OF THE ECONOMY AND THE WITHDRAWAL OF LIFE

The acceleration of the rate of capital's reproduction in the global economy maintains a close relation to the deterioration of life on our planet and the reduction of the rate of the reproduction of life and health in countries like Ecuador. While investments and profits reproduce more quickly in the contemporary world and society, there is increasingly less space and resources left for life on earth.

The turn of the millennium has not witnessed a change in the nature of the economic systems governing the world. Instead, there has been an acceleration of its processes, increasingly cutting the cycles of capital reproduction. Unfortunately, this has been accomplished through mechanisms that unleash not only devastating planet-wide climate change and the destruction of ecosystems but also global processes that structurally restrict the conditions required for the reproduction of life and health.

A socio-economic system diametrically opposed to the principle of sustainability has pushed the planet's natural life to the brink of catastrophe. This has unleashed a massive deterioration in social reproduction and ways of living that affect health. In other words, there



is a co-determination of social and natural factors on global changes in health.

The notion of *global warming* synthesizes the dangerous tendency of increasing physical temperatures that are provoking phenomena such as the retreat of glaciers; a lower return on crops; malnutrition caused mortality and heat caused stress; vector born disease; rising sea levels and ocean acidification, which affects ecosystems, etc.⁷ We suggest that one could employ the metaphor of *social warming* to synthesize a collection of increasingly devastating processes that provoke a disaster in the globe's biocapacity and the destruction of healthy life. In countries like Ecuador "social warming" is as if not more serious than "global warming," and the two are deeply interconnected. Unfortunately, social policies from the recent golden years of neoliberalism in Ecuador have encouraged this warming in healthcare and society as a whole.

In the current age, the bustle of production, the cult of competitiveness and the rapidity of economic operations go hand in hand with the religion of consumption. The speed of flows and operations that increase profits are the justification and end for everything, but the circulation and sale of merchandise is required to complete the economic cycle. So the ruling logic is to *extract, produce* and

⁷ Stern Report. WHO Climate Change and Human Health: Risks and Responses, 2006

distribute to generate products that can be *consumed*. The companies cannot complete the circle of investment if the masses do not consume their products. The circulation of merchandise is key, and while production levels grow, consumption must be maintained and increased. It is irrelevant if a substantial portion of these products are soon discarded or thrown away. Consumption in and of itself is all that matters to keep economic accumulation alive.

The irrationality of this interminable cycle is the cause of many health and environmental problems. The case of the United States elucidates the chaos gripping the economy, health and the environment. This country, with just 5% of the world's population, consumes 30% of its products and dumps 30% of its waste. In this economic model, designed to rapidly concentrate benefits and socialize losses, it is not possible for extractive and productive industries to look after life and nature; neither is it possible to institute equitable and healthy distribution and consumption. On the contrary, an unhealthy and rapid cycle increases profit and competitiveness, extracting primary resources, draining and exhausting resources and contaminating nature. All of this employs technologies that are efficient for corporate accounting but profoundly inefficient with regard to the grand accounting of health and nature. In this way, processes dangerous to life are accumulated alongside economic accumulation; merchandise is distributed, but costs are externalized so that corporations can increase their productivity; mass consumption is induced, but the people's *good living* is not taken into consideration. The focus is on the exchange value for corporations instead of a good's use value. This is exemplified by the irrationality in designing products while planning for their obsolescence or the creation of conditions where people perceive a product to be obsolescent and go out and buy new "models," even if the old ones were perfectly useful. This entire process accelerates the consumption of energy, forests and life. This destructive cycle ends with the massive production of disposable goods.⁸

Viewed from any perspective, it is a doubly perverse system, but even more so from the point of view of those of us who make up the citizenry, the common people. We demand as a right the permanent consumption of the goods offered to us by the corporate machinery—even though we may think of ourselves as conscious—as the foundation of our well-being or, even worse, as the foundation of our identity. And that is where the great possibilities for alienation and human suffering begin. On one end, those from the middle class, those that have purchasing power, set out to consume, and in this way contribute to the economic acceleration that is destroying us. This paradoxically reminds us of the horrifying case of the cybernetic criminal in a recent thriller (*Untraceable* by Gregory Hoblit) who displayed his victims on a webpage and installed a device that increased the lethal dose in response to the number of visitors to his sinister portal. We all, within our means, participate in this great party of global consumption. And while it does not really have beneficiaries, it does satisfy the appetite for corporate profits. On

⁸ Peonard, Annie. Story of Stuff. www.storyofstuff.com, 2008

the other hand, the impoverished masses that cannot access the hustle bustle of consumption, especially young people, swell the ranks of criminal violence as a response to their marginalization. This phenomenon fuels an increase in insecurity and a loss of collective health.

Acceleration, Dispossession and Shock Suffocate Life

Globalization signals a new supranational form of capitalism created because the “production and reproduction of technology has changed the old space-time relations...this not only allows capital, goods and work to be in many places at once, but also ensures that human beings’ affective experience of space and time are radically altered.”⁹ Global rapidity has three structural mechanisms at its base that have raised the level of capital reproduction over the past decades

while cutting the rates of the reproduction of life and health: a) the recomposition of networks or productive forces; b) the incorporation of a new technological base for the acceleration of production allowing for the instantaneity of economic flows;¹⁰ and c) the implementation of fundamentalist strategies to control strategic goods and the market.^{11,12} Human life and nature have been

Figure N° 2

ECOLOGICAL & HUMAN DISASTER UNDER CHINEESE ACCELERATION

- 70% of water system contaminated; water provision impossible in many places (World Bank, 1997)
- 90% of rural population and 60% of urban population without health insurance. (Economist, 2004)
- Emergence of previously controlled diseases: tuberculosis, hepatitis B and smallpox. (Gómez, S.P. México, 2004)
- Hospitals have started charging patients for services, making it almost impossible for poor and even middle class people to have access to health care and preventive services. All that in the face of China's economic boom of the last 30 years. (Gómez, S.P. de México, 2004)

submitted to the overpowering technology of exploitation through this machinery in societies tied to Global Acceleration, especially those like China, where economic speed has reached vertiginous heights. One need only look at the Asian giant's public health balance sheet, at their social and environmental indicators, to

⁹ Davidson, Alastair, *Globalización y Hegemonía en Hegemonía, Estado y Sociedad Civil en la Globalización*, Dora Kanoussi –compiladora), México: Plaza y Valdés, 2001, p.121

¹⁰ In late capitalism, the global management and efficient operation of the monopolized means of production and high technology is made possible by instantaneous economic flows through digital communication, teleinformation and hypermedia

¹¹ Castells, Manuel (1996) *The Information Age: Economy, Society and Culture*, Oxford: Blackwell Publishers.

¹² Hinkelammert, Franz. (1997) *Los Derechos Humanos en la Globalización*, San José: DEI.

understand the enormous destructive power of the acceleration model advanced by the “Chinese locomotive.”^{13 14}

In Latin America, political and structural phenomena must be included in the analysis of processes of acceleration that we have described, as they heighten the economic problems. There is an aggressive pressure to resolve the crisis of accumulation experienced by the United States through a real *dispossession* of the subaltern economies’ vital resources (i.e. energy, communications, financial resources, land, water and biodiversity’s genetic wealth), obtainable through fraudulent and aggressive mechanisms that recall periods of primitive accumulation.¹⁵ As health is a process inextricably linked to the enjoyment of these resources, neoliberal globalization has led to serious health impacts for large social sectors and populations.

Exploitation strategies have reached unimaginable forms in the midst of this predatory logic. The theorists of the Chicago School, led by Milton Friedman, went so far as to formulate economic “shock treatment.” This program took advantage of massive social crisis, including natural disasters, to soften up the people’s will and facilitate the penetration of extreme adjustment measures:¹⁶ the demolition of economic, social and cultural rights; the auctioning off of public services at bargain prices; and the penetration of the culture of dispossession and competition, similarly accelerated the cycles of economic exploitation, stifling space for life and health.

From the health perspective, it is important to note that larger flows of labour have been unleashed in rivers of migration alongside the acceleration of capital flows and economic information within the framework of a globalized economy. These migrants live under increasingly precarious conditions and face exposure to unhealthy ways of living. We have even witnessed the globalization of the health field itself (models, personnel, goods and services). These mechanisms accumulate effects and make fragile health systems of dependent countries even more vulnerable. And the liberalization of commerce and services only serves to aggravate these tendencies. For example, the General Agreement on Trade in Services (GATS)—launched by the World Trade Organisation (WTO)—has allowed for the multiplication of the number of international accords signed without serious studies of the agreements’ negative health effects. Ministers of Health in our countries are generally poorly informed about these repercussions. Since health policy is increasingly about privatization, these agreements threaten increasingly devastating impacts. Given the absence of constitutional and legal

¹³ Fayanás, Edmundo. *El Desastre Ecológico Chino*. Barcelona: El Inconformista Digital, 21 August, 2006.

¹⁴ Gómez, Octavio. *Grave Deterioro de la Salud del Pueblo Chino*. Cuernavaca: Salud pública Méx v.46 n.5 sep./oct. 2004

¹⁵ Harvey, David (2003) *The New Imperialism*, Oxford: The Oxford University Press.

¹⁶ Klein, Naomi. *La Doctrina del Shock, El Auge del Capitalismo del Desastre*. Buenos Aires: Paidós, 2008.

regulations to protect policies and programs guaranteeing the right to health, there is an ever-decreasing political space for the sovereign management of health policy.^{17,18}

This globalized capitalist system is sustained by the instantaneous exchange of information, capital and cultural communication. This communication is maintained despite the greatest paradox of the information and technology era: *information's defeat of knowledge*. Categories and facts have been emptied and there has been a fetishistic construction of information and individualization (*de-communalisation*) of thinking.¹⁹ This is one of the reasons why there is incredible disinformation with regard to the real determinant factors of health. There is an ignorance of the dangers that global acceleration poses to the right to health in the spaces where decisions are made and in many university health programs. All of this takes place despite the consistent emphasis on “evidence based medicine” or of “evidence based policy” in health forums and services.

SUMAK KAWSAY (HEALTHY WAYS OF LIVING) AND DEMEDICALIZING HEALTH: TOWARDS A TRULY INTERCULTURAL AND TRANSDISCIPLINARY PARADIGM

To recover a more human path of development and health, it is not sufficient to appeal to a greater distribution of basic goods and services. While this is an important task, little can be accomplished through simple distribution. If the same basic conditions persist, little can be accomplished through a better distribution of curative services. In order to reorient hospitals and health centres, we must change the development model to allow for the possibility of changing our ways of living—to really create the definite conditions for “good living.” This requires, among other things, that we recognize that the system is at an impasse. While this predicament is in part due to big corporations’ suicidal myopia, it also reflects the regular people’s confusion: there has been a limited development of health consciousness, which makes adequate public policy oversight impossible. We must undertake a massive education campaign to reconstruct identity and move beyond the logic that consumption has imposed upon us. In other words, we have to ask ourselves: in the midst of this system of irrationality, waste, destruction, insecurity and pollution, where is the “good living”? How can a health

¹⁷ Blouin, Chantal, Drager, Nick and Smith, Richard. *International Trade in Health Services and the GATS*, Washington, D.c., The World Bank, 2006.

¹⁸ Labonte, Ronald, Blouin, Chantal, Chopra, Mickey et al. *Towards Health Equitable Globalisation: Final Report to the Commission on Social Determinants of Health*, Ottawa: Globalisation Knowledge Network, June, 2007.

¹⁹ Breilh, Jaime (1999) *Derrota del Conocimiento por la Información*, Rio de Janeiro: Ciencia e Saúde Coletiva 5(1): 99-114, 2000

system facing this cycle of accumulation of damage and the systematic negation of life be successful?

It is clear that the process of finding solutions and answers cannot be left to economists alone. Rather, we face an interdisciplinary and intercultural challenge. And collective health—or public health, as it is conventionally known—should not be reduced to something to cure, or, even worse, to an issue left to the traditional logic of curative medicine. Hospital and healthcare services are necessary and important. But they must complement rather than substitute for a national system of prevention in the workplace, as well as in consumption and the environment.

It is thus urgent to demedicalize the debate, the planning and health programs. Only in this way will we be able to move beyond the current mould of public sector health and put limits on companies that manage the business of private healthcare, whether in hospitals or other types of businesses. The economic machinery designed during the neoliberal era produces mass illness and induces unhealthy social logics and ways of life. It has deepened inequality in all of its expressions and bred the great illnesses of our time: toxicity caused illnesses, cancer and mental disorders. Thus a better distribution of the same thing does not constitute a necessary transformation of health. Rather, we must break the moulds of “living poorly.” We must recover human activities like work and consumption and create spaces for culture and recreation, along with the necessary conditions and media, that allow for “living well”—healthy ways of life.

Facing this challenge, it is urgent for research centres and the national health system to redouble their efforts to explain the most harmful mechanisms in our society, including those that have increased under economic acceleration and radical monopolization. To do so, we need a new and innovative paradigm rooted in our various forms of knowledge. We must expound the understanding of nature and society’s profound interdependency, the intertwined determinants of our ways of life and health.

Thus nature and society form an irreducible unity. Ecological and social problems should be treated through their social roots and, in the same way, social problems should be understood as part of life on Mother Earth. The protection of nature alongside social and human life form a single project.

Unfortunately, modern positivist thought, incubated in the bosom of the European Enlightenment, breaks open the unity of the natural and human social worlds, instating a separation between nature and human beings. Mother Earth is in this way posited as a world of objects to be dominated through economic progress, with human beings beginning to think of themselves as the owners and lords of nature.

The imposition of this anthropocentric cosmovision and the idea of nature as an economic object—tied to the extraction and accumulation of wealth—also plays a role in the complex historical process of domination and cultural colonization. While this is an issue of great importance, there is not space for an

exhaustive discussion here. But it is necessary to mention that for this book's purposes, these forms of reasoning imposed by the market society reproduce the loss of social life. This is a concept of civilization that has been imposed despite voices of warning from modernist critical thought and the superior reasoning of indigenous peoples' cosmovision.

In the case of health and related problems, this same positivist thought reproduces the false rupture between the social and the biological. This in spite of contemporary research on the body and its functions that has reinforced evidence that the development of a human being's life is not determined by purely biological or individual processes, and that phenomena like health are also social.

And when we affirm that health and life are social processes or socially determined, we are not only referring to precise phenomena such as the artificial transformations realized through genetic engineering or the recent appearance of so-called "synthetic biology," which has comprehensively constructed the genome of certain organisms such as that of the bacteria *mycoplasma genitalium*.²⁰ Rather, we allude to this extended and massive artificialisation and modification of nature and human beings that social development produces, which conditions human populations' ways of living and dying, their genome and biological prototypes.

Social reproduction takes place through productive systems, industries, and their ecological operation in agricultural and urban industrial settings. The transformation of ecosystems, of the course and quality of water, and the restructuring of human life patterns provoke deep transformations in ways of living and thus in the characteristics that define patterns of exposure to illness and collectivities' supports or protective processes.

There are damages to life that we could call "classic," such as unhealthy work patterns in the mines, factory or plantations; or the expansion of unhealthy, polluted and infected spaces in cities and rural communities. But the large corporations and universities that accompany systemic economic appetites look for other mechanisms of profit acceleration through monopolization and high technology. As will be shown later on, the commercialization of sport is a great example of how activities naturally tied to the development of life and health can be denaturalized and become unhealthy when they are recreated within the buy-sell logic and through the acceleration of profit.

Unfortunately, the medical world was slow to recognize that life and health are socially determined processes. This failure is largely due to the influence of biological determinism and healthcare decision makers who are subject to a reductionist vision of public health.

²⁰ Kaiser, Jocelyn, DNA SEQUENCING: *A Plan to Capture Human Diversity in 1000 Genomes* Science 25 January 2008: Vol. 319. no. 5862, p. 395

Fortunately, the integral vision that we articulate has grown in increasing areas of academia and in traditional spaces of progressive thought, despite the notable influence of this determinism. This vision stresses the deep interrelation between forms of life and Mother Nature and emphasizes “good living” as the foundation of health. Experiences like the debate over an article on interculturality in the proposed Ecuadorian constitution have demonstrated the surprising parallels between the indigenous concept of “good living” (or *sumak kawsay* in Kichwa) and the idea of a *healthy way of life* supported by researches affiliated with the Latin American critical epidemiology movement since the 1970s. This coincidence is a palpable demonstration of the deep ties that unite critical academic thought and the holistic vision of indigenous knowledge. Our adoption of the concept of *ways of life* arises from the critical necessity to distinguish the structured processes of life ways characteristic of distinct groups within a society, noting personal and family lifestyles and individuals’ free will. On the other hand, indigenous knowledge, forged within the framework of a community logic and a cosmivision that takes life and the survival of the commons as its centre, prioritizes the idea of living in community (*kawsay*) and ties it to notions of the good, protection, the beautiful, the agreeable and the pleasant (*sumak*): “...the importance given to the autarkic protective sentiment of indigenous *sumak kawsay* fits together rather well with the idea of *way of life* articulated by critical epidemiology. The two visions both prioritize the common good and collective life above private interests and logics that restrict and deteriorate.”^{21 22}

The intercultural construction of a healthy way of life should be rooted in both life and health: progressive social science knowledge and policies with regard to collective health alongside the ancestral and popular knowledge regarding harmonious relationship with nature, the rhythms of life and slower forms of spirituality, which are nourishing and responsible and cannot be built in the midst of an accelerated, unequal and competitive society. In short, there is a necessity for a great movement to put things in order and transform the damaging logic that prioritizes an unhealthy economy over life. This logic leads to an interminable spiral of productionism, competitiveness, waste, profound inequalities, and the increasing loss of possibilities for human and natural health.

This is why there is a necessity to understand the social conditioning of health and its interdependence with the spiritual, social and biological. In Latin America, this understanding has been constructed through decades of academic and popular experience. On the academic side, it emerged at the end of the 1970s when, as opposed to the Northern scientific world, a variety of research centres in countries like Brazil, Ecuador and Mexico broke ties with the positivist medical

²¹ Breilh, Jaime. *Sumak Kawsay ¿en Versión Light?*. Guayaquil: El Telégrafo, 7 de Julio, 2008.

²² Breilh, Jaime. *¿Riesgo o Determinación: De Qué Estamos Hablando? Hacia una Perspectiva Emancipadora de los Determinantes Sociales de la Salud?*. México: Conferencia para el Taller Latinoamericano sobre Determinantes Sociales de la Salud, septiembre 29- Octubre 3, 2008.

hegemony and began to scientifically explore the relationship between society, nature and health.²³

The present study on global acceleration's impact on health is written within this framework and interprets the health of our communities and their members as the result of a complex mix of determinations that go beyond the mere biological or individual.

Indigenous people have hundreds of years of experience defending their ways of life, connected to nature as the mother of life rather than something to covet. This has allowed for the development of sophisticated forms of knowledge that are now enormously useful for rethinking development along with forms of spirituality that are detached from the *mestizo* world. This allows us to envision integral health more clearly.^{24, 25}

The present study is focused on global acceleration's impact on health between 1990 and 2005 and is inspired by this emancipatory intercultural movement. It engages the challenge of "the collective construction of a new social contract for coexistence in diversity,"²⁶ towards good living, and is in the tradition of Latin American Social Medicine. Our collectivities and their members' health is interpreted as the result of a complex set of determinations that go beyond mere biological or individual phenomena that cannot be understood within the narrow framework of hegemonic medicine.

This study takes health to be a social, economic and biological phenomenon. Its study requires tools from the social and natural sciences as well as from emancipatory currents of philosophy and ancestral knowledge. While physical and mental disturbances or health conditions are expressed through individuals, health is not just an individual process or merely psychobiological. It should not be reduced to a simple matter of illness. To take on a holistic vision of health, it is necessary to understand that its characteristics and development cannot be defined solely on the individual level and that while physical and psychic

²³ A true academic and scientific movement, whose researchers played a lead role in investigating the social determination of health, inequality and the interrelationship of the biosocial. With the formation of The Latin American Association of Social Medicine in 1985, academic spaces dedicated to this problematic were consolidated. Its scientific production has received increasing attention in the academic North and is increasingly cited by recognized researchers and found in the libraries of the most important universities and the most prestigious journals such as *The Lancet* in England or, more recently, *The International Journal of Epidemiology*.

²⁴ Taxo, Alberto. Sanación, Filosofía y Cosmogonía de los Pueblos Indígenas. Guaranda: Conferencia en Módulo 7 de Maestría en Salud con Enfoque de Ecosistemas, abril 27, 2007.

²⁵ Quizhpe, Marcelo. Guaranda: Conferencia en Simposio sobre Conocimiento, Interculturalidad, Salud y Naturaleza, Módulo 7 de Maestría en Salud con Enfoque de Ecosistemas, abril 30, 2007.

²⁶ Ramón, G. ¿Pluralidad o Interculturalidad en la Constitución? Quito: documento digital, Marzo del 2008.

phenomena take place through individual phenotypes and genomes, they are still deeply related to a social order of phenomena.²⁷

The investigation of the social determination of the biological has produced important evidence in a number of academic areas, including genetics, which has been a bastion of biological determinism. Fortunately, this linear understanding of transmissible hereditary codes of human phenotypical characteristics has been seriously questioned. Classic works such as that of Gould²⁸ have demonstrated the social conditioning of racial and sexual features. Lewontin, Rose and Kamin's²⁹ important contributions have expounded the social conditioning in the deployment and triggering of the norms of genetic reaction, and recent contributions such as that of Gluckman et al.³⁰ demonstrate the powerful influence of early development conditions on "development plasticity" and the appearance of subsequent chronic illnesses. This means that a modulation of genetic expression is in large part produced through epigenetic processes such as the methylation of DNA and the modification of protein histone components. This confirms Lewontin et al's argument that epigenome—reversible changes in DNA, allowing or suppressing gene expression depending on external conditions—continue to influence the phenotype of people and their sensitivity to environmental illnesses and consequent illnesses.³¹

The social-biological relation is expressed in different dimensions of reality and through diverse mechanisms closely tied to social determinants of health, which are constantly reproduced because the collective group processes and patterns correspond to distinct class and social group ways of life. The ways of life reflect distinct ways of working, consuming, recreating, cultural systems and spatial-environmental relations. These reproduce a set of conditions that determine people's lives and have a determinant weight on health possibilities and realities. In other words, individual lives and the individual processes that correspond to possible life styles, alongside biological and psychobiological factors and free will, mark our health and are part of the broader complex of determinations of collective life.

²⁷ To study the contributions to Latin American social medicine one can consult information systems like that maintained by Howard Waitzkin and the University of New Mexico Library. They have worked on a rich product and have highlighted the work of Laurell (Mexico), Almeida Filho (Brazil), Samaja (Argentina) and Breilh (Ecuador) as classics.

²⁸ Gould, Stephen. *La Falsa Medida del Hombre*, Barcelona: Antoni Bosch Editor, 1984.

²⁹ Lewontin, Richard; Rose, Steven and Kamin, L. *Not in Our Genes*. New York: Pantheon Books, 1984.

³⁰ Gluckman, Peter; Hanson, Mark; Cooper, Cyrus and Thornburg, Kent. *Effect of In Utero and Early-Life Conditions on Adult Health and Disease*. The New England Journal of Medicine Volume 359:61-73 July 3, 2008 Number 1

³¹ Development plasticity is the ability of an organism to develop in different directions in response to environmental determinations.

The *social determination of health* is consequently a multidimensional and fundamentally collective process. In its broadest dimension, it is related to society's general processes, which are conditioned by a global logic. Social lives and mass cultural patterns are subjected to this logic, along with its policies and institutions. The *system of economic accumulation* also acts at this broad level of determination, determining ways of collective life for particular populations. This plays a major role in determining the possibilities that a society can offer in terms of quality of life and health for distinct communities and their members.

Thus we must begin to study *global acceleration* as a determinant factor of health at the scale of society as whole. At the turn of the century, this driving force has changed the rhythm of capital accumulation, provoking a major shift in life patterns. Not only has it produced certain unhealthy ways of living, but has also accelerated societies and groups' loss of life and its constitutive elements. The rapid expansion of unhealthy ways of living, or surviving, under the extreme productivist and mercantile logic of neoliberal capitalism—called savage or perverse by some—intensifies determinant social processes and deteriorates health. This has been demonstrated by research into Latin American health profiles since the 1980s.³² Decades of globalization has produced a deterioration in working life and a detrimental or “modernizing” unhealthiness in consumption (food, water, housing; recreational time; physical activity, environment). At the same time, social, political and institutional support for collectivities and individuals, required for social protection and the care of life, have been dismantled. This has all coincided with the imposition of certain cultural patterns that increase social vulnerability.

Key Processes and Categories for the Study of the Social Determinants of Health (*Conceptual and Methodological Approximation*)

The formation of the WHO Commission on the Social Determinants of Health (CDSS)³³ in 2005 has contributed to developing a global vision. It has also helped to institutionalize the scientific question posed by the Latin American Social Medicine Movement since the end of the 1970s: how does one locate the social determination of health?

The necessity to explain the contradictions and paradoxes of health is, after years of a linear and reductionist conception predominating in academic and expert spheres, increasingly clear. In a world of increasing investment and technology, paradigms are shifting to a more sensible and objective attitude, recognizing the urgency of researching the way in which health is socially determined as part of an integral and creative model.

³² Observatorio Global de Salud (Global Health Watch) -CEAS, *Informe Alternativo sobre la Salud en América Latina*, Quito, Somos Punto y Línea, 2005.

³³ WHO World Commission on Social Determinants of Health, formed in 2005.

There is no single or uniform understanding of social determination and official explanations do not match the depth and breadth of the interpretative models developed by Latin American Social Medicine. But on the global level and in a variety of Northern academic and expert contexts, the WHO proposal has contributed to the heightened possibility of a more complete vision of the serious health problems that are overwhelming humanity. As is normal in times of social unrest and inequality, the concerns of intellectual workers, researchers and leaders are intensifying and debates over this topic are multiplying on both sides of the Atlantic.

Indeed, Latin America was never alone in working to transform health paradigms. The valuable work of critical European and North American thinkers has been documented in a number of publications and books on Social Medicine. These have inspired and guided our work in this part of the world. Recent works, such as that of Catalan critical epidemiology,³⁴ comprise a talented and *avant-garde* intellectual tradition of European critical thought on health. From this perspective, the inconstancies of the dominant biomedical ideology are criticized for continuing to support the notion that health and differences between groups are determined solely by “genetic causes” and “personal choices.” Collective health must not be understood as the sum of personal decisions and realities, but rather as the result of “the multiple determinants and social necessities that shape ways of living, relating to one and other, working and getting sick in each sector of society” (Benach and Muntaner, 2005, p.19).

The Latin American Perspective: An Integral Methodology

There is a necessity to confront growing inequality, the uncontrollable commodification of goods and services related to well being and health, and the power structure’s lack of social sensitivity, both on the national and international level. There is also a necessity to confront the constant draining of vital resources that peripheral societies in the market system are experiencing. These issues have provoked an intensification of intellectual work and organization on issues of human rights, development and health in Latin America. The struggle for the right to health has also led to intense debates on health and the proposal of important interpretative models centred on the categories of social reproduction and inequality. Much of this literature has been discussed in regional congresses convened by the Latin American Association of Social Medicine (ALAMES). It has also begun to be systematized in international databases such as SCielo³⁵ and the

³⁴ Benach, Joan y Muntaner, Carlos. *Aprender a Mirar la Salud: Cómo la Desigualdad Social Daña Nuestra Salud*, Barcelona: El Viejo Topo, 2005

³⁵ Scielo Brasil; http://www.scielo.br/scielo.php?script=sci_serial&pid=0102-311X&lng=en&nrm=iso

University of New Mexico's Health Sciences Center Latin American Social Medicine Project.³⁶

As we have explained, a number of Latin American research and teaching centres have published enlightening material discussing contemporary health since the 1970s. These offer important contributions to the epistemological and methodological debate on the determination of health, publishing incisive models for the interpretation of this phenomena.^{37,38, 39, 40, 41, 42,43,44,45}

The present study applies the Latin American conception of social determinants of health in the context of the impact of global acceleration.

A number of recent contributions to the investigation of globalization and health offer a conceptual support for this project, including those by Labonte & Schrecker,⁴⁶ as modified by Diderichsen F, Evans T, Whitehead M⁴⁷ as part of the Network to Understand Globalization and Health (coordinated by Ron Labonte at the University of Ottawa and Jaime Breilh at the Andean University in Ecuador).

Figure No. 3 highlights the present work's principal dimensions of analysis, paths of determination and analytic categories, modifying them in accord with the model of critical epidemiology.⁴⁸ In the upper portion, the *central categories* are

³⁶ Latin American Social Medicine web page; <http://hsc.unm.edu/lasm/>

³⁷ Laurell, Cristina. *Algunos Problemas Teóricos y Conceptuales de la Epidemiología Social*, San José: Revista Centroamericana de Ciencias de la Salud, 1977

³⁸ Breilh, Jaime. *Epidemiología: Economía, Medicina y Política*, Quito: Universidad Central, 1979 (later Dominican editions in 1981, and three Mexican editions in 1986; 1988, y 1989; Portuguese edition in UNESP-HUCITEC, 1991.

³⁹ Laurell, Cristina. *Salud y Trabajo: Los Enfoques Teóricos en "Debates en Medicina Social"* (Nunes editor). Quito: Organización Panamericana de la Salud y Asociación Latinoamericana de Medicina Social, 1991, p.249-339

⁴⁰ Almeida Filho, Naomar *Epidemiologia Sem Numeros: Uma Introdução Crítica a Ciência Epidemiologica*, 1987.

⁴¹ Samaja, Juan. *Epistemología y Epidemiología*. Campinas: ponencia al Congreso Brasileño de Epidemiología, 1992

⁴² Breilh, Jaime. *Nuevos Conceptos y Técnicas de Investigación*. Quito: Ediciones CEAS, 1994 (2nd ed in 1995 and third in 1997).

⁴³ Samaja, Juan. *Epistemología y Metodología*. Buenos Aires: EUDEBA, 1996.

⁴⁴ Almeida Filho, Naomar. *La Ciencia Tímida. Ensayos de Deconstrucción de la Epidemiología*. Buenos Aires, Lugar Editorial, 2000

⁴⁵ Breilh, Jaime, *Epidemiología Crítica: Ciencia Emancipadora e Interculturalidad*, Buenos Aires: Lugar Editorial, 2003 (Portuguese edition by FIOCRUZ Brazil in 2006)

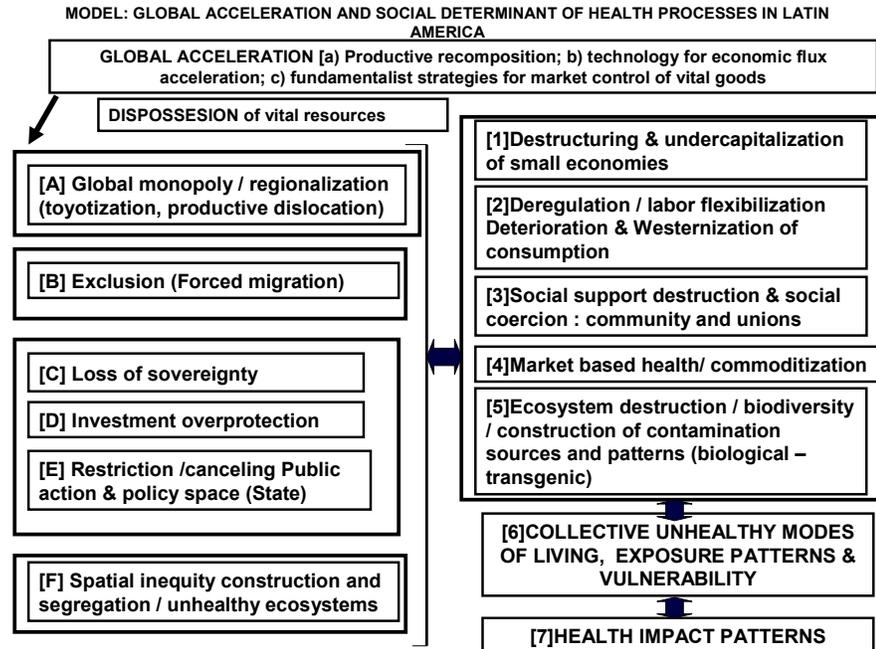
⁴⁶ Labonte, Ronald & Schrecker, Ted (2006) *Globalization and Social Determinants of Health: Analytic and Strategic Review Paper*, On behalf of the Globalization Knowledge. Ottawa: U. of Ottawa Institute of Population Health Network, August, 2005 (final version March 11,)

⁴⁷ Diderichsen F, Evans T, Whitehead M. *The Social Basis of Disparities in Health*. In: Whitehead M, Evans T, Diderichsen F, Bhuiya A, Wirth M, eds. *Challenging Inequities in Health: From Ethics to Action*. New York: Oxford University Press; 2001. p. 12-23.)

⁴⁸ Based on the model of social determination of health proposed by the author of two principal publications: A) Breilh, Jaime (1979) *Epidemiología: Economía, Medicina y Política*. Quito: Universidad Central (1st ed.) [Also a Dominican edition in 1981, Mexican editions by Fontamara in 1986, 1988 and 1989 and Portuguese versions in 1991 by HUCITEC-ABRASCO

displayed; towards the left appear the *principal determinant processes* [A - F], which interact with the general mediating processes [1 - 5] that appear towards the right of the model; also shown are the *unhealthy living patterns, patterns of exposure to vulnerability and determination of class* which are generated by these conditions [6]; and finally the *patterns of the health impacts* generated within this context.

Figure No. 3



Following the established model (Breilh, 2003), there must be a focus not only on the destructive impacts of global acceleration but also on the so-called protective processes—proactive supports or patterns that counteract and become more feasible under progressive governments or forms of social organization.

It is in the midst of this set of determinations that the evidence and collective health care indicators in Ecuador (1990-2005) must be understood. Over these years, large populations' right to health were diminished, institutional resources were lost and tendencies towards illness and death were reproduced.

It is worth adding as background that this model of accumulation incorporates an unviable and destructive energy model that constitutes a threat to health and nature. Until recent decades, the advance of productive development was mainly located in urban industrial spaces based on an oil energy paradigm. Thus Ecuador has sustained an economy based on the sale and utilization of hydrocarbons, relying on its considerable crude reserves.

The experience of this era has been ill fated. The lawsuit brought by Amazonian communities against Chevron-Texaco for human and environmental damages is the most categorical evidence. But it is also true that in Ecuador and

Publicaciones del Brazil]; y B) Breilh, Jaime (2003/2004) Epidemiología Crítica. Buenos Aires: Lugar Editorial and also the recent Portuguese version produced by FIOCRUZ, Brazil and launched in the last World Congress of Public Health, Rio de Janeiro, August 2006].

other market societies it is becoming increasingly more difficult and costly to maintain this type of production based on the hydrocarbons energy model. This non-renewable energy source is reaching its global limits and has been increasingly called into question. The large transnational companies and powers have launched an aggressive search for a post-petroleum model, fully aware that this resource is increasingly scarce. Their hope is that other energy sources could substitute for oil and maintain the same extractivist and consumerist economic logic. From the perspective of an analysis of global acceleration's impacts on health, it is worth mentioning that agrofuels—which depend on large plantations of sugar cane, palm, corn, etc—are the source that has been increasingly touted as an alternative. While this energy solution has been described as a “clean” path, it seriously compromises human and natural health. It has been implemented as a business and is not a safe and sustainable answer for humanity. In the logic of accelerated accumulation, there is no space for methods or technical routes that protect human life and nature. Rather, after promises are made and environmental impact studies undertaken, it ends up applying techniques and mechanisms that myopically seek to ensure profitability at whatever cost. All that matters is to apply an efficient substitute for the petroleum energy model. Agro-energy (agrofuels) has turned out to be the most profitable solution since it is an agro-energy model based on agro-industrial monopoly and genetic engineering.⁴⁹

This is related to the goals of the present analysis, which seeks to understand the health and environmental implications of an agro-industrial economy experiencing uncontrolled expansion. In recent research congresses and forums there has been a continued accumulation of unsettling evidence of these immense monocultures' massive impact. This includes the destruction of biodiversity, the expansion of the use of agrottoxins, and the institution of extremely dangerous working conditions that threaten the health of agro-industrial workers. Perhaps the most shocking example of the danger posed by the new technology is the fatigue deaths of sugarcane plantation workers in Brazil. The condition is known as “tropical Karoshi” because of its similarity to the death caused by extreme work fatigue originally described in Japan. In the case of Brazilian agrofuel production, research suggests that these worker deaths are caused by a system that pays by weight of cut cane in genetically modified fields that allow for a fast cutting rhythm.⁵⁰

Table 1: Change in the Agrarian Model, the Energy Model and Challenges of Nutrition

PERSPECTIVE	URBAN INDUSTRIAL MODEL	AGROBUSINESS SOCIETY	RESPONSES TO THE FOOD CRISIS
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⁴⁹ Sur Global (2007) *Geopolítica de los Agrocombustibles*, Quito: Red por una América Latina Libre de Transgénicos.

⁵⁰ Moraes Silva, Maria; Martins, Rodrigo; Ocada, Fábio, *Revista Nera*, 9 (8), Janeiro/Junho, 2006. pp. 74-108.

PERSPECTIVE	URBAN INDUSTRIAL MODEL	AGROBUSINESS SOCIETY	RESPONSES TO THE FOOD CRISIS
Energy Model	Fossil combustion Petroleum era	Agrofuels Post-petroleum era	Technological responses
Type of Agriculture	Agro-export plantations	- Monopoly of food industries -Biotechnology (genetic engineering)	Commodification of nature: - Carbon market -Environmental services – False green certification
Urban-Rural Relation	-Integration of agro-export plantations with the traditional hacienda economy - Agricultural communities and small producers feeding the internal market	The appropriation of marginal land for the production of food for internal market - The destructuration and decapitalization of small and family agricultural economies - The extreme concentration of land and water - The exclusion of small <i>campesino</i> producers - Territorial redistribution: displacement of food crops and increase in food prices - Acceleration of internal migration and urbanization. - Increasing distance between sites of food production and consumption.	

Sources: Sur Global, La Geopolítica de los Agrocombustibles, 2007; SIPAE, El TLC y lo Agrario, 2004.

THE URGENT CHALLENGE TO RECOVER THE RIGHT TO HEALTH (Renovate Ideas and Dismiss Functionalism)

It is neither possible nor coherent to formulate a new national health project if we only think about repairing the reduced access to curative services caused by neoliberal regimes. It is necessary to dedicate equal emphasis and resources to the understanding of the deep determinants that we have discussed and to analyze the health repercussions resource dispossession. It is indispensable to use this knowledge to innovate norms and to control the structural mechanisms that determine the right to health and the possibilities of a healthy way of life.

In the decades prior to the Washington Consensus, the State was a weak protector and a generator of modest policies of social protection. But nevertheless,

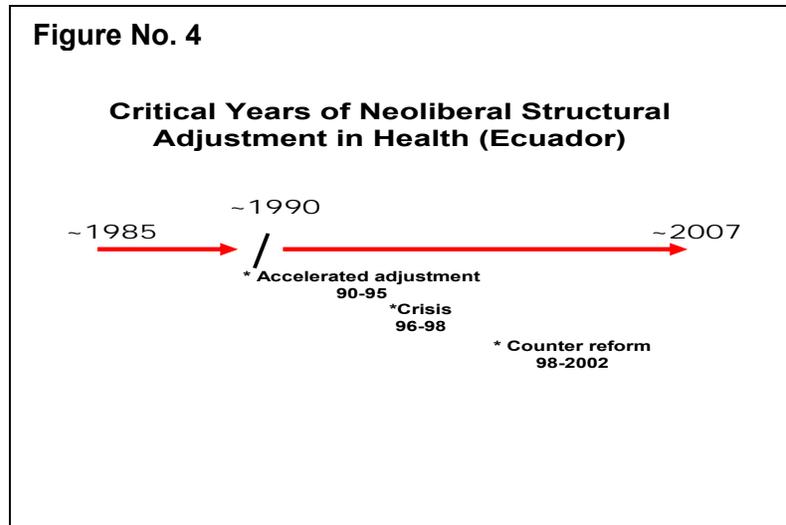
the right to health as a public responsibility and major victories such as social security were supported, although within serious limitations. In this era, the now hegemonic privatizing and commercial medicine model was not proposed in social and health policy. There were evident problems during the pre-neoliberal period, but it was at least possible to extend social security benefits to a fifth of the wage-earning population and free public coverage for marginal populations.

While this model was in no way sufficient or just, it at least respected, in discourse and practice, the theoretical right to basic health services and social security. But with the turn to neoliberal globalization beginning in the late 1980s, policies emerged that dismantled these small advances in public benefits. Social investment was restricted, and what little funds were left for health was used to legitimate the privatizing model rather than ensure the right to health. The communications media had a multiplier effect on business discourse and the neoliberal policies instated. Especially in the city halls of the largest metropolises, they faithfully mimicked the World Bank's prescription: if we were going to survive in an accelerated world and have wealth to distribute, we had to put an end to the supposed burden of the protector state and introduce health programs that followed a market logic. Professionals and experts made the entry of this business rationality possible in our country, both directly and indirectly. People who self-identified as progressives fell for the World Bank's seduction and webs of influence and began to reproduce their logic in technical papers. They argued for the supposed need to go beyond an inefficient state, which they defined as obese, to an "efficient" administration under a logic of social control where claimants are transformed into "clients" and the weakened free public system become self-sufficient and charges for services.

These experts, whether well or poorly intentioned, never recognized what propelled their plans to achieve a behind-closed-doors efficiency. What was taking place was a turn allowing for the penetration of neoliberal logic and the conversion of the right to health into a commodity. And as will be seen later on, the healthcare sector's adjustment was not the only regression in rights. At the same time, other transformations dismantled social policies in key sectors, such as the case of labour deregulation and flexibilization or the removal of agrarian and crop resources that are crucial for food sovereignty and security. These policies were pushed following the recommendations of the so-called "Whitaker Report," which attempted to subordinate Ecuador to U.S. agricultural production.⁵¹ These sorts of reports and manoeuvres were the precursor to the Free Trade Agreement that was to come. We must add to this the fact that, during this same period, the Government of Ecuador disaffiliated from the Organization of Petroleum Exporting Countries (OPEC) and dismantled our financial system's regulatory mechanisms through the General Law of Banks. Social and environmental rights were also

⁵¹ Whitaker, M.D. *Políticas Agrarias en el Ecuador: Evaluación 1990-1996*, Quito: Ministerio de Agricultura y Ganadería, 1998.

affected through the **Trole Laws**, which among other things favoured the expansion of an irresponsible form of mining that undertook projects without community consultation. We can clearly see that the 1990s witnessed a dangerous move away from the right to health in this country (see figure 4).



The organized neoliberal offensive in the field of health services consisted of a discourse of management and efficiency, the conversion of achieved rights into merchandise, and the monopolization, privatization and

commodification of the supply of healthcare goods and services. This led to a net increase in the vulnerability of human life and ecosystems. This path provoked a long-term deterioration of Ecuadorian rural and urban workers' health, a phenomenon that has taken place throughout Latin America. The same is true for the more vulnerable sectors of the middle class, along with small and autonomous producers.

As will be clear in Part II, certain international policies and regulations—such as the international agreements and treaties included in the General Agreement on Trade in Services (GATS) and neoliberal laws elaborated to consolidate the dispossession of resources—led to the loss of rights and the expansion of corporate properties and privileges, intensifying the generation of abysmal inequalities and discriminations and imposing structural obstacles to health. This legacy is a heavy burden on the current public administration and cannot be surpassed by mere redistributive policies. What is required is a transformation of the relevant social determinants.

Thus the present study is intended to be a tool for the systematization of the most critical processes generated by the 1990-2005 counter-reform. The health reality must be understood and the health system must be refounded. This is a challenge that, as one might deduce, does not merely consist of filling a gap in technical knowledge but rather inserts itself in a field of analysis linked to current social movements' pressing demands for change.

To construct a new health model we must come up with new ideas and practices. A healthy society cannot be constructed if the logic of economic liberalism persists. In the first place, we must go beyond this logic, defeating and dismantling its policies and regulations. At the same time, we must move towards

dismantling the hegemonic medical model. We must denaturalize the practices that stem from its commercial and profitable character. It is a technically obsolete model, given that it wastes technological advances and the knowledge generated by a range of scientific disciplines. These technologies are used as commercial and private instruments and do not fulfil their collective potential as instruments of the common good.

In a similar way, we must defeat traditional public health's functionalism, which has denigrated itself and become disfigured, to the point of becoming a permissive instrument of the logic of power. We must clear up the health system and be open to the contribution of other forms of knowledge and to the effective and efficient tools of public monitoring and oversight.

The majority of my compatriots long for this transformation. The recent constitutional debate has been enriched by the creative and informed proposals generated by a diversity of social and academic organizations. These proposals, informed and full of originality condense the aspirations and possibilities for change, a change towards a healthy way of living and for the rectification of our health system's greatest distortions and inequalities. All of the social energy generated by the Constituent Assembly and towards the approval of a constitution is only a starting point or platform from which to launch an era of social victories. It protects and organizes us without tying our hands. Whatever the correlation of forces that express themselves in the upcoming constitutional referendum, what is most important is that we have been able to mobilize social and academic forces, which are indispensable in constructing and approving laws that consolidate and contribute to the realization of these ideas' great potential.

Part II

THE ONSET OF DISPOSSESSION AND GLOBAL ACCELERATION IN ECUADOR

In the first part of this work we explained that the definition of health cannot be reduced to the absence of sickness or to the suffering of individuals isolated from their social context. Thus we established as a basic premise of this study that it is not sufficient to refer to sickness and mortality statistics or to simply describe the deterioration of medical service coverage levels. Rather, one must explain the correlation of these indicators with social determinants generated by the impact of the neoliberal economic model and attendant policies.

Given the importance of this conceptual turn, we have dedicated the first chapters to the explanation of a new health paradigm. This is a vision that breaks

with the linearity of dominant thought, allowing us to understand the multidimensionality of the issue and their dependence on collective ways of living. These ways of living—i.e. patterns and relations of labour and consumption, cultural conditions and political and organizational supports—have, in both cities and rural areas, deteriorated most rapidly from 1990 to 2005.

Thus in the first part we argue that an integral vision of the right to health depends on the strength of the other fundamental rights that sustain healthy life, including: worker and consumer rights to dignity and health; food sovereignty; the right to water; a self-affirming cultural identity; the right to a healthy environment; and the capacity to organize and participate in the direction and oversight of all health goods and rights.

Now that the conceptual base of the present study has been clarified, we can delve into the second part. The different mechanisms of social deterioration that we have previously alluded to can be summarized as such: the policies of adjustment that coincided with processes of wealth concentration and exclusion; the worsening of working conditions and the decrease in available jobs; the destructurement of small urban and rural economies; the loss of organizational and union supports; the diverse forms of privatization and commodification of public services; and, finally, the installation and expansion of the social determinants that multiplied unhealthy ways of living.

We would like to put the reforms backed by the International Monetary Fund and World Bank in Ecuador, especially since the 1980s, into relief. We will pay special attention to those policies that pushed for a plan of economic opening and acceleration, including: structural changes that had considerably negative effects on collective health; the overprotection of investments and a regression in social rights; the boosting of market mechanisms as a way to access health goods; the gradual termination of the State's social responsibilities; and everything that has to do with the gradual damaging of the nation's public health.

Global Acceleration, Increased Inequity and Social Exclusion in Ecuador Since 1985

Structural adjustment and its principal phases

Facing a new socio-economic paradigm, the country adopted Washington Consensus guidelines and implemented important reforms from the 1990s on. These included tax reforms and trade openings, the 1992 tariff reduction and the 1994-95 financial liberalization. And during the first neoliberal period (1996-2002),⁵² the country focused on moving toward the neoliberal framework.

An Inter-American Development Bank (IDB) report distinguishes two stages between 1990 and 2002: the period of reforms and the period of crisis. The

⁵² Inter-American Development Bank Report. *Evaluación del Programa País 1990 – 2002*, Oficina de Evaluación y Supervisión, July 9 2004.

document analyzes the *most favourable moments*, such as the periods of *fiscal derailment*, in applying this model in Ecuador.

The first period, from 1990 to 1995, was characterized by turbulence that was in some cases accelerated by the process of structural reform and adjustment. This period began under the presidency of Rodrigo Borja and under the auspices of the International Monetary Fund. It then continued under President Sixto Durán Ballén, who gave off an air of speed and conviction, advocating the approval of various reform laws. But he then had to confront the failure of plebiscites aimed to deepen their implementation.

The second period, from 1996 to 2002, was characterized by political and economic crises, which brought an end to the reform as a broader process. The conflict with Peru in 1995 led to a loss of fiscal discipline and setbacks for a series of reforms below the argument of defending national security. With Jamil Mahuad's 1998 election, the reform process began anew. The period culminated in Gustavo Noboa's presidency, who formalized dollarization and sought to normalize relations with international creditors, achieving the refinancing of the external debt in 2001 and pushing for the construction of the Heavy Crude Pipeline (OCP). This then gave way to the 2003 election of Lucio Gutiérrez as constitutional president.⁵³ **[tal vez mas informacioon sobre la derrota de esos gobiernos por movilizaciones populares para lectores extranjeros?]**

To induce and condition their policies and intentionally force indebtedness, beginning in the early 1990s the World Bank prepared a Country Assistance Strategy (CAS) for our country that was renewed over various periods, culminating in the version titled "CSAS 2003-2006 for Ecuador."⁵⁴ This final version consolidated the rules for structural adjustment policies for the credits bestowed: private sector benefits via subsidies and economic incentives, the reduction of wages and salaries and the suppression of subsidies for basic services and necessities.

⁵³ According to an Inter-American Development Bank Report from 1990 and 2002, the IDB approved \$1,856 millones in loans to Ecuador in 41 programs throughout three program cycles (1990/1993, 1994/1996, y 2000/2002), along with a transition period from 1997-1999.

⁵⁴ World Bank. Ecuador Country Assistanse Strategy.

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/ECUADOREXTN/0,menuPK:325129~pagePK:141132~piPK:141105~theSitePK:325116,00.html>

Propelled by the World Bank's technical and credit resources, the process of the Ecuadorian State's neoliberal "modernization" was launched in the 1990s (see figure No. 5). The government of Sixto Durán Ballén (1992-1996) began the implementation of policies that strongly privileged the expansion of the private sector. These policies, backed by the new legal framework, were accompanied by a program of concessions and privatizations in sectors previously reserved for the public sector. This period constituted the project's dramatic beginning. But in reality it in the early 1990s under the Rodrigo Borja regime, when laws like the ones cited in figure N°5, which began to trace a path towards increased openings

Figure No. 5

**ECUADOR: KEY EVENTS OF JURIDICAL AND INSTITUTIONAL REGRESSION
(1990 - 2000)**

- **1990 (Rodrigo Borja):** Law of Tariff Reform and Wet Shop ("maquila") Regulation and Part Time Contract Law
- **1992 (Sixto Durán):** Ecuador leaves the Organization of the Petroleum Exporting Countries OPEC.
- **1993 (Sixto Durán):** State Modernization, Privatization and Public Services Law: National Modernization Council, private initiative in public services; dismantling of public services as "monopolies", free trade and public services delegation; dismantling of public control over public enterprises except those of economic exploitation.
- **1994 (Sixto Durán):** General Financial System Institutions Law; dismantling of economic regulation mechanisms.
- **1994 (S. Durán) :** Agrarian Development Law; privatization of community properties; sale of public land; free import.
- **2000 (Jamil Mahuad):** Law for the Economic Transformation of Ecuador (Trole I) and Law for Investment Promotion and Citizens Participation (Trole II), incorporate dolarition, promote privatization of public companies; favor foreign investment; labor market flexibilization; expansion of uncontrolled mining.

to foreign investment and labour flexibilization convenient to capital.

In following years, other laws that were conducive for neoliberal development were launched: The Law of Financial Institutions, the Tax Reform, the Stock Market Law, The Industrial Property

and Technology Transfer Law, and The Regulatory Norms for Foreign Investment. These norms completed the shift to a judicial framework oriented towards economic openings. Later on, other laws were added to this new juridical framework: The Financial Institutions Act; The Tax Reform; The Stock Market Act; The Industrial Property and Technological Transfer Act; Regulatory Norms on Foreign Investment. This legislation completed the economic opening's juridical scaffolding. In the early 1990s, Ecuador began to transform its juridical structure and, under pressure, embarked on a path to adapt to international requirements in key areas such as investment and trade. In the last decade, intellectual property and services have been particularly important.

For the purposes of this work, it is important to note that analysis shows a clear coincidence of principles and strategic aims between the documents that directed the World Bank reforms—in agreement with neoliberal governments—and those laid out for health sector reforms.

In 1993, a critical legal instrument for adjustment was issued during the Durán Ballén government. The State Modernization, Privatization and Provision of Public Services Act introduced a new set of norms for the private sector. Among

other things, these reforms established: administrative rationalization and efficiency; decentralization, deconcentration and simplification; private sector provision of public services; so-called “domonopolization” (in other words, the termination of public management in areas of economic interest), the free competition and deregulation of public sector services and activities; the transfer of State participation in public companies that were not in areas of economic exploitation reserved for the state or mixed enterprises. Within this framework, the National Modernization Council (CONAM) was created to concentrate decision-making with regard to the redefinition of the state’s role in the economy. In other words, it became the executor of the neoliberal modernization process and a technical body equipped to undertake evaluations. In this way it established the financial, economic and technical paradigms on a national level. Thus the processes of demonopolization, privatization and deregulation of economic activities and public services that the State undertook were from then on determined by the CONAM, under presidential guidance.

A number of privatizations took place, founded on delegating the concession and exercise of vital activities to the private sector, such as: the production and distribution of potable water; the generation, distribution and commercialization of electricity; the production, transport, storage and commercialization of hydrocarbons and other minerals. While it is true that some exceptions were instituted, they were easily evaded by the private sector: the delegation or concession could take place when activities had a negative impact on the public sector budget or when it involved a technological shortcoming that would impede national development. In this way, spending on investment or loans of public services could be lowered by 30%. It was also permitted in the case of the state’s financial inability to undertake the necessary process of investment, to complete the objectives in an autonomous manner.

A study on the this law’s impact⁵⁵ explains that while the State Modernization Act was not intended to support a program of “indiscriminate privatization of state economic entities, it is possible that the government’s tactic was to emphasize the public enterprise’s inefficiencies when they were interested in having it privatized—such was the case for the Ecuadorean Institute of Electrification or the Public Communications Enterprise” These two cases demonstrate state companies’ decreasing level of credibility created so as to transform national goods into privatizable ones.

On the other hand, the late 1990s witnessed the financial crisis, the elimination of the national currency and the introduction of the dollar. In August 2000, the Economic Transformation of Ecuador Act (Trole I) and the Promotion of Investment and Citizen Participation Act (Trole II) were approved, instituting dollarization, promoting the privatization of state companies, favouring foreign

⁵⁵ Endara, Ximena, *Modernización del Estado y Reforma Jurídica, Ecuador 1992-1996*, Serie Magíster. Universidad Andina Simón Bolívar, 1999.

investment and flexibilizing the labour market. In this way, legal statutes were established under legislation such as the Promote and Guarantee Investments Act and the Foreign Trade and Investment Act, which reinforced the prioritization of foreign investors over natural persons and eliminated the need for government authorization prior to the realization of an investment. These reforms' legal framework facilitated the privatization of basic public services such as potable water and sanitation, the utilization of natural resources and goods that are **non-lapsable?** and inalienable state property. These reforms went so far as to contradict constitutional laws that gave pre-eminence to national interest. In consequence, the reduction of the State role and public spending in the name of preserving fiscal equilibrium had an impact on social investment.

In this same line of analysis, it is worth mentioning the report presented by the economist Rafael Correa⁵⁶ on the period of 1988-2002, which demonstrates the grave deterioration of social capital in Latin America due to structural reforms and economic globalization imposed on developing countries. The study warns of the Ecuadorian economy's high vulnerability to external crashes, whose negative effects are evident in the lack of growth, the weak generation of employment and the unsatisfactory decrease in poverty.

As in other Latin American countries, these general strategies that we have discussed affected the broadest determinants of social welfare, but at the same time constituted a general framework of regression and "adjustments" more directly tied to health sector programs. In Ecuador, these programs were to a large degree promoted and financed by the "health system modernization projects" called FABASE and MODERSA.⁵⁷ These projects were based on imposed foreign debt, the legitimacy of which is now part of an official commission's study (see later on, "Privatisation and the Deterioration of the Public").

Congress blatantly carried out these legal reforms which created the conditions for a regressive economic and political model, propelling the material and institutional framework for neoliberal reform and creating a conservative political climate in areas like that of public health, negatively effecting the country's technical thinking.

While FABASE and MODERSA projects were the facilitating element of neoliberal policies in the sector health, they were just one component of a broader neoliberal project that affected social reproduction and health by a number of means.

Economic Growth Does Not Necessarily Imply Human Development

⁵⁶ Correa, Rafael. *Vulnerabilidad de la economía ecuatoriana*. Programa de las Naciones Unidas para el Desarrollo, Quito, 2004.

⁵⁷ Créditos BIRF 3510-EC y BIRF 3510-1-EC, correspondientes al sector salud y conocidos como FASBASE I y FASBASE II; y Proyecto de Modernización de los Servicios de Salud MODERSA.

In the context of the past decades' rapid transformations in the global economy, Latin America has registered a moderate and volatile rate of per capita economic growth, marked by periods of wellbeing, stagnation and collapse.

In Ecuador, Central Bank statistics show a weak per capita GDP growth from 1990 to 1998 (around 1% annual average per capita). Later on, the curve shows a fall until 1999 and finally, from 2000 to 2006, a tendency towards growth (4.6% annual). Neoliberal economists celebrated these statistics, even though they did not reflect such indicators as income, unemployment—which continued to fluctuate around 10% throughout this period—or, even worse, an increase in social inequality and income concentration (as measured by the Gini coefficient), which worsened in all regions of the country over this period (see table No. 2).⁵⁸

So Ecuador's economic growth between 1990-2005, and its indicators that seduced analysts of adjustment, cannot be taken as an advance or an indication of general wellbeing. Rather, they just corroborate the weak relation in market societies—especially under the neoliberal model—between economic growth and the social distribution of its benefits.

Table No 2 Income Concentrations by Region in Years of High Neoliberal Economic Growth (Ecuador, 2000-2006)

REGION	Concentration by Gini Coefficient (Maximum Concentration = 1.0)	
	1990-1995	2001-2006
Quito	0.322	0.362
Guayaquil	0.288	0.361
Urban Coast	0.265	0.325
Rural Coast	0.276	0.283
Urban Andean	0.308	0.357
Rural Andean	0.355	0.426
Amazonía Urban	0.285	0.320
Rural Amazonic	0.305	0.421
Total National	0.336	0.414

⁵⁸ Secretaria Técnica de Desarrollo Social. Mercado Laboral Ecuatoriano: 1990-2005. Quito: Informe Desarrollo Social, 2006, p. 17-18.

Moreover, the supposition that growth in production is the fundamental basis for development underestimates a basic fact of a structural nature: the conditions of access to economic means always determine an unjust distribution of the benefits of production. This includes increased rates of big business accumulation, profits, and decapitalization alongside the impoverishment of small and medium family economies.

A more rigorous investigation dispels the adjustment experts' argument that macroeconomic growth—defined by growth in exports; a positive trade balance; controlled inflation; increased domestic investment; and a growing gross national product—can be equated with the existence of a ““healthy-looking” society.⁶⁰ To support their premise, neoliberal government health spokespersons were constantly divulging data ostensibly demonstrating an improvement in health. As we will show later on, these studies do not withstand a more probing analysis.

Thus the question to ask is: what then is the social and epidemiological reality that actually exists behind the statistics on adjustment? In what sense does the growth of the economy and macroeconomic indicators express a parallel social growth and development in collective health?

Throughout these pages we will attempt to demonstrate through evidence, such as the case of the socioeconomic roots of the gap between economic growth and health, that negates the interpretations of neoliberal experts.

The “Bonanza’s” Dismal Social Panorama

For the purposes of the present study it bears analyzing a few indicators' performance so as to contrast our hypothesis about the correlation between productive acceleration and dispossession on the one hand and the growth of inequality and the multiplication of unhealthy ways of living on the other.

An analysis of the available information indicates adjustment policies' high cost, despite the fact that such information is limited by a system constructed within conventional parameters that often obscures reality. In a general sense, the data affirms that the adjustment model had major impacts, increasing poverty, underemployment and the concentration of income.

⁵⁹ Larrea, Carlos; Landin, Renato; Larrea, Isabel; Wrborich, Wladymir; y Fraga, Rosario. *Mapas de Pobreza, Consumo por Habitante y Desigualdad Social en el Ecuador: 1995-2006*. Quito: RIMISP-UASB, 2008.

⁶⁰ Garcés, Francisco. *Ecuador: Peligroso Resultado Electoral de Asamblea Constituyente*. Quito: Publicación N° 404 del Centro de Economía Internacional Libertad y Desarrollo, **October 29** 2008

However, the building of evidence around the *social impact of neoliberal “adjustment” can be undertaken in different but complimentary ways*. On the one hand, there is an understanding of the observable deterioration in the sphere of individual consumption: the impoverishment of the acquisitive capacity of the wage-earning and underemployed middle classes and their loss of access to social services. On the other hand, there is an analysis that focuses on the structural conditions—those that determine the deterioration of the majority classes (wage-earning employees and urban and rural low income populations) or others grouped in a certain position within the power structure—such as their own reduced access to the right to health. The first type of investigation is focused on the sphere of people’s consumption and income indicators (i.e. “poverty rates,” employment rates, illiteracy rates, etc.). This analysis presupposes the stratification of this data so as to differentiate the distinct impact by gender and on different social classes and ethnic groups. The second type of analysis focuses more on structural and collective phenomena such as social exclusion and the concentration of property, the mode of production linked to the plunder of society’s strategic resources, and the consequent reduction of the goods that sustain those collectivities’ that do not possess the means of production. In the following paragraphs, we will review the evidence of adjustment’s impacts on consumption and income inequality.

The analysis of consumption and social inequality in Ecuador from 1995-2006⁶¹ points to evidence that allows us to demonstrate the regression unleashed by neoliberalism’s socio-economic model.

This backdrop shows a modest increase in per capita GDP over the Ecuadorian economy’s past 25 years. A plateau in the per capita GDP is observed from 1950 to the present, aside from a marked rise due to the eruption of variable petroleum prices (1975-1985). But for our analysis, it is important to emphasize that the average phenomena masks processes of enormous importance for social wellbeing and health, The large rates of corporate profit led to an increase in the inequality of income distribution. In this case, the acceleration is not so much expressed in general production curves, but rather in the speed of capital returns at the expense of social rights, and of the adoption of productive processes and profitable technologies even though they are not friendly to ecosystems or human health. All of this allows for the concentration of wealth and the ensuing socio-economic exclusion. One should also not forget that in Ecuador impoverishment was accompanied by marginalization, leading to phenomena such as migration and displacement, as has taken place in the other countries subjected to the neoliberal model of structural exclusion. A study focused on the evaluation of

⁶¹ Carlos Larrea (Editor), Renato Landín, Ana Isabel Larrea, Wladimir Wrborich, Rosario Fraga, Mapas de pobreza, consumo por habitante y desigualdad social en el Ecuador: 1995-2006 Metodología y resultados, UASB -RIMISP, Quito, 2008 (Unpublished document, database), based on: Censos de población de 1990 y 2001, INEC, ECV, 1995 y 2006.

regional cooperation shows the deep social crisis experienced by Ecuador from 2000-2006, with its retrograde effects and the deepening of inequalities.⁶²

Despite the methodological difficulties caused by the lack of trustworthy information on individual consumption in the country—and the near total lack of information about the structure of property and inequality in distribution—a few pieces of evidence can be established that will be of great use in analyzing the processes of social determination of health under neoliberal adjustment.

To begin with, we can assume the variable of “poverty” as an indicator of the degree of access to the most basic consumption, which is distinct from the conventional construction of this measure. In traditional convention, poverty refers to a household’s incapacity to satisfy basic necessities such as health, education, nutrition and housing. Meanwhile, *extreme poverty* or *indigence* refers to those homes in which the total consumption is less than the cost of a basic food market basket. In other words, while the category of poverty does not directly express the problem’s essence—the loss of resources or the lack of access to them—it shows the result of different groups’ structural location within the economic system. This can be taken as indirect evidence of dispossession and lack of enjoyment of a just life. Thus from the health perspective, it allows us to highlight basic living conditions’ degree of deterioration. This data allows us to establish a few worrying points, as it supports the thesis that Ecuador has experienced a deterioration in basic consumption and an increase in inequality.⁶³

In Table No. 3, the increase in the poverty and indigence rates in Latin America are clearly observable over the period that we are analyzing.⁶⁴

Table No 3: Poor and Indigent Population in Latin America

Year	Poverty (including indigence)					
	Total		Urban		Rural	
	Millions	%	Millions	%	Millions	%
1980	135,9	40,5	62,9	29,8	73,0	59,9
1990	200,2	48,3	121,7	41,4	78,5	65,4
1994	201,5	45,7	125,9	38,7	75,6	65,1
1997	203,8	43,5	125,7	36,5	78,2	63,0
1999	211,4	43,8	134,2	37,1	77,2	63,7
2000	207,1	42,5	131,8	35,9	75,3	62,5
2001	213,9	43,2	138,7	37,0	75,2	62,3
2002	221,4	44,0	146,7	38,4	74,8	61,8

Year	Indigence					
	Total		Urban		Rural	
	Millions	%	Millions	%	Millions	%
1980	62,4	18,6	22,5	10,6	39,9	32,7

⁶² Bonilla, Mariana. Ecuador: Reseña de los Principales Programas Sociales y Lecciones Aprendidas, 2000-2006. Santiago: Documento de Proyecto de la CEPAL, 2008.

⁶³ Larrea y col., *Ibidem*, p.8

⁶⁴ Larrea, Carlos y col. *Informe sobre el desarrollo social y gestión municipal en el Ecuador* based on INFOPLAN, INEC, 1990 Population Census.

1990	93,4	22,5	45,0	15,3	48,4	40,4
1994	91,6	20,8	44,3	13,6	47,4	40,8
1997	88,8	19,0	42,2	12,3	46,6	37,6
1999	89,4	18,5	43,0	11,9	46,4	38,3
2000	88,7	18,1	42,8	11,7	45,6	37,8
2001	91,4	18,5	45,8	12,2	45,9	38,0
2002	97,4	19,4	51,6	13,5	45,8	37,9

Source: CEPAL 2005 y años anteriores. Panorama Social de América Latina, (Santiago: CEPAL)

Produced by: Carlos Larrea

The increase in poverty during these years is thus an indicator of the neoliberal model's incapacity to "trickle" down the promised benefits from business. And as was previously indicated, when we disaggregate and stratify the data on the impact of adjustment by social class, ethnic group and gender, the deeper inequality of the social system is revealed.

The analysis shows that the urban and rural regions where most small or medium size businesses investment was concentrated showed an average increase in basic consumption over the neoliberal years. Other places apparently stagnated or were impoverished, creating greater inequality. This is especially true of the places with higher concentrations of wealth, geographic remoteness and concentrations of poor indigenous campesinos.⁶⁵

The rates of concentration of consumption from the first six years of the 2000s were greater than the rates from the 1990s in the eight regions selected. This is worrying, although the contrast would be even greater if we were to take the years before 1985 as a point of reference, since 1990-5 were already part of the period of adjustment. In three of the regions considered for this study, average poverty rates increased: coastal urban; rural highlands; rural Amazon. As the authors noted: "surprisingly, despite economic growth reaching 7% during this period, poverty only declined by two percentage points...a lack of correspondence that is due to the pronounced increase in social inequality."⁶⁶

The inequalities that affect groups distinctly positioned within the power structure must be unravelled in the context of this general inequality: social classes, peoples and gender groups.

Class differences in our country are difficult to show because the social and economic statistics do not directly identify populations by class. But approximations do exist—known as "proxies" in the social science lexicons—that have been applied to studies on the period in question, allowing for us to get a better grasp of this situation.

The gap between the country's socio-economic classes has increased from 1990-2005. According to the 2006 national report,⁶⁷ not only are there profound disparities between classes engaged in the informal and formal economy, but

⁶⁵ Larrea y col. Opcit, 2008

⁶⁶ Larrea y col. , Ibidem, p.8

⁶⁷ Secretaria Técnica de Desarrollo Social. Op. Cit, p.72

within each sector as well. It is also found that the relation between the majority classes' income and the basic food basket grew worse during this same period.

When the population is grouped together by strata, the worsening of income distribution is clearly observable. From 1990 to 2005, the poorest 40 percent of the country received increasingly less of the income, while the wealthiest 10% received an increasingly greater proportion. The poor became relatively poorer and the wealthy monopolized increasingly more resources (see Table No. 4), continuously widening the distance between the two groups (going from 11.4 times to 15.3 times over the period).⁶⁸

Table No. 4 Deterioration in the Poor's Participation in Income and the Increased Social Gap in Ecuador (1990 – 2005)

YEAR	AVERAGE INCOME	PARTICIPATION IN TOTAL INCOME				CONTRAST richest 10% / Poorest 40%	CONTRAST Q5/Q1
		[1] 40% more poor	[2] following 30%	[3] next to most rich	[4] richest 10%		
1990	5.5	17.1	25.4	27.0	30.5	11.4	12.3
1999	5.6	14.1	22.8	26.5	36.6	17.2	18.4
2002	6.7	15.4	24.3	26.0	34.3	15.7	16.8
2004	6.9	15.8	24.7	27.5	32.0	13.9	15.4
2005	7.4	15.1	24.3	26.3	34.3	15.3	16.7

Source: CEPAL. Panorama Social de América Latina, 2007

The cited study confirms that the Gini coefficient for the concentration of income in the country worsened, increasing from 0.461 in 1990 to 0.0517 in 2005. This highlights the inconsistency of the neoliberal equation that holds economic growth to equal social development.

In turn, the *ethnic contrasts* also form part of the inequality matrices. A recent study showed how the process of impoverishment has been consistently greater in indigenous groups than non-indigenous. There is a clear difference throughout the entire period in question between the poverty rates among indigenous and non-indigenous people. For example, extreme poverty, which in 2006 affected 19% of non-indigenous—already a grave situation—affected a

⁶⁸ CEPAL. Pobreza y Distribución del Ingreso en “Panorama Social del América Latina 2006”. Santiago: Publicaciones de la Comisión Económica para América Latina y el Caribe, 2007, p.

larger percentage of indigenous people (37%). During the golden years of neoliberalism, this inequality went largely unchanged.⁶⁹

There is an extensive bibliography on *gender inequality*, including numerous studies of its relation to health. From the beginning of the neoliberal era we have, from the perspective of critical epidemiology, stressed the relations of power that underpin gender ties and the unhealthy consequences of the triple burden that women in socially unequal and hierarchally patriarchal contexts must bear.⁷⁰ We proposed integrating these relations as part of an inequality matrix, in which relations of class, ethnicity and gender converge.^{71, 72} We also demonstrate the correlation between the rate of social inequality on gender inequality throughout all of Latin America.⁷³

Thus gender relations are also powerful social determinants of health that determine the satisfaction of needs, the capacity of control over life and health, and the realization of economic, social and cultural rights (DESC).⁷⁴ In Ecuador, indigenous women had less access to formal education and health services than non-indigenous women over the analyzed period, and much less than men from both of the two ethnic groups.⁷⁵ Over the neoliberal years, there was an intensification of dispossession, the exploitation of health goods, exclusion and discrimination, and the modification of ways of life. In particular, these unhealthy patterns affected women through diverse mechanisms: migration; the destruction of nuclear families; female heads of household and the assumption of the triple burden (work, family and procreation) without assistance; the feminization of poverty and wage discrimination. These circumstances explain the evidence of female overmortality from a great number of illnesses.⁷⁶

In turn, the category of *generational* group introduces the impacts on particular age segments, whose vulnerability was amplified during the period in question. This is especially true among youth, adolescents and the elderly. The latter's vulnerability was in part due to the intentional deterioration of social security and retirement benefits.

⁶⁹ Larrea, Carlos, Montenegro, Fernando, Green, Natalia y Cevallos Maria Belén. *Pueblos Indígenas, desarrollo humano y discriminación en el Ecuador*. Quito, Abya Ayala, Universidad Andina Simón Bolívar, 2007.

⁷⁰ Breilh, Jaime. *La Triple Carga (Trabajo, Práctica Doméstica y Procreación): El Deterioro Prematuro de la Mujer en el Neoliberalismo*. Quito: Ediciones CEAS, 1991.

⁷¹ Breilh, Jaime. *El Género Entrefuegos: Inequidad y Esperanza*. Quito: Ediciones CEAS, 1996

⁷² Breilh, Jaime. *La Inequidad y la Perspectiva de los Sin Poder en "Cuerpo, Diferencias y Desigualdades (Viveros, M. y Garay, G. –compiladoras-. Bogotá: Ediciones Facultad de Ciencias Humanas, Universidad Nacional de Colombia, 1999, p.130-141.*

⁷³ CEAS. *Mujer, Trabajo y Salud*. Quito: Ediciones CEAS, 1994.

⁷⁴ Sen, Gita Ostlin, Pirooska and George. Asha. *Unequal, Unfair, Ineffective and Inefficient Gender Inequity in Health: Why It Exists and How we Can Change It*. Women and Gender Equity Knowledge Network. Stockholm: Karolinska Institutet & IIMB, September 2007.

⁷⁵ Larrea, Carlos y col. *Op.cit.*, 2007

⁷⁶ Sen, Gita. et al. *Op.cit.*, 2007, annex 3.

And young people are numerous. They are left out of the country's development and evidence their own particular vulnerabilities to the processes that neoliberalism has let loose. On the one hand, the youth of various marginal rural and urban areas have suffered economic and cultural pressures due the expansion of the neoliberal economy. In floricultural regions, for example, those from a worker or campesino background—less well educated and weakly integrated into the labour market—experience the contradictions of their conditions as wage earners. The effects on the last decade's labour force have broken ties of dependence with the world of rural communities. Certain patterns of work, mobilization, alimentation and culture were acquired, including with regard to recreation—that expose them to unhealthy types of consumption. Perhaps this is why health service professionals in the Cayambe region began to report a growing level of youth consumption of psychoactive substances and cases of HIV/AIDS that were previously almost entirely absent in these contexts.

On the other hand, the youth and adolescents of other educated and urban social classes are exposed to forms of socialization that are distanced from real life and fully enveloped by consumption. Given that “the hegemonic notion of school—so thoroughly studied by education epistemologists—is a bubble disconnected from the processes of collective life, such as work. This ends up imposing a feeling of emptiness on the various stages of childhood and youth in these groups. While there is a lot of educational potential, their lives are more than anything tied to an impoverishing form of consumerism....In the midst of this commercial logic, the human rationality to produce for necessity is inverted. Rather, it teaches that necessity is a function of supply, the conception of which is based on the interest of producers. In this dominant logic, beyond appearances, it is supply that conditions the demand and not the reverse. In this world of empty feelings, the inducement to certain types of consumption is increasingly sophisticated; there is a consequent loss of sovereignty over life, especially among those most culturally vulnerable. A phenomenon that cuts across all social classes, peoples and genders acquires typical forms within each demographic, creating differentiated patterns of unhealthy consumption and alienation...In this world of emptied and commercialized culture, the absence of deep feelings propels the search for palliatives and psychoactive crutches. Drugs and their cycles, compensate for anxieties of a life enslaved to impoverishing forms of materiality, albeit fleetingly and dressed up in the pseudo-sophistication of fashion.”⁷⁷ We have looked for hard evidence of the consumption of psychoactives among youth populations in the floricultural areas of Cayambe and Tabacundo, but we only found disparate testimonies that must still be corroborated.

In effect, neoliberalism has accentuated this emptying of the sense of life, which the consumption society and young people's ways of life recreate in a thousand ways. This creates the conditions for addiction and other aspects of

⁷⁷ Breilh, Jaime. Discurso en la Sesión Solemne por el Día Internacional de la Lucha contra el Uso Indebido y el Tráfico Ilícito de Drogas. Quito: Ministerio de Relaciones Exteriores, Junio 26 - 2008.

young people's experiences. For 2006, around 60% of the population between 15 and 29 years old in Ecuador feels deprived of one or more basic necessities—which is a condition recognized as poverty—and around 30% of this age group reports being unable to satisfy two or more basic necessities, falling under the category of extreme poverty. Provinces such as Cotopaxi, Manabí and Morona Santiago have, respectively, 40.6%, 44.2% and 40.9% rates of extreme youth poverty. Towards the end of the neoliberal golden age, employment indicators show worrying levels of inactivity and unemployment. Among young people between 15 and 29 years old, 22% neither work nor study, a statistic that goes up to an alarming 31% by ages 30 and over. Those that work without studying reach 43% and 67% in those strata. In the case of women, there are consistently higher levels for these indicators. Inactivity also tends to be higher in the city than in rural areas.

The “Third National Survey on Drug Consumption in the Home, 2007”⁷⁸ compares the levels of consumption and dependence for the three illicit drugs most frequently used in Ecuador with that of other Andean and Southern Cone countries. The survey found that while consumption levels in Ecuador are relatively low, it has clearly higher levels of dependence or addiction (see Table No. 5).

Table No. 5 Consumption and Dependence on Most Common Illicit Drugs in Ecuador (2007)

CHARACTERISTIC	DRUG		
	MARIJUANA	COCAINE	Cocaine Sulphate
Age of first use	18.7	20.4	19.8
Consumes occasionally	4.4	1.34	0.80
Dependence	51.2	46.1	38.0

Source: CONSEP. III Encuesta Nacional sobre Consumo de Drogas, 2007

The consumption of licit drugs such as alcohol (55.3%), cigarettes (47.3%), tranquilizers (3.1%) and stimulants (2.5%) form part of a trend of the increasing presence of unhealthy elements. And their circulation and sale is now more common among youth. Drug consumption is beginning at very early ages; in fact 1.5% of 15 years old try marijuana, 0.5% ecstasy and 0.5% solvents and inhalants.⁷⁹

⁷⁸ CONSEP. III Encuesta Nacional sobre Consumo de Drogas en Hogares. Quito: Consejo Nacional de Control de Sustancias Estupefacientes y Psicotrópicas, 2007

⁷⁹ SIISJOVEN. Consumo de Drogas en Jóvenes (CONSEP, Encuesta Consumo de Drogas en Hogares). Quito: Sistema Integrado de Indicadores Sociales del Ecuador, 2007

Another way to analyze the deterioration of consumption is the loss of access to the consumption of public services (as will be seen in the following section). In this case, the evidence also confirms the decrease in spending on social services in public administrations (**APU**) that were uprooted throughout the

neoliberal period.

Spending decreased from 7.3% of GDP in 1981 to 4.2% in 1991. It is

worth stressing that during this period neoliberal governments gave little importance to the allocation

Table No. 6
Public Social Spending Per Capita (1994-1996 average)

	Total	Education	Healthcare	Potable Water	Housing	Social Security and Assistance		
						Total	Soc Sec	Soc Assist
Regional Average	255	88	67	9	16	75	61	15
Costa Rica	521	145	191	19	26	140	108	33
Brazil	741	218	177	14	60	273	251	22
Chile	651	139	114	15	54	328	269	59
Belize	303	157	88	25	0	33	21	12
Colombia	284	90	69	8	16	101	84	17
Jamaica	252	128	66	4	8	46	11	35
Ecuador	119	52	36	2	5	23	21	2
Peru	88	49	34	2	3			
Nicaragua	61	24	24		2	12	0	12
El Salvador	60	34	21			4	2	2
Dominican Rep.	85	30	20	17	10	7		
Bolivia	91	46	14	9	10	12	9	3
Guatemala	61	26	14		10		11	

Source: CEPAL. Gasto Público en Servicios Sociales Básicos. Santiago: CEPAL, 1999

of funds for social services. In a classification of countries elaborated by CEPAL towards the end of the 1990s, Ecuador was identified to be among the group of countries with the lowest per capita public spending.⁸⁰

As one can see in Table No. 6, Ecuador's per capita spending on healthcare during the late 1990s was half the regional average, and much below that of countries like Costa Rica, Brazil and Chile which, while also submitted to neoliberalism, constructed our region's market societies' best health systems.

The decrease in social spending condemned the public social and health programs and services to a process of deterioration and dismantling, which sought to substitute the public for the private in the name of an efficiency that never arrived.

Thus once we have looked over the mechanisms through which the strategy under question operated, we can begin to better explain the regression experienced in social rights since the end of the 1980s and the serious gap between health and the economic model. This gap is made even more palpable by reviewing the epidemiological evidence of a collective health crisis (Part III).

The relation between poverty and access to health is conclusive. Data from the last Living Conditions Survey reveals that 70% of the population does not have any type of insurance. Of the remaining percentage, 21 percent are covered by the Ecuadorian Social Security Institute (IESS) and Campesino Social Security (SSC);

⁸⁰ CEPAL. Gasto Público en Servicios Sociales Básicos. Santiago: CEPAL, 1999

7 percent is controlled by private insurers and 2 percent is shared between the Ecuadorian Armed Forces and Police Institute.⁸¹

At the national level, it is estimated that up to 78% use health services provided by public and private entities and barely 22% are affiliated with some sort of health insurance (19% in Social Security and 3% in prepaid Medical Companies). Regardless, those that access services receive insufficient quality. The data from the Ecuadorian Health Ministry shows that only 19% of services corresponds to the first quintile of poverty, while 57% is concentrated at the third, fourth and fifth quintiles. In Social Security centres, 89% of services correspond to the third, fourth and fifth quintiles (46% to the wealthiest quintiles) and only 5% to the first quintile (the poorest).⁸²

The destructuration of small rural economies and familial production

Over more than two decades, global capitalism's process of recomposition evidenced a growing inequality in economic-commercial interrelations and technology in a number of countries. There have been a number of contributions to the project of untangling this deep gap and the role of global acceleration in deepening it. In this regard, the destruction of small economies has had one of the greatest impacts on wellbeing and health.

A notable study published at the turn of the century uncovered the critical situation of the world's small farmers and the vicious cycle of monopolization and impoverishment that has been imposed upon humanity, making a social and alimentary future unviable.⁸³ In this same current, food transnationals have been denounced in important international forums for using their enormous power to exercise a "destructuring" effect with on small and medium sized agricultural production units. This has lead to perennial decapitalization and the impossibility of realizing their reproductive cycles.⁸⁴ This is a model based on inequality far more than simple "adjustments."

In line with our concern over collective health and its necessities we want to interrogate this aggressive dynamic and make it visible throughout these pages. This is a dynamic that destructures rural life, destroys cities' sovereign food supply, and directly impacts the rights of agro-industrial workers.

Consequently, the new conditions have imposed globalization in the form of the accelerated monopolization of vital resources, the expansion of monocultures

⁸¹ Sistema Integrado de Indicadores Sociales, Encuesta Condiciones de Vida, 2006.

⁸² Ministerio de Salud Pública del Ecuador, *Conjunto de prestaciones del Sistema Nacional de Salud*, Marzo de 2007, Segunda edición.

⁸³ Mazoyer, Marcel. *Defendiendo al Campesinado en un Contexto de Globalización*. Roma: Organización de las Naciones Unidas para la Agricultura y la Alimentación, 2001

⁸⁴ Rubio, Blanca (2005) *Los Enfoques Contemporáneos sobre el Mundo Rural: ¿Existe un Debate Teórico Real?*. México: Ponencia al V Coloquio latinoamericano de Economistas Políticos, octubre 27.

for agro-export, the generation of agrofuels, the appearance of a new international division of labour, the creation of labour reforms characterized by deregulation and flexibilization, bringing about regression throughout the region and in Ecuador in particular. In this sense, the rural sector has shown itself to be particularly vulnerable.

An analysis of the current and future health situation would not be complete without taking the rural situation into account. Agriculture is the depository of food sovereignty and security and the rural populations' means of support. Its importance also lies in its productive-economic articulation: the environment and biodiversity, the occupation of space, the use of land, and the socio-cultural reproduction of the peoples and communities from a range of ethnic and regional backgrounds. From there, we can evaluate the social and ecological costs provoked by the budding economic model. It is undeniable that from a perspective of integral development, and a true human development, one can categorically assert that the dominant economic model from 1990-2005 caused a negative impact on the country's small rural and urban producers and on the majority of Ecuadorian families' consumption.

This is why Ecuadorian social organizations, especially rural ones, mobilized four years ago in defence of their small economies and in doing so showed that it was necessary to develop a real literacy program with regard to the implications of global capitalism's new logic. They began to understand the mechanisms through which the dispossession was being organized, learning about the great threats posed to small agriculture and small urban business.⁸⁵ It became ever more important to question the logic of acceleration and its penetration of vital areas like water, food and energy resources that are so critical for sovereignty and health.

An especially important aspect of this problematic alarming campesinos and rural communities is the transnational monopolization of seeds. For example, the transnational corporation Monsanto's manoeuvres have allowed it to control 80% of the global seeds market. The nation's campesinos, citizens and scientists understand the North American company's strategic objective, which seeks to dominate the planet's germinative resources. They buy seed companies around the world so as to control the food chain. Once they have purchased the control of conventional seeds (non-transgenics), all that they have to do is to stop producing them. They then have absolute control over the global food system and submit it to the transgenic private mode of production.⁸⁶

At the international level, we can see that over the past few years production directed towards the global market has only allowed the least

⁸⁵ SIPAE. TLC en lo Agrario: Evidencias y Amenazas, Quito: Compugraf, 2004.

⁸⁶ Ribeiro, Silvia. El imperio de Monsanto y la destrucción del maíz. México: Periódico "La Jornada", Sábado 26 de Mayo 2008
(<http://www.jornada.unam.mx/2007/05/26/index.php?section=opinion&article=019a1eco>)

developed countries a very restricted access to modern productive technologies. They also operate at a smaller scale of production in large export markets. The agricultural surface area in Ecuador, in terms of crops and pasture, increased by 3,947,900 hectares from 1961-1990 (or by 101%). In the last period, it has only grown by 261,000 hectares, or just 3%. This reorientation is to a great extent the result of certain products market fluctuations, especially those linked to the international market and the interests of global agribusiness. Consequently, this affects the adaptability of small and medium family agriculture.

This also translates into the reduction in rural labour power and the mechanization of the agricultural sector. In 1980, the Ecuadorian countryside had 6,2000 tractors of various types. In 2004, this number rose to 14,800. The processes of technological innovation and its application in a variety of fields threatens the destructuretion of small economies and forced adaptations in the face of the global economy.⁸⁷

However, the processes of globalization and the implementation of reforms over the past decades have not altered the regional distribution in farming activities and of its territorial concentration.⁸⁸ According to recent studies, the Highlands region absorbed 48.6% of Ecuadorian rural production, the Coast 45.8%, and the Amazon 5.5%. Regardless, government policies have moved Ecuador towards global and bilateral commercial treaties, which, as has been explained, forces small and medium producers to compete in oligopolic markets. This situation has given rise to the ostensibly healthy prescription of providing the associative work of small and medium sized units of family agriculture to large companies. This is a formula that submits these producers to a dependence on big business. This formula reflects big companies' interests rather than the possibility of consolidating cooperative systems to finance small producers. This poses a variety of dangers to food sovereignty and real development for small producers.

This perverse logic has led to the crisis in the production of basic foodstuffs. Crops like rice, corn or wheat have suffered. A study presented by the National Agrarian Issues Research System (SIPAE)⁸⁹ signals that in 1995, 395,000 hectares of rice were cultivated and 1,050,000 metric tons were produced. Ten years later, this was reduced to 324,000 hectares and 1,104,000 metric tons. In the case of corn, one can see that consumption rose but national production fell, reaching 640,000 metric tons in 1997 and 250,000 metric tons in recent years. The same goes for other products like cotton or wheat. While in 1995 the country produced 17,000 metric tons of cotton, ten years later it barely reached 5,000 metric tons. In the case of wheat, 20,800 metric tons were produced in

⁸⁷ García Pascual, Francisco. *El sector agrario del Ecuador: incertidumbres (riesgos) ante la globalización*, Íconos. Revista de Ciencias Sociales. Num.24, Quito, enero 2006, pp. 71 – 88.

⁸⁸ Ibid.

⁸⁹ The study was presented during the International Seminar:: TLC, Impactos en los sectores campesinos de Latinoamérica: investigaciones y resistencia donde se expusieron los casos de México, Costa Rica, Colombia y Guatemala.

1995, while barely reaching 1,2000 metric tons in 2004. In this last case, the importation of wheat from the United States is ten times greater than national production. We were previously an exporting country.

Trade agreements have also affected a large number of agricultural enterprises' tariffs and subsidies, impacting employment and prices, the use of land and other factors. In consequence, these measures have also affected non-agricultural sectors.

It also bears mentioning that global acceleration has had a troubling effect on the problem of labour and family economies that depend on employment. Below this model, processes of decreasing protection, regulation and flexibilization of labour have caused these sad consequences for thousands of wage-earning families in Ecuador. In a general sense, the most visible sign of increasing labour insecurity was outsourcing. This is a mechanism by which many companies have avoided carrying out their obligations to social security. In this situation, the low social security coverage that characterized previous eras worsened (we will show data demonstrating this later on).

Workers' reality is fraught by uncertainties with regard to the protection of the labouring populations' health, a group characterized by temporariness and scant formality. Thus the labour environment, subject to the global and technological revolution, supposes a new reality that coincides with the new models for employment. Great social costs are entailed in the systematic subcontracting of certain risky activities and the increase in work rates.

In this sense, socio-economic variables and structural adjustments have affected the labour market and production. In fact, the economic situation sweeping the region in the 1980s that caused reduced growth rates also had an effect on the evolution of employment and remuneration. A recent CEPAL report estimates that the context of low growth in Latin America throughout the decade, barely reaching 1%, caused a rapid increase in the labour supply. This coincided with the incorporation of women and children into the workforce, which translated into an increase in informal employment and of low labour productivity with the consequent reduction in real wages.

On the other hand, the country's dollarization provoked important changes within the national economy and had a negative effect on social indicators. Carlos Larrea analyzes the Ecuadorian experience after the 2000 process of dollarization and points to some important data: "Between 1998 and 1999 Ecuador experienced a decline of approximately 10% in per capita income, the breaking or transfer of the majority of the State to private banks and an extremely acute social and political convulsion."⁹⁰

The context of growing market liberalization meant that in countries at a disadvantage like Ecuador, growth was made at the expense of wages, labour

⁹⁰ Larrea, Carlos. *Pobreza, Dolarización y Crisis en el Ecuador*. Quito: Abyayala, 2004.

flexibilization, the loss of worker benefits and growing labour insecurity. This resulted in pressure for the increasing involvement of indigenous and campesino children in productive processes, often in highly destructive labour environments. On the other hand, we can also see the dispossession of traditional populations' means of sustenance in areas where productive activities are now destined for export.

The application of said reforms eliminated the weak policies that previously, in some sense, helped small-scale agriculture and supported commercialization with soft loans.⁹¹ Their dismantling has exacerbated rural tensions.

In the area of health, we explore how these socioeconomic determinants caused a worsening of the quality of people's life and health. In these conditions, health services swam against the current, serving as a rationalization for the increasingly unhealthy ways of living. Hospitals and health centres were not prepared to deal with this massive influx of illness and thus its most important function was tarnished. It would be logical to put an end to these determinant processes that ruin our society's possibilities for health. From this integral perspective, we begin to understand that problems like the concentration of land, waste, technology, credit—and all of life's resources—are not as distant from the issue of collective health as they may have seemed.

Labour deregulation and flexibilization as determinants of the deterioration of working conditions

The principles, rights and guarantees afforded to labour are enshrined in constitutional texts, as well as conventions and treaties. But these protections are constantly violated by the productive logic of market forces, which demand that national production be more competitive at the expense of labour's working and health conditions. As we have previously reiterated, mechanisms like flexibilization and deregulation were corner stones of acceleration.

The model of accumulation and wealth concentration that has taken off in Ecuador since the 1990s contains the structural conditions for massive social exclusion. One could say that until the 1980s, the economically marginal percentage of the population was maintained at alarmingly low levels. But in later years, there was a disproportionate growth of the marginal sector, already greater than 45%, so that it no longer operated as a true industrial reserve army.⁹² Instead, what it became was a so-called *relative surplus super population*,⁹³ no

⁹¹ Wilma Salgado. *¿Ayuda alimentaria o ayuda a las exportaciones? en Globalización, agricultura y pobreza*. Francois Houtart, compilador. Ediciones Abya Ayala, junio 2004.

⁹² The industrial reserve army is an excess labour population that is reabsorbed during capital's cycles of high production.

⁹³ Nun, José. *Superpoblación Relativa, Ejército Industrial de Reserva y Masa Marginal. Proyecto Marginalidad (copy)*, 1970.

longer having the possibility of entering the primary economic circuit, circulating in the secondary spaces of low wage and informal work. This population is gathered amongst disorder and insecurity in peripheral neighbourhoods and deteriorated metropolitan centres in conditions of extreme economic privation. Neoliberal governments have not attended to these areas, except, in most cases, with measures aimed at containing potential social unrest.

The research has demonstrated that in Latin American countries the mechanisms deteriorating public services and preventive programs are a clear product of this model.⁹⁴

We are speaking then of cycles of accumulated unemployment and underemployment whose complex dynamic not only depends on the growth of production, but also on other elements such as the types of businesses running the economy. In the most moments of major recession and structural adjustment, the bigger companies —with more than 50 workers— have a heightened flexibility, as much as to fire workers during contractions as to rehire them during periods of expansion. This process has also led to the accelerated incorporation of women and children into the labour market, particularly in low-income households.⁹⁵

Underemployment and marginality as forms of surplus population imply grave consequences for ways of living and health: on the one hand, they provoke a drop in value of the labour force and, concurrently, the imposition of insecure forms of subsistence. This structural condition is reproduced with the aim of increasing competitiveness through the reduction of labour costs, concentrating discrete wage increases only in the most dynamic and organized sectors.

In this context, labour flexibilization is justified as a necessity in a globalized world, meaning: disinvestment, the formation of mixed enterprises, concessions, outsourcing of services, etc. But it is necessary to distinguish between labour insecurity, which refers to the conditions under which a worker must carry out his job, and flexibility, which is more related to the juridical order or legal framework that regulates the relationship between capital and labour.⁹⁶

⁹⁴ Sabrosa, P.; Toledo, L; Osanai, C. A Organização do Espaço e os Processos Endêmico Epidêmicos em “Saúde, Ambiente e Desenvolvimento” (Leal. MC et al. Org.). Sao Paulo: HUCITEC-ABRASCO, 1992, p.57-77

⁹⁵ CEPAL, *Evolución del empleo asalariado en América Latina y tendencias recientes en la ocupación*, 2006.

⁹⁶ Martínez, Luciano. *La precariedad laboral, manifestación de la mala calidad del empleo*. FACSÓ, September, 2004.

Over the past decades, the structure and conditions of employment have been greatly modified by legislative labour reforms. In Ecuador's case, various norms to flexibilize labour have been expedited since 1990. Regardless of the fairly protective labour provisions in the 1998 constitution, which were not modified, labour representatives have pointed to the approval of organic laws that flexibilize labour relations. This was a prerequisite for the implementation of the neoliberal production model in place of the import substitution model.⁹⁷

In this contest, the Sweatshop Regime Law⁹⁸ and the Part Time Contracts Law, passed during the Rodrigo Borja Cevallos Administration in August 1990, were the first pieces of legislation to beat a path to labour flexibilization in Ecuador. The ongoing importance of this law is that it undermined the principal of continuity in labour relation: "the model required labour relations be short term, allowing contracting and firing of workers with great ease. In contrast to the prior model, which was based on stable and long-term labour relations."⁹⁹

The law also led to part time employment, forcing workers to labour four extra hours on top of the eight-hour workday. The law thus established that part time workers would not enjoy stability. It also gave employers the legal authority to terminate a contract without indemnifying the worker.

Months later, in February 1991, the Free Trade Zone Act (*Zona Franca*) was passed.¹⁰⁰ This law created a new framework for "foreign trade, tariffs, taxes, exchange, finance and the treatment of capital and labour." This norm determined that "by their nature, labour contracts in the free trade zones are of a temporary character. Thus they are not subject to article 14 of the Labour Code and can be altered as many times as is necessary."¹⁰¹

97 Guerrón, Santiago. *Flexibilidad laboral en el Ecuador*. Universidad Andina Simón Bolívar, Serie Magíster, Volumen 31, Quito 2003.

98 According to 2002 data, there are about 64 maquiladora factories operating in Ecuador. It is estimated that of the total number of job positions, half are in textiles, nine are agroindustrials and eight are in the production of jewelry. Of this total, 36 are located in Quito and Guayaquil.

99 Ibid, pág.56

100 Articles 5 and 6 of the law designates users of free trade zones to be natural or juridical persons, national or foreign, that are settled in said places to undertake duly authorized activities. Companies administering free trade zones must be public or private juridical persons, or of a mixed nature, which obtain, by Executive Decree, the concession to operate the country's free trade zone mechanisms.

101 Guerrón, Santiago. *Flexibilidad laboral en el Ecuador*, Universidad Andina Simón Bolívar, Serie Magíster, Volumen 31, Quito 2003.

So as to attract workers to this type of insecure work, the law determined that wages within the free trade zones must be at least 10% above the base or sectoral minimum wage. To compensate, businesses benefited from tax exemptions, unalterable for a 20 year period.

On the other hand, the Labour Code Reform Act of November 1991 established new privileges for companies. Already weakened labour organizations especially feared articles that increased obstacles to forming a union, raising the base number of workers from 15 to 30, which made things especially difficult for workers in smaller companies. Other provisions suppressed the one year labour stability that operated during solidarity strikes. With respect to collective contracts, points of disagreements were obligatorily referred to the Mediation and Arbitration Tribunal for resolution.

In 1999, the Public Finance Reform Act was passed, which “denied and institutionally reduced public sector workers rights. And with the creation of the National Council on Public Sector Remunerations (CONAREM), collective bargaining freedom was disallowed.”¹⁰²

The other powers taken up by CONAREM were: determining the maximum amounts to cover wage increases and other economic and social benefits; the power to fix the maximum compensation that public sector and other workers could received; “it also denied the principles of irrevocability and intangibility in labour rights; all of this took place prior to massive public sector firings, the reduction of the size of the State and the privatization of state enterprises.”¹⁰³

On the other hand, the Economic Transformation of Ecuador Law and the so called “Trolley” Law introduced labour contracting by the hour for any activity, allowing employers to terminate contracts at any time. “Under this kind of payment, all of the legal and economic benefits that make up the total income of workers in general, including those that are paid with a periodicity other than monthly, are dismissed.”

The “advantage” of this law is that the company does not create a dependent relationship with the worker, meaning that they do not receive any sort of benefit given to workers with other types of contracts.¹⁰⁴

¹⁰² Guerrón, Santiago. *Flexibilidad laboral en el Ecuador*, Universidad Andina Simón Bolívar, Serie Magister, Volumen 31, Quito 2003.

¹⁰³ Guerrón, Santiago. *Ibid.*

¹⁰⁴ According to 2006 data, contract by hours covered 40% of the labour market in a total of 91,261 different areas, including agriculture, livestock, fishing, trade, construction, hotels and restaurants,

One of the fundamental aspects of this law is the distinction between contracts for continuous labour, which is to say “those productive activities that are regularly and in a systematic manner undertaken throughout all of the year and in eight hour workdays and forty hour work weeks, as are generally developed in the manufacturing or trade industries;” and discontinuous labour, “those that cannot be undertaken in regular work days of eight hour days and forty hour weeks, in a continuous and systematic manner, but rather, on more or less regular schedules.”

And then came the famous Investment Promotion and Citizen Participation Act (Trolley Law II) passed in 2000, which contradicts the Constitutional Tribunal’s legal rulings in reference to the Labour Code, among other things.¹⁰⁵

The Trolley Law II introduced labour principles that were the subject of controversy in the Constitutional Tribunal. Provisions such as the categorization of multifunctional workers were declared unconstitutional because they “allowed the indiscriminate alterability of non-technical labour and to artificially cause labour insecurity.” The same occurred with article 178, which altered the concept of remuneration established in the Constitution.

But this law also violated constitutional principles of the Right to Work, eliminating the compensation for untimely dismissals of workers that perceived a monthly salary of more than 500 USD during the last 24 months. This provision was also declared unconstitutional.

Finally, one of the Trolley II Law’s most controversial points is what is referred to as the Collective Pact, “a provision that did not require a special organization or committee serving to counter the employer’s stronger negotiating position. This left workers in a disadvantaged position.”

We can observe that the labour reforms initiated in the 1990s had a negative effect on living conditions and caused a deterioration in labour conditions. The Central Bank’s own statistics from the late 1990s noted an accelerated growth in the informal sector. In 1999, during the period of economic crisis, the population working in the informal sector surpassed the number of people working in the modern sector, according to statistics from the National Institute of Statistics and Censuses (INEC).¹⁰⁶

etc.; with regard to the distribution and number of contracts by gender, the following data was obtained: men 59,859 and women 31,402. (*Diario El Comercio*, March 29 2007).

¹⁰⁵ Guerrón, Santiago. *Ibid.*

¹⁰⁶ Baquero, Marco, et.al. *Evolución de mercados laborales formales e informales. Una definición alternativa*, Apunte de Economía N.-46, Banco Central del Ecuador, Quito, 2004.

Another aspect of flexibilization that is worth pointing out is outsourcing,¹⁰⁷ which employers used to obviate social security and labour protections, including those regarding worker training and minimum wages.

INEC found that the proportion of outsourced workers doubled from 2003 to 2005.¹⁰⁸

According to the Federation of Intermediate Businesses for the Promotion of Complimentary Employment and Services (FEDEHUMANA), an association of 110 companies, on April 13 2008 there were around 435,000 people working under outsourced contracts. Of that total, 80,000 workers were in the public sector and 355,000 worked in the private sector. The Labour Ministry, however, apparently does not keep data on this matter and much outsourcing takes place without the Ministry's permission.¹⁰⁹

According to the Pan American Health Organization (PAHO), ILO and CEPAL, "the proposed labour laws adopt flexibilization as a fundamental criterion to lower labour costs and generate conditions of competitiveness. In this case, this is related to the adoption of external criteria of flexibility tied to the necessities of adjustment of the labour market by redefining contract conditions or dissolving labour ties, undermining labour stability and social benefits..."¹¹⁰

Hiring flexibility also affected health services and social security. Various health services in Ecuador function on diverse modes of contracting. The Carcelén Health Center, for example, in 2002 had a total of 75 employees, of which only 13 were personnel named by the Health Ministry; 33 were contracted with self-funded resources (through patient payment) and 30 were professionals tied to the unit, dedicated to "shared risk." The hiring undertaken with self-funded resources was registered under the Labour Code's regulations regarding direct attention professionals (resident doctors and nurses), administrative personnel and service workers. They used the pay received in similar positions within the Health Ministry

¹⁰⁷ It bears distinguishing three terms: outsourcing, employment of workers through another natural or juridical person that establishes and supervises tasks; sub-contracting of additional services, contracting a juridical person who executes, with his own personnel, activities additional to that of the other company's productive process. Subcontracted workers are not employees of the user (surveillance activities, security, food, cleaning, messenger, etc.).

¹⁰⁸ A subcontracted employee is that which is contracted through a third company, has no direct relation of dependence with the location or company where the work is undertaken, but rather with a separate company of employment.

¹⁰⁹ Redacción Economía. La Intermediación y Terciarización Agonizan. EL Telégrafo, edición del 13 de abril, 2008

¹¹⁰ Federación Ecuatoriana para la Salud y el Desarrollo (FESALUD), Estudio de Perfil de Flexibilización de las condiciones laborales para la prestación de servicios de salud en el Ecuador., April 2002

as a point of reference to define their salary levels. Hospitals also outsourced the provision of food services for shift personnel.¹¹¹

In sum, the neoliberal model applied to labour relations since the 1990s restricted the application of laws and safeguards for workers. These changes went so far as to violate the Labour Code's already tepid principles and created the conditions for the deterioration of the working population's life and health.

Neoliberal globalization and the loss of collective support mechanisms

Contemporary epidemiology has made great advances in explaining the ways in which social processes determine collective health. And critical epidemiology has begun to understand the opposition that exists between the processes that harm us, negatively affecting our health, and those processes that we could call "protective" or healthy, that act as supports or defences.

However, health defences cannot be reduced just to the world of antibodies and individual organic reserves, which can help our body to counteract parasites and other illness agents. There are also collective defences such as community supports, unions, and, more generally, the resources and capacity for organization that collectivities depend on to face damage and trauma in their social reality.

The neoliberal model weakens these collective health defences and supports, dismantling rights such as that to free association. Diverse legal, political and cultural strategies are applied to dispossess workers, peoples and communities of the organizations that represent their interests and defend their health. One of the axes of this strategy is the obstruction, dismantling and discrediting of union organizations.

In this sense, democracy under neoliberalism is just barely formal, given that the instruments of justice are some of the basic elements of democracy. But a regime of justice is impossible in countries where the principles of the so-called "Washington Consensus" reign. This logic governed the actions of Ecuador's neoliberal governments from 1990 to 2006, promoting the "reduction of the State, deregulation, privatization, market deregulation, cutting social spending, labour flexibilization, macroeconomic equilibrium and the concentration of power in transnational corporations and the international banking system. There was a simultaneous reduction in the power of the State and the power based in popular

¹¹¹ Estudio de Perfil de Flexibilización de las condiciones laborales para la prestación de servicios de salud en el Ecuador. Federación Ecuatoriana para la Salud y el Desarrollo (FESALUD), April 2002.

sovereignty. This low intensity (formal) democracy could also be called 'neoliberal democracy.'¹¹²

In previous eras, the social contract maintained collective rights, albeit weakly, and ensured that social conflicts could be resolved by the State. In contrast, the neoliberal State prioritizes the liberal individual and social conflict is not recognized as a part of the contract.

This is to say that the market is governed by a totally undemocratic rationality. And the market's impact on democracy is not only based in restricting political power and parties but gradually eliminating social democracy and its base of workers organizations, unions and other associations.

Over the past decades, there has been a reported loss in the fundamental right to free association in all Andean countries. The available information on this subject is very limited and does not allow us to develop a real comparison of the period before and after global acceleration. The rate of unionization, as an indicator of this right's existence, remains obscure within official statistics. In a comparative study of unionization in Andean countries, it appears that not even 5% of Ecuador's labour force is unionized, far behind Venezuela where up to 28% of the workforce is organized.¹¹³ One study undertaken in Mexico reports that Ecuador has a unionization rate of 10% and shows that our region's unionization rate is falling. Collective bargaining is another indicator of the development of social labour rights. From 1987-1996, the number of these agreements in Ecuador was reduced from 315 to 206.^{114, 115}

Similarly, there were approximately 1,800 union organizations and about 300 collective contracts from 1970 to 1979. From 1999 to 2004, however, there were only 500 organizations, the majority of which had in reality already disappeared. While in previous decades union organizations grew within the import substitution model and constituted an expression of the struggle for democracy and citizen participation, they were gradually dismantled and eliminated during the neoliberal years.¹¹⁶

We can also say that weakening social protections offer another example of the regression in the right to health in our country. As you can see in Table No. 7, the golden age of neoliberal policy has witnesses a reduction in the right to these protections.

¹¹² Informe Plan País, *Inversión Social. Derechos Humanos, Apuntes para la Reflexión*, 2004.

¹¹³ Taller Organizaciones Sindicales de la Región Andina. En: www.viso.plades.org.pe/.../htm/v-encuentro/Taller%20movimiento%20sindical%20en%20la%20region%20andina.doc

¹¹⁴ Sepúlveda, Juan. *Breve Reseña de la Situación Laboral en los Países Andinos*, Lima: .ACTRAV/ETM, 2000

¹¹⁵ Gnecco, Gustavo. *Panorama del Sistema Laboral en América del Sur*. BibliotecA Jurídica Virtual del Instituto de Investigaciones Jurídicas de la UNAM. [www. Juridicas. UNAM.mex](http://www.Juridicas.UNAM.mx)

¹¹⁶ Touma, Guillermo. La Situación de los Derechos de los trabajadores. http://historico.asambleaconstituyente.gov.ec/blogs/guillermo_touma/2008/04/27

Table No. 7 Loss of Coverage of Social Protection for Workers in Andean Countries

COUNTRY	WORKERS' SOCIAL PROTECTION COVERAGE	
	1990	1998
ECUADOR	55%	47%
PERU	54%	42%
VENEZUELA	55%	50%

Source: Sepúlveda, Juan. 2000

▪ Neoliberal policy sought to weaken social contracts that promoted equality and universality, instruments that attempted to sustain redistributive mechanisms and assure the right to health, including goods and services necessary for subsistence and dignity. Guarantees to such goods as education, medical attention and fundamentals like potable water were weakened. The policies implemented from 1990-2006 transformed the social contract from a guarantee of the public good into private contracts between governments and suppliers.

Agro-industrial mechanisms for the loss of community and family supports

In previous sections, we analyzed the implications of changes in the agrarian model and the serious limitations and unsustainability of its underlying energy model. We also explained the destructure and decapitalization of small campesino economies provoked by the concentrating and exclusionary agro-industrial model. In this section, we will review some more specific mechanisms that alter rural social modes of reproduction. Our aim is to understand the deterioration of rural communities' ways of life and the loss of supports for collective health.

A recent study updates the description of peasant agriculture in Ecuador.¹¹⁷ Agricultural activity accounts for approximately 28% of national employment. And while the countryside supplies the country's food, it also has its highest poverty rates (61.5%). Over the past 50 years, the profound structural inequalities with regard to ownership and concentration of land, water and credit have not

¹¹⁷ SIPAE: *Hacia Una Agenda para las Economías Campesinas en el Ecuador*, Quito: Informe al proyecto "Economías Campesinas" de Intermon-Oxfam, 2007.

significantly varied. This is evidenced by, for example, the rate of land concentration's stagnation, from -.86 in 1954 to 0.80 in 2000.¹¹⁸

The bulk of food production for the internal market was once undertaken through family agriculture, activities realized by *campesinos* and their close relations. This mode of production is characterized by the seasonality of labour, the diversity of activities, the incorporation of minors, students and elders, with a growing responsibility for women. The destructuring pressures on small-scale agricultural enterprises, while already fragile, have notably affected this social arrangement. This has taken place through the monopolization of the means of production and natural resources, hastening the dismantling of the institutional apparatus designed in past decades to sustain agricultural production for the national market. This follows the guidelines of neoliberal agricultural reform, whose central document is the previously cited "Whitaker Report."

This tendency is naturally accompanied by a fall in production in areas related to food and raw materials, best exemplified by the situation of rice and corn. The expansion of waged agro-industrial work as a fundamental and dominant component in the generation of value and social wealth is another important characteristic. Also important is the commercialization of land and its use as a form of private capital's appropriation of natural resources central to human subsistence.

Land—where predominant social relations were the bases of human subsistence—has been increasingly subordinated to forms of social relations dictated by big capital, whose source of accumulation is waged work. This relation absorbs small properties and natural resources. The countryside and small-scale peasants are reincorporated into agro-industry. They are expelled from their land and transformed into waged workers in capitalist agricultural enterprises.¹¹⁹

The decline in the campesino economy's power and the imposition of the new agrarian model under the new logic entailed economic openings and the reduction of taxes on foreign agricultural products. Importantly, it also forced the elimination of domestic price support for all products, which were now fixed to the value of international price system.

In the local context, agriculture confronted a problem that has been described as "an unbalanced confrontation" between the local and the global. Ecuadorian agriculturalists were doomed to find alternative means of subsistence. This constructed a new type of social reproduction in Ecuadorian agriculture, especially for waged workers and the many families with little land or livestock. The campesino masses, especially since 1990, have been forced to strengthen a series of adaptive strategies. This process has been complicated, intensified and extended in the neoliberal years. Thus the reorientation of crops and livestock took place alongside the increasing use of industrial inputs and technological

¹¹⁸ Ibid, p.32

¹¹⁹ Cavalcante, David. *Globalización, agricultura y pobreza*. Ediciones Abya Ayala, 2004.

resources, the search for financing, associating with cooperatives or social movements, building ties to NGOs or international agencies, working in other economic sectors to diversify income sources, or immigration to the city or overseas as a way to generate capital through the export of labour.¹²⁰

With the deepening of neoliberalism and the transformation of the economic model in the 1990s, Ecuadorian agriculture underwent two concrete transformations. In changing the economic model, the State ceased to intervene in the sphere of production, which had to be rapidly incorporated into international markets and the global business process. This move was established through “highly” competitive agricultural production, particularly in the case of flowers, broccoli, bananas, fruits and agro-industrial products. The second change of great importance to agriculture took place through the promulgation of a series of laws such the Agrarian Development Act, which, among other reforms, eliminated the official prices for some products as well as tariffs that had previously protected internal production.

This led to the accelerated growth and concentration of resources in the business sector and agro-industry and to the gradual deconstruction of campesino economies. In this way, the rights of agro-industrial workers who lacked capital or technology for production were reduced.

The State increasingly retreated from rural areas from the 1980s on. Many state institutions for campesino assistance were privatized, while others limited their activities or simply disappeared. This was the case for ENAC (product reserve silos system), EMPROVIT (vital consumer product provision system), ENSEMILLAS (seeds provision for farmers), FERTIZA (fertilizer provision), INIAP (National Institute for Agricultural Research), etc. The State’s withdrawal was part of a much larger policy of market subordination¹²¹ and transformation of the service State into the neoliberal State. This aggravated the situation of small and medium *campesinos*, who in the 1970s and 80s, were somehow or other the beneficiaries of public agricultural promotion policies.

On this front, there was also a process of agrarian counter-reform and land reconcentration. Despite the passage of two agrarian reform laws (1964 and 1973), the inequitable structure of agriculture never changed. The small estate-large estate duality continued. For example, “properties of at least one hectare increased, but at the same time control over land was reduced, on their own representing 29.2% of the production units –**UPAs**- and controlling barely .78% of the land.”¹²²

¹²⁰ FLACSO. *Revista Íconos*, Revista de Ciencias Sociales N.24, enero de 2006.

¹²¹ Herrera, Stalin. *Percepciones sobre la Reforma Agraria. Análisis de discurso de dirigentes de organizaciones campesinas e indígenas*, Sistema de Investigación para la Problemática Agraria del Ecuador, SIPAE, 2007.

¹²² Herrera Stalin, *Ibid.*

The same unhealthy patterns have been repeated—with slight variations—in the realm of agro-industry: capital investments in agro-production enterprises in communities where there is a high pressure on land; the total or partial conversion of poor campesinos into waged (or partly waged) agricultural labourers; the breaking of young people's cultural ties to their communities; monetarization of wages and an opening for consumerism; changing workers' way of life through high rates of exposure to chemicals and changes in nutritional patterns; and the weakening or abolition of family agriculture and exposure to physical and psychic excess.

Analyzing the history of floriculture agro-industrial expansion allows for a better understanding of the changes in campesino social reproduction. For example, the total or partial transformation of traditional haciendas in Cotapaxi into high-technology farms for the production of flowers for export not only altered social inequality but also reinforced it. It did, however, slightly modernized social relations, thanks to the entrance of the region's young campesinos into the waged labour force. However, the unequal structure of land and water ownership remained. Thus, in the fertile Cutuchi basin, the medium and large landholdings persisted, with properties of more than 50 hectares controlling at least 1.97% of the total production units –UPAs-, concentrating 47,49% of agrarian property and 37.55% of irrigated land.¹²³ In Part III of this work, we examine the case of the Granobles Basin (Cayambe) to explore these transformation's impacts on ways of human life and ecosystems.

Privatization and the Deterioration of Public Health Resources: Principal Health Sector Privatizations

Over the last two decades in Latin America, the processes of privatization were a substantial part of government's political agendas, leading to new legislation or legal reforms that created the necessary conditions to consolidate the agrarian counter-reform. As has already been mentioned, the World Bank prepared a series of prescriptions that "recommended" the privatization of public enterprises and a change to a pay-for-services system with private insurance and providers. The supposed objective was for people to pay healthcare's real cost and in doing so contribute to productivity and the improvement of the system.

These structural reforms, implemented in Latin America from the early 1980s on, were directed towards the transformation of the State's role and the modification of economic policy priorities. In this way, the processes of privatization were understood as a mechanism to reduce and restructure the State and deregulate the economy. In the social realm, the reforms aimed to eliminate the Keynesian conception of the protector state in order to implement a subsidiary State concentrated on financing, regulating and designing a social policy adapted

¹²³ Zapatta, Alex. *Cotapaxi: Dinámicas Agrarias y Modificación de las Condiciones Agro Ecológicas*, Quito: Proyecto Ecociencia-SIPAE, 2006

to the model of accelerated accumulation rather than the provision of services as public goods within the framework of a social contract.

As previously mentioned, the so-called Country Assistance Strategy (CAS) that the World Bank designed for Ecuador in 1993 stressed four objectives, of which only the third was really a part of the Bank's agenda: a) improve basic services for the poor; b) promote public sector reform; c) strengthen the bases for private sector growth; d) assist in the resolution of Ecuador's difficulties with external debt.

Our first reflection with respect to the Bank's overall operations is that each one of these strategic guidelines reflect the four principles of neoliberal development that were early on identified in Latin America:¹²⁴ a) focus on the poor; b) introduce legal reforms to dismantle the public sector; c) strengthen the private component of development; and d) provide financial resources for "adjustment" operations. These strategic objectives have been achieved through reforms tied to hegemonic discourses like "modernization" and the restriction of a "centralist" and "obese" state: decentralization; financing of decentralized units; modernization of hospitals and healthcare centres, i.e. the introduction of pay for service as part of so-called "self-management"; and the development of convenient policies through forced "consensus." A number of experts joined this project, whether economically seduced by the projects' not insignificant salaries or attracted by the discourse of "social management" that captivated various minds, whether due to naïveté or pragmatism.

It is no surprise that the early years of FABASE (circa 1993) and MODERSA (circa 1995) coincided with the most aggressive adjustments, principally promoted by the governments of Sixto Durán and Jamil Mahuad. In this same period, powerful social determinants were unleashed as a result of the legal reforms that we have described, greatly affecting collective health.

Behind society's back, the National Congress approved laws like the State Modernization Act, which aimed, among other things, to privatize health and social security. The National Health Council (CONASA) served as the Act's technical counterpart, which was reactivated in 1995 as a supposed space for participation. In reality, it was a space where the most important voices for the common good and national interest were unable to stop the influx of World Bank money and the aura of "modernization's" persuasion of anointed functionaries.

The late 1990s Health Services Modernization Project, which was undertaken for five years at a cost of \$65 million (\$45 million of World Bank credit, \$8 million of national funds and \$12 million in local funds), became a major force in the process of dismantling the emaciated public health system. Mechanisms such as the purchase of varied local network services based on a plan of calculated

¹²⁴ Valenzuela Feijóo, José. *Crítica del Modelo Neoliberal*, México: Colección América Latina de la Facultad de Economía de la UNAM, 1991

service costs, was part of a prescription that was sold as a panacea, an instrument of modernization and efficacy in the health sector.¹²⁵

Neoliberals made the improvement of poor mothers and children's health, the improvement of child nutrition, and the provision of medicine and basic medical services central to their argument. These apparent objectives concealed the strategies of adjustment and were financed through public debt. These debts lack legitimacy and legality and should be investigated by the Commission for the Integral Audit of Credit (CAIC) to prove that these multi-million dollar experiments were neither genuine, related to a plan to benefit the public, nor subjected to the country's laws. On the contrary, the power of financial resources was applied to create a situation favourable to the dismantling and weakening of public social service programs and companies (i.e. medicines, food factories, etc.), the gradual introduction of so-called self-management (self-funded) systems in services, and a general opening towards the logic of the market.

Indeed, this logic moved the sphere of social welfare into the private: family, community and private sector services. This implied that the State should only assume responsibility for the provision of a few public goods and minimal programs for the extremely poor. From there, the focalization strategies, the plans for health services, and the very practice of public health were, during the neoliberal years, transformed. The right to health became a commodity and health services turned into spaces for private accumulation. In this way, they sought to ensure that certain limited self-managed health benefits and public services were strengthened to reach the poorest tiers of society. And the middle and wage-earning classes became the clients of private insurance, because they had to be incorporated, sacrifices aside, into the health market. Throughout the region, leaders championed the supposed benefits of the Law 100 in Colombia as a successful example of an efficient reform.¹²⁶

A number of countries throughout the region used this argument to apply reforms directed towards the substantial modification of the relations of the public and private sector and social security, opening the spaces for the formation of new ef such as took place in Brazil, Chile, Argentina, Colombia, Dominican Republic and Peru. In this sense, the sectoral diversification of privatizations and concessions spanned a gambit of projects: highways, railroads, telecommunications, the generation and distribution of electric energy, natural gas, among others. An aspect of the discourse of privatization is the maligning of the public and of State managed companies as "inefficient" and the overestimation of the private as "efficient."

¹²⁵ Echeverría, Ramiro. *El proceso de reforma del sector salud en el Ecuador*, período Agosto 1997 – Agosto 2000. CEPAR, Quito, 2000.

¹²⁶ Ver Documento de María Esperanza Echeverri. *La salud en Colombia de cara al siglo XXI: entre la equidad y la violencia*. Universidad de Antioquia, Medellín, Colombia, August 2000.

The health reforms that we are analyzing proclaimed the necessity of efficiency, and the discourse of equality and universality became simple rhetoric to legitimate their manoeuvres. The directives were to respond to health problems through three types of government intervention: the financing of essential services for the poorest; the supply of public health actions; and the correction of market failures in the areas of health services and insurance. These criteria shaped a health system with a regulated market and a minimal state where universal insurance was propagated as the solution to problems of inefficiency and inequality.¹²⁷

Market mechanisms in the provision of social services (competition) were also introduced, such as focalized subsidies for bonds or particular subsidies.¹²⁸ Enthusiastic followers of these reforms—many of whom continue in public policy and have now changed course—assume, or at least tolerate, the privatizing trend, going so far as to call the new mode of social policy more flexible, open, transparent and participatory.

The social effects of these policies began to be felt in the late 1990s, with the privatization of water, education and health. Major controversies then erupted between the neoliberal government and mobilized social sectors. The privatization of basic services damaged essential principles of wellbeing and health, such as: national sovereignty; rights viability; employment and remunerations; access to services with justice and equity; democratization of management; gender equality; and environmental protection.

These reforms went so far as to contradict a number of the 1998 constitution's theoretical precepts. The right to health is referenced in at least five articles that guarantee, albeit ambiguously, "the promotion and protection of health, through food security, the provision of potable water and basic sanitation, the support of healthy environments in the family, workplace and community and the possibility of consistent access to health services, under the principles of equality, universality, solidarity, quality and efficiency." Article 42 says, "the programs and actions of public health will be free for all. The public services of medical attention will be for those people that need them..." In the same way, Article 46 determines that the State is responsible for assigning the necessary financial resources to ensure that the "fiscal allocation for public health annually increases at the same rate as the central government's total budget increases."

Similarly, Article 46 of the constitution established financing for the National Health System through the general budget with obligatory, sufficient and timely contributions. This article details the obligations for those responsible for the

¹²⁷ Vega, Román (2000 a). *Evaluación de políticas de salud en relación con justicia social. Una aproximación metodológica crítica, igualitaria y pluralista*, Bogotá. Pontificia Universidad Javeriana (unpublished):34.

¹²⁸ Fundación Esquel caso Ecuador for CEPAL, in relation to public spending on basic social services in Latin America and the Caribbean.

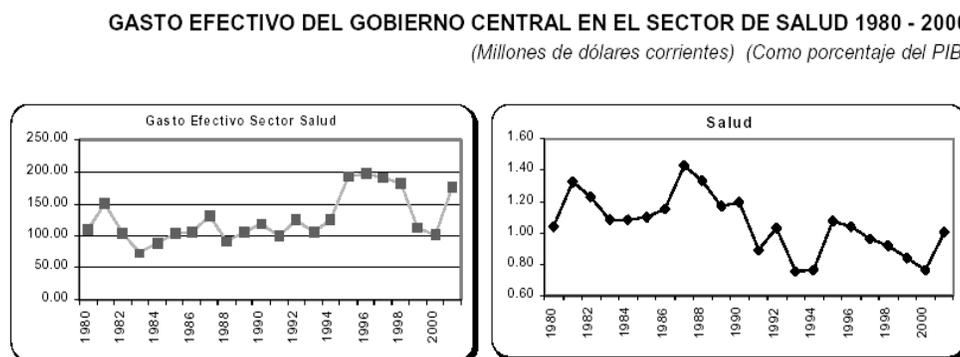
national budget, which is to say the Executive branch, to ensure that allocations for public health are not reduced and, rather, that they increase in relation to the increase in the national income. Regardless, as we have insisted in various parts of the present study, various investigations show the systematic reduction of the health budget at the end of the 1980s and the early 1990s.¹²⁹

General and Health Sector Structural Adjustment: Two Dimensions of the Same Strategy

Over the past 35 years, Ecuador received large amounts of **currency** through the sale of oil, but this did not reflect a substantial improvement in its inhabitants' living conditions.

Social spending fell from 7.5% of GDP at the beginning of the 1980s to 5.2% in 1996, which confirms that this wealth was directed to goals unrelated to ensuring social wellbeing. In Figure No. 6, CEPAL data from 1980-2000 is presented, according to which the proportion of spending on health (in current prices) as a percentage of GDP show a clear tendency towards decreasing, bordering on 1% of the GNP.¹³⁰

Figure 6



Fuente: Ministerio de Finanzas y Crédito Público, *Estadísticas Fiscales y Liquidaciones Presupuestarias*

Produced by: Economic Commission for Latin America and the Caribbean (CEPAL)

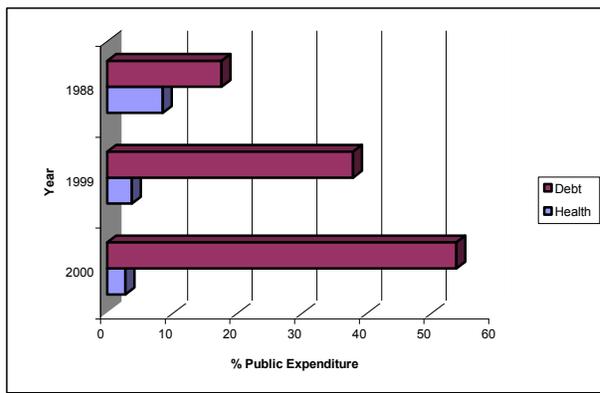
The restriction of the Ecuadorian government's health budget, on par with the general World Bank logic, was also the product of pressure from holders of external debt bonds. The governments of the period systematically assigned a lower percentage of the total budget to health, while increasing the percentage

¹²⁹ CEPAL, *El gasto social en América Latina: tendencias positivas y consecuencias de desaceleración económica en la región*, Panorama social de América Latina 2002 – 2003.

¹³⁰ Vásquez, Rosana, et.al. *La construcción de las políticas sociales en Ecuador durante los años ochenta y noventa*. CEPAL, Santiago de Chile, 2005.

destined to service the debt. In 1988, health already made up just 8.6% of the budget, in comparison with 17.65% for payment of the debt. And that gap only worsened. In the 1999 budget, foreign debt service was 38% of the total budget, 10 times larger than the 3.8% assigned for health. In 2000, the payment of the debt increased to 54% while health barely reached 2.8% of the total.¹³¹ In figure No. 7, a rapid growth in debt service is observed from 1988 to 2000, while healthcare spending shrunk.

Figure No. 7 Contrast between % of Spending on Debt and Health (Ecuador, 2003) Source PAHO



basic right to healthcare and other social services so as to serve the interests of debt investors. For 2000, given the enormous inequalities between the assignments for debt payment and health, the government's declarations that the reduction in health spending was unavoidable is demonstrably false.¹³²

According to a report by the Pan-American Health Organization, spending on

debt was greater than that on social investment by a factor of 1.4 in 2003. This means that for every dollar that entered the public financial system, 50 cents went to the external debt and 33 cents on social spending. This is corroborated by the data released by the United Nations Children's Fund and the monitoring organization called Lighthouse Group ("Grupo Faro-Lupa Fiscal"), which held that Ecuador occupies the penultimate place among 21 Latin American countries in social investment.¹³³ This problem appears to be even worse once we begin to look at the divergence from national interests caused by the so-called illegitimate debt.

The World Bank Style: External Meddling, Extra-budgetary funds and Health Losses

In previous sections we have shown evidence with regard to public spending policies and the deterioration of spending on health in the State budget.

¹³¹ CDES. *La exigibilidad del Derecho a la Salud*. Una petición ante el Sistema Interamericano de Derechos Humanos, 2002, p.10

¹³² See the document from the Centro de Derechos Económicos y Sociales (CDES). *La exigibilidad del derecho a la salud* presentado ante la Corte Interamericana de Derechos Humanos, December 2000.

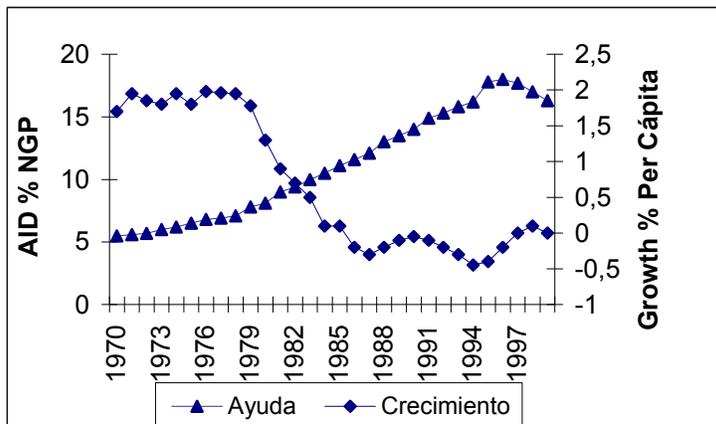
¹³³ Published by *Diario El Universo*, December 11, 2006.

This section, on the other hand, focuses on the question of international cooperation. Our research reinforces the argument that, in cases like that of the World Bank's presence in neoliberal operations from 1993 to 2006, cooperation was aimed at intervention and political control rather than legitimate material and technical support.

Recent history has obscured the image of international cooperation. Some agencies have maintained honest dealings in technical and financial support, respecting the sovereignty of the national sphere of action and legitimately assisting social development. Others, however, have simply transmitted foreign strategies to subordinate the economy and impose political hegemony for the growth of the international bureaucracy's fortunes.

The most illustrative case of the distortion that can be caused by external cooperation is a document in a report entitled "The White Man's Burden." The careful investigation of spending and actual achievements by a number of agencies of international cooperation in African countries uncovers some disconcerting consequences of the North's international cooperation.¹³⁴ As can be observed in figure No. 8, there is a clear disparity between the growth in spending entailed by cooperation and the declining economic curve. This study explicates

Figure No. 8 International Aid vs. Growth (África)



Source: Easterly, W. *The White Man's Burden*, 2006

the gap between the international planners and consultants' rhetoric, their alien goals and bulging salaries, with regard to the real necessities of the countries that usually pay for these massive operations by indebting themselves.

Large non-government organizations have played a decisively negative role in this process, provoking a recently published study to ask the following question:

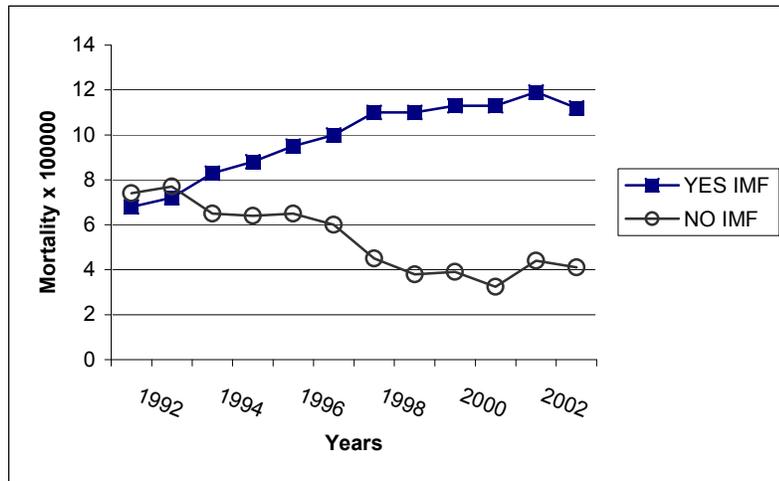
have NGOs served progress or decadence?¹³⁵ In achieving the Washington Consensus' goals, many international agencies and NGOs have become mediators of donors' policies and have thus multiplied their number in countries like Ecuador, alongside programs to support adjustment.

¹³⁴ Easterly, William. *The White Man's Burden*, New York: Pinguin Books, 2006.

¹³⁵ North, Lisa and Cameron, John. *Rural Progress, Rural Decay*. Bloomfield: Kumarian Press, 2003

The relation between the presence of certain entities of “cooperation” and true disasters in health has been documented. Perhaps the most striking case in scientific literature is a recently published study¹³⁶ which uses sound data on 21 countries to demonstrate the relation between the resurgence of tuberculosis in Eastern European countries and the International Monetary Fund. The authors from Cambridge and Yale University have used hard data to show that, taking 21 countries into account, those that received an IMF loan registered an annual increase of 13.3% in mortality rates from this chronic infection. There was also a 16.6% increase in morbidity. As the study is based on exact data, it can be calculated that there was a 0.9% increase in mortality for every percentage point increase in IMF credit. Inversely, every time a country abandoned IMF programs, the mortality rate dropped by a 31% average. This robust research makes note of the same phenomena that we bring to the fore in this work, as it shows empirical evidence that IMF programs, rather than inoculating people against tuberculosis (an illness of poverty), brought impoverishment and a social crisis that could be reflected in the resurgence of this or other illnesses (see figure No. 9).

Figure No. 9 Tuberculosis Eastern European Countries with or without IMF programs (International Monetary Fund)



Source: Stuckler; Lawrence; Sanjay.. International Monetary Fund Programs and Tuberculosis Outcomes in Post Communist Countries. PLoS Medicine, 5(7):14:1079-90, July 2008

This robust research makes note of the same phenomena that we bring to the fore in this work, as it shows empirical evidence that IMF programs, rather than inoculating people against tuberculosis (an illness of poverty), brought impoverishment and a social crisis that could be reflected in the resurgence of this or other illnesses (see figure No. 9).

In Ecuador’s case, the average national curve of pulmonary tuberculosis has stagnated from 1993 to 1999. Later on, the focalization of actions to contain the illness achieved a significant decline in the average from 2000-2007 ($\beta = -5.4$; $R^2 = 0.89$). But on the other hand, we have a large set of illnesses associated with social suffering that have worsened and we do not know what tuberculosis looks like disaggregated by class and location.

In any case, it is important to investigate the sort of projects entailed by Ecuador’s cooperation with the World Bank. Of these, it is worth highlighting the

¹³⁶ Stuckler D, King LP, Basu S (2008) *International Monetary Fund Programs and Tuberculosis Outcomes in Post-Communist Countries*. PLoS Med 5(7): e143 doi:10.1371/journal.pmed.0050143

example of the Health Services Modernization Project (MODERSA), introduced by the Jamil Mahuad administration. The project was carried out by a *coordinating nucleus* decentralized from the Ministry of Public Health. The fact is that, beyond its illegitimate intervention to impose their strategies of focalization, decentralization and privatization, the provision of a substantial budget—serving to cover the salaries of functionaries and technical cadre, often above the normal scale—practically created a parallel health system and, finally, a noxious one.

Another episode that illustrates the cession of administrative sovereignty was the creation of the National Secretariat for Millennial Objectives (SODEM) in 2005. This program was initiated as a private corporation by President Alfredo Palacio to facilitate the Universal Coverage System (AUS, see the more detailed analysis in the previous chapter) designed by Johns Hopkins Hospital at the government's request and financed by a non-refundable loan from Japan. SODEM was created at the ministerial level and operated as a cabinet level position that, according to the then president of the Medical Federation, became a "parallel health ministry," stripping the ministry of its authority over health and converting it into a mere provider of services.¹³⁷

International Regimes: Another Mechanism to Consolidate the Privatization of Health

In late 2005, the United States negotiated a Free Trade Agreement with Ecuador, a deal that attempted to impose a supranational and supra-constitutional norm.

The text of the treaty proposed to Ecuador was practically the same as had been negotiated with Mexico and Central America. And the set of strategies was the same, too: a total opening to U.S. products and investments; overprotection of the interests of U.S. companies; opening to foreign private investments, including in key areas such as water, food, education and health; dismantling the protective tariff barriers on vital goods; installation of an extraterritorial juridical framework for the arbitration of conflicts of interests and the submission of national laws to the primacy of treaty regulations; subordination of government purchases to international competition, eliminating priority to national providers; and the limitation of the State's means of human and environmental protection below the primacy of corporate profit.¹³⁸

This strategic packet was in the end defeated by social mobilization and brings to light the intentions behind these types of negotiations and the danger in new projects of opening towards supposed "free trade."

¹³⁷ Sánchez, Luís Felipe. Declaración al periódico "Hoy" en "El Tortuoso Camino del Seguro de Salud". Quito: January 21, 2006 edition

¹³⁸ SIPAE. *TLC en los Agrario: Evidencias y Amenazas*, Quito, Compugraf, 2005.

This international treaty constituted a perfect neoliberal instrument. And while reinforcing the global reform strategies, it also sought to install other mechanisms that constituted threats to the social right to health. In effect, along with trying to clear a path for the penetration of foreign businesses in the provision of services, insurances and other privatizable aspects of health, it moved towards absorbing a number of critical elements into the private sphere, such as generic medicines and the ancestral knowledge of herbs and medicine. The country's genetic resources are extremely important given that Ecuador has one of the highest levels of biodiversity on the planet.

Research into the potential effects on the market for medicines and chemical products of an FTA between Ecuador and the Colossus of the North has revealed very serious issues. A problem of special concern is that of generic medications. Currently, 20 years after the patenting of a molecule of a drug's active agent there are no longer market protections, and it can be used freely by public health programs as a generic and circulate in competition with brand name drugs, significantly lowering prices.

What the agreement sought to do was amplify the protection of so-called "proof data"¹³⁹ extending market exclusivity for profitable active ingredients. And the artifice would not be limited to new products, given that in the Andean Region there are currently a number of products under evaluation that are already in the market while others are undergoing re-registration (decision 436 of the CAN). In addition, it sought to: establish a five year protection period of test data for every special or new study required by regulations; requirement that national authorities notify the patent owner of the identity of any third party that solicits registration; additional protections for secondary uses of active ingredients; and compensations for delays in the awarding of patents and registrations.¹⁴⁰ In other words, these were a set of measures to increase the private business of medicines, their monopoly control and the limitation of the generic market.

The counterfactual calculations and projections undertaken with the country's active ingredients trade databases allows for an estimation of the national impact in price increases and growth of the monopoly market.

Fortunately, the country's social organizations detected this stratagem in time and organized a powerful social mobilization to stop the FTA. In this way, in contrast to neighbouring countries (Peru, Colombia), the deal was not approved.

But the lessons learned about the social implications of the international order do not end there. Currently, there are a number of trade accords that are already established, and others waiting to be signed, that also affect the right to health. Such is the case with the World Trade Organization (WTO), which is

¹³⁹ Proof data: which are data that the company has to show in order to prove the efficacy and security of a medical or chemical product.

¹⁴⁰ Gaybor, Antonio; Nieto, Carlos y Velasteguí, Ramiro. *TLC y Plaguicidas*, Quito: Ediciones SIPAE, 2006.

pushing, through the General Agreement on Trade in Services (GATS), to establish mechanisms that open the service sector to the private sphere and non-profit providers, including in sensitive areas like water, health and education. The agreement progressively liberalizes the “trade in services” between WTO members, which implies the total elimination of any government measure to favour a national provider over a foreign one. This means that GATS covers virtually any action, rule or regulation that has a direct or indirect effect on the trade in services. As the WTO recognizes, GATS defines the trade in services in such a general way that it becomes “directly relevant for many areas of regulation that were *traditionally unaffected* by multilateral trade rules.” The breadth of the GATS guidelines threatens to seriously limit government’s capacity to undertake actions or policies in areas of social, environmental or developmental priority. In addition, all commitments to liberalize services that a government assumes in response to another country’s request apply to all WTO members, according to the Most Favoured Nation rule.¹⁴¹

What is most patently worrying is its “virtual” irreversibility, given that from the beginning any country that detaches itself from their GATS commitment in the service sector must indemnify affected trade partners and face reprisals in the form of trade sanctions. In this way, GATS dangerously infringes on national policies, limiting its sovereignty and its capacity for action.

These agreements put the right to health in a risky position, strongly linking it to social, economic and political processes where diverse interests are in play. An agreement of this kind favours the private sector above the majority of the population’s interests.

The impact of international trade norms—and the GATS in particular— and its effect on the liberalization of goods and services related to public health, extends in various directions, according to one specialist’s criteria.¹⁴²

In the first place, there are the potential effects on the services provided to businesses (including professional, investigative and development services), which have until now remained relatively independent. In second place, within social and health services, such as hospitals, the full and partial commitments assumed under GATS with regard to market access and national treatment constitute serious threats that can be summarized as such: *“The principal transformations will be visible in limitations on national, provincial and municipal governments have and will have in developing public policies that respond to*

¹⁴¹ Citizens’ Network on Essential Services. *Los servicios públicos en peligro: El GATS y la agenda privatizadora*. www.socialwatch.org/es/informesTematicos/67.html

¹⁴² Terán, Juan Fernando. *Impactos de Regímenes Internacionales y del GATS sobre la Salud*. Quito: Comunicación Personal, April 2007.

citizen interests. If the government continues to refuse to sign the FTA, the GATS is still in effect as a World Trade Organization treaty. Its aim is to progressively liberalize trade in services. Among other things, liberalization implies the total elimination of government programs that could favour a national provider over a foreign one, such as preferential public services. This is a measure that will considerably affect the health sector."¹⁴³

Within this historical framework, it can be deduced that adjustment policies and health reforms from 1990 to 2006 have been articulated alongside structural processes and market transformations to finance the transition to a new conception of social policy, where the participation of the private sector is privileged in the provision of services.¹⁴⁴

Free trade certainly does not merely refer to the control of trade and certainly does not imply free development. And while the momentary victory of our social organizations have, at the present, been able to stop the force of the free trade agreements, grey clouds remain on the horizon in the form of new schemes of this sort. These deals will certainly be packaged as something new and distinct, but they will incarnate the same threats.

The Retrocession of Public Services and the Modernizations of Ills: The Case of the Privatization of Water in Guayaquil and "Electrosmog" in Quito

Health sector reform in Ecuador is developed between two well-defined poles.¹⁴⁵ The first, part of the neoliberal thesis, links it to the logic of the market and marginalizes public participation, arguing that the public is by definition bureaucratic and inefficient. They recommend a management logic strongly rooted in the private sector. The second position is characterized by a defence of the public and equality, demanding, for example, that the State assume full responsibility for social and human development. The two tendencies have fought over the introduction of reforms in the sector. In 1995, during the Durán Ballen presidency, the National Health Council (CONASA) created a Health System. One of the declared goals was the creation of universal health insurance¹⁴⁶ as a way to

¹⁴³ Terán, Juan Fernando. Ibidem, entrevista, April 6 2007.

¹⁴⁴ According to Social Watch reports, in the 1990s the World Bank, the International Monetary Fund and the Inter-American Development Bank delivered important credit packets to a number of Latin American countries, including Ecuador, conditioning them to privatize of public services like water.

¹⁴⁵ Ministerio de Salud Pública del Ecuador, *Marco General de la Reforma Estructural de la salud en el Ecuador*, Quito, 2007.

¹⁴⁶ In a document prepared for PAHO and WHO in March 2003, they define "universal coverage as the effective guarantee of the protection of health, of all citizen's access to quality health services, without regard to social class, ability to pay, race, gender, religious beliefs, political creed or any other social condition."

pay the social debt and a strategy to increase coverage under the guidance of the Public Health Ministry.¹⁴⁷ Similarly, during 1997, the Decentralization Act affected a transfer of goods and resources to municipalities, provoking a weakening of central Executive's institutionality.

These reforms are put forth in the name of the very logical idea of creating a system for the functional articulation of health management through the coordination of the Cantonal, Provincial and National Health Councils. The goal was to achieve a desirable level of decentralization and transfer of responsibilities to area governments. The theoretical argument is acceptable and we do not contest it. But within the framework of the State, enchanted by neoliberal reforms, it implies the dismantling of the central state's responsibilities and allocating regions smaller packets of services. This opens the way for public **subsectors** to implement forms of self-management and paid insurance in the supply of services.

It is worth mentioning here that while not all of the activities deployed by the central State in previous periods were initiated for the private sector's benefit, they constituted profitable spaces with a guaranteed market. This is why fundamental prevention programs in areas like work, environmental protection, adolescents, the elderly, etc., were systematically marginalized and reduced to their minimum expression.

To absorb public funds and the population's savings, the reforms introduced the creation of fund administrators and provider networks, arguing that it would strengthen the capacity to provide universal services and improve regulation. It was in this way that the legal changes to the public system and distributive financial regime were approved, a mixed model that allegedly combined the benefits of intergenerational solidarity with the benefits of individual capitalization, to achieve changes at the structural, parametric and institutional level.¹⁴⁸

As was to be expected, the rhetoric of universality was suffocated by the underlying logic of focalization. In this way, the "General" Security coverage levels were not only lower than in other Latin American countries, but far from able to cover the necessities of social protection and security. Universality was tied to a theoretical right consecrated in the 1998 Constitution, which supposedly guaranteed the free access to public health. The inequalities in the distribution of income contributed to deepening the evident inequalities in access to those services, despite the repeated propaganda of the supposed goodness of universal insurance.

Unfortunately, the implementation of a concentrating and privatizing social model coincided with an increase in family spending on health during the analyzed period. According to 2006 data from the National Institute of Statistics and Censuses (INEC), the average annual spending per Ecuadorian household was

¹⁴⁷ Ibid, p. 111.

¹⁴⁸ Pazmiño, Sandra. *La Seguridad Social en Ecuador*. Apuntes de Economía N.-47, Quito, Banco Central del Ecuador, 2004.

estimated at \$541.87. This statistic rises to \$576.16 if the 6% of those who do not have health problems or use services are included. It is observed that the spending is greater in urban areas (\$613.33) than in rural areas (\$437.98). The average spending rose by the same degree in all economic levels, from \$277.49 in the lowest quintile to \$873.01 in the highest one. With regard to ethnic groups, the lowest annual spending is found in indigenous households (\$301.75) and the highest in meztizo ones (\$560.33).¹⁴⁹

This change expresses the displacement of social security towards “health business” and therefore the imposition of a growing burden on the poor.

In 2006, health spending bordered on \$1.3 billion. This amount includes, among other things, consultations, the consumption of medicines, medical attention, therapies, rehabilitation, and operations. Until now, 60% of this spending has come from clients’ pockets with the difference paid from the State budget financing public entities.¹⁵⁰

Press reports confirm that the growth in demand began in 2000 and incentivized the private sector to invest in new health establishments, clinics and hospitals. In less than a decade, from 1994 to 2003, they grew from 266 to 463 units in cities like Guayaquil, Quito, Cuenca and Machala. The tendency continues, as close to \$100 million in investments have been registered in the construction of four new hospitals and clinics in Guayaquil and Quito in less than a year. And then there are the health plans that companies, private insurance and clinics offer to users. The counter-reform has turned prepaid medicine into a very profitable business in Ecuador.

Currently, there are ten companies (Salud S.A, Humana, Ecuasanitas, Panamericana del Ecuador, Panamerican Life, Salud Coop, Seguros Bolívar, Vida Sana, Morreón, Mediken) that offer these services and control around \$280.2 million, according to data from the Superintendent of Banks and Insurance Companies.¹⁵¹

As a result, health policies have promoted a new discourse of an individualist sort that legitimates the values of competition and the notion that the market is the optimal allocator of resources. In a parallel manner, a culture of consumption proclaimed a lifestyle-centred health and a personal aesthetic of *looking and feeling good*. In this way, the social and collective dimension of health is diluted to the individual and State responsibility remains reduced to the function of regulation. A citizenry with the right to make demands is transformed into a “consumer” that can be, in the best of all cases, a contract’s indirect counterpart.

¹⁴⁹ Instituto Ecuatoriano de Estadísticas y Censos, (INEC), Quito, 2006.

¹⁵⁰ *Diario El Comercio*, “USD 100 millones se invierten en salud”, 26 de mayo de 2006.

¹⁵¹ Taken from *Diario El Comercio*, *Ibid*.

The net result was that poor households lost access to basic medical attention. This reality has been extensively documented in studies on the realities of many Latin American countries.

Scientific and technical literature on public health has registered the failure of privatization. Nevertheless, the mass media continues to espouse a discourse that emphasizes the supposed efficiency of private service providers, who have pressed for changes in policies to open areas like water, education and health to international capital.

With the aim of legitimizing their investments, neoliberal projects have been represented as instruments of efficient supply, including to the poor. But the actual contrasts and regression, which the communications media systematically invisibilize, have in the end negated the model's supposed benefits. In the neoliberal period from 1990-2006, we have witnessed a deterioration in services and public supply. The resources are insufficient to prevent and satisfy the health necessities of the majority classes whose emaciated incomes are, through enormous sacrifice, saved to purchase limited private services.

The privatization of water services in the city of Guayaquil is paradigmatic and an illustrative case of regression and the power of propaganda to mask injustice. This was publicized as an example of the benefits of private concession and the success of a mayor who is "concerned for the poor." However, a detailed study evaluating the real effects of this service uncovers the net results of water in private hands and the municipality's hidden intentions, especially with regard to our compatriots from the port city's poorest classes.

The research is supported by the precept that all privatizations inflict a serious impact on the popular sectors' right to health. The great urban masses and their basic necessities are seen as a great marketplace by investors and neoliberal politicians. This is why an angry social protest in defence of the right to water has been provoked, becoming an area of deep conflict in Ecuador and other Latin American countries.¹⁵²

Municipal governments like that of Guayaquil have also implemented diverse adjustment mechanisms, accentuating social differences in the access to health goods like water. This is due not to the increased impoverishment of the poor and the deterioration of their income levels, but rather to the increase in the differences in the distribution of urban infrastructure and services between the social classes that predominate in certain areas of the city.

Thus water ceases to be a source of life guaranteed by the State, and instead becomes an ever more expensive commodity, leading to severe social suffering. Until the 1980s the greatest problem was water shortages, low quality

¹⁵² Zapatta, Alex. Las Políticas de Agua en América Latina: Entre el Ajuste Hídrico y la Resistencia Popular en "*Informe Alternativo sobre la Salud en América Latina*" (J Breilh – editor-). Quito: 128-137

and contamination in the poorest neighbourhoods' deteriorated systems. This led to high rates of infectious disease and infant mortality. Privatization has only added to the list of problems. We will look then at some pieces of evidence of what has taken place in Guayaquil, drawing on in depth research of the issue.¹⁵³

The municipality of Guayaquil, employing the usual justifications, conceded the provision of potable water to the international corporation Interagua through an Inter-American Development Bank loan. As the Citizen Monitoring of Public Services shows, the problems of access have not been remedied. Beyond the municipality's rhetoric and neoliberal doctrine, the citizenry's complaints have multiplied, with interminable service cuts and high prices.

In effect, in the period from January 2000 to April 2007, although all prices were hurt, the increase reached more than 176% for the poorest section of Guayaquil's population (i.e. 0-15 m³, cubic meters consumption strata); 164.3% for the segment 15-30 m³ and 188.9% for those who consume 30-60 m³ (middle class). In contrast, the increase was less than 110.7% over the same period for industrial sectors and major consumers (2500 – 5000 m³).

Table No. 8 Increase in water rates/prices of the private provider Interagua

YEAR	ANNUAL INFLATION	INTERAGUA INCREASE*
2000	91,01	33,32%
2001	22,44	51,64%
2002	9,36	15,84%
2003	6,07	12,19%
2004	1,95	0,38%
2005	2,12	6,24%
2006	3,30	-10,94%
* 0-15 m ³ Segment Source: BCE, Observatorio Ciudadano de servicios Públicos, 2008 Compiled by: Econ. Andrés Freire, AnalisisProfesional.Net		

The research confirms that the increase in prices was relatively higher for the poorest social strata, alongside the evident poor quality and difficult access. In short, this led to a more expensive service (price-quality relation). With this data, the Municipality of Guayaquil entered the ranks of local governments in Latin America that have provoked the rejection of the most conscious and affected social sectors. Lamentably, the people sometimes take time to see first hand that private concession does not improve services—but that it does guarantee higher profits for business. “In Ecuador’s main port city, Interagua has distributed water

¹⁵³ Freire, Andrés. *Estudio tarifario del servicio de agua potable de Guayaquil: un análisis técnico sobre la estructura tarifaria y el impacto del crecimiento del costo del agua potable en la ciudad más poblada del Ecuador*, Observatorio Ciudadano de Servicios Públicos, Guayaquil, 2008.

that is not fit to drink, raised costs without explanation, has failed to expand service, is responsible for regular cuts in service to the entire city and has been negligent and irresponsible in wastewater treatment, compromising the environment and public health.”¹⁵⁴

As we have argued throughout this study, the model of accelerated accumulation and neoliberal policies complicates social misery. We have observed unacceptable basic shortcomings and inter-neighbourhood contrasts in the quality of life and infrastructure. In Quito, for example, infant mortality rates are 5.4 times higher for marginalized urban residents.¹⁵⁵ Now, as a product of privatization and adjustment, the problem of the differences in access and quality are added to other problems of environmental justice and new forms of environmental contamination and human damage.

Private electrosmog in Quito

In some of the country's cities, such as Quito and Cuenca, people have become increasingly aware of flagrant forms of pollution that are surrounding us, especially since the turn of the century. For example, the case of reactions against the epidemic known as Electromagnetic Hypersensitivity (EHS), which is caused by the environmental inundation of waves emanating from the uncontrolled installation of radioactive sources of all sorts (especially video monitors, various systems of wireless transmission, mobile telephones and mobile phone base stations). Mobile phones are without a doubt the most ubiquitous sources. In response to the growing evidence of this problem, the World Health Organization (WHO) organized an international workshop that attributed a variety of non-specific symptoms to EHS, which afflicted populations ascribe to electromagnetic fields exposure, including: dermatological symptoms (reddening, tingling and burning sensations; also neurasthenic and vegetative symptoms (fatigue, tiredness, difficulty concentrating, vertigo, nausea, heart palpitations and digestive disorders). EHS is similar to the Multiple Chemical Sensitivity syndrome, another disorder related to current environmental exposure to low level of chemicals, which is also currently expanding. These are non-specific disorders that lack an apparent toxicological or physical base and for now are recognized as Idiopathic Environmental Intolerances (IEI).¹⁵⁶

Indeed, we are talking about the propagation of a “postmodern” epidemic whose consequences and incubation time are still little understood. They take time

¹⁵⁴ Freire, Andrés. *Estudio tarifario del servicio de agua potable de Guayaquil: un análisis técnico sobre la estructura tarifaria y el impacto del crecimiento del costo del agua potable en la ciudad más poblada del Ecuador*, Observatorio Ciudadano de Servicios Públicos, Guayaquil, 2008.

¹⁵⁵ Breilh, Jaime; Granda, Edmundo; Campaña, Arturo y Betancourt. Oscar. *Ciudad y Muerte Infantil*, Quito: Ediciones CEAS, 1983

¹⁵⁶ OMS. Taller sobre Electro hipersensibilidad. Praga: Organización Mundial de la Salud, 2004
http://www.who.int/entity/peh-emf/publications/facts/ehs_fs_296_spanish.pdf.

to make all of their lethal effects felt. And they are problems that expand under large corporate global competition, which unnecessarily double and triple dangerous sources of radiation to consolidate their markets; companies such as mobile phone providers that install radiofrequency stations throughout our cities' neighbourhoods, encouraging the use of their products even for children, which not only reinforces an alienating cultural model but exposes their immature nervous and immunological systems to destructive impacts.

This entire set of environmental aggressors form part what is referred to as "electropollution" or "electrosmog."¹⁵⁷ This, as we have said, has unleashed complications and the consequent protests and demands from neighbourhood organizations in cities like Quito.¹⁵⁸ It is the expression of an informed citizenry that, facing the appearance of EHS, clearly associated with the proximity to electropollution sources, demand the enforcement of laws and ordinances, the application of the precautionary principle and the immediate removal of the danger. The procrastinations and ambiguities of the municipal government's response bring two possible explanations to mind. Maybe the authorities and specialists are unaware of the valuable judicial and scientific precedents that have determined the application of this precept in the world's most developed countries. Or, perhaps, there are interests tying Municipal District representatives to powerful transnationals.

Cases such as this remind us of the constant conflict of interests, repeated a thousand times, between the population's aspirations for good and healthy living and the indolent arrogance of investments protected by the permissiveness of the law or institutional complicity. This is an awful phenomenon, the gravity of which is magnified in this particular case, considering the data on the mobile phone companies' immense business. According to information and calculations produced by a known analyst with the available data, the two transnational mobile phone companies in Ecuador will receive a "net benefit in their **factor**, at the expense of the Republic and its inhabitants, of \$20,557,287,200 over 15 years. Which is to say that \$1,370,000 every year, \$156,449 every hour, \$2,607 every minute, night and day, constantly, for 15 years in a row!"¹⁵⁹

All of this transpires while the lives of children, pregnant women, and the elderly in many of our cities and rural areas find themselves forced to live in unhealthy environments, replete with biological and sometimes chemical and

¹⁵⁷ Electropollution is the increase in electromagnetic fields, electrical wires, transformers, mobile phone antennas, radio and television stations, radars, etc.

¹⁵⁸ Comité pro Mejoras del Barrio "La Floresta". Oficios Varios de la Organización Barrial al Comisario Metropolitano Ambiental, a la Comisión de Medioambiente del Consejo Denunciando Instalación Ilegal e Inconsulta de radio base de Empresa Otecel (Movistar). Quito: Archivo de la Organización Barrial, 2007.

¹⁵⁹ Delgado. Diego. *Error terrible que el Presidente Correa Debería Corregir* (En Defensa del Patrimonio Social y Nacional), Quito: artículo de circulación electrónica, August 2008.

electromagnetic contamination. Global acceleration condemns us to suffer a cocktail of the old and new aggressions' social harm without remedy or relief, the result of an insensitive economic system.

Inequality in the Distribution of Resources is Accentuated

In Ecuador, the inequality in the distribution of professional human resources between urban neighbourhoods, provincial regions or provinces, has historically been large. To begin with, medical resources have always had to follow the laws of the market and thus seek to situate themselves where there is demand with purchasing power. The result has been that there are more and better services and coverage rates in cities, especially in large ones. But within cities, there is also an unequal distribution that reflects the peripheral and depressed areas' lack of protection. And according to municipal reports, this takes place not only with curative resources but also with the distribution of urban infrastructure.

In turn, rural areas and in particular the poorest zones have major personal health deficiencies. Along with Ecuador's prevailing regional and social concentration of income and the search for wealth that directs private health, one observes a concentration of personnel in the wealthiest areas, which also possess the country's best services. This is confirmed by a study entitled *Social Development and Municipal Administration in Ecuador*,¹⁶⁰ which warns that the poor regional distribution of healthcare is inequitable and lacking in affirmative priorities.

As this study demonstrates, public health personnel per thousand inhabitants shows marked differences:

Table 9 Public Health for Every 1000 Inhabitants

Geographic Area	Public Health Personnel	Private Health Personnel	Total Personnel
Rural	2.20	2.47	4.68
Urban	18.58	28.98	47.56
Total	11.73	17.90	29.62

Source: Carlos Larrea Informe sobre Desarrollo Social y Gestión Municipal en el Ecuador en base a INFOPLAN, INEC, Censo de Población de 1990.

This report shows the concentration of resources in urban areas at rural areas' expense. When this is analyzed by parish, it is observed that 19% of the

¹⁶⁰ The study cited was written by a research team conformed by: Fernando Carrasco, Javier Cervantes and Noemí Viedma and coordinated by Carlos Larrea. A document for the Secretary General of the President of the Republic and the Modernization Project.

rural population totally lacks health personnel (public or private). In the case of public health personnel, the figure reaches 37%, and on the Rural Coast, the percentage is 42%.

We have not identified information that allows us to compare the distribution of resources before and after 1990, which is to say before and after the beginning of the neoliberal era. Regardless, it can hypothetically be said that the deepening of the law of the market in the years of adjustment cannot but have reinforced said inequalities. We must also consider the variable of the rise of new sites of accumulation in emergent cities like Santo Domingo or in new rural business sectors like Cayambe.

The Growing Insecurity of Healthcare Worker's Labour Conditions

The new labour model, the increase in the pace and duration of work, the systematic subcontracting of certain risky activities, and the modalities of underemployment are processes that have contributed to the growing insecurity of labour conditions in the previous century. Especially in countries with subaltern economies like Ecuador, the difficulty of working conditions and the workforce's insecurity have increased at alarming rates.

In the neoliberal period, unhealthy work profiles have multiplied and been accentuated throughout all of Latin America. They have propelled the strategies of deregulation and flexibilization that we have already discussed and, moreover, ushered in new and more dangerous modalities of work, whose most dramatic expressions, reported in health forums, are slave labour and death by fatigue. The worst cases of slave labour and death by fatigue ("Karoshi tropical") have been reported in Brazil. From 1995, when the Mobile Combat Unit on Slave Labour was created, through April 2007, 8,225 people were liberated from slavery in 205 plantations in the State of Pará. The majority worked at livestock farms and in coal mining.¹⁶¹ Death by fatigue has also been reported in plantations of genetically modified sugarcane grown for agrofuels.¹⁶²

Naturally, health worker's jobs are in no way as dangerous, but we must nevertheless be cognizant of the fact that all forms of work have worsened since the advent of the neoliberal model.¹⁶³

Work in hospitals and health programs, intrinsically surrounded by dangerous processes, has worsened over this period. Profit strategies in the

¹⁶¹ Sutton, Alison. *Trabalho escravo: um elo na cadeia da modernização no Brasil de hoje*, São Paulo: Editora Loyola, 1994

¹⁶² Antunes, Ricardo. *O Karoshi Tropical e a Velha República. Brasil: Azucar Etico*, on line, Saturday August 13, 2005. <http://www.sucre-ethique.org/O-Karoshi-Tropical-e-a-Velha>

¹⁶³ Noriega, Mariano; Garduño, Angeles y Cruz, Celia. El Impacto del Neoliberalismo en la Salud de los Trabajadores de América Latina en "*Informe Alternativo sobre la Salud en América Latina* –Breilh, J. editor- Quito: Punto y Línea Producciones, 2005.

service sector have led to weak and unstable forms of contracting and demand more work for the same wage. Workers must turn to second jobs for survival.

In this regard, a joint study by UNICEF and The Latin American School of Social Sciences (FLACSO)¹⁶⁴ presents an analysis of labour market changes during the period of structural reforms and adjustment. The report found that through 1995, workers covered by appointments or definitive contracts came to represent 60.7% of the waged urban population. But by 2003, during the period of crisis, this rate dropped to 43.9%. And while 39.3% worked in non-permanent forms of employment in 1995, this figure rose to 56.1% in 2003. This dismantling severely effected the labour force between 1990 and 2004, given that union organizations were reduced from 480 to 96, while the number of collective contracts signed fell from 221 in 1993 to 115 in 2003.

On the other hand, over the past 10 years, the number of healthcare workers increased from 53,357 to 66,743, a 25% increase. 50% worked in the private sector while the public sector represented only 10%. Regardless, the decline of labour organizations during the periods of structural adjustment demonstrates another reality. According to the Latin American Institute of Social Research (ILDIS), there were 1,750 legally registered labour unions from 1970-79. Nevertheless, three decades later, from 2000-2004, that number fell to 96.¹⁶⁵

Health sector unions are mainly found in the Health Ministry, with smaller numbers in the Social Security Institute (IESS) and others in institutions like the Charity Board of Guayaquil (“Junta de Beneficiencia de Guayaquil”).¹⁶⁶ Facing the processes of modernization and decentralization affecting the sector in recent years, unions have built a front of resistance through paralyzing services. These actions have received strong criticisms from various sectors, which see the stoppages and strikes as indicating a lack of sensibility on the workers’ part, without taking into account the serious labour problems that they are forced to confront. They are left with no other solution to the insensibility of the labour model.

The Universal Insurance Program as a Mechanism of Privatization, Inequality and Public Setback

¹⁶⁴ Oleas, Julio en *Foro sobre la democracia, el bienestar y el crecimiento económico*, UNICEF, FLACSO, Fundación Terranueva, Quito, 2006.

¹⁶⁵ Oleas, Julio. *Exclusión social y crecimiento económico en Ecuador, 1990 – 2004*, Fondo de la Naciones Unidas para la Infancia, Facultad Latinoamericana de Ciencias Sociales, Quito, 2006.

¹⁶⁶ According to data from the Ecuadorian Foundation for Health and Development, the National Union of Public Health Ministry Workers (SUNSTRAMSP) has 7,300 members, mainly from the Highlands and Amazon region. The Union Association of Health Ministry Workers (ASUNTRAMIS) has 8,600 members, mainly from the coastal region. While other unions exist, the the aforementioned data is based on those that represent the majority of members.

The Universal Insurance Program (AUS),¹⁶⁷ signed into law in October 2005, cost the State \$200 million. The AUS was part of Alfredo Palacio government's plan for national health insurance, with headquarters in Quito and Guayaquil. Quito received a budget of \$3,300,000 while Guayaquil received \$6 million.

The AUS was conceived as a way to coordinate the actions of the Health Ministry, the Ecuadorian Social Security Institute, and the Police and Armed Services Social Security. In the first phase, it covered the strata of extreme poverty (quintiles 1 and 2 of the population), equivalent to 1.2 million Ecuadorians.

In Quito's case, Universal Health Insurance (AUS) began in March 2005 under the direction of the National Secretary of Millennium Development Goals (SODEM) and executed by the Metropolitan Health Corporation, created that same year. The plan offers a set of health services for the Metropolitan District through a voluntary affiliation costing \$3, which includes coverage for ambulance and hospital care along with assistance and diagnostic services. The service has 48 providing organizations with care networks and a national patient reference and counter-reference model formed by organizations with municipal contracts: municipal healthcare centres, for and non-profit private organizations, and public institutions affiliated with the Public Health Ministry.

Regardless, results indicated something else altogether after the program's first year. The public has suffered a marked regression with regard to the benefits assigned to local governments. This led to the appearance of different types of public and private insurance with greater inequality in access.

With regard to this topic, "Salud de Altura", a project of Belgian Technical Assistance, undertook health research in Quito. The results revealed that the poorest segments of the population prefer to visit private institutions, despite the fact that 45% of out of pocket spending is for health, a considerable amount for Quito families.¹⁶⁸

Inequalities have been reinforced in Quito over the past 13 years, after the intervention of Metropolitan Health Insurance and AUS. This is a result of the increasing concentration of income: the wealthiest 20% continue to accumulate over half of total incomes, which is to say that the situation not only continued but worsened. Similarly, while in 1990 the difference between the richest and poorest

¹⁶⁷ In July 2005, the World Bank paid \$90 million to the Universal Insurance Program (AUS), also giving \$536 million for the execution of ten projects that same year and in 2006. The credits spent in two stretches correspond to three projects in 2005 and another seven in 2006. (Diario *El Comercio*, 10 de julio de 2005).

¹⁶⁸ Proyecto Salud de Altura – Línea de Base. *La salud en Quito, Análisis de acceso y calidad*, Quito, 2007.

decile was 23.8 times more (1.6 to 37.1% of income in the Metropolitan District of Quito), in 2003 it reached 26.4% (1.4% to 38%).¹⁶⁹

This study confirms that Quito residents visited private healthcare locations more often than public, 70% versus 30%. Private practices were the most visited, at 27%. This result is repeated in Quito's poor population, which also sought private attention 52% of the time, while only 49% visited public centres. The most visited location was the pharmacy, at 21%, followed by private practices, at 20%. Among the principal reasons cited were the poor service of public institutions and their distance. Poor households used private services more often (37.12%), but a larger percentage went to pharmacies than to a doctor.¹⁷⁰

The AUS in Guayaquil

The Guayaquil Health Insurance Program, which changed its name to the Popular Insurance Plan (PAP), started up three months late in October 2005, when the Transmédica company signed a contract with the Popular Insurance Foundation, run by Mayor Jaime Nebot.

Transmédica would receive payments from the Ecuadorian State to attend to recipients of the human development bonus less than 18 years old. The company would receive \$2,025,000.¹⁷¹ As a part of the plan, the Foundation for Popular Health Insurance considered incorporating other organizations that provided health service into the network, such as churches and doctors with private practices.

According to a communiqué from the President that circulated in the months of the Palacio government, “the first phase of the Universal Insurance Program will be undertaken with a World Bank loan for \$45 million, to be completed over a three or four year period.” This signified an increase in the external debt to the benefit of medical companies rather than an improvement of public hospitals, the Public Health Service or access to medicines—as would occur in any country implementing social policies aiming to improve its population's health.

The Executive Decree N° 1685, promulgated on July 20th, 2006 assigned the payment to the Popular Insurance Foundation of USD \$4,50 for each recipient of the Human Development Bonus. The decree dictated that the funds would be disbursed “in a regular and undefined manner from the fiscal year 2007 on”. This was meant to cover benefits within the canton of Guayaquil and increase the PAP's coverage and service. For such purposes, the budget reached \$7,290,000 “in consideration of the Ministry of Economy and Finance calculations, would cap the number of monthly recipients at 180,000.” In addition, the budget would have

¹⁶⁹ Ibid.

¹⁷⁰ Ibid, pág. 33.

¹⁷¹ Bimonthly *Tintají*, first two weeks of November 2005.

to be drawn up each year in accordance with the Human Development Bonus recipients.

Thus the financing to structure Universal Health Insurance came from funds already assigned to health and new resources like those from the World Bank. This is how the National Fund for Universal Healthcare (FONAUS) is structured, whose function is to integrate and accumulate resources at a national level.

The New Face of Hunger: Cultural Globalization and Unhealthy Ways of Eating

The way of living of each social group determines the health of its people, and thus constitutes a critical point of epidemiological analysis for understanding the impacts of neoliberal economy and policies, which have accentuated the extent of destructive socio-psychobiological processes.¹⁷²

In this chapter we will focus on the impacts provoked by nearly fifteen years of the neoliberal model in Ecuador, taking a close look at the important case of the determinants of food consumption patterns. For this reason, we return to a focus on the question of what conditions consumption. We will look not only at the decrease in families' purchasing power¹⁷³ and the entailed nutritional deficits, but also at the growing instability of nutritional patterns.

As a product of nearly two decades of neoliberalism, from impoverishment to the physical composition of typical urban and rural diets, structural pressures have arisen which induce unhealthy personal and collective ways of life. This includes collective "bad habits" and the gradual deterioration of our ways of eating. These cultural determinants, while they are tied to the same structural economic conditions, operate through various mechanisms. Firstly, the induction of alimentary tastes and needs linked to industrialized junk food with poor nutritional properties (i.e. poor nutrition, overweight, obesity, diabetes and arterioesclerosis) and containing unhealthy components and carcinogenic precursors. But more importantly, they obey a cultural and ideological determination. This is linked to issues of socially imposed physical images (i.e. anorexia and bulimia) along with the increasing turn towards the social valorisation of trash food.

In this section, we will focus on the complex and multidimensional problem of determinant processes for malnutrition in Ecuador after 15 years of adjustment. The concern over this issue has now been reinforced by the appearance of new forms of poverty, and variants of malnutrition that are increasingly visible in

¹⁷² Breilh, Jaime en *Reproducción social y salud. La lucha por la vida y salud en la era de las revoluciones conservadoras*, Editorial Universidad de Guadalajara, Guadalajara, 1991.

¹⁷³ Some data from the World Food Summit in 2001, determined that low income families had reduced the number of daily meals from three to two.

societies that have forcefully embraced the neoliberal way of life. This is a “postmodern poverty” of sorts, reaching dramatic heights in countries like China, with its vertiginous pace of economic liberalization and the deep changes in the nutritional norms of its people. Thanks to the rapid commodification of everyday life, people abandon their ancient and wise diets. The entrance of “Occidental” models is tied to the corporate supply of “trash” food—the so-called “McDonaldization”—that has led to an unprecedented obesity epidemic.

Recent scientific publications have been greatly preoccupied with the same issues. A recent study undertaken by the National Academy of Sciences’ Institute of Health in the United States¹⁷⁴ drew attention to the negative consequences for children’s health caused by the marketing of medicine. Food and pharmaceutical company’s pressure is a clear threat to future generations’ health. The corporations are taking advantage of children’s tastes and values through the mediatic construction of images so as to create a youth market and induce the consumption of their products.

In Ecuador, the appearance over the past decades of a modern food market for children jumpstarted the entrance of infant formula companies through propaganda and doctor’s visits. This introduced paediatricians and health professionals to the prescription of formulas and nutritional supplements for newborns, which induced the mass abandonment of breast milk. Although time has passed since that era, we now observe the same problem re-emerging through new mechanisms.

In the case of children’s nutrition, it is worth taking a look at the way in which we understand the determination of this problem beyond the discrepancies over the best methods to detect early age malnutrition.¹⁷⁵

The predominant explanation reduces the view of malnutrition to the problem of poverty, characterized by a low family income and poor education, with a corresponding nutritional impoverishment. Since one part of the problem could be located on the demand side (with consumption), it then requires measures to improve said demand. We thus focus on responses such as distributing diverse forms of nutritional supplements among poor families, accompanied by educational campaigns. A similar logic is that which is applied when the problem of morbidity/mortality from infections is perceived such a way that it is principally treated through the application of vaccines, leaving aside the structural conditions that maintain children in insufficient and unhealthy ways of eating.

¹⁷⁴ J. Michael McGinnis, Jennifer Appleton Gootman, Vivica I. Kraak -editors-. *Food Marketing to Children and Youth :Threat or Opportunity?*, Washington, D.C: The National Academies Press (Committee on Food Marketing and the Diets of Children and Youth Food and Nutrition Board on Children, Youth, and Families Institute of Medicine of the National Academies, 2006

¹⁷⁵ Freire, Wilma; Molina, Andrea; Bermudes, Kerlly. *Estimación de la Prevalencia de Desnutrición Infantil: Ajuste a los Datos Oficiales*. Quito, Secretaría Técnica del Ministerio de la Coordinación de Desarrollo Social, 2008

Therefore, a broader and deeper vision is necessary to understand the problem's social or collective dimension during the neoliberal decade. In this sense, our observation must consider the determinant processes most built into affected families' ways of life. It is within this framework that ways of feeding and caring for children and negative patterns are multiplied under neoliberalism. Experts began to untangle important social mediations with regard to these questions, such as the loss of early exposure to breast milk,¹⁷⁶ which have had a major impact over the past 20 years. It is worth mentioning that, until the 1980s breastfeeding was more common, but now barely reaches 20% nationally and 40% in rural areas. The data indicates that while hospital births have increased, immediate breastfeeding has decreased.

There are two explanations for this unfortunate social loss. First, in the 1980s, within the framework of the already unstable policies of the "welfare" state, 100 "friendly hospitals" were opened with the help of UNICEF. This program encouraged the joint housing of mother and child and the immediate initiation of breastfeeding. But later, under the influence of the new hegemonic policies, these programs were terminated. In this way, the small policy advances of the 1980s were dismantled.

But alongside these policies, which were nothing other than another weakening of the public, came the social changes in the ways of life that were imposed on the working class. In many regions of Ecuador, patterns of childcare have been made more difficult and models pushing for mothers and both parents to work have been reinforced, which are incompatible with the provision of breast milk. Lacking the right to social security and state protection, mothers are forced to work to survive, often taking on a number of jobs. In these circumstances, there is a structural obstacle to breastfeeding. Mothers from the middle and waged classes have found it impossible to feed their babies.

Without proposing that we reach levels like those in Norway (one and a half years of paid maternity leave), we must recognize that neoliberalism has generated a set of very negative changes: the breaking up of families; migration; the necessity of multiple jobs for survival; working hours without social guarantees; the absence or deterioration of the right to social security; deterioration of community nutritional patterns; dismantling of labour organizations and a weakening in the social consciousness of rights. All of these factors have contributed to the abandonment of breastfeeding.

At the same time, the cultural propaganda and media pressure in some classes has reinforced a sense of female identity and an aesthetic valoration of the body (the aesthetic function of mothers) that distances young women from their vital role in nutrition. Not only has the role of breastfeeding been affected, but

¹⁷⁶ Freire, Wilma. Interview about nutritional and research policies. Quito: personal communication, 2008.

there also has been a turn among middle and upper class women towards caesareans, with the same aim of maintaining a body image that indexes success.

However, children are clearly not the only ones affected in our society. There has also been a transformation of adult patterns of malnutrition. When we look, for example, at the Food and Agriculture Organization –FAO– and WHO data, the existence of 1.6 billion underweight adults is revealed, along with at least 400 million that could be considered obese. We tend to think that the latter is a problem of wealthy countries and social classes. However, the reality is that this new epidemic is really just a change in poverty. In effect, two of every three of these overweight people today live in low and medium income countries and the great majority are countries described as “emerging markets” or “in transition” economies. Thus we confront the paradox of obesity in the midst of malnutrition. In many cases the problem can be explained by the waged class’s access to cheap food of high-caloric content, including those that regularly frequent supermarket chains, encouraged by the communications media’s eye-catching propaganda. The exposure through global communication to external nutritional models induces the middle classes and certain classes of workers to consume this type of industrial food, gradually distancing them from local markets and traditional nutrients.

Thanks to the dominance of the market logic, poor people in our country live the paradox of obesity amidst malnutrition.

The World Bank’s megaprojects have also played a role in this. As we have explained, one of the axes of the MODERSA project in Ecuador was to “improve the health, nutrition and reproductive health of the poorest Ecuadorians and protect other segments of the population from the effects of impoverishment, malnutrition and high fertility.” Important sums were assigned for the nutritional subcomponent. They contracted a number of experts, but their opinions were in the end nothing more than a costly drain on resources

Experts on the topic expressed serious concern over spending causing an increase in the country’s external debt. According to documents that estimate the prevalence of malnutrition, we can establish that the 0.5% a year rate of decrease is so low that it would have taken place regardless, without the massive spending on technically useless programs. They will in no way meet the declared millennium goals and the failure is evident. The research demonstrates the growing problem of children that “eat” but are undernourished, or who eat yet suffer from diarrhea and become malnourished. This calls attention to the staggering magnitude of bureaucratic resources invested and the inefficient distribution of food supplements dedicated to solving these problems.¹⁷⁷ The strategy of dismantling state resources accompanies the neoliberal turn in public policy. For this reason the World Bank decreed that the MSP food processing plant, which never

¹⁷⁷ Freire, Wilma. Acerca del Tema de las Políticas sobre Nutrición e Investigación. Quito: comunicación personal, June 1 2008.

functioned well, be handed over to the private sector. This never actually took place and its equipment was simply abandoned.

It is curious that, facing these criticisms, the World Bank itself came to recognize these failures. Unfortunately, in suggesting solutions to a problem of its own creation, its logic continues along the very same lines. The following paragraph summarizes this linear vision that we have been questioning, inverting reality and blaming the victim:

*“nutritional insufficiency during pregnancy and the first years of life inevitably leads to lower human capital resources, negatively affecting physical strength and adult’s cognitive ability. At the same time, this directly leads to individuals’ reduced potential for generating income and damages national economic growth and potential competition.” p. XV*¹⁷⁸

Similarly, the experts entrapped within these external logics and agendas want to continue responding with more of the same. Likewise, transnational food companies have reaffirmed their commercial offensive through “novel” “social awareness” campaigns, promoting the consumption of industrialized food in poor and populated areas through their “nutrimobiles.” We have already discussed what international scientific opinion has signalled with respect to this type of food “marketing.”

As was demonstrated in an earlier section, all of this has taken place while small and medium agriculture, upon which our food sovereignty is based, has been undermined. Compounding this problem are the dangers stemming from genetic engineering and transgenic crops, part of a trend towards a type of food production based on the biotechnology industry.¹⁷⁹

Groups from USAID to the United Nations World Food Programme have admitted giving transgenic crops grown in the United States to Third World countries as aid. Until 2000, the United States had donated over two million tons directly to the Third World, while the Food Programme donated another million and a half tons.¹⁸⁰

Our nutrition and health have been in the hands of large corporations and a

¹⁷⁸ Banco Internacional de Reconstrucción/Banco Mundial. *Insuficiencia Nutricional en el Ecuador: Causas, Consecuencias y Soluciones*. Washington, D.C.: Publicaciones del BM, 2007

¹⁷⁹ According to Acción Ecológica, transgenic organisms are the result of a process in which foreign genes (of four or five distinct organisms), called transgenes are introduced in another living thing. It is presumed that these new genes can confer some ecological, nutritional or other sort of advantage. The living thing that has received these genes is then referred to as a genetically modified organism or a transgenic organism. Among those genes used are the genetic markers, or antibiotic resistant genes. These can enter into contact with pathogenic bacteria through a process known as “horizontal gene transfer,” increasing the growing public health problem of antibiotic resistance.

¹⁸⁰ Acción Ecológica. “*Alimentos transgénicos: ¿el plato fuerte de la ayuda alimentaria?*”, Alerta Verde N.-97, Acción Ecológica September 2000.

neoliberal public administration that have jointly imposed a development model that is damaging to collective health. The free market sells and values unhealthy and unsustainable ways and styles of living through the communications media. The mass media imposes subjugation to market consolidation and profit.

Part III

EPIDEMIOLOGICAL AND ECOLOGICAL DETERIORATION UNDER GLOBAL ACCELERATION

Many lessons have been learned in Latin America on the impact of neoliberal acceleration and its effect on the processes that are structurally determinant of health.

Part I examined the key categories for the study of said determinants, explaining the general model that has guided us in the systemization of the principle mechanisms through which structural adjustment generated negative impacts on determinants of health (see Part I – figure No. 3).

Using this model and its categories, Part II analyzed the concrete forms of neoliberal penetration of our country and the determinant processes of health.

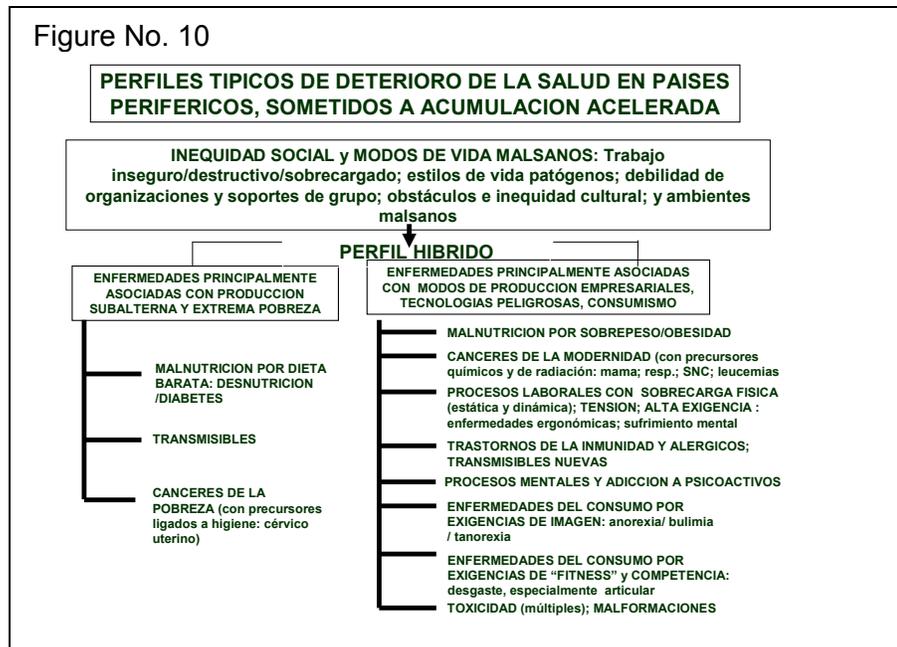
Part III exposes the deteriorative consequences for national collectivities and the ecosystem. Thus sections I, II and III utilize an integral epidemiological model the effects on health are connected to their structural roots. Thus this research covers the mechanisms that have multiplied unhealthy ways of living, pollution ecosystems and severe restrictions on public action.

The macro model that we have adopted to explain more general processes of acceleration in no way implies that effects are uniform for the entire population. There exist in our society profound differences between different social classes' ways of life due to their distinct positions in the economic structure; among distinct peoples and their ethno-cultural characteristics; and between gender groups, with their own form of power and cultural relations. It is important to emphasize, as we have shown in Part II, that the impact of the general mechanisms of acceleration and dispossession are not equally distributed among distinct social classes, peoples and genders. Each one of these groupings—depending on its capacity to access the means of production, on its culture and political organization—assume possible ways of life that can be more or less unhealthy. They experience particular vulnerabilities and are over all characterized by their distinct capacities and the social and community supports that can lend a hand in their development and the defence of their lives. Each grouping's health situation depends on this set of determinations.

In any event, and despite the aforementioned contrasts and inequalities, it is certain that there are patterns or profiles of general illnesses that are typical for a given period. In this way, the research underlines the pre-eminence of certain

types of problems in the last quarter of the 20th century that constitute a hybrid profile between the illnesses basically associated with subaltern forms of production and poverty and others related to the corporate mode of production, the application of

Figure No. 10



dangerous technology and the pressures of a consumer culture (see figure No. 10).

Recapitulation: Social Determinants of Health and Ecosystems in Latin America Under Neoliberalism

The analytical model that we have applied to the study of determinant processes of health assume various levels and categories: on the most general level, the central concepts cover three large modes of acceleration that exacerbate the logic and velocity of profit (productive recomposition of corporations; incorporation of a new technological base of production; and strategies of market fundamentalism) and the *dispossession* of vital resources.

In the intermediary level are the *principal determinate processes*, which in Figure no. 2 (part I) correspond to the areas "A" to "F": monopoly control of wealth; massive social exclusion; loss of sovereignty in various forms; overprotection of investments; restriction/termination of public action and space for social politics and the construction of unhealthy productive and reproductive spaces, including ecosystems.

On a third level of analysis are the *general mediating processes* that in Figure No. 2 correspond to areas "1" and "5": destructuration and decapitalization of small economies; labour deregulation and flexibilization; destruction of the right to free association and the weakening of other supports and social organizations; the application of health programs and services in rural areas that follow a commercial logic instead of defending human rights; destruction of ecosystems and

biodiversity; multiplication of sources and patterns of pollution (biological and transgenic).

On the level of *most direct mediations* are: pressures for the emergence of unhealthy ways of life, with the typical patterns of exposure to processes that are dangerous to collective health.

Finally, the model incorporates the level of the specific impacts that are made evident in concrete people's bodies and psyches.

Next, we will review a few of the analytical categories that we have mentioned, thinking about the predominant reality in our Latin American societies.

The *privatization and monopolization of resources*, including in the health sector, was the counter-reform's *leitmotif*. This monopoly control was not only applied to conventional strategic resources (i.e. energetic, communication, land and financial resources) but also sought to accelerate the control over goods that underpinned the right to health (i.e. water, food), and over the public health, social security and education resources and programs. The motive of the neoliberal governments' cultural and media offensive from 1990 to 2005 was to convince us that we had to let go of these collective rights so that more efficient companies could administer them. In our country, privatization is not imposed by violence but through persuasion and mechanisms applied by the World Bank to clear the way for privatizations.

The neoliberal "adjustment" policies caused a dramatic regression in the right to health, including in countries like Chile that had achieved a greater development of an integral health system. In Chile, neoliberalism was able to "reinvent inequality;" the authoritarian reforms propelled by blood and fire reproduced what Allende's democratic government had almost been able to eliminate: "one medicine for the rich, another for the poor." This simultaneously produced a disaster that was reflected in the fragmentation, segmentation, disorganization and defunding of services; devastation of hospitals; and the demoralization of functionaries through the loss of rights and the repression of the right to association.¹⁸¹

In most countries, economic and trade fundamentalism provoked a *regression in rights and the degradation of working conditions*, leading to a number of pernicious tendencies in health: the increase of demands under labour processes that are increasingly damaging; the invisibilization of occupational injuries and accidents as a consequence of the increased mobility and the labour **polyvalence** of workers in the region; the increase in mortality among the most vulnerable groups in areas of aggressive maquiladora and agro-industry exploitation; labour conditions for women and children; the greater vulnerability of

¹⁸¹ Labra, María Elena. La Reinención de la Inequidad en Chile: El Caso de Salud. en *Informe Alternativo de la Salud en América Latina*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.25-32.

workers forced to lose their right to organize through diverse mechanisms, the deregulation of labour and the privatization of assistance and security programs.¹⁸²

The *process of commodifying goods and services*, or the conversion of rights into products, has led to devastating effects on the quality of life and consumption. At the centre of this movement we can locate determinant processes such as the loss of food sovereignty and the expansion of the consumption of contaminated foods;¹⁸³ the privatization and monopolization of water for human consumption and irrigation;¹⁸⁴ environmental destruction in urban spaces, which has reached unprecedented levels of corporate irresponsibility and institutional inaction such as the infamous case of Barrio de Ituzaingó in Córdoba, Argentina.¹⁸⁵

Another process that propels the accelerated deterioration of the quality of life and health is the *institutionalization of violence and insecurity*. The wave of criminal violence that has disfigured our community relations in our country's cities must be recognized. But there has not been enough attention paid to institutional or structural violence that certain states organize or that which is exercised within and from businesses whose production is structured around aggressive patterns of personnel control. This characteristic of neoliberalism was already foreseen in the early 1990s in a visionary piece by Agustín Cueva,¹⁸⁶ which looks at the painful example of the femicides around the maquilas of Ciudad Juárez, México. This is a prototype for the integral penetration of violent patterns in models constructed on the rapacity and irresponsibility of certain companies.

Free trade zones and the municipalities that shelter them thus appear as the prototypes of neoliberal cities, where all of the rough mechanisms of accelerated exploitation are gathered together. It may be that the aggression is reproduced in the assembly lines and the disproportionate production quotas in the maquilas; it could be that it consistently recreates the violence of gender relations; and it could be that it reappears in multiple forms of ethno-cultural discrimination and violence, but all of the factors are rampant and connatural systemic facts. But there is no doubt that the horrifying case of Ciudad Juárez,

¹⁸² Noriega, Mariano, Garduño, Angeles y Cruz, Cecilia. El Impacto del Neoliberalismo en la Salud de Trabajadores en América Latina en *Informe Alternativo de la Salud en América Latina*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.63-69..

¹⁸³ Miranda, Ary, Moreira, Josino, Peres, Frederico. Neoliberalismo: El Uso de Plaguicidas y la Crisis de Soberanía Alimentaria en el *Informe Alternativo de la Salud en América Latina*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.118-127.

¹⁸⁴ Zapatta, Alex. Las Políticas del Agua en América Latina en *Informe Alternativo de la Salud en América Latina*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.128-137.

¹⁸⁵ Godoy, María, Herrera, Norma, Gatica, Sofia et al. Destrucción del Espacio Urbano: Genocidio Encubierto en Barrio Ituzaingó de Córdoba. en *Informe Alternativo de la Salud en América Latina*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.110-117.

¹⁸⁶ Cueva, Agustín. *América Latina Ante el Fin de la Historia*, Quito: Debate, 22: 45-55, 1991.

with one foot in criminal violence and another in corporate-institutional violence, is just the tip of the iceberg in societies organized around distinct groups of power's brutal dispossession and domination. And it is becoming a characteristic phenomenon of public health in the Era of Globalized Neoliberalism.

But communities in Ecuador were also victims of another enormous mechanism of violence, which may appear distant from the economic model that we are discussing, part of a military and mercenary program. This is the case of the so-called "Plan Colombia" to control illicit coca drug crops, with its high-impact military logic and aims of occupying and expelling the population. It was conceived to consolidate control not only over drug production—which is in and of itself a controversial and ambiguous topic—but also over the geo-strategic space of the *Andean Horseshoe*. Plan Colombia articulates three necessities of the neoliberal Colombian state: a) its historic alliance with the imperial projection of power over South America; b) the supply of an aerial illicit crop control system proved in other contexts by an international mercenary corporation; and c) pressure from the transnational Monsanto to consolidate the market for one of its most profitable products (i.e. Glifosato, the commercial version of Round Up). Exploiting the Colombian people's legitimate desire to put an end to narco-production and illicit coca crops, they have unleashed an absolutely illegitimate offensive, which in the end affects the health and ecosystems of Ecuadorian communities along the Northern border.

The high-altitude aerial fumigation program, which drops a wide spectrum herbicide packet, ignores technical criteria and fails to respect human and environmental rights. Employing a military model centred on aerial fumigation of large areas of forest and agriculture has obvious consequences for human health and ecosystems. An Ecuadorian Scientific Commission designated by the President of the Republic has systematized this damage to collectivities. Damages are not limited to the health of children, women and adults in the region, but also lead to the destruction of agro-social resources necessary for life along with the degradation of biodiversity and ecosystemic health.¹⁸⁷

Finally, after reviewing the principle determinant mechanisms of social and health effects, we see the *deterioration of health possibilities and the multiplication of ecological threats* in the scenarios described. This primarily responds to an anthropocentric and corporate conception that subordinates human life and natural resources to the short-term interests of large transactions—whether in terms of food, agrottoxins, genetic engineering, mining or, of course, oil, which, as we have previously explained, occupies the centre of the dominant energy model.

These branches of expansion, fuelled by massive investments, are a notorious indicator of a vision of the future that animates global acceleration and

¹⁸⁷ Avila, Ramiro, Bravo, Elizabeth, Breilh, Jaime, Campaña, Arturo et al. *El Sistema de Aspersiones Aéreas del Plan Colombia y sus Impactos sobre el Ecosistema y la Salud en la Frontera Ecuatoriana*, Quito, Mantera Editores, 2007.

the substitution of an oil-based economic system for another one centred on agro-energy. There is now an increasing prevalent analysis in regional scientific and academic forums on the present and future impacts of the substitutive model that seeks to consolidate its position without any inventory benefit whatsoever. There are countless scientific projects that demonstrate the devastating impacts on health and the future of life on our planet.

Finally, the penetration of the neoliberal economic model required, along with a transformation of the sphere of production, an ideological counter-reform, attempting to impose new hegemonic terms through cultural persuasion and the artificial creation of needs. The communications media in Latin America played a key role in this project, reproducing the notions and perspectives convenient for the wave of privatization and the intentional disparaging of public service's image. Anthropological research, using a variety of techniques—ethnographic, semantic and critical discourse analysis—have demonstrated how since the 1990s a variety of projects, including the health campaign against dengue, were taken advantage of to reproduce an ideology convenient to the biomedical model and to neoliberal control.¹⁸⁸

Illustrative Cases of the Impact in Latin America

In the context of a regional analysis, interesting data with regard to the deterioration of health caused by these processes can be shown. There is no intention of offering a complete vision of all effects that have occurred. Rather, we show the regional prototypical cases that clarify the panorama of effects in our country.

Deterioration of Urban and Rural Spaces: Vector-Borne Diseases

Vector-borne diseases such as malaria and dengue, are one of the types of illnesses that have the greatest impact on the world's health due to the magnitude and territorial expansion of its morbidity and mortality. Its current increase is a clear expression of the deterioration of rural and urban spaces in the neoliberal years. Over the last three decades, various epidemiological reports and bulletins published in the region emphasized the increase in the frequency and gravity of these illnesses in clinics and the increase in their distribution, alarming care systems and the groups responsible for generating public health policy.

Thus we will use the described profile as an illustrative case of the transformations accelerated in rural and urban spaces that began in the early and mid 1980s. These transformations have led to contaminated ecosystems and unhealthy ways of life.

¹⁸⁸ Briggs, Charles y Manzini, Clara. *Hegemonía Comunicativa y Salud Emancipadora: Una Contradicción Inédita (El Ejemplo del Dengue)*, Quito: Observatorio Latinoamericano de la Salud /CEAS, 2005, p.148-157.

Dengue:

Dengue, a viral illness transmitted through vectors, has epidemiological characteristics that allow us to illustrate the above-mentioned point. More than 100 countries report cases of dengue, 500,000 of which correspond to grave forms such as Dengue Haemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS), including 25,000 deaths. In Latin America, these problems are acquired in the endemoepidemic form.

At the core of this problem is the increase in the prevalence of dengue and the emergence of its most dangerous forms associated with deteriorating urban spaces, in poor and crowded neighbourhoods of Latin American cities—coinciding with the dismantling and crisis of state **ETV** prevention programs. Contemporary epidemiological research has established the determinant processes for high levels of transmission. Research points to the confluence of a crisis in health services: the lack of access to running water that forces people to preserve water in insecure open receptacles; the absence of systems to dispose of solid waste that, if left exposed, become larvae nurseries; the processes of migration from rural to urban areas and impoverished neighbourhoods; and the growth of insecure housing. In this situation, there is a total disconnect between the anti-dengue campaigns and the social and cultural reality of the affected communities.¹⁸⁹

Dengue's epidemiological behaviour in the region is an example of the resurgence of an illness. From the end of the 18th century, and during all of the 19th and the beginning of the 20th century, some cases of an illness with characteristics similar to dengue were reported in the United States and the Caribbean. But it was not until the mid 1960s that—after 20 years without a single case reported—important strains of classical dengue were identified. The reinfestation of large areas by *A. aegypti* (the principal vector for the transmission of the dengue virus) was witnessed, which had been almost totally eliminated in the 1950s. Then a resurgence of major diseases like DHS and DSS took place, along with a trend towards epidemic behaviour in some countries.¹⁹⁰

The history of the presence of this disease in Latin America confirms the relation of vector-borne with the socio-economic periods and the model that we are analyzing. At the beginning of the neoliberal period in the late 1980s, five South American countries witnessed explosive strains, including countries like Ecuador that had never reported cases or that had not done so for over three decades. Between 1982 and 1987, different cities in Northern and Central Brazil

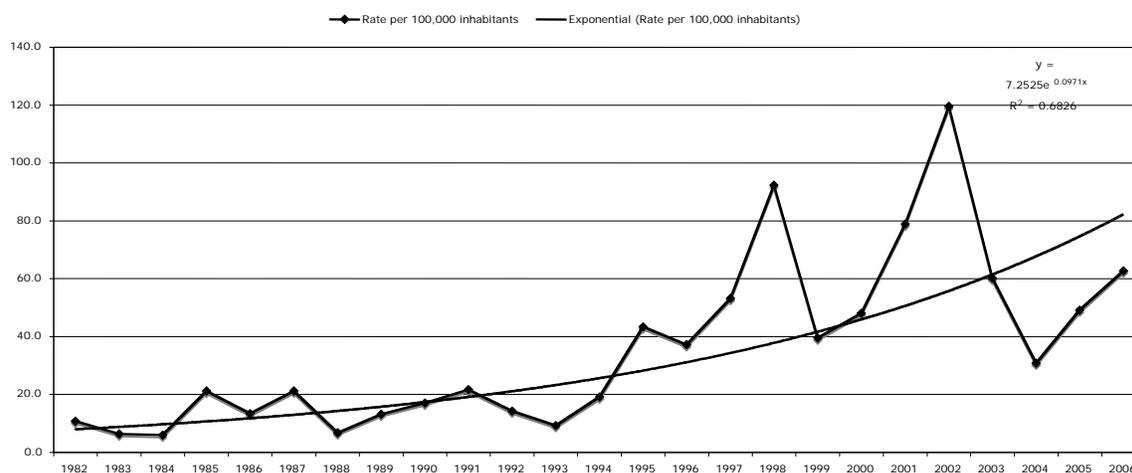
¹⁸⁹ Sabroza, P. Toledo, L. Osanai, C. *A organização do espaço e os Processos Endêmicos-epidêmicos em "Saúde, Ambiente e Desenvolvimento* (Leal MC et. Al. Organizadores). São Paulo: HUCITEC-ABRASCO, vol 2, p 57-77.

¹⁹⁰ Roses-Periago, Mirta; Guzmán, Maria G. *Dengue y dengue hemorrágico en las Américas*. Rev Panam Salud Pública. 2007, 21(4): 187 – 191.

presented over 100,000 cases. Epidemics of classic dengue were reported in Bolivia (1987), Ecuador (1988) and Paraguay (1990), reporting approximately 240,000 cases. Serological studies and surveys, however, suggested millions of infections. In 1993, Panama and Costa Rica, the only two Latin American countries that been spared, presented strains. In 1998, a record number of 741,865 cases were reported, two-thirds of which were in Brazil. So far, the situation in the new millennium is worsening, registering an average of 500,000 cases a year. Between 2001 and 2005, 2,879,926 cases of dengue were reported.¹⁹¹

In figure No. 11, the significant increase in morbidity for classic dengue is confirmed ($R^2=0.6826$) in Latin America following a marked exponential trend since the mid 1980s. Moreover, to compare the 1980s with the 1990s, one observes a doubling of the number of cases (111,739/270,980). This relation quintuples from the 1980s and 2006 (111,735/548,613), in accord with the growing rate of deterioration that we have described.^{192,193}

Figure No. 11: Increase of class dengue in Latin America, 1982-2006



Source: Pan American Health Organization (PAHO), 1997, 2007. Source: authors

With respect to the serious cases of dengue, before 1981 only 60 cases met the WHO classification criteria and had been reported as such. In that year, Cuba experienced the most important dengue epidemic in our region's history with 116,143 people hospitalized, 10,312 cases of Dengue Haemorrhagic Fever (DHS) and Dengue Shock Syndrome (DSS), and 158 deaths. From this moment on and for reasons little understood, these clinical forms frequently returned. Every year, with the exception of 1983, grave cases have been increasingly reported.

¹⁹¹ OPS. *Resurgimiento del dengue en las Américas*. Boletín epidemiológico, Organización Panamericana de la salud. 1997; 18(2): 1-6.

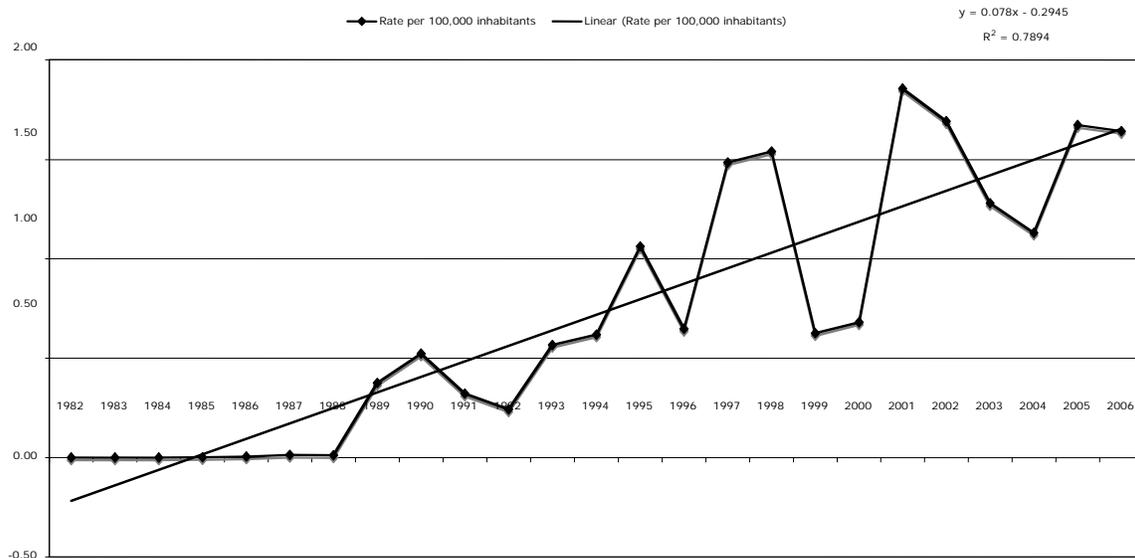
¹⁹² Ibid.

¹⁹³ OPS. *Número de casos de dengue*. En: <http://www.paho.org/Spanish/AD/DPC/CD/dengue.htm>. Consultado Diciembre 2007.

According to the Pan American Health Organization (PAHO) data, in 1989 Venezuela experienced the second large-scale epidemic of DHS dengue, which lasted until 1990 with 3,108 cases and 73 deaths. For 1996, 25 countries in the region have reported at least one case of DHS, while some countries like Colombia, Venezuela and Brazil have presented an endemic pattern.

Figure No. 12 shows the eruption of DHS and DSS in the region. After a period of very low prevalence until 1988, an abrupt and significant increase of the phenomena is observed ($R^2=0.7894$). In the 1990s, cases quadrupled (1,471/5,920), and this number would actually be 16 times greater (365/5,920) if the data from the 1981 Cuban epidemic were not taken into account, which corresponds to a peculiar behaviour that merits explanation. Likewise, there has been a doubling in cases (5,920/12,195) from 2000-2006 compared to the 1990s.

Figure No. 12: Emergence of Dengue Haemoraggic Fever during Latin America's neoliberal era, 1982-2006



Source: Pan American Health Organization (PAHO), 1997, 2007. Composed by: authors

Malaria:

Malaria, a parasitic disease transmitted through vectors, is another transmittable process widely studied in relation to processes of social and ecological change. This issue has long existed and expanded in Latin America, but as we will show, its scope notably widened during the neoliberal era.

About 21 countries in the region report the active transmission of malaria, including 11 South American countries: Argentina, Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Paraguay, Peru, Surinam and Venezuela. Currently nearly 14% off the population lives in areas at risk of malaria transmission. If one considers only the countries with active transmission, this

percentage more than doubles (**from 30.3% to 40%**). In 2006, 276.139 billion people in Latin America had been exposed to malaria. With a reported annual average of more than one million cases over the past two decades, Latin America represents 3% of the disease's global burden and almost 1% of the mortality.¹⁹⁴

While the beginning of anti-malaria campaigns in the late 1950s affected a notable decrease in mortality from malaria, this trend was only maintained until the early 1970s when a consistent increase of the epidemic began, a problem which has continued to this day. While the average Annual Parasite Index (API)¹⁹⁵ from 1970 to 1979 was 1.78 cases per 1,000 inhabitants, after 1990 the average API more than doubled (see Figure No. 13).

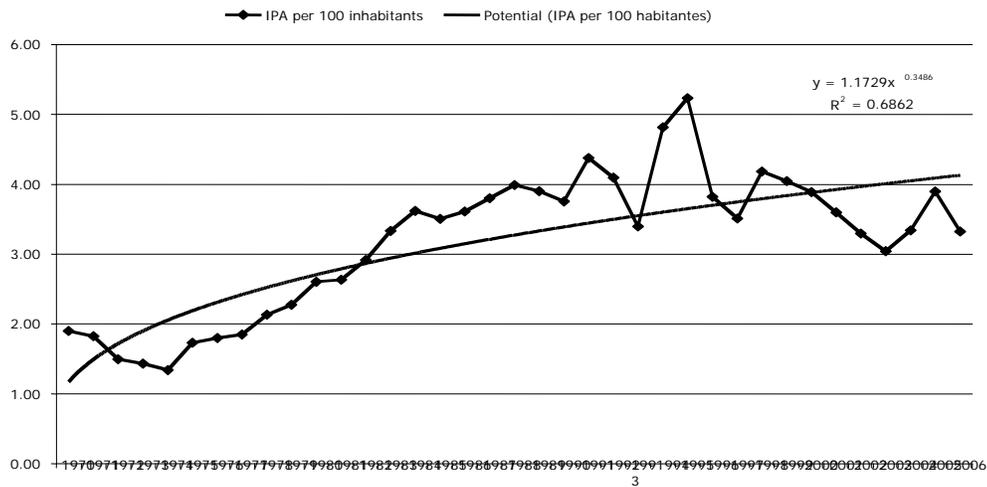
An analysis of the processes of transformation in the Latin American countryside during global acceleration allows us to understand how the deterioration of productive processes and the conditions for social consumption in the areas of tropical rainforests—such as the case of the Amazon—is related to the increase in malaria. The large-scale economic processes of the predatory extractive economy caused deforestation through logging and the dedication of large swaths of land to livestock and illicit crops. Unsustainable forms of mining and migratory processes under deteriorated social and ecosystemic conditions have impacted impoverished populations. Patterns of vectoral exposure are very high due to the prevalent types of work and difficult living conditions. These negative effects are fostered by nutritional and immunological deficiencies. This phenomenon began in the 1970s but accelerated in recent years,¹⁹⁶ constituting in its rapid increase an unfortunate symbol of the acceleration that we have described.

¹⁹⁴ Panamerican Health Organization. *2006 Malaria in the Americas Data Tables*. En: <http://www.paho.org/English/AD/DPC/CD/mal-americas-2006.pdf>. Consultado Diciembre 2007.

¹⁹⁵ Annual Parasite Index (API)= (number of confirmed cases / total population at risk of transmission) x 1000

¹⁹⁶ World Helath Organization. *World malaria report, 2005*. In: <http://www.rbm.who.int/wmr2005/html>. Consultado Diciembre 2007.

Figure No. 13 Malaria Increase in Latin America, 1970-2006



Source: Pan American Health Organization (PAHO) 1998 and WHO 2005. Developed by: Authors

Campaigns against vector transmitted diseases:

Examining the campaigns against these illnesses, we observe that the actions undertaken have been directed at each of the illnesses' modes of transmission: human- infectious agent -vector. Aside from some changes of an operational sort realized in the early 1990s, anti-malaria actions almost always focalize the problem using conventional epidemiology as a tool to expand oversight and intervention. The campaigns have basically maintained the narrow limits of classical prevention: fumigations against mosquitoes; interventions in the ecological arena to control breeding areas; educational campaigns about malaria prevention, diagnosis and treatment; and individual measures such as the use of bed nets, repellents and protective clothing, treatment and prophylaxis.¹⁹⁷

This conventional view has prevailed in the face of an expanding problem. Actions are rarely directed at precise elements, are susceptible to manipulation and fail to affect the determinant processes. This reductionist and linear vision contrasts with the problem's growing complexity. And this despite the fact that from 1980 to date, various official organizations' reports and bulletins pointed to

¹⁹⁷ López-Antuñano, F. J. *La malaria y su sombra: I manejo integrado*. Rev Fac Med UNAM. 2001; 44(1), 18-23.

three types of “problems”: 1) *technical*, such as resistance of parasites to anti-malarials and vectors to insecticides. 2) *social, or associated with development* such as the processes of territorial colonization, the migratory process and the transformation of spaces for agricultural processes and the construction of physical infrastructure such as highways, hydroelectric plants and dams, and 3) *financial* issues in countries’ anti-malaria programs. All of these factors are the product of global acceleration.

The same epistemological logic and action design have guided the anti-dengue campaigns, although with a stronger emphasis on the vector.

Commodification and Monopolization of Sports: Hegemony and Damage to Health

Sports and daily physical activity are a crucial part of a way of life and have a strong impact on health.

But despite its massive effect and the social valorisation of sports as a life resource, the commodification of sports and its effects on health are barely recognized. This despite the fact that sports-commodities destroy spaces for life and health in various ways. The commercial, consumerist logic and the spirit of exacerbated competition reproduce the same logic of consumerism and its unhealthy consequences on the fields and courts.

The case of the commodification of sports—the conversion of a physical and recreational practice into a space of transnational corporate profit—merits emphasis because it reflects an important determinant of health. Effectively, critical epidemiology establishes that health is defined by the contradictions between those processes—both collective and individual—that protect us and offer support and those processes that are destructive and deteriorate our ways of life and our health.^{198,199}

Physical activity and sports are among the processes that can act as a protective force. But the historical conditions of monopoly acceleration have produced an inversion of this protective meaning as physical activity has become a commodity whose production and circulation is absorbed by the logic of big business.

¹⁹⁸ Breilh, Jaime. *Epidemiología: Economía, Política e Saúde*. Sao Paulo: Hucitec/UNESP. (Translation to Portuguese by the Universidad de Botucatu). Spanish editions of this book (1979/1988). 1991/1979/1981/1986/1988) "Epidemiología: Economía, Medicina y Política" primera edición por la Universidad Central de Quito (1979), second edition (1981) by the Universidad Autónoma de Santo Domingo, República Dominicana (Primer Premio "Universidad Central" en 1981). Ediciones Mexicanas by "Editorial Fontamara" (México-España), 1986-1988.

¹⁹⁹ Breilh, Jaime. *Epidemiología Crítica: Ciencia Emancipadora e Interculturalidad*, Buenos Aires: Lugar Editorial (2003/2004) Translated to portuguese: .Breilh, Jaime. *Epidemiología Crítica: Ciência Emancipadora e Interculturalidade*. Rio de Janeiro: Editora FIOCRUZ, 2007, p.315

A project prepared by the World Health Organization and undertaken by a collective in Brazil and Ecuador analyzed the negative health impacts on Latin American societies caused by the transformation of sports and physical activities, of the rise of spas and fitness centres, as damaging instruments of a massive global business.²⁰⁰

Over the past decades, athletic spaces in Latin America and Ecuador have been transformed. Their content and spirit have been tied to the logic of global acceleration and market conquest. The sports spectacle businesses have been able to make athletic practices and physical activities into merchandise that circulate through the machinery of high profit industries.²⁰¹ Its vertiginous pace has propelled the rupture of territorial barriers and increased the necessity of appropriating the resources for physical and athletic practices, often from distant lands.

The transnational sports complexes can fulfil their processes of accumulation because they globally dominate the following resources: the sponsoring communications media; the monopoly over large and unique events (large-scale sports events); clubs and teams; the control of international sports organizations (led by the International Olympic Committee); ownership or agreements with installation and infrastructure production companies; material services, sports gear and competition instrument companies; multidisciplinary teams for sports performance research; the complicity of host nation-states; ownership of the players' license or over means of athlete competition training; and the massification of consumption for an alienated consumer public.²⁰²

To cite one case, it has been calculated that the U.S. sports industry is worth \$213 billion, more than double the earnings of the automobile industry and six times larger than the movie industry.²⁰³

This type of business has been able to construct hegemony and ideologize us thanks to the “fetishism of fair play.” The spectacles and merchandise are presented under the banner of supposed “egalitarianism” and the ideal of human coexistence (sports as a synonym for tranquillity, peace, harmony, fair play and friendly competition).²⁰⁴

The “commoditised sports and physical activity” paradigm excludes or relegates the majority to an eminently passive role as consumers of spectacle and team propaganda. And this is all undertaken with a deeply unequal stratified labour force. Athletes with high skill levels—who constitute a labour force and are

²⁰⁰ Breilh, J. Matiello, E. Capela, P (2007) *Acumulación, Aceleración Global y el Deporte en la Salud (Negocio o Instrumento de la Vida?)*. Global Health Watch II (in print).

²⁰¹ Silva, Ana Márcia. *Corpo, Ciência e Mercado*. Florianópolis, Editora da UFSC, 2001.

²⁰² Altuve, Eloy. *Deporte: Modelo Perfecto de Globalización*, Universidad del Zulia, 2002.

²⁰³ AFP. *El verdadero sueño americano: negocios que generan negocios; publicidad, la más beneficiada*

<http://www.jornada.unam.mx/2007/02/04/index.php?section=economia&article=022n1eco>, 2007.

²⁰⁴ Altuve, Eloy. *Deporte: Modelo Perfecto de Globalización*, Universidad del Zulia, 2002.

in the last instance the magnet for sports spectacles—are part of an unequal labour force. The boundless economic success of an elite minority masks the unfavourable labour situation of the majority of athletes, as can be seen in Table No. 11.²⁰⁵

Table No. 11 Income Stratification for Brazilian Soccer Players (800m clubs with 12000 players) WHAT DOES 800m mean???

INCOME STRATA (USD)	%
Up to 1 minimum wage of 75	44,9
75 to 150	41.6
150 to 375	5,0
375 to 750	2,8
750 to 1500	1,5
> 1500	3,3 (402 players)

Source: E. Altuve, *Deporte Modelo Perfecto de Globalización*, Universidad del Zulia, 2002, p.104

Sports business reproduces profound social inequalities in physical activity. On the one hand, the inequality between those that have access to truly healthy sports activities and those that remain outside of a sustained and beneficial sports practice. The latter, in most cases, become mere spectators, with factors of gender, ethnicity, age or disability additionally discriminating and imposing passivity. In the second place, it reproduces a disparity between the value paid to the majority sports labour force on the one hand and the spectacular payments that the sports elite receives for their spectacular performances and the profits accumulated by large companies on the other. To this add the fact that there is no freedom of contract for the athlete-commodity, for whom severe regulations and limitations have been established. These reproduce an iron control over athletes and their spirits. The attempts at protest and the isolated acts of rebellion by some celebrities are immediately repressed and discredited.

Thus we observe the poor's decreasing access to the goods and resources that an adequate sports practice requires. This confirms the abyss between the massive gains and privileges accrued to a small elite and the massive exclusion of the poor, who are pulled out of their way of life for a few minutes of athletic leisure time or participate in the circus of sports staged as the perfect form of an alienating globalization.

And as takes place in other novel branches of transnational business—such as with floriculture export—the appealing products that are generated and circulate in the mass sports market hide the sad reality of the workers behind it. Just as we

²⁰⁵ Grupo de Estudos e pesquisa em Sociologia do Ssporto. *Um Outro Mundo é Possível e Nele Uma Outra Cultura Esportiva*. Goiânia: Manifesto ao II Fórum Social Mundial do Grupo da Faculdade de Educação Física da Universidade Federal de Goiás, 2002.

must ask ourselves what health, ecological and social realities produce the beauty of a rose, we must disentangle the grave health and environmental problems that are hidden behind the goldmine business of football, without offering much at all to the workers that make the products with the FIFA logo.²⁰⁶

In the Ecuadorian case we do not have information on the studies that have been realized on the relation between the commodification of sports and health or those on the health implications of physical activities that have been commodified or tied to a spirit of extreme competition. These processes end up having a major effect on the options for physical and mental health in our society. Such an investigation in Ecuador is sorely needed. What has been produced, and with high-quality products, is an interpretation of soccer as an example of a mass spectator sport.²⁰⁷ There has been much social analysis dedicated to soccer as a cultural or journalistic object and a certain degree of broad analysis of the soccer economy, covering a general historical and sociological area.²⁰⁸ But this work has not placed emphasis in criticism of the phenomenon of the monopolization/transnationalization of sports as a whole, and of its conversion into a tool of hegemony.

The Postmodern Epidemics of New Technology at the Service of Profit: Genetic Doping and Nanotechnology

And how to analyze the tendency of a technology that becomes dangerous when submitted to the rationality of profit? Genetic doping, the employment of genetic therapy to produce high performance “athletes-commodities” rather than to cure, appears to be an ever more frequent problem. Such techniques modify characteristics like musculature or activate genes to stimulate the production of erythropoietin and red corpuscles.²⁰⁹ These types of manipulation seek to construct so-called “human beings 2.0” that can operate as commodities on the sports market, as has been denounced by the American Association for the Advancement of Science (AAAS).²¹⁰

The “sports-merchandise” is ever more distanced from disinterested competition, reducing sports to a commerce in spectacle, services, sports teams and news. Moreover, genetic engineering has now produced athlete-merchandise, genetically modified for economic competition, guaranteeing the fraudulent profits thereby gained. From our point of view, this has ended up imposing the business of sports as spectacle, while the game of life loses out.

²⁰⁶ Ferrari, Sergio. *Mundial de fútbol: Juego limpio y salarios justos*, Berna: ALAI-AMLATINA, May 30, 2002.

²⁰⁷ Mora Witt Galo. *Un pájaro redondo para jugar*. Quito: Editorial: Eskéletra, 2002.

²⁰⁸ Carrión, Fernando (editor). *Biblioteca del Fútbol Ecuatoriano*. Quito: FLACSO, 2006.

²⁰⁹ Reaney, Patricia. Genetic Doping is Next Olympic Threat. *News in Science*, March, 17, 2004. <http://www.abc.net.au/science/news/stories/s1067801.htm>

²¹⁰ Salomone, Mónica. *Dopaje genético: seres humanos 2.0*, Madrid: El País, Suplemento Científico, September 2, 2008

Similarly, large corporations seek to dominate new technologies that can multiply their profits. A perennial occurrence, the discovery of a new and profitable technology is usually propagated as a panacea for all ills. In its time, it was vapour; or chemicals; electricity; and later the cheap energy of atoms; transistors; and still later genetic engineering; and now the brand new nanotechnology, the manipulation of matter at the atomic and molecular level, ostensibly offering enormous potential for the world's poor.²¹¹

One nanometre is equivalent to one billionth of a meter, or more or less the length of 10 hydrogen atoms in a row. The fields developing products at this scale belong to the sphere of quantum physics and biotechnology, the sciences of knowledge, information and robotics that as a whole lead to the global control of industry, agriculture, industrialization of food, cosmetics and health.

Specifically, it is the carbon buckyballs (molecules in spherical form), nanotubes, or quantum dots that are used for biological transport, or as semiconductors, insulators or markers of biological material. However, world forums have regularly warned of the serious dangers to human health and the environment posed by the technology's high degree of toxicity, intense radioactivity and capacity to generate free radicals that provoke irritative processes and the formation of tumours that can, at their size, bypass defences such as the hemocerebral barrier. Unfortunately this technology is expanding in an almost imperceptible way through peoples and governments, inundating the market with nanoparticulate products such as cosmetics, sunscreen, food additives and pesticides.²¹² The avalanching consumption of these products has without a doubt entered into the chain of precursors to cancer and immunity disorders.

In this way these examples of the dangers of new technology, inserted in the vertigo of global acceleration, begin to form part of the *postmodern epidemics*. In other words, the business logic restricts advances that were probably conceived of in the name of humanity and trap us within a nefarious logic. In the context of corporate interests, researchers' good intentions (geneticists, physiologists, electronic engineers, sports medicine specialists, ergonomic design specialists) succumb, delivering their knowledge to business and often abandoning the ethical principles that they claim to defend.

Our citizen struggle to dislodge these sorts of projections of capitalist acceleration must understand that these harmful processes penetrate and corrupt health services and supposed areas of prevention such as sports and the new industrialization, requiring us to rethink the field and meaning of prevention.

²¹¹ ETC Group. *Downsizing Development: An Introduction to Nano-scale Technologies and the Implications for the Global South*. New York: INCTAD; 2008.

²¹² ETC Group, *Ibid*, p.16

Illnesses Produced Through the Pressure of Consumer Images: Anorexia and Tanorexia

The imposition of unhealthy ways of life through the hegemony of beauty stereotypes, of image and success, propel increasingly large sectors of the middle class and the bourgeoisie to embrace cultural forms and social codes that constitute a new set of threats to collective health.

Among adolescent groups, the process of identity construction amidst a lack of values and massive propaganda of models of femininity and success, have unleashed a major epidemic of anorexia bulimia.²¹³ These two illnesses run rampant in the population, particularly among adolescent females. Its prevalence is often not fully reflected in official statistics and its accumulation takes place invisibly, with the extreme cases showing up in private practices.

The new illness of tanorexia, the compulsion to expose oneself to sessions of ultraviolet radiation to acquire a darker skin colour—taken as an image of status or a sign of beauty—is tied to similar processes. It has been described as a form of dependence incorporated into the The Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association.²¹⁴

This type of addiction has been scientifically confirmed through a study of a sample of people on the beach, 26% of whom gave positive results for a dependency profile and 53% of whom were declared to be psycho-dependent and possessors of substance abuse disorder.

As has been seen, there is not an area of life that, once submitted to the logic of commercial value, is free of the distortions of human activity.

The Ecuadorian Case: Regression in Health During the Neoliberal Years, 1990-2007

The Limits of Available Information

The Latin American cases that we have highlighted to illustrate the mechanisms and effects of accelerated economic accumulation in the region are similar to the problems faced in the particular case of Ecuador. And while the available information limits a deep analysis of the problems, various studies

²¹³ Anorexia is the pathological decline in appetite tied to multiple problems but that, currently, is deeply related to the pressure to maintain a lean body image. The paradigm of said image is the so-called “top model,” whose stark figures influence our adolescents’ beauty standards, as they are trapped within the mediatic culture. Paradoxically, anorexia combines with bulimia, which is an overeating disorder that, to compensate, leads to self-induced vomiting.

²¹⁴ Warthan, Molly M., Uchida, Tatsuo, Wagner Jr., Richard F. *UV Light Tanning as a Type of Substance Dependence Disorder*. Chicago: Archives of Dermatology, Aug 2005. Vol. 141, Iss. 8; p. 963-966

undertaken in critical spaces, where the model provoked serious consequences, allow us to affirm that Ecuador was also the site of major regression since the 1980s.

We must be capable of penetrating the data without allowing ourselves to be misled by the images of progress that are often used to demonstrate the supposed achievements of State programs during the neoliberal years. This will allow us to show empirical evidence to demonstrate our prediction of the deterioration of health. It is the case, for example, that the curve of the national averages for infant or maternal mortality decreased. But as we shall later see, while they may have lowered from 1980 to 2005, when we divide the analysis before and after the era of adjustment, we find the effect of deterioration that we predicted.

The problem is that, as socio-demographic and epidemiological research has demonstrated in most of the world's countries, neither catastrophes nor the most severe crises have been able to decrease these types of indicators that demonstrate annual improvements. This is true even in contexts of deep inequality such as in Haiti, which in no way means that there has not been a deterioration in health and much less confirming regular progress.

Therefore, ideally, we should bring disaggregated data from sensitive indicators to the study. We should use subtle comparisons of socioeconomic, ethnic and gender groups; study the marked regional differences in accord with the distribution of wealth, resources and infrastructure; analyze the human and ecological harm taking place in spaces of production; and study the contrasts and shortages in the poorest urban areas. But this is impossible given that the information is not designed to deduce these relations. If mortality was reported in Ecuador as it is in England and other European countries, we would have the conditions in this study to show the effects of global acceleration in all of its severity and scale: a systematic and obligatory reporting and publication in workplaces of events related to the labour force's health; mandated reporting for private services of hospitalizations and outpatient consultation, with a minimal registry of the social and cultural demographics; consistent monitoring and opening to public scrutiny of the social determinants of health, such as labour's exposure to dangerous substances and processes.

Unfortunately, the information systems and research projects usually are not constructed to highlight urgent problems, but rather obey the hegemonic vision that we have been questioning, because it covers up the roots of the health situation. Ecuador has one of the worst health systems in Latin America, particularly in indigenous territory, as is seen in the case of illnesses and occupational accidents. For these and other situations in Ecuador, our information systems have historically been a black hole.

This is why the present study only just begins to outline a few illustrative cases of the impact. We take advantage of the reported statistics and

emphasize the discoveries of a nucleus of research on Ecuador that has attempted to show the human and ecological harm caused by agro-industry and the neoliberal model, tied to the productive systems and structural conditions of the spaces where capital achieves its highest levels of accumulation and relating them to the policies that demolished public services.

General and Infant Mortality in the Years Before and During Neoliberalism

In the context of the transformations generated by globalization, the epidemiological situation in Ecuador has worsened, especially the morbidity indicators that affect society's most vulnerable populations.

We begin this section by reviewing some of the health impacts that can be reconstructed with the available data, starting with a simple exercise of comparing our vulnerabilities in two groups susceptible to impacts (mothers and children) with those in Norway, a country on the other end of the world's spectrum of social development and characterized by a high presence of its classic indicators. In table No. 12, one can observe the difference in what has occurred in the two countries over the years that we are analyzing with regard to infant and maternal mortality. Both are strong indicators of the basic social conditions that support health. In doing so, we have noticed an abysmal difference between the two countries' indicators. This difference certainly predates the neoliberal era. But during this period, the maternal mortality rates nearly became 22 times greater in Ecuador than in Norway. This simple exercise begins to remind us of Ecuador's disastrous health situation and calls attention to the aforementioned growth of the abyss during the neoliberal years. It shows that in these years there was a major difference between dependent countries like ours, with limited sovereignty and pronounced social inequalities—a State that has washed its hands of social and health rights—and a sovereign country characterized by a notable social equality and a completely responsible State.

Table No. 12 Distance between the mortality of Ecuador and Norway before and during the neoliberal period

IMPACT GROUP	INDICATOR	COUNTRY	VALUE BEFORE NEOLIBERALISM (1980)	RATE NOR:ECU BEFORE	VALUE AFTER NEOLIBERALISM (2000)	RATE NOR:ECU AFTER
Children under one year	Infant Mortality*	NORWAY	9	7.1	4	6.8 (*)
		ECUADOR	64		27	
Women (Reproductive Age)	Maternal Mortality**	NORWAY	11.8	13.7	3.4	22.03
		ECUADOR	162.1		78.3	

Rate x 1,000 born living ** Rate x 100,000 born living

Source: INEC (2007) www.inec.gov.ec; UNICEF (2007); European Health for All database on line.

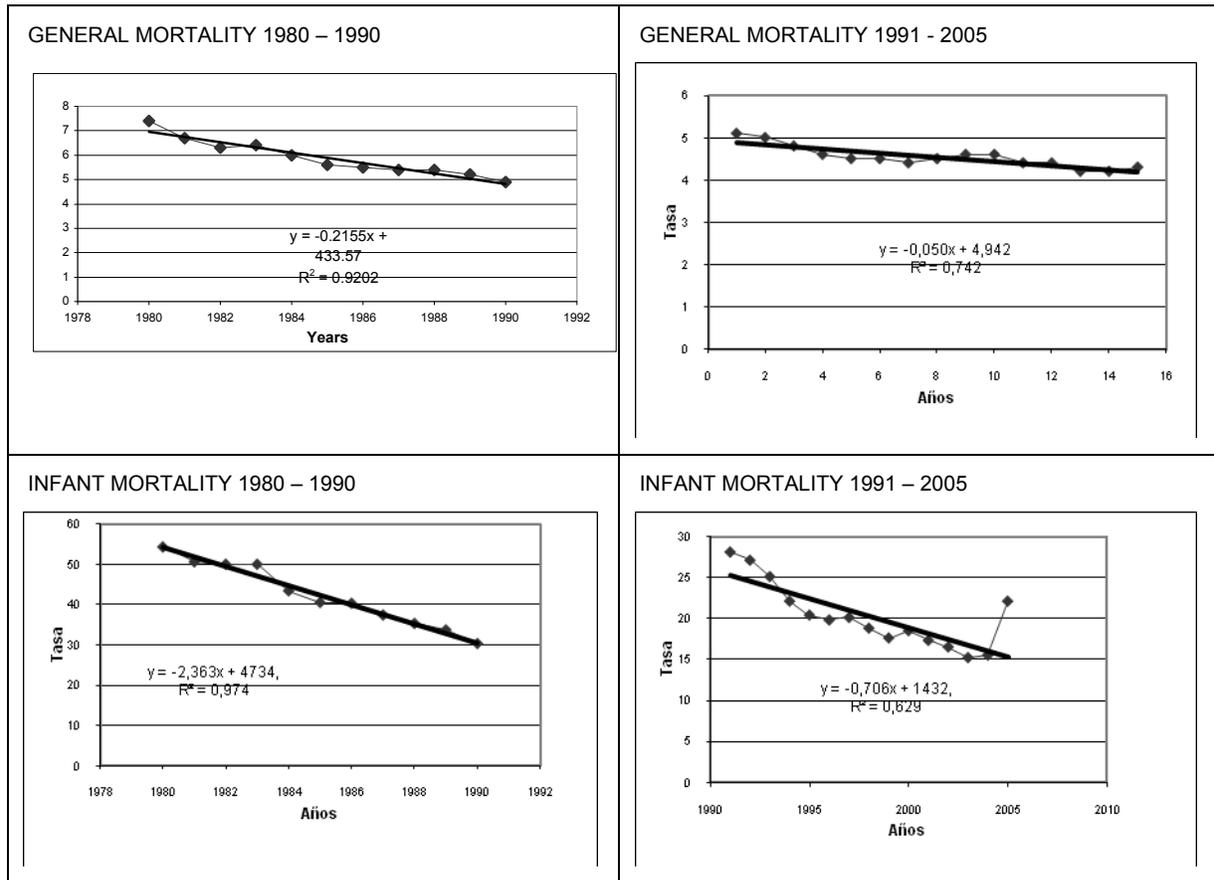
Having located our comparative disadvantage, we can look at some important evidence with regard to the consequences of the neoliberal State's social and political order for our health.

The epidemiological footprint of the neoliberal years can be observed in the data on general mortality (all ages) and infant mortality (under one year). In both cases it is confirmed that, despite the fact that there is an effective average decline between 1980 and 2006, a slowing or correction in the curve is detected if we look more carefully and break with the trend before the deep implementation of the adjustment model (1980-1990) compared to the neoliberal years (1991-2005).

In effect, if we compare the slope (coefficients β) and the coefficients of correlation (R^2), we see that the curve in the second plot levels off and decreases its correlation, showing that there is a slowing of the trend with both indicators.

With respect to *general mortality*, the sub-period 1980-90 of the slope was -0.22 ($R^2 = 0.92$), while in the neoliberal era it was barely -0.05 ($R^2 = 0.74$). (see figure No. 14).

Figure No. 14 Contrasts of General and Infant Mortality, 1980-1990 and 1991-2005



Source: Ministerio de Salud Pública de Ecuador, 2007; INEC, 2005 Produced by: Authors

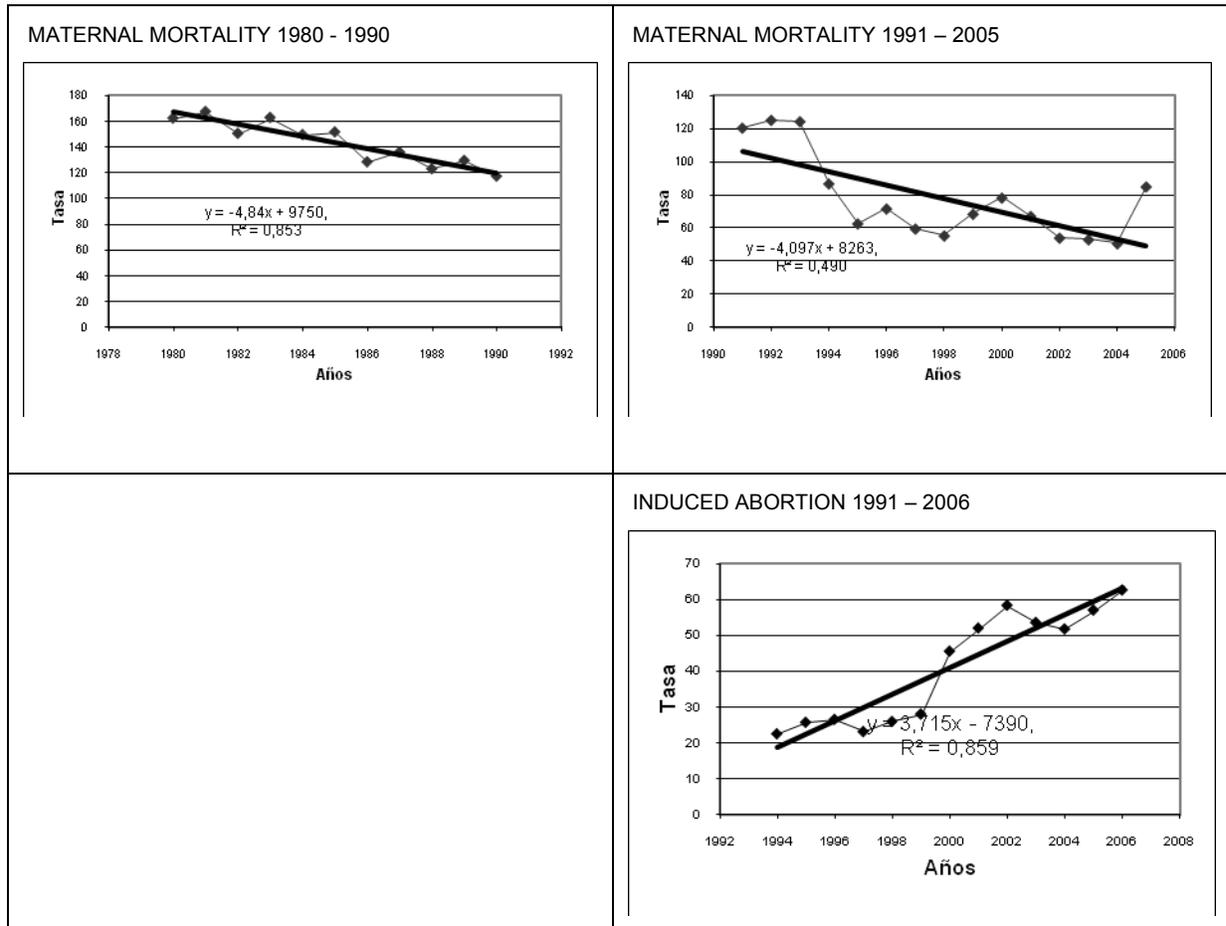
Infant mortality, an indicator sensitive to social change, also denoted an important change in the rate of epidemiological performance during the neoliberal

period (Figure No, 14). While in the 1980s the infant mortality rate presented a significantly declining slope of -2.36 ($R^2= 0,9741$) until 1990, after this year a notable slowing is observed, with a slope of -0.70 ($R^2= 0,6296$).

Maternal Mortality and Induced Abortion in the Structural Adjustment Era

As is observed in the infant mortality trends, maternal mortality presents two moments at different rates. The first covers the 1980s, during which there was a significant decrease in mortality rates ($R^2= 0,8535$) and the second, after 1991 until 2005, where there was a decrease in the rate ($R^2= 0,4908$) (Figure No. 15).

Figure No. 15 Contrast of Maternal Mortality Rates from 1980-1990 and 1991-2005 and the Growth in Induced Abortions from 1991 to 2006



Source: Ministerio de Salud Pública de Ecuador, 2007; INEC, 2005 Produced by: Authors

At the neoliberal era's end, Ecuador's maternal mortality rate was 85 for

every 100,000 live births, which is to say 12 times higher than in Canada (7 per 100,000 live births).²¹⁵ As if this were not scandalous enough, it is even more reprehensible when one takes into account the fact that during the neoliberal years the World Bank espoused the improvement of maternal health as a priority for their massive investments. We show that during these years there was an end in the significant decrease that had begun in previous years. This discovery acquires special meaning if we remember that said index is clearly associated with the complications that take place during pregnancy and birth and is thus very much influenced by the quality of obstetric services. In other words, those same problems that were supposedly a priority of the projects the World Bank offered to modernize and develop us.

Induced abortion is also tied to the availability of reproductive health supports and services. It calls attention to the rapid increase in abortions during the neoliberal years, with a significantly increasing slope of +3.71 ($R^2 = 0,859$).

Accumulation of Infective Sources and Infectious Transmission Patterns

Processes of transmission weigh down on the mortality rates and have always formed part of the poorest social classes' epidemiological profiles.

With the passage of time, however, the three great processes that have been recognized by critical epidemiology as integral to collective transmission have been transformed: a) the construction of spaces/microenvironments with infectious sources; b) the appearance and reproduction of social models of exposure to all orders of parasites; and c) the conformation of each socio-economic class or group to models of susceptibility (infectivity).²¹⁶

When the socially determinant processes of health generate consequences for the processes of collective transmission, it can be indirectly evidenced by the national infectious disease averages.

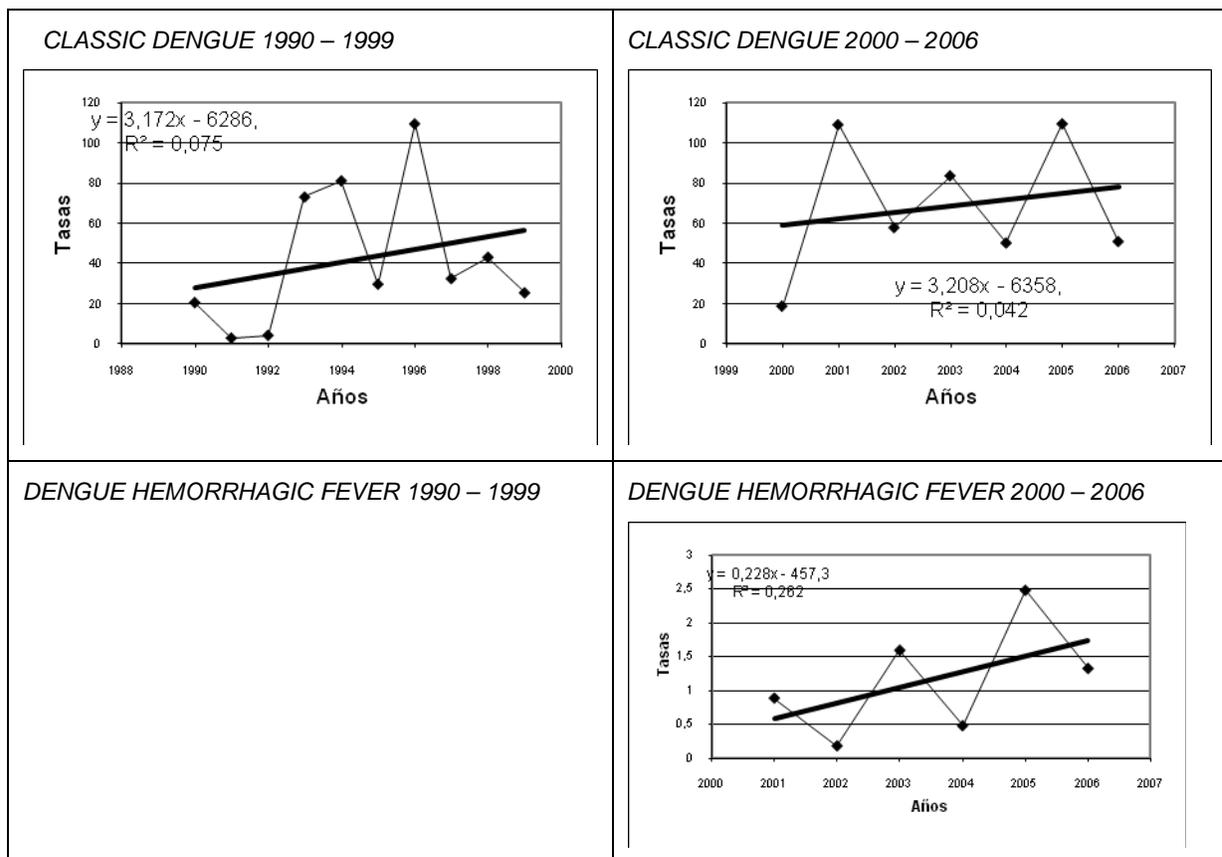
We have already discussed "The illustrative cases in Latin America" and its subsection, "The Deterioration of Urban and Rural Spaces: Vector-Transmitted Diseases." This offers an explanation of how the advance of neoliberal logic in our countries' new countryside bred dengue in all of its forms. The case of Ecuador does not show a significant increase but rather stagnation, as can be seen in Figure No. 15. The neoliberal State was compelled to focalize its actions in response to the alarm that the problem provoked. The State was at risk of losing legitimacy for failing to respond. In this context, using disaggregated data for city

²¹⁵ UN Data. Maternal Mortality Ratio, 2008 <http://data.un.org/Data.aspx?d=SOWC&f=inID%3A20>

²¹⁶ Breilh, Jaime. *Constraints and Opportunities in the Face of an Alternative EID's Research Paradigm*. Honolulu: Speech at the Dialogue of Ecology & Epidemiology to Deal With Complexity and Inequity Working Meeting, Conference on Emerging Infectious Disease and Socio-Ecological Systems at the Imin International Conference Center (University of Hawaii), March 19th, 2005 Based on Holloran, E. (1998) Concepts of Infectious Disease Epidemiology in "Modern Epidemiology (Rothman & Greenland -edit.-

zone and by socio-economic sector, we can demonstrate the problem's worsening in some of these spaces.

Figure No. 16 Rates of Increase for Classic and Hemorrhagic Dengue in Ecuador, 1990-1999 and 2000-2006

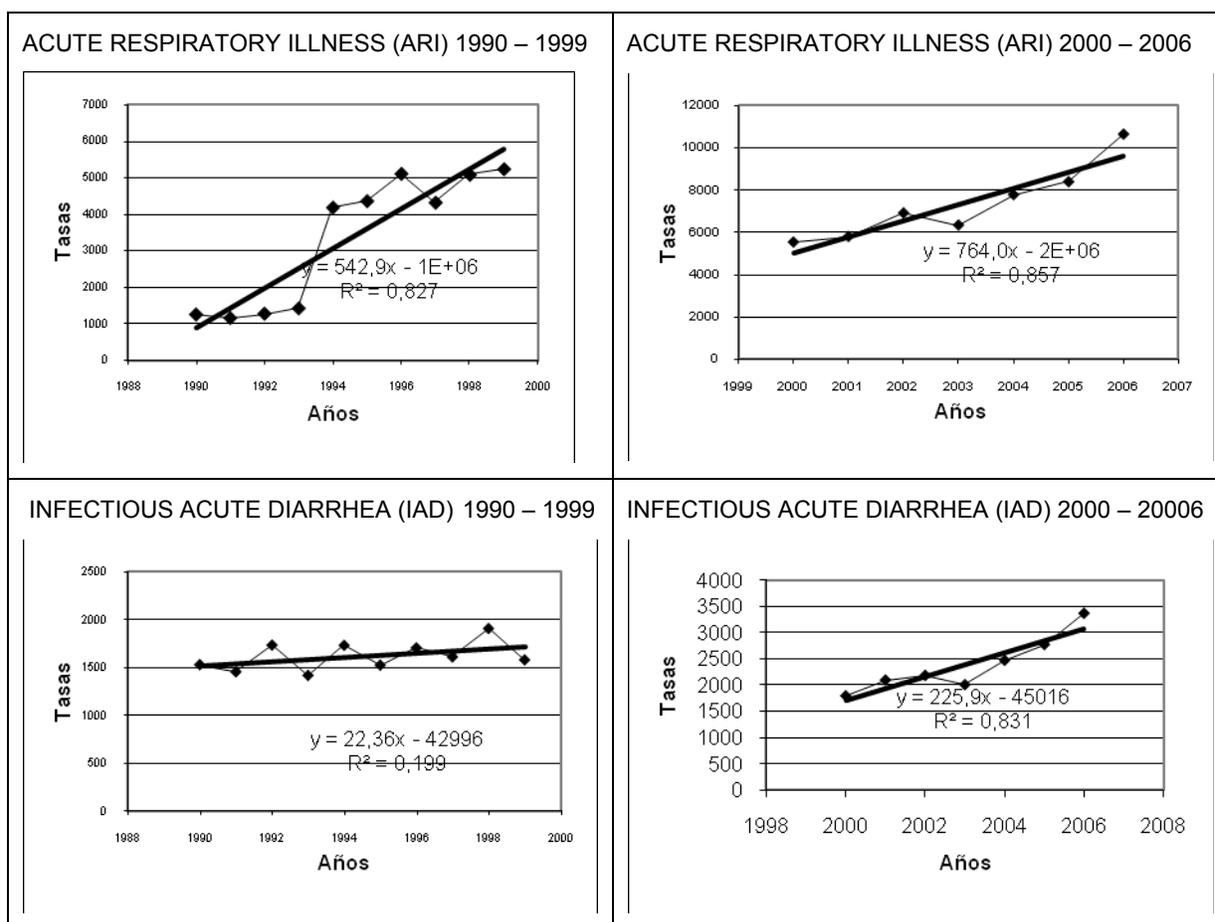


Source: Ministerio de Salud Pública de Ecuador, 2007; INEC, 2005 Produced by: Authors

On the other hand, it is worth looking at two other expressions of collective health in the adjustment years: *Acute Respiratory Illness (ARI)* and *Infectious Acute Diarrhea (IAD)* (see figure No. 17).

These two processes are known for their association with the poorest classes' living conditions. The statistics on this problem accumulate in the poorest rural sectors and the marginal urban neighbourhoods. The increase in the average national rates for ARI and IAD reflect a deterioration in the secondary spaces and circuits, rural and urban, where economic and political interests are less focused.

Figure No. 17 Strengthening of Acute Respiratory Illness (ARI) and Infectious Acute Diarrhea (IAD) in Ecuador, 1990-1999 and 2000-2006



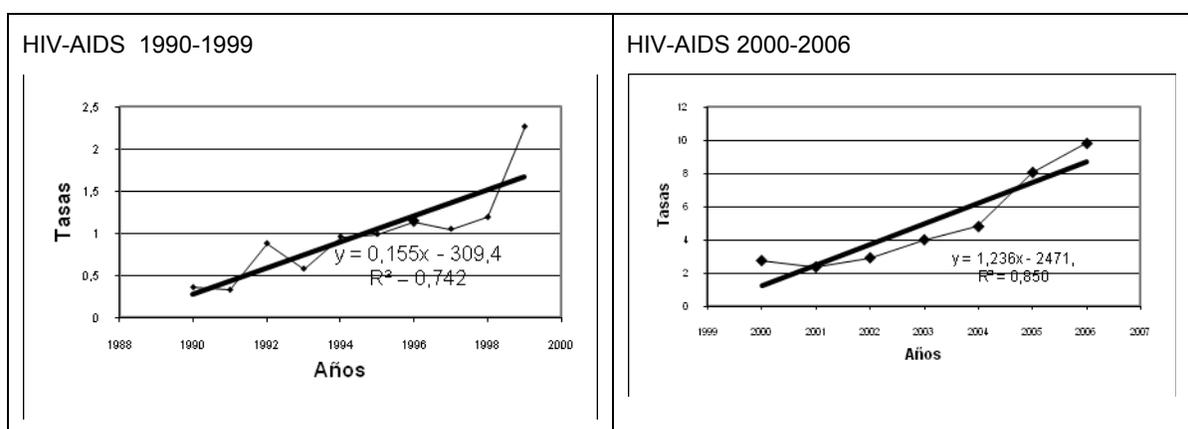
Source: Ministerio de Salud Pública de Ecuador, 2007; INEC, 2005 Produced by: Authors

In both cases, there is a clear acceleration in reports of these two processes. Thus while the ARI before 1999 showed a slope of (β) +542,9 ($R^2=0.83$), the prior slope was 764.0 ($R^2=0.86$).

Finally, in this section on transmissible disease, we must address HIV-AIDS (Acquired Immune Deficiency Syndrome), which is fought by a nearly “Grade A” program of health institutions, with access to funds and larger resources.

In figure No. 18, the slopes before and after 1999 are contrasted.

Figure No. 18 Acceleration of HIV-AIDS in Ecuador, 1990-1999 and 2000-2006



Source: Ministerio de Salud Pública de Ecuador, 2007; INEC, 2005 Produced by: Authors

The prevalence of infection by HIV-AIDS presents a significant increase from 1990-1999 of +0.156 ($R^2= 0,743$), but was considerably greater during the latter neoliberal years +1.24 ($R^2= 0,85$). Its rate of incidence has increased 27 times from the 1990s to the present. This situation is a true reflection of the social and cultural transformations of a given historical period that rapidly introduced logics and enticements for consumption and deteriorating ways of life, incorporating habitual and quotidian daily sexual practices in a context of commodified leisure lacking in values.

Proliferation of Unhealthy Living , Mental Suffering and Domestic Accidents

The proliferation of unhealthy ways of life not only impacts physical health and corresponding mortality but also gave rise to a series of problems related to mental health. We emphasize various disorders linked to said impacts, whose significant increase curves from 1994 and 2007 are tied in large part to changes provoked by acceleration: we are referring to problems such as depression, suicide attempts, alcoholism and hypertension. And the rates of domestic accidents also grew in relation to the domestic environment.

In effect, various measures of mental morbidity have significantly increased according to the evidence of the significant slopes (β) of the curves for depression, hypertension, and alcoholism for 1994-2007. Also, the case of suicide attempts and hypertension, the slopes of the subperiod 2001-2007, when the economic model's effects were expressed, show a greater growth than in the previous period (1994-2000) (see these two problems in figure No. 19 and table No. 13).²¹⁷

Table No. 13 Increase in Mental Morbidity, Hypertension and Domestic Accidents 1994-2007

MORBIDITY	Entire period 1994-2007		1994 – 2000		2001 - 2007	
	Slope (β)	Significance (R^2)	Slope (β)	Significance (R^2)	Slope (β)	Significance (R^2)
SUICIDE ATTEMPTS	+0.71	0.79	+0.56	0.60	+1.06	0.60
DEPRESSION	+2.43	0.78	+1.49	0.61	-2.20	0.30 (ns)
ALCOHOLISM	-0.02	0.004 (ns)	-0.29	0.21 (ns)	+0.41	0.40 (ns)
HYPERTENSION	+16.5	0.86	+12.4	0.81	+27.8	0.74
DOMESTIC ACCIDENTS	+6.02	0.93	+6.23	0.95	+4.45	0.51 (ns)
LABOUR ACCIDENTS	-0.25	0.05 (ns)	+0.31	0.03 (ns)	+0.80	0.13 (ns)

Source: Aguilar, E. Ministerio de Salud Pública, 2008 Produced by: Authors
http://www.msp.gov.ec/index.php?option=com_content&task=blogsection&id=21&Itemid=175

In the case of *depression*, an increase is observed in the first subperiod while in the second period it stagnates. The opposite is true with alcoholism, where the first period shows no significant variation while significantly growing from 2001-2007.

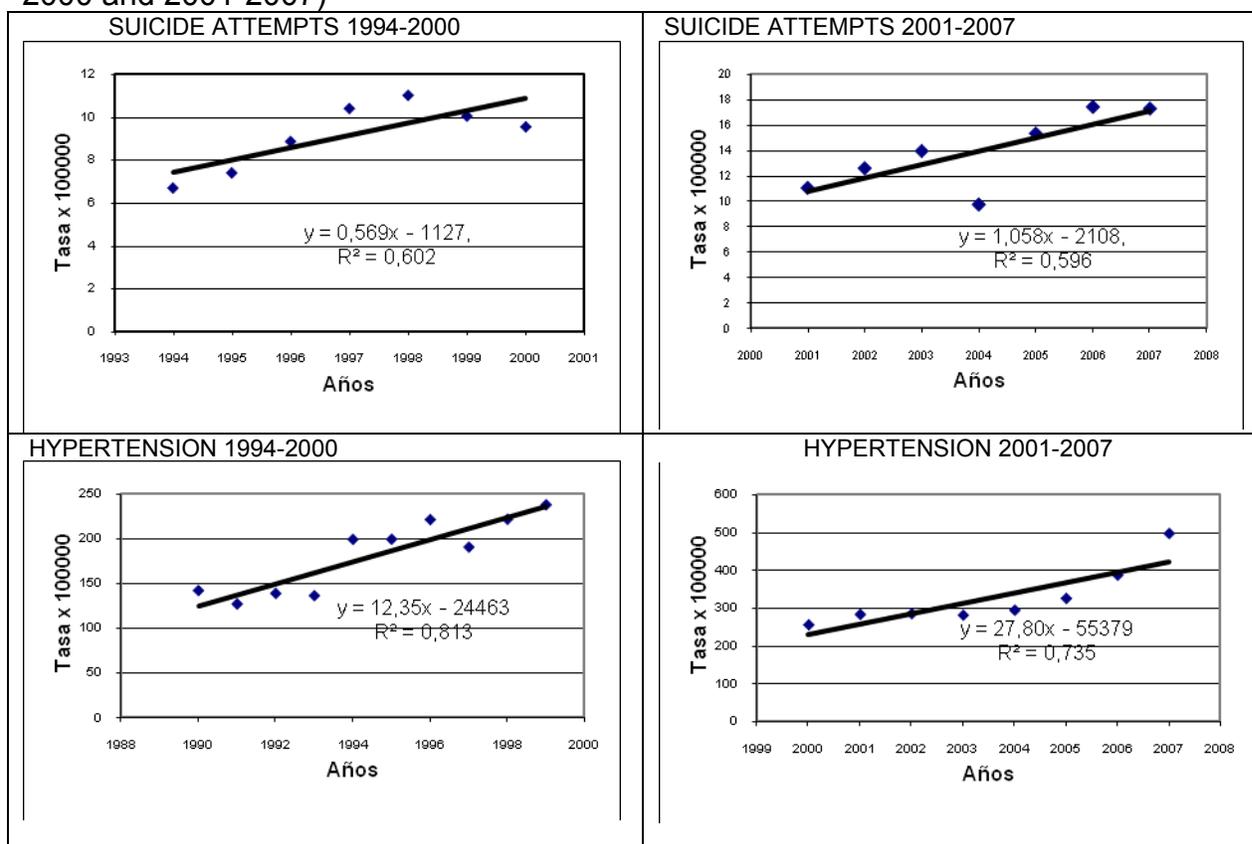
Also striking is the increase in morbidity for *domestic accidents*, which grew significantly throughout the entire period and consistently during each subperiod.

Labour accidents do not register an increase according to the source consulted. Alcoholism also basically maintains the same level, while pointing to a slight increase until the end.

As we have said from the beginning of this chapter, our country has witnessed the influx of diseases primarily associated with precapitalist or subaltern production—such as the transmissibles—along with illnesses primarily associated with the corporate mode of production, dangerous technologies and consumerism—such as poisoning from chemical residuals, cancers, mental problems, addictions, etc.

²¹⁷ Aguilar, Eduardo. *Estadísticas del Ministerio de Salud*. Quito: Dpto. de Epidemiología
http://www.msp.gov.ec/index.php?option=com_content&task=blogsection&id=21&Itemid=175

Figure No. 19 Deterioration of Mental and Cardiovascular Health in the Neoliberal Years in Ecuador, Significant Growth in the Two Subperiods (1994-2000 and 2001-2007)



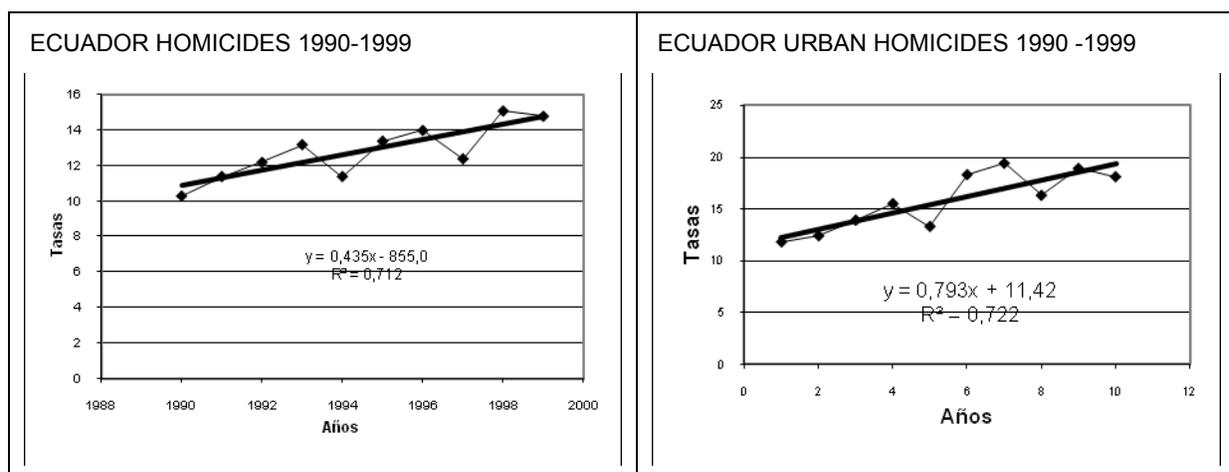
Source: Aguilar, E. Ministerio de Salud Pública, 2008 Produced by: Authors
http://www.msp.gov.ec/index.php?option=com_content&task=blogsection&id=21&Itemid=175

The real and perceived insecurity is also accompanied by a series of changes in our health profiles. Although Ecuador is located in an intermediate position in the scale of violence compared to other Latin American countries, it is worrying that social conditions are incubating increasingly aggressive and violent social conditions.²¹⁸ The market society exposes wide sectors of the population to

²¹⁸ IADB. *Magnitud y Tendencias de la Violencia en el Ecuador, 1990-1999, 2002.*

unemployment, discrimination and poverty, on par with the display of images of success and possible consumption. Facing the impossibility of accessing these standards through licit means, resorting to violence becomes a mechanism of socialization.

Figure No. 20 Rate of Death by Homicide (Ecuador 1990 – 1999)



Source: IADB. Magnitud y Tendencias de la Violencia en el Ecuador, 1990-1999, 2002

Homicide as a degradation of values and the value of human life has incessantly grown in Ecuador since 1980. From this year (6.4 homicides x 100,000) until 1990 (rate of 10.3 x 100,000) grew by 60%; and from 1990 until the end of the decade grew by 45%, and by 57% in urban areas. While neoliberalism may not have accentuated the trend, it did not substantially modify it. And the national averages probably mask sectoral phenomena where the crisis may have been more acutely present (see figure No. 20).

*The High Social, Health and Environmental Cost in the Floriculture Agro-business "New Rurality"*²¹⁹

At present, various forums on development have come to the consensus

²¹⁹ CEAS presented in: Breilh, Jaime. *Nuevo Modelo de Acumulación y Agroindustria: Las Implicaciones Ecológicas y Epidemiológicas de la Floricultura en Ecuador*. Rio de Janeiro, Ciencia e Saúde Coletiva, Janeiro-março, year/vol.12, number 001, 2007.

that no development model or national project that fails to effect a transformation of agrarian conditions and assume a deep analysis of the rural—egalitarian and sustainable production; food sovereignty and an internal market; transgenic agriculture and food industry; agrofuels, intercultural relations in the countryside—can be considered a true alternative. Something similar can be said about the place of health in an alternative project. In fact, no health proposal that fails to undertake a transformation of rural social relations for the construction of healthy ways of life in agriculture and for a defence of life and agrarian ecosystems can be recognized as a legitimate proposal. For this reason, we supplement the critical panorama of negative health indicators in the country with the following illustrative case about the multiple effects of a particular type of agro-business. It is worth noting that in various regions of Ecuador there exist even graver cases evidencing the model's destructive consequences.

The agro-businesses that produce flowers in Ecuador have flourished with State support in a context of weak protections for life. This illustrates the absence or non-application of laws and ordinances that ensure a social, healthy and ecologically adequate form of production. Instead, the majority of businesses undertook their profitable activities outside recognized international norms. It is true that if we compare the destructive processes of floriculture with those provoked by other activities, such as banana plantations, they are not the most serious. But floriculture exemplifies a branch of agro-industry that does not return an equivalent social benefit or care for humans and the environment to the degree that one would expect from such a visible and profitable sector. In floriculture, a businessperson that has between \$250,000 and \$500,000 per hectare in technology accumulates a growing social and ecological debt. The production of cut flowers for export is structured for competitive productivity and not for the wellbeing of the thousands of families directly or indirectly tied to the industry. It is not for sustainable development. The logic of accelerated capital accumulation is imposed, occupying fertile agricultural territory and draining it of its water resources, extracting the labour of poor *campesinos*, inundating the ecosystems and food chains with agrottoxics and promoting a cultural and organizational transformation towards models that abandon a sustainable agrarian culture.

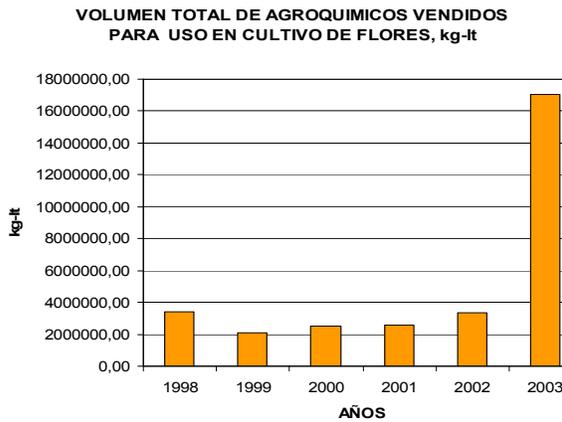
The floricultural businesses present and justify themselves as sources of employment and wealth. They set their average wages slightly higher than in other agricultural sectors. They identify themselves as a regional driving force to jumpstart progress. Companies with a national base meeting international standards report successes in competitiveness. But they offer very little to address social equality in the countryside—neither now nor in a projected future. And they cannot show us data with acceptable results on the health situation of their workers or the people living in communities in the floricultural areas. Nor do they have data for respective microbasins. They simply do not have this data and have not been concerned enough to monitor the net effects of their production.

These arguments are not meant to combat any successful form of agro-

industry. Rather, we are looking at things from the perspective of science and a project of human development. We call attention to the inconsistencies in this type of business logic in the redistribution of wealth, the possibilities for the expansion of healthy forms of life and the generation of a sustainable ecology.

The first big problems are the impacts on the ecosystem, the intensive use of water and the dissemination of a range of agrottoxins. The international demand for “perfect flowers”, similar to the situation of “blemish free bananas,” leads to the use of agrottoxins for pest control and the growth of immaculate products. The consistent washing through the use of large quantities of water leads to an extremely high consumption per hectare and per month. A flower plantation in the Cayambe region, for

Figure 21

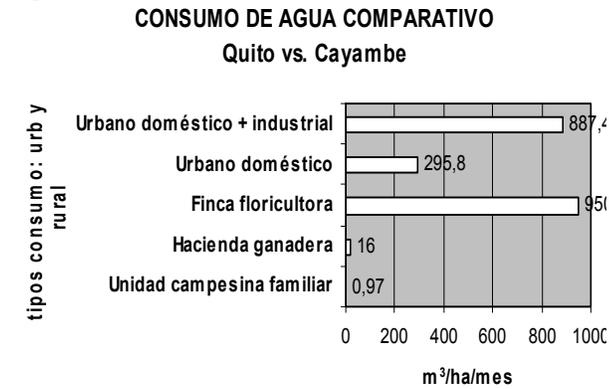


Source: GAMA, 2003; Produced by: CEAS (O. Felicita)

example, uses 60 times more water per hectare/month than a traditional hacienda, 1,000 more than a smallholder campesino, and up to 1,007 times more water per month than a hectare in metropolitan Quito with its people and industries

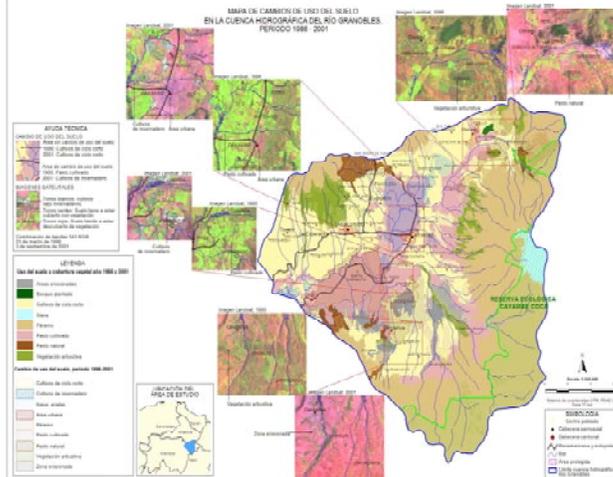
included (see Figures 21 and 22).

Figure No. 22



Source: CEAS, 2004

Figure No. 23 Contrast of Biomass from the Granobles Basin Before (1986) and After (2001) Floriculture



Source: CEAS, Proyecto EcoSalud CEAS/CIID, 2004

Investigations undertaken around the country show the contradiction between high profitability/technology and deficient social, health and environmental protection. Of the nearly 400 companies in the country

spread throughout the Northern, Central and Southern Highlands, less than 60 have met the international standards for social, health and environmental protection under the Flower Label Program (FLP). The number of active chemicals that floriculture dumps into the ecosystem is remarkable. The data are shocking, and even more so if one takes into consideration that the amount of surface area cultivated with flowers is relatively small (less than 4,000 hectares). This is much less than is dedicated to other crops such as rice (349,726 hectares); banana (266,124 has); sugarcane (131,852 has); soy (55,980); potato (49,719has); hard maize (275,145 hectares), soft maize –flower corn- (196,400 hectares); etc. (INEC-MAG, 2000).²²⁰

The Centre for Health Studies and Advisory (CEAS) study on health and environmental impacts of floriculture companies in the Granobles Basin (Cayambe-Tabacundo) has offered important contributions. Ecological evidence shows, through the study of the application of an agro-industrial scale economic model, that without the necessary precautions in place there is a loss of biomass in the floricultural region of the basin. And if we compare the satellite images obtained by the Clirsen system in 1986 (before floriculture) with those from 2001 (after approximately 15 years of operation in the agro-industry flower zone), a considerable contrast is noted (see figure No. 23).

²²⁰ INEC; MAG; SICA (2000) *II Censo Nacional Agropecuario. Datos Nacionales*. Quito: Instituto Nacional de Estadística y Censos.

The discovery is repeated at three different points in the valley, showing an important loss in green areas, which in the image symbolize greater biomass density.

This study contrasted the pollution for pesticides in water systems in the high zones (> 3000 m.) of La Chimba, Pesillo, Santa Ana and San Isidro (zones for potato production, other crops and livestock) and the low zones (< 3000 m.) of San Pablito de Agualongo and Cananvalle (zone for the collection of floricultural effluents). The corresponding systems' water and sediments from the respective channels were found to be polluted by chemical residuals in a proportion relative to their proximity to contamination sources: lower in the highest sectors of the slope, moderate in the zones for potato production, barley and pasture, and greatest in the valley of floricultural (Table No. 14).

Table No. 14 Differential Pollution in the Flower Production Region

COD ZONE	NAME	LOCATION CHARACTER	CHEMICAL POLLUTANTS AND FOUND IMPACTS E (*) (**)
CH1	Chahuancoral Alto	High altitude, close to slopes	Water: ORG. FOSF/CLOR : Betaendosulfan y Sulfato de Endosulfan (trazas) PHYS/CHEM/BIOL: pH bajo; sulfuros; nitritos; alta c. bact y DBO5 alto. Sediments: CARB: 3 Hidroxicarbofurán (trazas Agosto); ORG.FOSF/CLOR: Betaendosulfán (trazas Agosto)
CH2	Chahuancoral Bajo	After cultivation of potatoes, pasture, other.	Water: ORG. FOSF/CLOR : Sulfato de Endosulfan (trazas Feb) PHYS/CHEM/BIOL: pH bajo; sulfuros, nitritos, nitratos; c. bacte y DBO5 alto Sediments: CARB: 3 Hidroxicarbofurán (trazas Agosto); ORG.FOSF/CLOR: Betaendosulfán (trazas Feb)
AY1	Ayora Puluvi	After population and before flowers (Norte bajo)	Water: ORG. FOSF/CLOR : Betaendosulfán (trazas Feb) PHYS/CHEM/BIOL: nitritos, nitratos, con bact y DBO5 alta, dureza Sediments:

COD ZONE	NAME	LOCATION CHARACTER	CHEMICAL POLLUTANTS AND FOUND IMPACTS E (*) (**)
			ORG.FOSF/CLOR:Betaendosulfán (trazas Agosto); ppDDT (trazas Diciembre)
AY2	Ayora Granobles	After population and before flowers (Norte Bajo)	Water: CARB: Carbofurán (High Dec. 0.08 and February 7.1); Metomil (Alta Dic 1.53 y 18.2 Feb) ORG. FOSF/CLOR: Cadusafos (Agosto 7.59 y Feb 0.66); Dimetoato (trazas Feb); Clorpirifos (trazas Feb); Betaendosulfan (0.28 Dic y Tiabendazole (trazas Agosto) PHYS/CHEM/BIOL: sulfatos, nitritos, nitratos, dureza, muy alta c bact y DBO5 Sediments: CARB:Trazas de 3 Hidroxicarbofurán (trazas Agosto); ORG.FOSF/CLOR: Cadusafos (trazas Feb) y ppDDT (trazas Dic)
P1	Pisque Balneario	Centre, after the confluence of the Guachalá and Granobles Rivers, oxygenization path.	Water: PHYS/CHEM/BIOL: nitritos, nitratos, dureza, alta c bact y DBO5 Sediments: ORG.FOSF/CLOR: ppDDT (trazas Dic)
P2	Pisque "Hueco"	Glens and flori unloading floricolas (7 km from P1de Cayambe, South).	Water: ORG. FOSF/CLOR :Betaendosulfan y Sulfato de Endosulfan (trazas Dic) PHYS/CHEM/BIOL: nitritos, nitratos, dureza, alta c bact y DBO5 Sediments: ORG.FOSF/CLOR: Betaendosulfán (trazas Agosto)
P3	Pisque "Puente"	Basin Exit	Water: CARB:Carbofurán (1.5 Agosto); ORG. FOSF/CLOR : Betaendosulfan (trazas en Dic) PHYS/CHEM/BIOL: sulfatos, nitritos, nitratos, dureza, muy alta c bact y DBO5 Sediments: ORG.FOSF/CLOR: Betaendosulfan (trazas en Agosto)

COD ZONE	NAME	LOCATION CHARACTER	CHEMICAL POLLUTANTS AND FOUND IMPACTS E (*) (**)
T1	Florícola T	Florícola effluents (Cananvalle)	<p>Water:</p> <p>CARB: Carbofurán (23.1 en Dic); Metomil (3.8 Dic y 1.2 Feb). Oxamil (4 en Feb); ORG. FOSF/CLOR : Diazinon (trazas Feb); Clorotalonil 0.99 en Dic); Alfaendosulfán (0.09 en Dic); Betaendosulfan (0.35 en Dic); y Sulfato de Endosulfan (trazas en Dic).</p> <p>PHYS/CHEM/BIOL: DQO muy alto; bajo O disuelto, sulfatos, sulfuros, nitritos y nitratos altos, cloruros, dureza, c bact y DBO5 altos</p> <p>Sediments:</p> <p>ORG.FOSF/CLOR: Dimetoato (trazas Feb); Alfaendosulfán (0.09 en Dic); Betaendosulfán (78.76 en Dic); y Sulfato de Endosulfán (trazas Feb)</p>

(*) CARB= Carbamatos; ORG.FOS/CLOR:= Organofosforados y organoclorados; MET PES= Metales pesados

Phys/Chem= Physical-Chemical Parameters

(**) Indicates the types and names of the chemicals found, whether traces or greater concentrations, in water (tg/L) or in sediments (µg/kg.)

Source: *EcoSalud* (CEAS/CIID), 2004.

In the Cananvalle area (Tabacundo), for example, flower companies sell excess foliage and stems from contaminated flowers to families in neighbouring sectors. They are bought as forage for veal livestock, through which the food chain is most likely polluted. This has been confirmed through a chromatographic analysis of chemical residuals of said remains and the milk of cows that consume them. To this we must add the dissemination through sale or gift of the excess wood or plastics from the similarly contaminated greenhouses.

It has been found that floriculture has a number of other important impacts on human lives. The corporate logic has determined profound changes in communities and agricultural workers' ways of life. On the one hand, there are the advantages of enjoying a positive source of employment with a salary slightly above the poor campesino region's average income. But harmful models of life are generated, dangerous to health and exposing communities to chemical residuals.

In this way the floricultural production system presents a high labour demand, especially in periods of peak production around dates of high flower demand in the international market, such as Valentines Day.

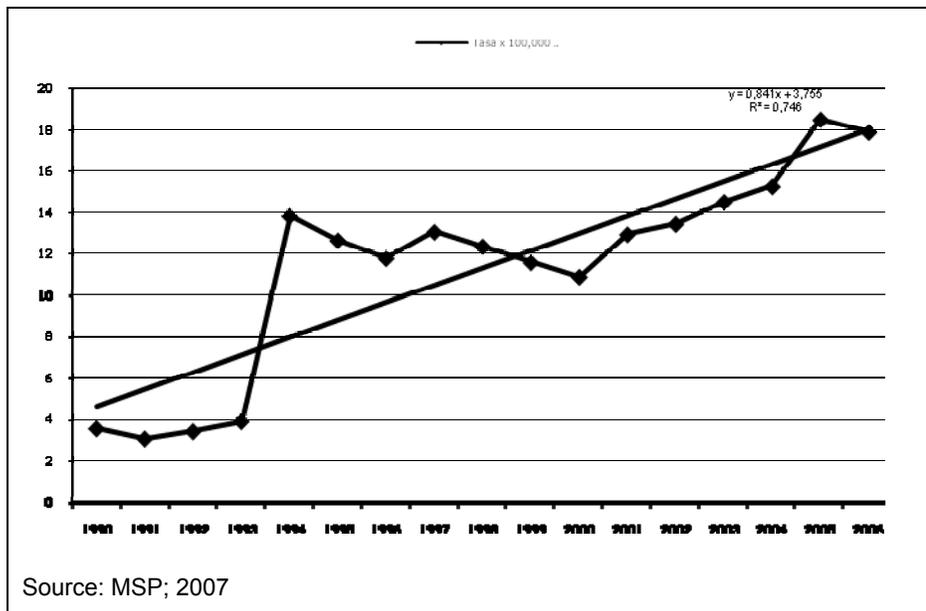
31% of the total number of families in the researched area has at least one member who works in flowers as the family's principal or secondary economic source. 24% of the primary wage earners in the most peripheral communities worked in flowers, rising to 52% in more integrated communities. In the Cananvalle community, even 67% of secondary wage earners worked in flowers. The floricultural system directly or indirectly defines the lives of an important

number of residents.

The very process of flower production is tied to modalities of intensive labour, fast paced and routinized mass production, with minimal periods and days of rest (especially during the harvest and post-harvest phases). This is particularly bad during the high cycle of flower demand, with labour profiles of exposure to chemicals and other dangers. Thus while in the communities with more flower workers 60-75% of pregnant women used pesticides, barely 17% did so in less linked communities. Likewise, while in the first group 40% of children were in contact with the mother's working clothes, in the latter only 18% were.

In Ecuador, the expansion of flower production and other agribusiness products for export after 1990 led to the increased use of agrotoxins and the incidence of poisonings (+ 0.84, $R^2= 0,7462$) (Figure No. 24). This increase goes hand in hand with the transformations of the processes of agricultural production and weakening labour protections for campesinos during the period of this study.

Figure No. 24 The Acceleration of Reports of Poisoning for Agrotoxins in Ecuador, 1990-2006



In flower companies, the organization of work in distinct areas of the farm leads to distinct problems and patterns of exposure. The types of tasks, hours, tools and machines that are employed and the distribution of shifts vary among sections and are related with to workers' daily practices.

In a general sense, the rate of cut flower production is intense and does not allow for minimum worker control over the production process. Exhausting and stressful working shifts are extremely demanding, without compensatory breaks or physical exercise or stretching. Daily and periodic resting times are minimal or insufficient. The tasks, according to area, impose a variety of damaging processes. In particular, there is a prevalence of problems such as acute physical overload, combined in some sections with static overload (such as during post-harvest); repetitive movements; temperature fluctuations; exposure to sound; respiratory irritants; skin irritations and funguses; and most importantly, exposure to agro-chemicals—eventually acute and generally chronic and low intensity—through the excessive use of highly dangerous substances (red and yellow label products). This is caused by the lack of alternative and integral pest management systems, the weakness or absence of protective mechanisms (deficient equipment; incorrect implementation of shifts and fumigation modes). Such problems are amplified in farms that are not subject to the international standards and the controls of the Flower Label Program (FLP).

The new countryside has led to particular problems and overloads for women. This is not only due to the “feminization of poverty.” The transformation of the campesina woman into a labourer has led to old patriarchal relations being subsumed by industrial labour relations and the impacts of the splintering of

community culture.²²¹

The results evidence major affects on human health in the working population. An analysis of the surveys and exams administered offers important confirmations. In the first place, the workers in all sections of the researched farms are shown to be exposed to dangerous processes. Above all, in the farms without FLP certification, nearly 60% are exposed to the majority of aforementioned dangers. Secondly, the quality and coverage of workers' protective equipment is limited, especially in farms that do not comply with international standards. Thirdly, a variety of health reports have registered high percentages of people with health affects. Contingencies and correlations will be established with analytic and control variables that are currently being studied to ascertain how many of these problems are attributable to floriculture. But in any case, certain worrying issues are clear. Workers on two types of farms are analyzed in the present study: one with more modern technology and the other we will refer to as traditional, with less technical development. In Table No. 15 it is shown that the percentage of affected workers is tied to their time working with flowers. It should be noted that increased years working with flowers tends to increase the proportion of cases. The proportion of workers affected in their neurotransmitter system (high-acetylcholinesterase or plasmatic AChE) is (23.1%); the number that display distortions of any of the organism's systems that are susceptible to toxic impact are similarly high (60.8%). In addition, the review of other distortions related to exposure to chemical residuals confirms a number of facts: changes in blood pressure (52%); toxic anaemia (14%); decrease in leukocytes (12%); hepatic inflammation 26%; genetic instability (25%); reduction in neurotransmitter acetylcholinesterase enzymes (23%)²²²; and 69% displayed moderate to severe clinical signs of toxicity. Moreover, 43% suffer from

Table N° 15 Impacts on Health According to Time Working in Floriculture, 2003

Pruebas	Años en Floricultura, % positivos (n)			Total	valor p
	<5 años	5-10 años	>=10 años		
	n=35	n=48	n=60	n=143	
AChE	39,4 (13)	39,4 (13)	21,2 (7)	23,1 (33)	0,013
Prueba de Referencia	25,3 (22)	39,1 (34)	35,6 (31)	60,8 (87)	0,123
Bateria CEAS	21,1 (16)	42,1 (32)	36,8 (28)	53,1 (76)	0,070

Source: Breilh, Campaña, Yassi, Straka et al, CEAS/UBC, 2007

malnutrition or are overweight. All of this indicates that the labour force is in poor health conditions. When the analysis advances and we have other comparative community data we will be able to better understand how much of this large

²²¹ López, Jansi. *Floricultura en el Ecuador y la Problemática de género*, San Diego: Masters thesis for the Universidad de California en San Diego, Centro de Estudios Latinoamericanos, 2004.

²²² The reduction of Acetilcolinesterasa as a conventional indicator used to measure workers' exposure to pesticides is unable to detect chronic low-intensity toxicity as a more frequent problem as our concurrent validation studies show.

problem is caused by floriculture. But the patterns of exposure make it likely that irresponsible floriculture is related.²²³

On the other hand, the study demonstrated that the typical stress of a floriculture job, including the increase in export quotas during peak periods, is an important measure of toxicity as it can strengthen its effects. It was found that 56% of workers experience stress. The prevalence of moderate and severe medical profiles was 73.4% in traditional farms and 58.8% in modern ones. At $p=0.07$, this is a significant difference. However, when we control for stress levels, this difference becomes more significant ($p=0,038$) and the difference between the farms is increased, reaching a 100% impact of toxins among the two farms most stressed workers. The same result occurs when groups of workers are compared by section. Similarly, the control of stress levels becomes more evident in the reduction of Acetylcholinesterase –AChE- rates on the two farms.^{224, 225}

*The mental suffering of the workers studied reached 38.8%, differentiated by moderate suffering (24,4%) and severe suffering (14,4%). The numbers are rather high if we consider that in an average population it should not be above 20% and 5% respectively.*²²⁶

And the neurological developments of children that live in the floricultural region's communities are also affected. Aspects of campesino youth's way of life—including factors such as low incomes, malnutrition, shortcomings in parental education, perceptions of childrearing, infant development and stimulation already affect neuromotor development—and they are also hit hard by exposure to pesticides.^{227, 228}

²²³ Jaime Breilh, Arturo Campaña, Annalee Yassi, Nadine Straka, Orlando Felicita, Maria-Lourdes Larrea, Doris Sánchez. Critical evaluation of public health screening methods for floriculture workers in Ecuador and development of a low-cost test battery to monitor toxicity from chronic low-dose pesticide exposure. San José: Abstract Paper presented to International Neurobehavioral Toxicity Meeting, 2007

²²⁴ Established through the application of a stress test called EPISTRES (developed by Breilh).

²²⁵ Breilh, Jaime; Campaña, Arturo; Yassi, Annalee; Larrea, Maria Lourdes; Felicita, Orlando; Straka, Nadine. *The Interplay of Toxicity and Stress in Agroindustrial Populations of Ecuador: Floriculture and Banana*. Paper to be presented to International Journal of Occupational and Environmental Health on December, 2008

²²⁶ Estudiado por medio del General Health Questionnaire de Golberg validado para el contexto.

²²⁷ Handal AJ, Lozoff B, Breilh J, Harlow SD. *Sociodemographic and nutritional correlates of neurobehavioral development: a study of young children in a rural region of Ecuador*. Rev Panam Salud Publica. 2007;21(5):292–300.

²²⁸ Handal Alexis J. Lozoff, Betsy, Breilh, Jaime and Harlow, Siobán. *Effect of Community of Residence on Neurobehavioral Development in Infants and Young Children in a Flower-Growing Region of Ecuador*. Environmental Health Perspective, 115 (11): 128-133, January 2007.

As has been shown, this perspective has allowed us to analyze national health indicators during Ecuador's neoliberal golden age. The results of an illustrative case have allowed us to effectively conclude that this model not only fails to bring the promised wellbeing but also propels a more serious deterioration of the country's health and environmental situation. This is an even more worrying fact given that there is no consciousness of the seriousness of the problems that have been created. Unfortunately, they will multiply in the coming years because many have a prolonged period of latency before becoming apparent.

Recently, more evident consequences have become apparent and others are beginning to emerge. There are cases, still isolated, of children with congenital malformations, increases in the incidence of cancer, effects of neurological and respiratory disorders and diverse impacts on mental health. In sum, all of that which is apparently obvious has nonetheless passed unrecognized, not only for the population but also for the public institutions that are the supposed guarantor of the right to health.

A poor health culture has been created and reinforced. The insensitivity with which they design and manage the productive processes and the lack of consciousness among the affected populations of health and their rights are combined with the biomedical model that **lleva mucosa** to think of all that hospitals and clinics must do to deal with the casuistry that continues to be generated.

FINAL REFLECTION: CHALLENGES FACING THE RIGHT TO HEALTH

The people of Ecuador and other Latin American countries began the new millennium with a fresh energy, despite the historic conditions and the difficult reality of a health system in crisis. The collectivities of South America have an era of social, political and cultural promise ahead of them, the possibility of retaking control of their history after nearly three decades of aggressive adjustment. This mobilization can be analyzed from the perspective of social sciences as a social and political victory. From the perspective of health sciences, it is a clear step towards the recuperation of the right to health. After the neoliberal night, we can observe interesting advances in the recuperation of goods and rights stolen from life, promoting just ways of life and the discovery of joy—although the new social dawn is not yet clear.

The *Alternative Health Report on Latin America* (Global Health Watch-CEAS, 2005) dedicates an entire section to describing the advances towards "This Other Possible Health" and recognizes fundamental achievements that have taken place in our countries, as much a product of democratic governments as of peoples.

In the Ecuadorian case, the experience of facing and defeating three neoliberal governments strengthened the collective conviction that it was possible to advance through organization and nonviolence. But it also showed that it was indispensable to win a critical space, plural and intercultural, where different ideas

and proposals about our society could be articulated and points of unity for a transformative struggle consensed upon.

The political victory against the Right's model allowed for the construction of an open and democratic space centred in the National Constituent Assembly, which elaborated the constitution of 2008 with the help of thousands of social organizations and academics. The new political charter, despite its imperfections, is one of the most advanced in the world. There is an interplay between the transformative content and its form. Its juridical structure consolidates important advances in the broadening and innovation of rights, placing them all for the first time in one fundamental level of importance. Moreover, they were assembled in such a way so as to establish an interdependence of rights. It consolidates a clear system of guarantees with organizational foundations and systematizes them around innovative categories that unite the oversight of the particular rights to the economic, political and cultural regimes that sustain them and make them viable.

And thus the country's social movements close the first chapter of a process that seeks to construct another possible country. This is a step of enormous importance that is more of a point of departure than a destination, a platform and agenda from which to advance towards the achievement of rights and guarantees that will direct the unification of forces to defeat the dominant project.

No one, and at the same time everyone, are owners of the new constitution, which does not pertain to or exist under the authority of any individual social or political sector. Its articles preserve the trace of long working days and analyses by thousands of organizations, of hundreds of workshops over the period of a year, concretizing the creative spirit of a people who firmly reacted and banished neoliberalism and its attacks on health that we have systematically analyzed throughout this study.

Those that try to challenge the result of the constituent assembly through appeals to technicalities and legal ruses pertain to an obsolete country of the elites. The new constitution is not perfect if seen from a legal-technical perspective. Rather, its value is in its social and mobilizing character and its novel deployment of the guarantees, requirements and institutional norms necessary for the protection of human rights.

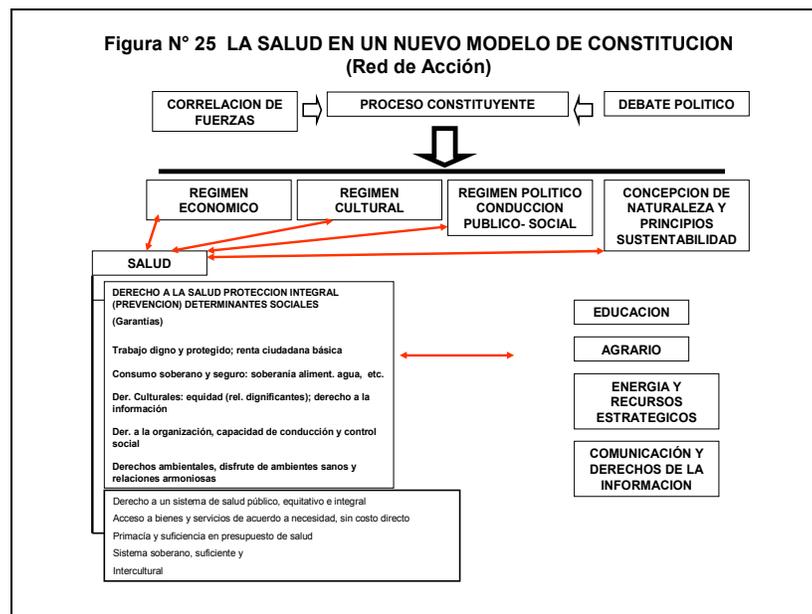
The *Health Rights Action Network*, alongside other organizations, mobilized to support the National Constituent Assembly, contributing to a debate around the improvement of the social and technical language on health. The right to health is not limited to particular headings or articles. From the beginning, we adopted the fundamental premise that the right to health is an individual and collective right guaranteed by the State, indissolubly tied to the assurance of other rights that determine a healthy way of life and depend on economic, political and cultural structures. The right to health should not depend on citizens' economic capacity or social, labour, ethnic, or gender status.

We successfully advocated for the necessity to keep our distance from a medicalized, technocratic or uncultural way of thinking. It was necessary to demolish the medical logic and culture forged during nearly two decades of neoliberalism and submissive functionalism. It was necessary to break the hegemony of technocrats and their narrow allopathic vision. In Ecuador, it was necessary to banish the rule of ideas crafted by the World Bank and its programs.

We understand that the debate and elaboration of a new constitution is essentially both political and scientific, and only secondarily juridical or technical. The “constitution is a political and not a juridical law” because it does not regulate or organize itself as laws, but instead institutes and founds” (Córdova, 2007). So it would have been wrong to reproduce a revamped version of the old and reductionist health ideas and practices in the new constitution, a better organization of the same old thing.

Thus we worked with six thematic axes, which followed the Network's work calendar, organized by commission:

- [1] Citizen Oversight / Political Rights
- [2] Global Rights, Regimes and International Treaties
- [3] Protection and Social Security
- [4] The Right to Healthy Work, Environmental Rights and Health
- [5] The Right to Healthy Consumption (Living Conditions)



[6] Cultural Rights, **University/Universality?** and Health

Each group had the responsibility for the analysis of their axis' issues and they did so keeping in mind each of the other working groups within the Assembly: Group 1. Fundamental rights and constitutional guarantees; Group 2. Organization, citizen participation and systems of representation; Group 3. State structure and institutions; Group 4. Territorial ordering and the assignment of responsibilities; Group 5. Natural resources and biodiversity; Group 6. Production and Work; Group 7. Regime and model of development; Group 8. Justice and the fight against corruption; Group 9. Sovereignty, international relations and Latin American integration; Group 10. Legislation and oversight.

The interweaving of the thematic definitions made coherent collaboration between the Network and the Assembly possible.

At the present time, it is crucial to clearly understand the role that we must undertake during the next phase: the consolidation of the right to health through the application of new constitutional precepts in the elaboration of pertinent organic laws and the improvement of our organizational priorities.

And we must not accept at face value the argument that current laws simply lack guarantees and regulations to effect a redistribution of resources. This would be akin to accepting that the current challenge is nothing more than a better distribution of the same old model. It would be like acting as if "health equality" solely consisted in expanded curative services as they currently exist, tied to the logic of medicine consumption and transnational corporate groups. This lucrative logic of health access through the market leaves untouched the hegemony of the pharmaceutical and medical companies, whose efficient business machinery is supported by the private insurance system. As always, they do not support the programs that concern other areas of the right to health. There must be a change in direction, and this change can no longer be a cosmetic makeover of the same ideas, spaces and practices that have characterized the current unjust, squalid and outdated system of health. It is indispensable to begin with a profound redefinition of the very right to health. It is in this direction the Health Rights Action Network has defined its task: ²²⁹

"Health is a fundamental human right for all, both individuals and collectives, and a responsibility guaranteed by the State. It is the result and object of the development regime insolubly tied to other fundamental rights such as food, water, work and a dignified life. The state applies this guarantee through the implementation of a development regime and social and economic policies that ensure

²²⁹ The Health Action Network in the Constituent Assembly, coordinated by the Universidad Andina, brought together 48 social and academic organizations working on health issues.

*healthy ways of life and the reduction of health dangers in all areas of social life. It must guarantee free, universal and egalitarian access to **acciones** and services for the promotion, protection and recuperation of health. In addition, the right of collectivities and people to define their own way of life, culturally and organizationally necessary for health, must be protected, in accord with their particular vision, ethnocultural condition, gender and age. The realization of a healthy human life depends on the inalienable conditions of dignity, self-determination, free association, total wellbeing and the enjoyment of a harmonious relation with healthy environment and microenvironments and the full respect for sexual and reproductive autonomy.*

Health constitutes a strategic public good, whose effectiveness depends on integral human development and other human rights.

The right to health entails Ecuadorians' guaranteed and free access to the public goods and services of the health system. These same services, including health system services and programs, which sustain a good quality of life, must be free of whatever exclusion for economic, ethnocultural, or migratory situation, or for sexual preference, physical or mental capacity or ability, or age group. Nor can there be exclusions based on age group. They must cover—sufficiently, and with opportunity, warmth and quality—all activities relating to the promotion, prevention, and recuperation of human or natural life, without which the existence of the right to health is impossible.

Whatever violation of this right, whether by a public or private agent, is a violation of human dignity. No one can be deprived of this right for any motive whatsoever.

Due to its fundamental character, the right to health can be directly invoked before administrative or jurisdictional authorities even if a given legal regulation is lacking. Its implementation is therefore independent of regulation.”

In consideration of this argument, our study was conceived as a way, from the world of science, to promote a deep reflection on health, uncovering the mechanisms through which neoliberal globalization has accelerated the deterioration of health in Latin America and Ecuador.

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