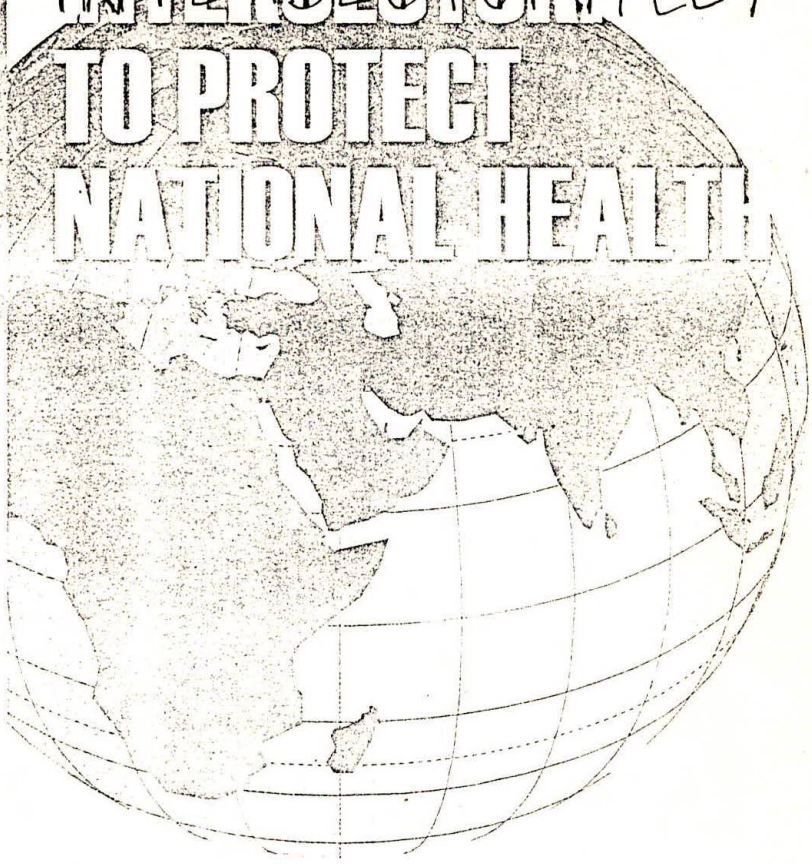
4363

MARCH 1997

WHO/PPE/PAC/97.2
Distr.: Limited
English only

Duplicate

THINK AND ACT
GLOBALLY
AND
INTERSECTORALLY
TO PROTECT
NATIONAL HEALTH



WORLD HEALTH ORGANIZATION

Contents

Glossary of Acronyms and Abbreviations

ACC	Administrative Committee on Coordination
CAC	Codex Alimentarius Commission
CIOMS	Council for International Organizations of Medical Sciences
CIDA	Canadian International Development Agency
COPINE	Cooperative Information Network Linking Professionals in Africa and Europe
CVI	Children's Vaccine Initiative
DALY	Disability-adjusted Life Years Lost
DNA	Deoxyribonucleic acid
ECOSOC	Economic and Social Council
EMC	Division of Emerging and other Communicable Diseases Surveillance and Control
EPHF	Essential Public Health Function
ESA	European Space Agency
FAO	Food and Agricultural Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GINC	Global Information Network on Chemicals
HACCP	Hazard Analysis and Critical Control Point system
hCG	Human Chorionic Gonadotrophin
HIV	Human Immunodeficiency Virus
IAEA	International Atomic Energy Agency
IACSD	Inter-Agency Committee on Sustainable Development
ICPD	International Conference on Population and Development
IFAD	International Fund for Agriculture and Development
IFCS	Intergovernmental Forum on Chemical Safety
IBRD	International Bank for Reconstruction and Development
IGO	Intergovernmental Organization
IHR	International Health Regulations
ILO	International Labour Organisation
IMF	International Monetary Fund
ITU	International Telecommunications Union
LDCs	Least Developed Countries
NGO	Nongovernmental Organization
OECD	Organisation for Economic Cooperation and Development
PRTRs	Pollutant Release and Transfer Registers
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers to Trade
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCED	United Nations Conference on Environment and Development (1992)
UNCHS	United Nations Centre for Human Settlements (HABITAT II)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations Office of High Commissioner for Refugees
UNIFEM	United Nations Development Fund for Women
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UN/OOSA	United Nations Office of Outer Space Activities
UNRISD	United Nations Research Institute for Social Development
UVR	Ultraviolet Radiation
WFP	World Food Programme
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization

Preface and Overview

The findings and recommendations of this global intersectoral review will be presented, in conjunction with national and local intersectoral reviews from developing and developed countries, to an international group of experts at a WHO international conference, *Intersectoral Action for Health: A Cornerstone for Health-for-All in the Twenty-first Century*, to be held in Halifax, Canada in April 1997. This document will also be used as a working paper at this conference. The Intersectoral Action for Health project represents an integral component in the development of a Health-for-All policy for the twenty-first century.

The major premise of this paper is that transnational threats and opportunities for health improvement in the twenty-first century will have major implications for WHO's future strategies and patterns of alliance. Global intersectoral collaboration will become more important in order to address the health status repercussions of, *inter alia*, global trade and travel, environmental degradation, new technology and communications, macroeconomic change and adjustment, and the transnationalization of unhealthy lifestyles and risk factors. As a response to these changes it will become increasingly important that WHO builds global alliances in order to create a facilitating environment for intersectoral action for health at national and local levels. This document will consider how WHO might build competencies and partnerships at the international/regional intergovernmental levels in order to address the broad determinants of health status.

In order to address the challenges of an increasingly globalized and rapidly changing world it is imperative that WHO's future actions not be conditioned by a business as usual approach. Only by *thinking and acting globally and intersectorally to improve national health* can WHO expect to bend global trends which have negative implications for achieving future health gains. Towards this end, it will become more important that WHO coordinates its policies and actions with its various health partners. At the international intergovernmental level of analysis it is crucial that the Specialized Agencies, Funds, and Programmes of the United Nations system and the Bretton Woods institutions/WTO form alliances to address the major transnational issues and broad determinants of health status, in order that human health becomes a primary objective of sustainable development. Moreover, it is important that these international institutional alliances are used to promote development settings at global, national, and local levels which lead to tangible health gains.

World society now recognizes more clearly than ever before its mutual needs; it must accept a shared responsibility for meeting them (Brandt et al.,1981).

A new kind of citizen is necessary if the human race is to survive. That citizen's loyalty should not stop at anything short of world loyalty (Chisholm,1948).

I. Section One: The Rationale for a Global Intersectoral Review

Introduction

In the 'global village' of the late twentieth century it is increasingly evident that the health of populations is dependent on numerous external factors which include, *inter alia*, market forces, environmental hazards, access to mass communications and technology, and cultural influences. As a result, a global health strategy must consider the broad determinants of health status. International development strategies which aim to improve the health of populations must therefore include a key role for intersectoral initiatives (Neufeld,Bergevin & Tugwell,1993). Complex, interrelated health development challenges increase the need for the health sector to "share power with other sectors, other disciplines, and most importantly with people themselves" (*Ottawa Charter for Health Promotion*,1986). Although intersectoral action is necessary to address the multiple determinants of health the practical implementation of these initiatives has often proven to be "an illusory goal" (Yach,1997,p.250). Moreover, the cumulative experience in implementing intersectoral collaboration for health initiatives underscores the "real difficulties of the task" (Sindall,1997,p.5).

However, a multi-dimensional approach needs to be stressed in the World Health Organization's updated policy if it is to maintain its leadership within the international health development community in the twenty-first century. WHO's *Task Force on Health in Development* has recently observed that the rapidly changing context of health development makes it imperative that WHO use its international leadership role to become "a truly global organization" (WHO, 1997a,p.4). At the global level an intersectoral approach means revisiting the way that WHO thinks and acts; failing to do so would risk becoming ineffective given the rapidity and complexity of change. It is within this context that this global intersectoral review aims to determine the implications of major global trends for WHO's global alliances in the twenty-first century.

Goals

The primary goals of this global intersectoral review are:

i. To review the health challenges, determinants of health status, and context of health development from a global perspective.

ii. To identify the principal transnational challenges to health improvement for the twenty-first century.

iii. To propose solutions to address these transnational health problems

iv. To assess the implications for WHO's future global actions, institutional structures, and interactions with its global health partners.

v. To identify case studies of intersectoral action for health at the international intergovernmental level of analysis which suggest "best practices" for future global intersectoral action.

This paper will concentrate primarily on WHO's interaction with its partners within the United Nations System, including the Bretton Woods institutions and the World Trade Organization (WTO). This analysis will also analyse transnational health problems within the context of an international society of states, taking into consideration WHO's responsibilities to Member States. Furthermore, since the problems and opportunities identified in this document are transnational in nature, this paper, while concentrating at the intergovernmental level of analysis, will also stress that global alliances with other transnational/national actors, such as regional development banks, international/grassroots nongovernmental organizations, the private sector, and local governments are equally as important to address the global health development challenges facing humanity now and in the future.

The Definition of Intersectoral Action: A Global Perspective

Most analyses of intersectoral strategies fail to delineate at the outset what comprises a sector. For purposes of this paper a sector will be defined according to the definition suggested by Degeling et al. (1992) in *Can Intersectoral Cooperation be Organized?* This definition includes the following criteria: institutionalized patterns of knowledge and expertise; well-defined 'professional/administrative/political territory; continuity in planning, accountability, and action strategies; formalized hierarchies; and established resource allocations for specific functions and work. Further, the concept of intersectoral collaboration in health development implies that the formalized institutional structures which constitute a sector develop "a recognized relationship between part or parts of the health sector and part or parts of another sector, that has been formed to take action on an issue or achieve health outcomes...in a way that is more effective, efficient, or sustainable than could be achieved by the health sector working alone" (National Centre for Health Promotion,1995).

A global intersectoral review will examine how specialized intergovernmental agencies such as WHO can address the emerging development challenges of the next century. According to the definition of a sector, quoted above, the Specialized Agencies of the United Nations system also meet the 'institutional' criteria of a sector. Accordingly, one approach would be to assume that a 'global' intersectoral health action includes the World Health Organization and at least one other Specialized Agency, such as the Food and Agricultural Organization. However, this does not take into account that other United Nations bodies (Table 1) described as "Funds", as well as the Bretton Woods bodies and the World Trade Organization (WTO), are also engaged in health related activities (Lee et al., 1996), and are involved in standard-setting in the health domain (WHO,1997,p.2)[1]. Therefore, for purposes of this analysis the term intersectoral/ interagency collaboration will refer to collaborative undertakings between WHO and one or more of the UN Specialized Agencies/United Nations Funds or Programmes, the Bretton Woods institutions/ WTO to protect and improve the health status of populations within countries.

TABLE 1.

UNITED NATIONS HEALTH RELATED ORGANIZATIONS
World Health Organization
World Bank
UN Children's Fund (Unicef)
UN Population Fund (UNFPA)
UN Educational, Scientific, and Cultural Organisation (UNESCO)
Food and Agricultural Organization (FAO)
World Food Programme
UN High Commissioner for Refugees
International Labour Organisation
UN Environmental Programme
UN Fund for Drug Abuse Control

Source: Lee et al. 1996, p.302

[1] Likewise, at the national level of analysis the work of the health sector, which in its narrowest definition refers to Ministries of Health, overlaps with the work of numerous other sectors, for example Ministries of the Environment, Education, and Social Affairs, which are involved directly with health-related activities.

II. Section Two: Globalization - The New Realities for Health Development

Theoretical Perspective

The world political economy is presently undergoing a global revolution in such areas as finance, trade, communications, research and technological development, and intellectual and knowledge services. This section will document these alterations in the world's political economy and identify challenges for health development that will affect the health objectives of all nations. Despite major health gains throughout the world, significant global threats to future health improvement exist in the late twentieth century which could jeopardize future health improvement. The following analysis will document the primary transnational issues that will likely affect future global health status, and will suggest how intersectoral/interagency initiatives can address these problems.

Transnational Challenges

Globalization, defined as the process of increasing economic, political, and social interdependence and global integration which takes place as capital, traded goods, persons, concepts, images, ideas, and values diffuse across state boundaries, is occurring at ever increasing rates (Hurrell,1995, p.447). This broad definition contrasts with others which limit the term to financial and trade areas. Globalization will have both negative and positive repercussions for future health development activities and the health status of human populations. The principal features of this global transformation include, *inter alia*, the following global trends (UNRISD,1995)

- *The expansion of liberal democracy*
- *The dominance of market forces*
- *The integration of the global economy*
- *The transformation of production systems and labour markets*
- *The speed of technological change*
- *The media revolution and consumerism*
- *The pressure for governments to reduce budgets and increase internal efficiency*

For purposes of the following analysis it will be assumed that global transformation is occurring at two primary levels[2]:

First, the globalization of the state which involves diverse phenomena such as complex communication systems, ecological issues such as environmental degradation and climate change, and mass movements of populations across borders. These factors have resulted in transnational policy linkages between states which are of mutual concern for state governments and policy-makers. The idea of transnational problems transcends the conventional boundaries of domestic and international policy-making.

Secondly, the globalization of the world's economy which has resulted in an explosion of cross-border trade and financial transactions forming complex networks of economic interdependence. Accompanying these changes is an intense competition for international market share and market access.

Political, social, and economic integration is also occurring at the regional level, and this is enhancing the interdependence and transnationalization of the world's political economy[3].

[2] This approach is adapted from Professor Sakamoto's description of globalization in the United Nations study *Global Transformation: Challenges to the State System (1994).*

[3] See for example, *Health Systems in an Era of Globalization*(Frenk et al,1995), and a recent FAO publication *Overall Socio-Political and Economic Environment for Food Security at National, Regional and Global Levels*(FAO,1996): both of these analyses assume that global and regional integration are complementary processes. An opposing view in the literature is that regionalization and globalization could be conflicting processes, especially if closed regional blocs were to evolve. A variant on this theme is provided by Huntington's *"Clash of Civilizations"*; in this scenario future conflict is based on cultural allegiance and identity.

The Globalization of Liberalism

The roots of globalization can be traced back to the industrial revolution and the *laissez faire* economic policies of the nineteenth century. However, the globalization of the late twentieth century is assuming a magnitude, and taking on patterns, that are unsurpassed in world history (Ruggie,1995,pp.507). The redrawing of the world's political economic map has been facilitated by the end of the Cold war, the fall of the command economy system in Eastern Europe and the rest of the former Soviet bloc, and the subsequent dissolution of the former Soviet Union. Yet, the seeds of this global restructuring were well established amongst the OECD countries before these events took place. Since the late 1960s, the 'Western' industrialized nations were linked into a process of progressive economic liberalization as offshore financial markets grew and trade liberalization expanded. In the 1980s global integration coincided with recessions in the 'Western' world and a debt crisis in the 'Third' world: these constraints resulted in more acute economic competition and inter-state economic rivalry, which in turn, resulted in a push to accelerate the restructuring process along neo-liberal lines. The debt crisis and decreased terms of trade for third world exports meant that many of these countries faced recurrent economic crises. These problems set the stage for the IMF and World Bank structural adjustment policies (Gill,1994,pp.175-176).

These alterations in world politics have implications for the autonomy of the state and its freedom to set 'national' policies: states cannot set policy without accounting for external factors and constraints in a globalized world. It has become apparent that no "sovereign" state can take actions in complete isolation from other state actors. States who act as loners in international society risk damaging their own economic and political well-being (Sakamoto, 1994, p.1-2). The blurring of boundaries, which attends a transnational shift in the political and economic interactions of individuals, multinational companies, IGO/NGOs, and collectivities such as nation-states, requires a reconstruction of many of the 'traditional' premises and paradigms of policy action. The UNDP, in its *Human Development Report (1993)*, observed that certain constraints exist within the global decision-making environment:

> "Pressures on the nation-state, from above and below, are beginning to change traditional concepts of governance. On the one hand, globalization on many fronts-from capital flows to information systems-has eroded the power of individual states. On the other, many states have become too inflexible to respond to the needs of specific groups within their own countries. The nation-state now is too small for the big things, and too big for the small (UNDP,1993,p.5)."

Since the processes of global integration are exerting 'pressures on the nation-state from above and below', global initiatives to foster intersectoral/ interagency collaboration should maximize the opportunities for renewed forms of governance for health to coordinate and share responsibilities for these initiatives at global, national, regional, and local levels. Also, the issue of improving internal efficiency of public institutions, a point well documented within the World Bank's literature, poses another challenge to implementing effective development strategies.

The accelerated process of change documented herein could spell both great opportunities for improving the livelihood and social well-being of millions of persons, but, it could also mark a time of potential political and economic disorder, if the changes lead to a breakdown in the social contract between state and society (Ruggie,1995,p.525-526). Moreover, the 'mental maps' that policy makers rely on as policy templates in order to guide their decisions have become 'severely strained' because of the blurring of the boundaries between domestic and international spheres by the processes of globalization.

Health Implications of Global Trends

It is becoming obvious that the "polarizing effects of globalization" pose a major threat to public health (UNRISD,1995,p.26), and at the same time offer major opportunities. The implications of globalization and transnational trends for health development are primarily fourfold:

- the globalization of health risks and disease, as well as opportunities such as the diffusion of ideas and technology;
- the need for global intersectoral action through transnational cooperation and partnerships;
- an enhanced role for international legal instruments/regimes, standard-setting, and global norms;
- the need for new intersectoral forms of global vigilance, monitoring and assessment are essential because information on health status and the global determinants of health are vital for defining future actions in a rapidly changing policy environment.

The following analysis will summarize these major transnational themes and demonstrate where global intersectoral initiatives are critical.

Globalization of Travel and Trade

This section will examine the transnational policy implications of increased trade and travel for health development. The globalization of trade and travel poses major challenges transcending national boundaries. These newly emerging challenges make the need for global intersectoral, multi-disciplinary collaboration more urgent.

Globalization of Infectious Diseases

A consequence of the increase in transnational trade, travel and migration is the greater risk of cross-border transmission of infectious diseases (WHO/EMC, 1995): *"Disease Knows No Boundaries, and Borders are Porous to Disease"* (Kamel, 1996). As the world becomes more interconnected, diseases are able to disseminate more rapidly and effectively. The worldwide spread of the human immunodeficiency virus (HIV) epitomizes this trend towards the globalization of infectious diseases.

Globalization of Infectious Diseases

In the past 200 years the average distances travelled and the speed of travel have increased a thousandfold, whereas disease incubation times have not changed; as a result, an infected person may now arrive at their destination and not develop symptoms for many days (WHO,1995a; Garrett,1996). With the number of passengers travelling by air increasing by seven percent per year in the past twenty years, and projected to increase by over five percent per year over the next twenty years, more people are travelling for recreational and business purposes today than any other period in history (De Schryver and Meheus, 1989;WHO,1996a). The movement of persons across international borders has increased by 7.5 to 10 percent since the middle of this century, so that over one million persons now cross international borders per day (Garrett, 1994,p.xi).

Also, global trade liberalization has resulted in multinational food production, processing and distribution, as the international trade in food and food products has soared[4]. The mass production and extensive distribution systems in the food industry, combined with a surge in international food trade, favour the spread of infectious diseases over wide areas (WHO/EMC, 1995;

[4] The value of global food trade in 1994 was US$266 billion, almost 300 percent greater than it had been 20 years ago (Kaferstein et al,1997).

Wilson,1995,p.43). Further, with approximately 400 million persons travelling across international borders every year the transmission of foodborne diseases presents a significant international health problem (Kaferstein et al., 1991,p.41).

In the 1990s stagnation in funding for communicable disease surveillance programmes has left many states poorly equipped to manage new and re-emerging disease problems. One factor that has contributed to the inadequate levels of funding for public health infrastructures is increased levels of global economic competition, which have placed pressure on national governments to adopt budget austerity measures (Fidler,1996). Also, with the collapse of public health systems in many countries, for example in the former Soviet Union, old diseases such as diphtheria have re-emerged. Moreover, the post-war optimism created by the development of new antibiotics and vaccines led to a complacent attitude and decreased vigilance towards infectious disease threats. Combined with several other emerging realities cited below it is evident that communicable diseases will remain a major and unpredictable public health problem in the twenty-first century.

Infectious Disease: A Lingering Transnational Problem

Numerous recent trends favour the spread of communicable diseases. These include *inter alia*:

- new and re-emerging infectious agents
- new drug resistant strains
- pharmaceutical research not keeping pace with microbial resistance
- erosion of disease surveillance systems
- increased urban population density and number of persons living in poverty
- increased susceptible populations e.g. the aged
- wider distribution of communicable disease vectors due to global warming.

In 1995 it was proposed to the Forty-Eighth World Health Assembly that a global plan be established to combat emerging and re-emerging infectious diseases and to meet the communicable disease realities of the late twentieth century. Four specific goals were proposed for this global plan (WHO, 22 February 1995):

- strengthening the global surveillance of infectious diseases;
- establishment of national and international infrastructures to recognize and respond to new disease threats;
- further development of applied research;
- strengthening of international capacity for infectious disease prevention and control.

To combat the transnational problem of communicable disease dissemination and to act effectively on the four above-mentioned recommendations global intersectoral collaboration will be essential.

Global Disease Surveillance: A Challenge for the Future

WHO in conjunction with its various health sector partners is presently involved in establishing a **global surveillance system** which will focus on, *inter alia*, developing global monitoring and alert systems for communicable diseases from all countries. This system will facilitate the sharing and exchange of information globally via electronic and printed media. The dissemination of information collected through this global monitoring system will involve the most recent communication technologies (WHO/EMC,1996a, p.9; WHO/EMC,1997,p.9). The establishment of complex communications networks, such as a global disease surveillance system, is partly dependent on the normative role of several specialized United Nations agencies: global liberalization of telecommunications has been and is facilitated by the activities of the ITU, WIPO, and the GATT (see Lee,1996,p.114). Since "epidemiological surveillance requires the collection and analysis of large amounts of varied data about the locations where diseases and health related problems occur" it is important that WHO's **global surveillance system** covers all regions of the world. However,for example, at the present time only 12 countries of the 49 countries in "continental Africa" are able to access the full range of Internet services, and 30 countries have direct e-mail links (WHO,January 6,1997). A comprehensive electronically linked surveillance system will require that these services are upgraded in the least developed regions of the world. In addition, the monitoring of infectious diseases amongst refugee populations will require close collaboration with UNHCR.

A recent WHO initiative to revise the International Health Regulations (IHR), the sole piece of internationally binding legislation requiring the "mandatory reporting" of certain infectious diseases, aims to transform this international legal regime into a working global alert system where sanctions for reporting will be minimum and all diseases posing a major threat to the health of populations will be reported (WHO,1995a). The revised IHR will be implemented in close conjunction with the global surveillance system outlined above. At the global level, the implementation of the revised IHR, as will be elaborated further in a case study in Annex A, will require close collaboration with intergovernmental agencies such as the World Trade Organization (WTO) and the Food and Agricultural Organization (FAO) in order to control and prevent the dissemination of infectious diseases across borders via traded food products.

Finally, global intersectoral/interagency initiatives such as the Children's Vaccine Initiative which was launched at the *World Summit for Children* in New York in 1990 represents a major step in the direction of eradicating and controlling many vaccine preventable diseases. Moreover, the quest to develop new vaccines, for example against the HIV, will be a Herculean task requiring close global collaboration between, *inter alia*, WHO and other United Nations organizations, such as UNAIDS, and the international research community, the private sector, and Member State governments.

A Global Summit in Action: The Children's Vaccine Initiative

The *Children's Vaccine Initiative* (CVI) was first sponsored by UNICEF, UNDP, the Rockefeller Foundation, the World Bank, and WHO. Since its inception a "global forum" has evolved, including development agencies, governments, private and public sector vaccine manufacturers, vaccine researchers, and national immunization programme managers. This system of global dialogue constitutes a "vaccine continuum" which permits the identification of "bottlenecks" in the global vaccine system, and thereby facilitating solutions to problems. The CVI also represents an example of where practical "workable" initiatives have been developed from the normative commitments made by the international community at a World Summit (Source: WHO/UNICEF:1996).

International Trade and Promotion of Harmful Products: Tobacco

Another harmful side effect of globalization is associated with the negative effects upon health of exporting harmful products/lifestyles through international trade, and the associated advertising of certain products by multinational corporations. Tobacco-related diseases represent the single most preventable adult health problem. Smoking has been associated with, *inter alia*, an increased risk of several different cancers, including lung and bladder cancer, ischemic heart disease, bronchitis and emphysema, and an increased perinatal mortality of infants whose mothers smoked during pregnancy (Stanley et al., 1989, p.5). Also, environmental exposure to smoke, also known as passive smoking, presents health risks to nonsmokers (United States Environmental Protection Agency, December 1992).

The Global Tobacco Pandemic: Facts and Figures

- 1.1 billion smokers in the world, 800 million in developing countries.
- Tobacco caused about 3 million deaths/year in early 1990s.
- If current trends continue there will be 10 million tobacco-related deaths in 2020, with 70% occurring in developing countries.
- The world's consumption of tobacco has increased by 75% over past 20 years.
- Most of the increased tobacco consumption has occurred in developing countries where tobacco use has increased 2.5%/year over past 20 years.
- Tobacco consumption in industrialized countries has declined by 0.5%/ year over past 20 years.

(Sources: Yach,1995,pp.4,21-22;WHO Tobacco Alert,1996;Chandler,1986).

The growth in tobacco consumption has been magnified by the aggressive advertising methods of multinational tobacco conglomerates that have increasingly targeted women, adolescents, and developing country markets (Council on Scientific Affairs, 1990). Tobacco companies have encountered declining sales in developed country markets, and thus, are looking to penetrate new markets in Asia, Africa, and Eastern Europe (Connolly,1992):

> "Cigarette smoking threatens to reach epidemic proportions in many countries in the coming decade if drastic measures are not taken to curb the efforts of transnational tobacco corporations who see their future "dying" out in the developed world. Many Asian and Third World populations have already proven themselves to be eager consumers of a product whose harmful effects are obscured by the sophisticated promotional schemes which portray smoking as an inexpensive way to buy into the glamorous life of the upper class *(Stebbins,1991,p.1322)*."

The soaring tobacco trade in the developing world is related to the liberalization of the world's marketplace.

The Political Economy of the International Tobacco Trade

The international trade in tobacco is dominated by six transnational tobacco companies (TTCs), two of which are British and four American. Together these companies control 85% of the tobacco sold on the world market. Market penetration by the TTCs has been facilitated by the removal of trade barriers which has hitherto been used by state monopolies to keep foreign competition out. Such monopolies are generally "inefficient" in comparison with the advertising and marketing strategies of the TTCs. In effect, the "marketing inefficiencies" of state monopoly companies may have had an "unintended public health benefit" by keeping smoking rates down in countries not dominated by foreign TTCs. TTCs have also allied with governments to assist the penetration of certain key markets. For instance, "in 1986-87 US cigarette companies asked key members of [the US] Congress to pressure the trade officials of Korea, Taiwan, Japan, and Thailand to open up their cigarette markets." Threats of US protectionist trade legislation, retaliatory trade threats, and trade sanctions were made against these countries unless the American cigarette companies were given free access(Connolly,1992,pp.29-31). Therefore,the liberalization of world trade, often under the threat of trade sanctions, has accelerated the spread of tobacco globally (Roemer and Roemer,1990). Although American public health experts warned of the detrimental health consequences of opening the Asian markets to tobacco products trade officials claimed that this issue was only one of free trade (Frankel,November 18 1996,p.11).

In contrast to those markets which have been pried open, the world's largest market, China, with a population of 1.1 billion, remains relatively closed to foreign tobacco multinationals. However, recent joint ventures have given foreign companies an opening into the potentially lucrative Chinese market. These companies are exploiting this opportunity through advertising, with the three largest multinationals each spending more than $US 20 million/annually on advertising in China (Frankel et al.,1996). Advertising associates smoking with exciting new lifestyles which appeal to the desire of young people to feel "contemporary and worldly" (Jing Jie Yu et al., 1990,p.1578).

Future initiatives to address the global tobacco pandemic will have to address the thorny issue of linking the trade and health sectors both at the national and global levels. For the health sector this represents a major challenge considering that "at the national level Ministries of Health generally are not the most powerful members of the Cabinet" and that "internationally, health remains at the fringes of the socioeconomic decision making process" (Pannenborg,1991,p.183). Moreover, it will be important that WHO develop channels of communication with WTO on trade issues, such as tobacco, which have scientifically established deleterious effects on health.

In this respect, although the "*Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*" (GATT,15 December 1993) makes special provisions under Article 8, *Principles for Member States*, for States "to adopt measures to protect public health and nutrition", WHO should not expect that the WTO will unilaterally initiate measures to protect human health status in matters of trade. In support of this conclusion is the WTO's recent ruling that, in response to a complaint filed by the United States, Canada, and the European Union, Japan should expedite measures to reduce its duties on imported liquours[5]. Thus, any form of global intersectoral initiative to counteract the adverse effects of international trade should be spearheaded by individual countries and WHO, in collaboration with WTO. A major step in this direction is represented by WHO's commitment to develop an International Tobacco Convention.

WHO's Tobacco Convention: A Global Intersectoral Initiative?

The World Health Assembly, in May 1996 adopted Resolution WHA49.17 "to initiate the development of a framework convention in accordance with Article 19 of the WHO Constitution". The convention will incorporate "a strategy to encourage Member States to move progressively towards the adoption of comprehensive tobacco control policies and also to deal with aspects of tobacco control that transcend national borders" (WHO, 25 May 1996). This convention should contain, *inter alia*, the following provisions and objectives :

- it should move towards implementation of comprehensive tobacco control strategies;
- it should encourage cooperation in research, programme, and policy development;
- it should encourage the sharing of information, technology, and knowledge;
- it should provide for regular meetings to strengthen global tobacco control and develop detailed protocols related to this convention (Collishaw,1996).

To be effective the International Tobacco Convention will have to make explicit reference to the need for intersectoral collaboration to curtail the trade in tobacco, as well as to develop a surveillance system to document the burden of disease associated with tobacco use and to monitor compliance with the norms of this convention. Within the framework of the Tobacco Convention it should be explicitly stated that the international trade norms of multilateralism, reciprocity, and most-favoured nation trading status, which are embodied in the framework agreements of the WTO, should not necessarily apply to traded goods which have a well documented adverse effect on human health status.

Transnational Trade in Psychoactive Drugs

The cross-border trade in psychoactive substances, other than alcohol and tobacco, also presents another important transnational policy issue.

The retail value of illicit drugs traded internationally now exceeds $US 500 billion per year, an amount which exceeds the international trade in oil. The international drug trade is only second to the arms trade industry. The hundreds of thousands of destitute farmers in developing countries enter the drug trade business to reap its benefits. The international drug trade has continued to flourish despite the control activities of the international community.

Trade which evades control measures?

Neither importing nor exporting countries have been able to stop the trade in illicit drugs, and as a result it has continued to grow rapidly (Griffin, 1992,p.114). Since they live in the world's most economically deprived areas the "high returns make the risk worthwhile" for growers. Moreover, "traffickers have proved more than a match for national or international authorities, concentrating their activities at points of least resistance where national governments have little control...Drug syndicates launder around $85 billion through financial markets each year (UNRISD,1995,pp.85-86).

[5] Also, see a recent report, "*The World Trade Organization and sustainable development: An independent assessment (1996)*", by the International Institute for Sustainable Development in which the WTO's reluctance to develop links with other bodies, especially NGOs, and "its failure to integrate sustainable development concerns into trade policies" is critiqued.

Over the past two decades the problems due to the use of psychoactive substances have become globalized. It is estimated that about 15 million persons are at risk of serious health impairment as a result of the abuse of psychoactive substances, other than alcohol and tobacco; of these it is estimated that 5 million persons inject. The number of drug injectors appears to be escalating in both developing and developed countries. It is estimated that between 100,000 to 200,000 persons die as a result of drug injection annually. Moreover, the sharing of injecting equipment results in the transmission of HIV, hepatitis B and C, and other blood-borne infections (WHO,1996d).

Control programmes for legal and illegal drugs need to concentrate on prevention and reducing demand, as well as curbing international and national drug supplies. All of these interventions require intersectoral collaboration with other partners outside of the health sector. WHO recognizes that the control of demand and supplies calls for international collaboration between Member States, intergovernmental and nongovernmental organizations to effectively address this global problem (Nakajima, June 1996).

In addressing this transnational problem WHO would have less of a role to play in the control and interdiction of the international drug trade. In an address to the UN General Assembly (October 1996) on the issue of International Drug Control, WHO stressed that "there is a need for solidarity, intersectoral and international partnerships to respond effectively to the range and complexity of problems related to substance abuse". Towards this end, WHO emphasized the need to develop and adopt "*Guiding Principles for Demand Reduction*," and to develop "a comprehensive demand reduction approach "irrespective of the legal status of individual drugs" (Riley,1996). Accordingly, WHO should focus on, and collaborate closely at the international level with, The United Nations Fund for Drug Abuse Control, and with Member States to curtail drug demand.

Environmental Degradation

Chapter Six of the Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992) stresses that the objectives of health improvement and development are "intimately connected",

> "Both insufficient development leading to poverty and inappropriate development resulting in overconsumption, coupled with an expanding world population, can result in severe environmental health problems in both developing and developed nations (UNCED,1992,p.54)."

The global problems associated with environmental degradation represents another transnational policy issue having major health status implications. One likely future trend given the effects of continued population expansion[6], combined with the increasing consumer expectations that will accompany global trade liberalization and rapid industrialization of many economies of the developing world, will be a geometric, unsustainable increase in energy consumption and environmental damage, if sustainable development models are not adopted (Sakakibara,1995).

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in June 1992, emphasized the interrelationship between environmental degradation and ill-health (Johnson,1993,p.167). Recent research, for example the report by the WHO/WMO/UNEP task force on *Climate Change and Human Health* concludes that global warming and climate change due to the accumulation of greenhouse gases will likely lead to adverse health effects such as major shifts in infectious disease patterns and vector distribution, deaths from heat waves, increased trauma due to floods and storms, and the exacerbation of food shortages and malnutrition in many regions of

[6] Although it must be noted that the rate of population growth has slowed in the 1990s: "the rate of world population growth slowed significantly in the first half of the 1990s" as compared to the previous decade (United Nations, 1995,p.145). However, the actual number of persons added per year has remained relatively stable at 85 million persons per year (FAO, March 1996,p.1).

the world. Further, the depletion of stratospheric ozone, as well as increasing the incidence of skin cancer in light-skinned populations, may result in an increased incidence of cataracts and may contribute to a weakening of human immune systems. The findings of this task force emphasize three major points:

- these projected health hazards are "not of a localized kind", but rather, are widespread and will affect "whole populations";
- the risks described cannot be described as "more of the same". These health disturbances will occur as a result of disturbances to natural systems;
- the forecasting of these risks involve a long-term time frame.

In addition, the hazards of other forms of environmental contamination/disasters may the cross borders of sovereign states, resulting in adverse effects on human health. For instance, the radiation contamination after the Chernobyl accident, which "released radioactive materials over a wide area totalling more than 100 times that of Hiroshima and Nagasaki", demonstrated how interdependent the world of states has become (WHO,1996e). Also, the potential for toxins, the result of pollution of the world's seas, such as halogenated hydrocarbons, polychlorinated biphenyls (PCBs), and tributyltin (TBT) to become incorporated into marine organisms, and thereby becoming incorporated into the human food chain, underscores the interconnectedness between the world's marine environment and human health (Tolba,1992,pp.37-38).

The recommendations of the WHO/WMO/UNEP task force stress the need for decision-making elites to think in terms of a 'global community' so that strategies of cooperation between developed and developing nations can be formed (McMichael et al.,1996). One example of global intersectoral cooperation at the environmental level is the UNEP *Global Environment Facility*.

The Global Environment Monitoring System

WHO collaborates with other United Nations agencies on a number of monitoring programmes. For instance, within UNEP's **Global Environment Monitoring System** (GEMS), WHO and UNEP "produce guideline documentation on issues related to the monitoring and assessment of air and water quality and pollution, on dietary intake of contaminants, and on the genetic effect of environmental contaminants. Additional resources are needed to extend these systems to include the direct and indirect risks associated with climate change, such as increased UVR and the rise in sea levels(McMichael et.al, 1996,p.210).

Since the activities of many United Nations agencies overlap, a framework, entitled *The climate agenda*, for integrating climate-related programmes was adopted by the WMO Congress in 1995. *The climate agenda* is intended to help international agencies harmonize their climate-related activities and to facilitate interagency collaboration in the following four main areas:

- new frontiers in climate science and prediction;
- climate (rather than weather) prediction for sustainable development;
- studies of climate impact assessments and of response strategies for reducing vulnerability;
- observation of the climate system. (McMichael et al., 1996,pp.210-211)

Likewise, GLOBE a group of environmental parliamentarians from different parties and from all European countries, warns that inaction in responding to climate change will have detrimental effects. The multi-disciplinary, intersectoral approach which they recommend emphasizes, *inter alia*, the following principles:

- integration of environmental matters into decision-making at all levels of government;
- public participation;
- effective implementation of international commitments;
- adoption of sustainable consumption patterns;

- incorporation of the above principles with economic (market based) principles.

In light of the serious health threats posed by environmental degradation and the need for urgent action it is evident that WHO's future policy must stress intersectoral strategies at all levels of development, and that the normative commitments at the global level must be linked to national and local initiatives. The recently completed WHO Task Manager's Report, prepared for the *Inter-Agency Committee on Sustainable Development (IACSD)* to review the progress, five years after UNCED in implementation of the objectives set out in Chapter 6 of Agenda 21, stresses the role of several global intersectoral initiatives to promote sustainable human-centered development:

- WHO's initiative Information for Decision-making in Environment and Health (IDEAH) aims to develop an effective environmental information system.
- Intersectoral links between the international level and local government are required to implement the global agenda for sustainable development outlined in HABITAT II.
- The Intergovernmental Forum on Chemical Safety (IFCS) was set up in 1994 at the invitation of UNEP,WHO and ILO to extend the understanding of the cumulative effects of chemicals on human health.
- The WHO, FAO, UNEP, and UNCHS Panel of experts on Environmental Management of Vector Control (PEEM) promotes the incorporation of health concerns into environmental impact assessments.
- The UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), since 1994, has been funding research projects which aim to reduce the impact of development projects on the risk of dissemination of tropical diseases.

Besides these initiatives the WHO Task Manager's report recommends that future intersectoral efforts in the area of sustainable development and the environment will need to focus on the relationship between human health and other factors such as consumption and production patterns, including trade, employment and sustainable livelihoods, and energy and transport, as well as understanding the environmental determinants of emerging and re-emerging diseases.
It is apparent that the breadth of these issues will require a wide degree of collaboration with numerous agencies at the intergovernmental level, in conjunction with local and national development partners (WHO,1996g).

Taking into consideration the findings and recommendations of other groups such as GLOBE it is also evident that the protection of the global environment to protect human health will have to stress the role of legislative instruments, both at the domestic and international levels. Also it will be necessary that realistic compromises between developed and developing countries are reached so that the world can meaningfully address the problem of ozone depletion and the accumulation of greenhouse gases. In areas such as the reduction of greenhouse gases little progress has been made (IACSD,1997, p.12). It is imperative that developing countries are not expected to shoulder all of the burden of adjusting: rich industrialized countries, which consume a disproportionate amount of energy per capita, as compared to developing countries, should make significant lifestyle adjustments and take concrete action. In this regard, the *Intergovernmental Panel on Climate Change (IPCC)* 1995 report outlines key mitigating actions, including *inter alia*, more energy efficient industrial operations, agricultural conservation, forest management, and rehabilitation policies, conversion to alternative sources of energy, and changes in the lighting and heating of residential, commercial, and public buildings. International carbon taxes and other forms of national taxation to deter the use of private vehicles are other options which must be explored. However, to make a meaningful impact it will be necessary to implement intersectoral policies based on the interdependence of many global issues.

"Cross-cutting" issues in Sustainable Development

Proposals for the future programme of action for the IACSD emphasize the need for linking "relevant chapters of Agenda 21 to the role of relevant sectors and major groups". This strategy would promote "cross-cutting issues", including *inter alia*, production and consumption patterns, population, and health, in order that integrated, practical policies are developed (UN,1997,p.26). In this regard, the IACSD has observed that, in the face of globalization, sustainable development will require that trade liberalization be accompanied by environmental and resource management policies. Towards this end the IACSD recommends that the WTO Committee on Trade and Environment, UNCTAD, and UNEP continue to collaborate in order to promote integrated trade, environment and development policies (IACSD,1997,pp.7,21). Further, the impact of trade and environment issues on health status underscores the need for WHO to play a key role in elaborating a sustainable trade and environment policy for the future.

As emphasized in the *Ottawa Charter for Health Promotion* (1986) it is crucial that the links between the natural environment and human health provide the foundation for a "socio-ecological" approach to health, which encourages "nations, regions, and communities" to cooperate in a spirit of "reciprocal maintenance" and "global responsibility".

Macroeconomic Implications

Although global liberalization has resulted in wealth creation and concomitant improvements in health status, for example in the Newly Industrialized countries of Asia (e.g. South Korea, Taiwan, and Singapore), the results of these changes have not been so encouraging for other countries. Many least developed countries (LDCs), especially in Africa, have been marginalized by the process of global liberalization. Since 1980 many LDCs have liberalized their trading relations in an attempt to increase and diversify their output and exports. However, a dependence on production and export of primary commodities has hindered the expansion of many of these countries' exports.

Globalization and Marginalization

Generally, an increase in manufacturing output has been responsible for much GDP growth in successful developing countries, particularly those in East and Southeast Asia, that have liberalized their trading relations. Nevertheless, in marginalized economies trade liberalization has been accompanied by 'deindustrialization', particularly amongst African countries. According to a recent UNCTAD analysis, trade reform and structural adjustment programmes have not taken into consideration the different structural conditions of LDC economies: for instance, some of these countries have a low or non-existent industrial base, and as a result, have faced an adverse external economic environment in the 1980s and 1990s (Shafaeddin, 1995). Economic globalization has transferred about $US 422 billion of new supplies, factories, and equipment to developing countries between 1988 and 1995, and according to the World Bank this investment has allowed many people to escape poverty. However, these positive effects of globalization have excluded "large parts of the developing world, including most of Africa and Latin America, [which] have been bypassed by the flows of private money or have yet to see its effects among the poor"(Richburg, 1996,p.4).

Therefore, it is becoming increasingly evident that the globalization of finance, trade, and technology facilitated by the series of GATT agreements, including the recently concluded Uruguay Round agreement, has resulted in winners and losers. The neo-liberal restructuring of the world's economy, which has gained momentum since the end of the Cold War, has contributed towards an increased gap between rich and poor, even within rich Northern economies (Sakamoto,1994,p.4). The introduction of market mechanisms of competition in the former socialist bloc has been accompanied by a widening socioeconomic gap between the haves and have nots. Moreover, the economic disparity between the industrialized and least developed countries has increased. Even within many industrialized countries, as neo-liberal restructuring has gained momentum the spread between rich and poor has grown (Sakamoto.1994,p.4);

unskilled workers find themselves exposed to harsh competition and the prospect of downward social mobility (Reich,1991).

The expansion of the global economy has increased competition, and as a result "all workers, communities and countries have effectively become competitors for the favours of transnational corporations (UNICEF, 1996)." One consequence of this global trend towards economic competition is that more children have entered the workforce,

> "In India, which has only in recent years opened up fully to the global economy, international competition has already led some sectors of industry to seek an advantage by recruiting cheap child labour-children's wages in Indian industry are less than half those of adults for the same output. Increases in child labour are reported in sericulture, fish processing and genetic engineering of seeds (UNICEF,1996,p.69)."

Also, rapid, cheap travel in a globalized travel market have encouraged the phenomenon of "sex tourism" which has resulted in the recruitment of children into prostitution; these markets are often controlled by international syndicates specializing in the exploitation of young children (UNICEF,1996,pp.36-37) with serious health consequences.

Globalization, Structural Adjustment, and Health Status

The effects of globalization of the world's economy has resulted in increasing competition between national economies and as a result of budget austerity "the ability of many governments to provide effective health services is decreasing" (UNRISD,1995,p.26). Further, the globalization of "one size fits all" reforms fails to appreciate that "no institution, policy, or programme" can be simply transplanted from one context to another (Marmor,1997,p.348). This approach reflects international ideologies, concerns, and perceptions rather than the specific circumstances of different countries and communities (Björkman et al.,1997,p.9).

Moreover, considering that the links between poverty and ill-health are well established (WHO,1996a,p.1) the potential economic inequalities of global financial and trade liberalization, especially if the needs of the most vulnerable are not taken into consideration in social and economic policies, could have significant negative implications for improving the health status of the world's population. The economic and political stresses brought on by globalization present potential threats to public health including:

- Stresses generated by incorporation into the global economy – the loss of jobs, reduction in wages and safety standards, access to health damaging products such as tobacco and agrochemicals, migration and the sense of alienation can " threaten the physical and mental health of many persons.
- The processes of urbanization, migration, and the involvement of increasing numbers of persons in informal economic activities makes many persons "invisible" to public health programmes. As a result, this may threaten the effectiveness of global public health programmes, for example interventions to control and eradicate the spread of infectious diseases such as poliomyelitis.
- In today's globalized economy "the prices of some medical products and services have increased through privatization". Also, there is the risk that the "quality of medicine" available may fall, especially in developing countries, if trade liberalization makes it easier to "dump" expired and/or unsafe medications or obsolete technology which cannot be maintained.
- As globalization gathers pace and as essential social support networks are weakened health status may be compromised since "families and communities" are not able to provide essential care "for preventing disease and aiding recovery" (UNRISD,1995 pp.26-27).

- The health risks of involving increasing numbers of young children in hazardous, low paying jobs and the sex industry are indisputable.
- The links between chronic unemployment and structural unemployment and higher mortality rates have been supported by research (Martikainen et al.1996). In this respect, increased global competition for employment is giving rise to a widening gap between the "knows and the know nots" (World Economic Forum, 1996).

Structural adjustment programmes aim to reduce the role of state institutions in national economies and to open up these economies to international competition by the reduction of external trade barriers, and market deregulation. This involves the removal of internal price controls and subsidies, the encouragement of private foreign investment and privatization of state companies, and limiting public spending (Woodward,1992,pp.36-38). Numerous studies have documented the potential health and social effects of structural adjustment programmes.

Structural Adjustment and Health

(1) Food availability and access to education and health services for children in selected African, Latin American, and Asian countries undergoing economic adjustment programmes deteriorated (Cornia and Jolly,1987).

(2) In several Eastern and Central European countries the 'protracted crisis' of reform placed heavy burdens on the health and welfare of children, as household incomes fell, and as social expenditure on health, eduction and child care were cutback (Cornia,1991; Sipos,1991).

(3) A recent study of the effects on health status of structural adjustment on rural and urban populations of Zimbabwe concludes that the government's cutbacks in the health sector, since structural adjustment was introduced to the country in 1991, has had an adverse effect on the welfare of the poor in both urban and rural areas, and that there has been a "serious economic degradation" of the rural and urban poor. The investigators conclude that the World Bank's report *Adjustment in Africa (1994)*, in which it is observed that "the majority of the poor are probably better off and almost certainly no worse off" (World Bank,p.73), is overly optimistic. However, this report concedes that the negative results of the study cannot be separated from the negative health impacts caused by the severe drought in that country in 1991-92 and the HIV/AIDS epidemic (Bijlmakers et al.,1996,p.74).

(4) A study by the World Bank, *Egypt: Alleviating Poverty During Structural Adjustment* suggested that the health status of the poorest rural inhabitants has not improved, and that additional reductions in resources might compromise the coverage and quality of programs in health and education, particularly in rural areas (World Bank,1991,p.xviii).

Although the social and health effects of structural adjustment programmes have been hard to pinpoint precisely, the evidence indicates a need for concern for the health and social status of the most vulnerable and marginalized populations in societies, particularly when societies undergo rapid economic adjustment.

Macroeconomic Determinants: Global Intersectoral Actions

The ability of WHO to have a major impact on the macroeconomic repercussions of globalization and structural adjustment on health status are circumscribed. Although the Organization should continue to advocate for equity and the protection of social safety nets for vulnerable groups, a great deal of the work in this area will have to be done in conjunction with other intergovernmental organizations. Three major areas on which WHO should , *inter alia*, focus upon are:

- to clearly define the nature of health risks associated with structural adjustment programmes;
- to make the reduction of social gaps in health and health care a top priority on the agendas of all of WHO's health partners;

- to support "targeted research" and continuous monitoring activities in "selected countries" as a means of developing and evaluating policies to reduce social differences in health and health care;
- to promote international exchange of information and experience in ameliorating the social differences in health status and health care (WHO/SIDA,1996,p.25).

While structural adjustment policies may represent a method of placing countries' economic development on a sustainable path, it is evident that in the complex, political and economic environment of the late 1990s these policies must define the role of the state in with respect to crucial social services[8]. In this regard, WHO must project a clear view of the role of state institutions in public health in the face of public sector austerity. In particular, WHO should work with the World Bank and other partners to ensure that "*essential public health functions*[7]" are delivered as a prerequisite for privatization and reform to proceed. A working group at WHO headquarters has documented that, in practice, certain essential public health functions are not being protected as privatization, "downsizing" and reform policies have taken hold, particularly in least developed countries and many of the Newly Independent States. As a result of these public health functions not being provided preventable disease morbidity and mortality has ensued.

Therefore, it is imperative that WHO work with the World Bank and other partners, for example the Regional Development Banks, to ensure that the role of the state in providing monitoring and support responsibilities for certain high priority areas of public health are not neglected. In effect, WHO should aim to delineate and define the role of the state and the limits of "downsizing" in reform and structural adjustment packages, and in particular to ensure that the public health needs of the most vulnerable in society are not compromised by reform initiatives. This line of thinking would seem to be gaining currency within the World Bank: the 1997 World Development Report will examine the role of the state in development. Moreover, bank officials have recently emphasized that the "the World Bank will continue to collaborate with governments, in partnership with the World Health Organization and other agencies and individuals to address priority aspects of disease control, making cost-effective and feasible interventions more widely available" (Claeson et al., 1996,p.268).

Therefore, WHO should continue to build closer ties with the World Bank and the International Monetary Fund (IMF). As part of a closer relationship between WHO and the Bretton Woods institutions it should advocate strongly for social safety-net schemes as part of enacting structural adjustment policies, and support the World Bank's recent moves towards debt alleviation for the poorest countries of the world.

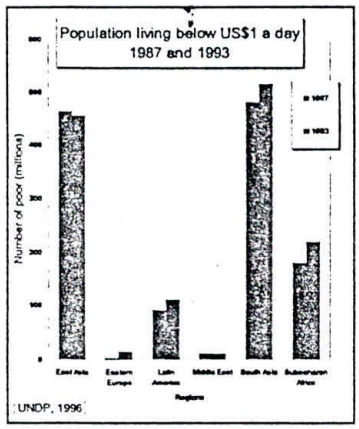
Shared Global Responsibilities

Recent work done by the World Bank, the OECD and UNDP have strengthened WHO's view that equity is a central concern for long-term health improvement and sustainable economic development. The fact remains that the absolute number of persons living in poverty, defined as less than $1/capita/day (Figure 1), has continued to increase to reach 1.3 billion persons in 1993 (Yach,1996). Although global economic expansion is a necessary precondition for improving the health status of the world's

[7] Essential public health functions (EPHFs) are defined as a "set of fundamental and indispensable activities carried out to protect a population's health and treat disease through means that are targeted to the environment and the community. EPHFs aim to improve the quality of life and reduce the incidence of disease through forward-looking health promotion, disease prevention, monitoring and surveillance, and the reduction of the burden of disease by cost-effective, intersectoral measures. EPHFs also include the delivery of selected health services for vulnerable and high risk groups (WHO,1996).

[8] Similarly, Wapenhans the author of a recent internal assessment of World Bank projects and implementation strategies (The Waphenhan's Report) observes that although structural adjustment policies might continue to be a useful tool to place a countries' economy on a sustainable path, it is equally important, in the increasingly complex, interdependent political and economic environment of the late twentieth century that "the role of the state needs to be redefined for societies in transition" (Wapenhans, 1994,pp.49-50).

Figure 1



population, "trickle down" economic policies will not benefit the poor, even in countries with high rates of economic growth (WHO/SIDA,1996, pp.12-13). Addressing the needs of the world's poor represents an area of shared responsibility for the world's development community.

For example, WHO should collaborate with organizations such as the ILO which has encouraged prudence in introducing reform packages so that health and social gains can be sustained.

Preventing the Big Bang approach to Globalization

The ILO warns that "introducing reforms on all fronts at once has often proved counterproductive: "A big bang approach is likely to lead to socially unacceptable increases in unemployment, underemployment, and poverty" and threaten to compromise the entire package of reforms. The ILO argues for a "phased and more gradual" approach which takes into consideration the need for taking time for difficult reforms "such as strengthening of administrative capacity, the streamlining of the tax system and privatization. The ILO notes that the "trickle down approach" to development is ineffective and that reform initiatives need to promote the development of "rural infrastructure, credit schemes, and improved access to education and health services" (ILO,1996). Therefore, if the process of globalization is to be sustained, social policy must focus on the losers in the new open world economy who are affected by rising inequality, job insecurity, and chronic unemployment (Kapstein,1996,p.17).

Also, in defining the role of the state in health development WHO needs to reinforce its links with agencies such as UNESCO and UNICEF to ensure that other social services that have health benefits, such as primary education (especially for girls), are adequately provided. A related policy issue is the provision of credit to the most vulnerable members of society.

Credit schemes for the poorest members of society

The experiences of countries which have implemented credit schemes targeted to the needs of the most vulnerable in society is that these initiatives have tangible social benefits, especially when the health component has been emphasised. These include, *inter alia*,

- improved nutritional status;
- improved ability to pay medical bills;
- increased savings for health and economic investment;
- a better physical environment;
- new technologies purchased with credit allow increased economic output;
- rural/urban migration is reduced as a result of better living standards.

In Nigeria, for example, an intersectoral initiative combined the credit facilities of a national financial institution and a WHO sponsored project, *"Promoting health through female literacy and Intersectoral Action"*. Poor women, in particular, have the greatest difficulty in gaining access to credit. Research has shown that when women are given access to primary eduction and a greater share of the household income their families' health status is more likely to improve. Therefore, microcredit schemes targeting women should be given greater attention (WHO/IBRD,1994,pp.4-8). At the intergovernmental level intersectoral microcredit schemes between WHO, the Bretton Woods institutions and the Regional Development Banks, as well as other organizations such as UNDP, UNESCO, and ILO should be encouraged.

WHO, in collaboration with other interested international parties, for example involving mechanisms such as the *ILO/WHO Committee on Occupational Health*, must ensure that the globalization of trade and production is supported by appropriate measures and international instruments to protect the occupational health and safety of the world's labour force. WHO should also work with organizations such as the ILO and UNICEF to strengthen, monitor and enact international instruments, such as the *United Nations Convention on the Rights of the Child*, to protect the rights of children in areas of child labour, exploitation of children through debt bondage, and other "contemporary forms of slavery" such as child prostitution (ILO,1996a). WHO's role in such initiatives may be limited to an advocacy and information gathering role in conjunction with other organizations such as the ILO and UNICEF. In global intersectoral initiatives such as these, the comparative advantage may rest with other organizations: for instance, international instruments relevant to child labour extend from the 1919 ILO Convention on child labour to the *United Nations Convention on the Rights of the Child* (1989), which represents the most comprehensive international treaty on the rights of children (ILO,1996a,p.28). Although child labour and exploitation has serious health ramifications, in issue areas such as these WHO's role should be supportive, in recognition of other organization's expertise.

In addressing the macroeconomic determinants of health status it is crucial that WHO work closely, at the international/regional intergovernmental level, with its partners in the United Nations system, the Bretton Woods institutions, the WTO, and the Regional Development Banks. Initiatives to address the economic determinants of health exhibits how interdependent WHO's actions are with those of its development partners. Through global intersectoral initiatives WHO can ensure that appropriate and effective action is taken to address the health consequences of poverty and economic adjustment.

Technology and Communications

The globalization of international trade and technology has allowed the diffusion of products and scientific knowledge resulting in extensive benefits for the health status of developing countries.

Technologies for Health

Roemer and Roemer emphasize that technology spread to developing countries has been vast, and that even if some technology has been misused, it must be recognized that appropriate technologies have benefitted the health of millions of people and will continue to benefit millions more. A list of such advances would include effective methods of contraception, techniques for obtaining safe drinking water, low-cost refrigeration, efficient transport and communication, fertilizers and pesticides to enhance agriculture and nutrition, new therapeutic agents that can effectively treat leprosy, schistosomiasis, trachoma, onchocerciasis (river blindness), and other scourges of the developing world, once regarded as hopeless (Roemer and Roemer,1990, pp.1189-90).

In the future, technological innovations in areas such as telemedicine and biotechnology will have profound effects on world health. Also, new mapping technologies have become available which are appropriate forms of technology for the control of tropical diseases such as malaria (Yach,1996,In press), and it is possible that international efforts to map the human genome will lead to "methods and techniques of testing and therapy that are affordable" to populations in developing countries (Bankowski et.al.,1991,p.3). The research and information dissemination made possible by globalization could facilitate widespread accessibility to advanced technologies such as these. However, it is important that the development of health-related technologies consider the needs of developing countries and the affordability of new technologies for the

poorest members of all societies, so that the health benefits impact the lives of the most vulnerable members of world society.

WHO needs to strengthen its existing arrangements for global intersectoral collaboration in the area of informatics and telemedicine so that the least developed areas of the world can enjoy the health benefits made possible by the communications revolution.

"Breaking down the barriers towards the global information society" (ITU, 7th World Telecommunications Forum,1995).

The potential uses of modern information technology in the area of health development include, *inter alia*, telemedicine, interactive health networks, epidemiological surveillance and telecommunication services in remote areas, human resources development and continuing education, and "distance learning." WHO has collaborated with the International Telecommunication Union (ITU), for example under "the aegis of the TELECOM and Telecommunications Development studies", for the "promotion and validation of new methods and tools for the support of health care services", for example Telemedicine (Mandil,1995,p.5). In recognition of the inadequate communications infrastructure and services in many developing countries the European Space Agency (ESA) and the United Nations Office of Outer Space Activities (UN/OOSA) have made a joint proposal for the establishment of a satellite based "*Cooperative Information Network linking Professionals in Africa and Europe*" (COPINE). WHO has been involved in initial studies in selected African countries to delineate the potential needs of COPINE users in the health sectors of African countries. If the COPINE project is developed it could have "a major effect on health care in developing countries, especially where the telecommunications infrastructure is poor" (WHO,1996,7 January 1997).

WHO in conjunction with UNESCO and other international agencies needs to work towards the "globalization of scientific policies" so that the benefits of new knowledge is readily available to the world's poorest populations.

The globalization of scientific knowledge to improve health will also have to involve other organizations such as WIPO and the WTO to ensure that provisions for least developed countries to develop their technology base, under the TRIPS agreement are practically applied[9].

The globalization of scientific policies

A recent UNESCO publication *Memory of the Future* (Mayor,1995) stresses that science can make major contributions to addressing problems which extend beyond national borders. Also, since policy issues are becoming more complex and unpredictable, interdisciplinary approaches are required to keep pace with the increased pace of world events and problems. Therefore, in many areas such as the "environment, telecommunications, health, energy, education, science policy, and protection of intellectual property" it is not rational to think of problems in purely national terms. In this respect, UNESCO is devising new ways of transferring knowledge to communities most in need. These strategies seek to reverse the "short-sighted" concept in science and technology, "techno-nationalism", which "threatens to perpetuate the dangerous gap between the haves and have-nots (Mayor,1995, pp.63-69).

An urgent need exists for international organizations such as WHO, the World Bank, Regional Development Banks, NGOs, development and professional agencies to formulate global frameworks and guidelines in the area of bioethics. The globalization of bioethics is indicated because medical sciences do not have all the answers, and thus there is a need to "redefine the field of bioethics" (Bryant, 1995,p.61). Given the global challenges and inequities facing WHO's Health-for-All policy for the twenty-first century a recent international conference on "Ethics, Equity and Health-for-All, cosponsored by the Council for International Organizations of Medical Sciences (CIOMS) and WHO, has recommended an international forum be created for "advancement of global health equity through the use of ethics and human rights" which should include intersectoral col-

[9] *The Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations* (GATT,1993) makes provisions under the **TRIPS agreement** (agreement on Trade-Related Aspects of Intellectual Property Rights), to recognize the special needs of least-developed countries to create a "sound and viable technological base."

laboration in the areas of education, research, policy and global monitoring (CIOMS/WHO,March 1997). In light of the transnational problems outlined in this section it is apparent that the ethical/normative dimension of international health development must be given the highest priority. Only by encouraging shared community interests can present and future generations hope to address the daunting tasks which await humankind in the future.

Ethical Dimensions of Recent Scientific Advances

Science has made rapid leaps forward in the areas of genetics and biotechnology. Advances in the biotechnology industry have facilitated the production of hepatitis B vaccine, insulin, erythropoietin, and human growth hormone, and if technologies such as these become more accessible to developing countries their benefits could become globalized. However, biotechnological advances are also the subject of safety and ethical considerations (WHO,8 November 1994). For instance, the need to develop international safeguards and guidelines was raised after scientists experimentally cloned human cells from human embryos in 1993 . Therefore, it is important that worldwide consultations involving many sectors are undertaken because "technology cannot be left to govern ethics on an empirical basis" (Nakajima,29 November 1993). Therefore, for humankind to address the ethical ramifications of these complex issues, bioethics will have to become truly globalized.

Population Growth and Mass Migration

In an era of transnationalization of the world's political economy the mass migration of persons across borders represents one more issue which has led to increased interdependence between states:

- in 1993 over 100 million persons, about 2 percent of the world's population, including economic migrants and political refugees, were living outside their country of origin;
- displaced persons are vulnerable and require international assistance to meet their health, education, social services, and shelter needs;
- the international traffic in undocumented migrants, especially women, youth, and children, are the objects of exploitation and abuse (United Nations, 1995, pp.72-73;UNRISD,1995,p.62).

Although international migration is not a recent phenomena the "global extension of market forces" has caused increased disruption for millions of persons, and thus, the pattern of migration would "seem to be taking on a different shape and character" in the increasingly globalized world of the late twentieth century (UNRISD,1995,p.59). The mass movements of the world's population are related to *inter alia* "international economic imbalances, poverty and environmental degradation" as well as other factors such as human rights violations, resurgent ethnic tensions, social dislocation, and looser border controls (United Nations,1995,p.67; UNRISD, 1995,p.59). These problems also threaten to undermine social stability.

The Coming Anarchy?

The stresses of economic, environmental, demographic, and political change could result in the unravelling of many nation states, to be "replaced by a jagged-glass pattern of city-states, shanty-states, nebulous and anarchic regionalisms" in what Robert D. Kaplan has referred to as *The Coming Anarchy (1994)*. Social cohesion within states may weaken as a result of the cumulative pressures of, *inter alia*, crime, overpopulation, scarcity, tribalism, and disease. In Kaplan's future scenario as crime and war become "indistinguishable", "national defense" may become regarded as a "local concept". The escalation of violent deaths and diseases associated with civilian displacement would pose a major threat to human security.

This transnational problem has many determinants and the actions of WHO should therefore be circumscribed. For instance, in the area of reproductive health WHO will continue to play a front line role.

Reproductive Health

Inadequate reproductive health and poor access to family planning services for women, men and "youth" are major factors which contribute to poor health and "sustained rates of populations growth" (CIDA,1996,p.3). It is important that WHO continues to work with its health partners to ensure that comprehensive reproductive health care programmes, including *inter alia*, a comprehensive and appropriate contraceptive method mix, antenatal and postnatal care,treatment of sexually transmitted diseases, and monitoring and treatment of other diseases (e.g. anaemia) which "disproportionately" affect women are provided (WHO,1994b,p.1). At the international intergovernmental level the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction represents a successful intersectoral initiative. This initiative should continue to stress private and public sector collaboration so that new contraceptive technologies, such as an anti-hCD vaccine and acceptable forms of male contraception can be developed (WHO,1994c).

In other areas, such as providing direct relief assistance for displaced populations, WHO's role will be most prominent in the area of technical/information support in the health field. In this respect, some key global intersectoral actions between WHO and other agencies to prevent the health problems associated with displacement and rapid population growth would include, *inter alia*, the following:

- WHO should continue to provide research and technical assistance for the the development of new, appropriate contraceptive techniques and be involved in integrated reproductive health programmes in association with agencies such as the World Bank, UNDP, and UNFPA, in order to implement the recommendations of the 1994 International Conference on Population and Development.
- Regarding relief assistance to displaced refugee populations WHO should cooperate with UNHCR and other agencies to improve surveillance, and to ensure the delivery of *essential public health functions* and health services to these vulnerable groups.
- In conjunction with UNCHS and other agencies WHO should provide support for the implementation of the Habitat II agenda, particularly in the following areas: integrating health and human development policies for human settlements, promoting and protecting health and specific health problems, and ensuring equitable access to health services. These objectives can be accomplished in concert with other United Nations organizations, Member States, in conjunction with local authorities and NGOs in *Healthy Cities Programmes* (UNCHS,1996,p.162).
- WHO's participation in the Inter-Agency Standing Committee (IASC) in association with UNDP, UNICEF, UNHCR, WFP, FAO, and numerous international/national NGOs provides an excellent mechanism for coordination of the various inputs required to address the health, social, and other hazards associated with complex emergency situations.

In this area WHO should once again emphasize its strengths, realizing that it cannot do everything, everywhere.

Food Security

Global food security, defined as "a state of affairs where all people at all times have access to safe and nutritious food to maintain a healthy and active life" and where there is no risk of households losing "physical and economic access to adequate food" (FAO,January 1996,p.5), represents a crucial transnational policy issue for the twenty-first century. Access to safe, nutritious, and sufficient food is a major determinant of health. Today it is estimated that over 800 million persons worldwide do not have access to adequate supplies of food to satisfy their basic needs.

Global integration of markets has facilitated an exponential expansion of trade in agricultural and food commodities However, other trends, including *inter alia* the following, indicate that food security will remain a major problem for

human health and sustainable development in the next century:

- In the past two decades food trade, facilitated by trade liberalization policies, has increased by 300 percent to reach US$ 266 billion, and over the same period the volume of international agricultural trade has increased by 75% to reach US$ 485 billion.
- The global food trade has expanded more than production.
- Globalization of international food markets will probably not affect the global availability of food as decreasing output in "high cost countries" will likely be made up by "increased output in other countries".
- There has been a sharp decline in food aid availability in the 1990s from a record 15 million tons in 1992/93 to an estimated 8 million tons in 1995/96, which may be linked to the effects of trade liberalization .
- Increased food consumption in the rapidly growing, high population areas of Asia might result in structural food security problems in marginalized economies of the world, if supply does not keep up with rising demand. The poorest countries of the world would be in no position to pay hard currency for these products if decreased food supplies become available on a concessionary basis.
- There is a long-term trend towards decreased growth in agricultural production of food, which does not mean that the world is incapable of producing more food, but rather these trends indicate that "the people that would consume more do not have sufficient incomes to demand more food and thus cause it to be produced" .
- Considering the combined effects of population growth, the possible effects of climate change and environmental degradation on future world food production, the issue of food security will remain a key global issue in the next century.
- The solution to these problems will not only entail the production of more food, but also must emphasize the adequate distribution of any extra food; in particular structural adjustment programmes need to focus on the requirements of underprivileged populations (FAO,1996,p.12; FAO,January 1996,p.13; WHO,1994a,p.15).

The recommendations of the 1996 *World Food Summit* stress that a Universal Food Security plan will depend on global interagency cooperation. There is a role for WHO in collaboration with other international organizations, such as FAO, UNEP, WMO, and WTO, to embark on global intersectoral action with the aim of:

> "Assisting member countries to implement the international conventions and agreements(on biodiversity and plant genetic resources,.on pesticide use, food standards and the Codex Alimentarius, drought and desertification, climate change, responsible fishing, straddling and migratory fish stocks, sustainable forestry) which contribute towards ensuring sustainable food production; and develop cooperative programmes to this effect (FAO,1996,p.16)."

Obviously WHO's involvement in some of these activities would be greater than others. In particular, WHO enjoys a distinct advantage in the area of food safety and in activities related to climate change, while its activities in some of the other above mentioned areas would be less apparent. For example, the production of sufficient quantities of food for the world's population will entail the use of new biotechnologies, such as genetic modification. These technologies offer many benefits such as increased food production, improved nutrient content, resistance to pests, and improved food processing and storage characteristics (FAO/WHO,1996,pp.1-2). However, these new technologies also call for increased international collaboration in order to address issues of safety. In this regard, WHO and FAO have initiated joint consultations on the issue of biotechnology and food safety. It is important that the intersectoral linkage between WHO and FAO[10] continues to address, in conjunction with other interested groups, the potential human health

concerns related to genetically modified agricultural and food commodities. Moreover, this complex issue also involves other sectors. For instance, concerns have been raised regarding the environmental safety of foods, food organisms, and food components produced by biotechnology. Further, considering that globalized trade links the production of raw materials to processing and distribution to consumers in all regions of the world, it is important that safety assessments of food produced, for example, by recombinant DNA technologies are worldwide (FAO/WHO,1996).

On the other hand, in areas such as food security other international organizations such as the World Food Programme (WFP), the International Fund for Agricultural Development (IFAD) and FAO are better placed to take a lead in addressing this crucial global determinant of health status. These organizations should expand and strengthen global warning systems for impending famines as a way of mobilizing necessary international assistance and preventing mass migration of populations. In this regard, WHO's role will be a supportive one, in which, for instance, the Organization should document the global impact of hunger on human health and nutritional status.

WHO Global Database on Child Growth and Malnutrition

WHO's *Global Database on Child Health* is a standardized compilation of anthropometric data derived from population-based nutritional surveys which have been conducted throughout the world since 1960. The database covers 90% of the world's total population of under-5-year olds. This global database provides an accurate picture of child growth and offers a basis for intercountry and interregional comparisons, which in turn, facilitates the monitoring of national, regional and global trends. This nutritional data is designed to assist national authorities in planning and evaluating nutrition interventions. This database represents a major source of information/estimates of malnutrition, and has been used by FAO (e.g. World Food Summit, 6th World Food Survey), UNDP in the construction of the poverty index, and the World Bank. Further, disaggregated longitudinal data on differences in child growth can provide an important indicator of equity in populations (De Onis,1997).

Concentrating WHO's Global Efforts for Greatest Health Impact

The foregoing analysis of transnational health threats and the global intersectoral initiatives to address them has demonstrated four main principles:

i. The health risks to populations and disease transcends state borders.

ii. The globalization of disease and health risks requires global intersectoral action to promote and protect human health.

iii. Certain transnational health problems are more or less amenable to global intersectoral initiatives.

iv. WHO enjoys a distinct advantage as far as it is equipped to address certain global determinants of the burden of disease, whereas its activities in other areas will be by necessity more peripheral.

Global intersectoral initiatives need to be focused on global health problems which represent the greatest burden of disease now and in the future. Also, to ensure that equity is an important component of these strategies interventions need to pay special attention to the poorest segment of the world's population. According to a recent report of the *International Health Policy Program*[11] the greatest percentage of deaths and DALY loss[12] among the world's poorest billion people is caused by communicable diseases (52.7% DALY loss), followed by noncommunicable diseases (32.7% DALY loss), and injuries and violence (9.7% DALY loss). The greatest share of disease burden in the least developed countries is due to inadequate water and

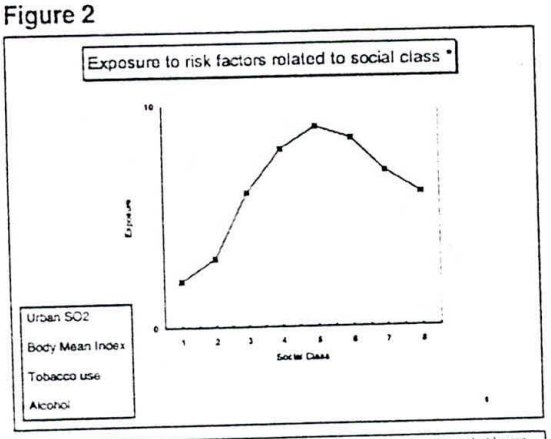
[10] The collaboration between FAO/WHO in the area of food safety represents an example of sustained and effective global intersectoral action for health, and suggests numerous best practices for future global initiatives (see Annex A).

[11] An initiative by the Pew Charitable Trusts and The Carnegie Corporation of New York in cooperation with the World Bank and the World Health Organization.

[12] Disability Adjusted Life Years lost

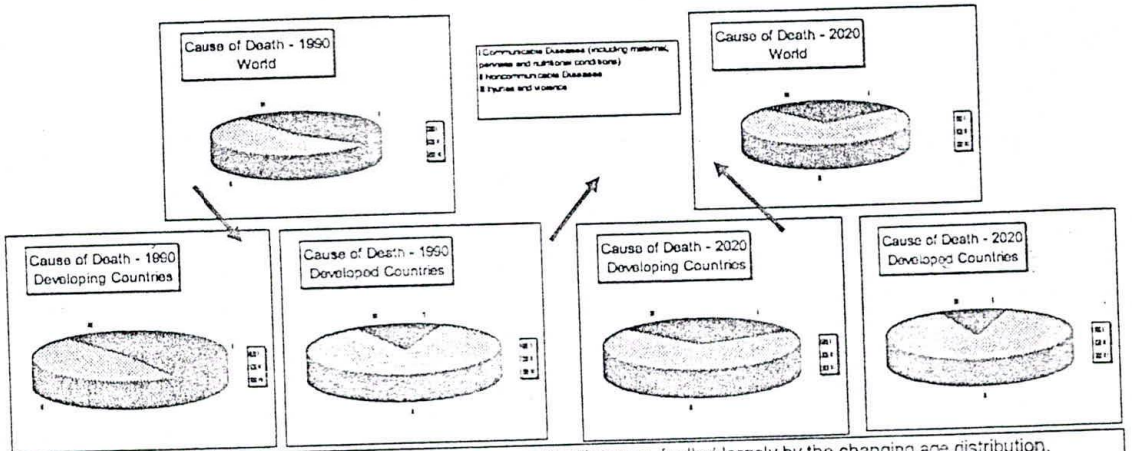
sanitation, under-nutrition and behavioural determinants, especially unsafe sex. However, future projections suggest that in the year 2020 the poorest billion will increasingly suffer from disease associated with behavioural determinants, such as tobacco use, in addition to the common causes of disease mortality and disability seen at present (Yach,1997). As depicted in Figure 2 industrial development and higher incomes are associated with certain risk factors such as urban air pollution, increased consumption of harmful substances such as tobacco, high fat foods, and alcohol, which will pose additional health threats to developing countries in the future. It is projected that there will be a transition, as a result of the world's changing age distribution, such that the burden of death, disease, and disability caused by noncommunicable diseases will predominate (Figure 3). The Global Burden of Disease Study assumes that a linear epidemiological transition based on past and present trends/observations will occur in the developing world[13].

Figure 2



Negative consequences of income growth are becoming apparent early and at lower levels of per capita income than previously. For example, urban SO2 or concentrations of particulates, consumption of tobacco, high fat foods and alcohol all increase rapidly with increased incomes and only decline when government action (regulation, pollution control, education, pricing) occurs and usually after the health problems become apparent. Early action could prevent these trends.

Figure 3 CHANGE IN DISTRIBUTION OF CAUSES OF DEATH



The continued shift from infectious diseases to noncommunicable diseases, fuelled largely by the changing age distribution, increased tobacco and high fat diets will occur in all countries. The transition will be slowest in Sub-Saharan Africa which by the 2020s will account for 93% of all malaria deaths, 61% of all childhood immunizable deaths and 46% of all diarrhoea deaths (up from 85.5% for malaria, 43.4% for immunizable deaths and 32.2% for diarrhoea deaths in 1990).

[13] See for example, The Global Burden of Disease Summary (Murray and Lopez,1996).

Table 2. HEALTH-RELATED FEATURES OF GLOBAL CHANGE

Feature	Quality of evidence	Impact
Global warming Climate change Sea level rise Heatwaves, etc	Fair to good, based on models and empirical observations	Entire world
Ozone depletion UVRadiation increase	Good: based on observations	Entire world
Resource depletion Fresh water Food supplies	Fair to good	Hits developing countries hardest
Environmental pollution	Good, but health impacts not always firmly linked to pollutants	Mainly Regional,e.g. E.Europe, Former Soviet Union
Demographic changes Population growth Migration Aging	Good, but many details based on estimates	Developing countries, especially Africa
Emerging, re-emerging pathogens	Good	Varies; HIV and some others global, some are regional
Other factors: Rise of transnational corporations, advances in technology, communication political volatility, religious fundamentalism, conflicts regional	Fair to good	Mainly regional, but some is global

Source: Last 1997

However, it should be emphasized that some of the global trends outlined in this section could result in some dramatic deviations from these future projections. While some global burden of disease projections, for example those associated with tobacco use, are based on sound scientific understanding and information concerning present global patterns, the projected burdens associated with communicable diseases, malnutrition, and violence could be underestimated, and may not be adequately modelled with existing equations. Further, as demonstrated in Table 2 the scientific evidence concerning the future health impact of many determinants of health status related to global change, for instance the disease burden associated with environmental degradation, are quite conclusive. As a result, it is worth noting that the expected epidemiologic transition and burden of disease estimates, which are based on linear projections grounded in

present experience, do not factor in complex and unpredictable variables, and as a result may not affect all countries equally.

While many countries may benefit from the economic and technological opportunities being created by the process of globalization, marginalized areas of the world could suffer from pockets of political anarchy, famine, violence, mass migration, and institutional collapse. Combined with the health effects of environmental degradation it is equally conceivable that many less fortunate areas of the world could simultaneously suffer from double or even triple disease burdens (noncommunicable, communicable diseases and violence/trauma). Moreover, some transitional economies, witness the recent political and economic chaos in Albania, may suffer from infrastructural and institutional strain as they struggle to adjust to an increasingly competitive and complex world political economy. Also, it is conceivable that some industrialized countries, faced with the downward social mobility and marginalization of disadvantaged groups in their population may experience the emergence of old health problems, such as infectious diseases; this has already happened in the case of tuberculosis. Therefore, a strong case can be made that unless appropriate preventive actions are taken it is possible that the trend towards a submerged "third world" in many industrialized countries could alter present disease burden predictions.

While these future possibilities may sound rather ominous, these examples underscore the need for WHO's new global health policy to be based on sufficiently complex variables and determinants so that it does not become locked into a paradigm which limits its perception of the future. In a similar respect, a recent analysis by John Last, *Ethical Dimensions of Global Ecosystem Sustainability and Human Health*, emphasizes that the global ecosystem is a complex system of "interconnected and interactive components in which each living component interacts with and is interdependent with the others" (Last,1997,p.1). In this regard, the future modelling of human health status may fit closer with an *order out of chaos* paradigm: in other words, it has been recently argued that models of all natural systems are affected by unpredictable turbulence which tends to undermine linear, orderly predictions about the future[14]. Likewise, it seems likely that our present models of disease burden will also be affected by similar patterns. For instance, present predictions concerning the global disease burden associated with tobacco use would seem to rest on firm ground and favour current linear models of disease burden based on present experience and expectations. However, other determinants of health such as the future availability of food, environmental degradation and global climate change, the access to health services and availability of public goods in the face of macroeconomic reform and public sector "downsizing", and the transnationalization of health risks associated with the liberalization of trade, introduce additional, interdependent, and potentially chaotic variables into existing disease burden equations.

If we consider some of the unexpected "realities" which have evolved over the past 25 years the need for a flexible and complex paradigm for modelling future disease burdens becomes apparent. The global spread of the AIDS virus, the dissolution of the former Soviet Union and the public health problems which have ensued, and the rapidity of scientific advances, for example in genetic cloning, should convince us that our future equations of disease burden must provide for unpredictable "X" factors. These "equations" of course must also factor in the possibility for major scientific advances, for example the discovery of a cost-effective, efficacious vaccine against HIV, which would render future predictions concerning the global burden of disease associated with HIV inaccurate. Moreover, the predictions of future tobacco deaths could prove incorrect if an effective, cheap, and acceptable (i.e.to the consumer) nicotine replacement is developed.

Therefore, decisions about where WHO must place its resources and attention in the

[14] See Prigogine,I. et.al., *Order out of Chaos: Man's New Dialogue with Nature (1984).*

future will need to be based on more complex global equations, a taste of which has been offered in the foregoing analysis. If WHO's new policy becomes constrained by linear, inflexible models the Organization risks being ill-prepared for future problems. Furthermore, the complexity and interdependency of the challenges and future opportunities outlined in this section underscore the importance of global intersectoral collaboration. Only by taking advantage of the strengths of different health partners at global, national, and local levels can the world hope to address the complex, inter-linked, and potentially chaotic problems which will affect human health status in the future. If the paradigm which guides WHO's future global health policy is based on a complex system of variables, which are amenable to ongoing re-adjustment based on new information, the Organization will be better prepared to address global human health threats in the future. In this respect, the following two recommendations made by *WHO's Task Force on Health in Development* (1997a, p.5), concerning WHO's future role and global health foresight are particularly apposite:

Table 3: Potential Threats of Globalization for Health

Global transnational factors	Consequences and possible negative impact on health
Macroeconomic prescriptions e.g. structural adjustment policies and "downsizing"	* marginalization, poverty, inadequate and decreased safety nets
Trade e.g tobacco, alcohol, psychoactive drugs	+ increased marketing, availability, and use
Travel	# infectious disease transmission across borders and export of harmful lifestyles
Migration and demographic (e.g. increased refugee populations and population growth)	# ethnic and civil conflict
Food security issues	* structural food crises; greater vulnerability in marginalized areas of the world's economy as rapidly growing economies in Asia demand for food increases
Environmental degradation and unsustainable world consumption patterns	+ global and local environmental health impact
Technology	# the benefits of new technologies developed in global market are not affordable to the poor
Foreign policies based on national self-interest	# xenophobia, tough immigration laws as some states try to isolate themselves from global forces; threat to multilateralism and global cooperation to address shared transnational concerns
Communications and media e.g. global advertising of harmful commodities such as tobacco	+ marketing of health damaging behaviour; erosion of cultural diversity and social cohesion

* possible short-term problem that could reverse in time
\+ long-term impact negative
\# uncertainty

Source: Yach, 1997

- WHO should function as a *global "clearing house"* where the most up-to-date scientific information and health situation in all regions of the world is disseminated globally.

- WHO as the world's "*health caretaker*" needs to ensure that public policy is always concerned with health concerns, so that it is able to alert its health partners where action must be taken based on emerging realities and new information.

Nevertheless, the global and transnational determinants of health status, outlined above, need not undermine WHO's attempts to prioritize which global intersectoral actions will have the greatest impact on the burden of disease so that the Organization can identify which initiatives should receive greatest attention in the future. Yet, the preceding analysis offers a note of caution: the Organization must retain a flexible outlook so that it does not become complacent and locked into a static vision of the future. Moreover, the future implications of global trends outlined in this section underscore the importance of sound and continuous global monitoring and surveillance as a means of early warning and vigilance. In this respect, Table 3 summarizes the primary transnational challenges to future health improvement in an era of globalization. Furthermore, annex 3 identifies particular alliances of international/regional intergovernmental organizations to address certain transnational health threats and the broad determinants of health status. For instance, in certain transnational issue areas such as tobacco trade and use, which will have a major impact on the future burden of disease, existing global intersectoral initiatives are quite weak, in light of the projected importance of this transnational risk factor in the twenty-first century. As a result, interventions such as global surveillance of the tobacco trade must be strengthened in parallel with the implementation of international instruments such as WHO's Tobacco Convention. Also, the future burden of disease associated with global environmental threats is likely to be profoundly negative. Therefore, global action focused on monitoring the health effects of global climate change, and elaborating international norms to protect the environment for sustainable human health gains need to be stressed. With macroeconomic determinants of health status, for instance, structural adjustment and economic reform, the future impact on the burden of disease is more uncertain. While the short term impact of macroeconomic adjustment may be negative, it is likely that for many adjusting countries these effects could be reversed in the future.

In other areas of public health intervention such as food safety, water and sanitation, monitoring and surveillance, and global immunization programmes future health gains could be adversely affected if existing initiatives are not maintained and strengthened. Past successes, for instance the eradication of smallpox, should not minimize the need to maintain and even strengthen global action for *global essential public health functions* in light of emerging transnational trends. *Essential public health functions* which benefit the health status of entire populations represent public health goods which should not be compromised in the name of public sector reform and "downsizing". The recent experiences of many countries, for example the successor states of the former Soviet Union, has clearly demonstrated what negative consequences can ensue if public health infrastructures are not maintained. Moreover, the emergence of new problems, such as emerging infectious disease, indicates that vigilance in areas of "traditional public health work" (e.g. monitoring and surveillance) cannot be overlooked.

Finally, other transnational health issues, such as the need for global disease surveillance and the enhanced exchange of appropriate technology across national borders, and between developed and developing countries, have the potential to improve health status significantly. However, in both of these areas existing levels of global action need to be enhanced and strengthened.

Section III: Think and Act Globally and Intersectorally to Protect National Health

The World Health Organization: An Intersectoral Pioneer?

The WHO Constitution stresses the importance of cooperation between sectors and organizations: at the intergovernmental level Article 2 (i) states that the Organization shall "promote, in cooperation with other specialized agencies where necessary, the improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene" (WHO,1996,p.2). Formal agreements of cooperation with several International Intergovernmental Organizations have been approved by the World Health Assembly. These include, *inter alia* agreements with the ILO (10 July 1948), FAO (17 July, 1948), UNESCO (17 July,1948), IAEA (28 May,1959), IFAD (23 May,1980), UNIDO (19 May, 1989).

The importance of intersectoral collaboration has been stressed since WHO was founded. For instance, in an address delivered at one of the earliest World Health Assembly technical discussions, Dr C.E.A. Winslow, at the Fifth Assembly (1952) emphasized the "vital interrelationship between health and social problems" and the need for WHO to work "in the closest and most intimate contact with the United Nations and its co-operating bodies" to address the interdependent determinants of health status (Winslow,1952,p.7).

Moreover, since Alma Ata in 1978 the World Health Organization has emphasized the 'multisectoral character of health development' as one of the key components of the primary health care approach. Following Alma Ata, intersectorality has been featured in several landmark papers, for example in WHO's technical paper *"The Role of Intersectoral Cooperation in National Strategies for Health-for-All"(WHO,1986)* and the 1986 cosponsored report of WHO and the Rockefeller Foundation Meeting in Bellagio, Italy, entitled *Intersectoral Action for Health: The Way Ahead (WHO,1986a)*.

Therefore, the Organization's intersectoral credentials are based on a firm foundation. However, based on the foregoing analysis, WHO, in its future endeavours, will need to more explicitly apply this concept to its interactions with its various international intergovernmental health partners in order to address global health policy issues efficiently and effectively.

WHO's Global Partnerships

Recognizing that emerging global realities make intersectoral/interagency cooperation imperative WHO is currently reviewing the need to extend and broaden its partnership base as part of updating the Organization's global health policy for the twenty-first century. Examples of recent steps to extend WHO's partnerships with other international organizations include, *inter alia*, the following initiatives:

i. A recent WHO initiative has aimed to build closer "working partnerships" with international organizations involved in health sector activities. For instance, discussions were initiated between WHO and the World Bank in 1994 to strengthen cooperation between the two agencies. Although collaboration between the two organizations extends back to the early 1950s there "have been limitations, duplication and gaps in their efforts to support Member States in the health and health-related fields" (WHO,1995,p.7). The 1994 agreement extends this previous base of cooperation to make the work of both Organizations more

effective, to prevent "uneconomic" duplications of work, and to build a partnership base in order to meet new global realities (WHO,1995).

ii. WHO is also participating in the *UN System-Wide Special Initiative on Africa* which was introduced by the Secretary-General at the October 1994 meeting of the Administrative Committee on Coordination (ACC). The future success of this undertaking is extremely important given that much of Sub-Saharan Africa has become increasingly marginalized by the forces of globalization. This intersectoral initiative represents an example of where the collaboration of intergovernmental organizations and the multilateral banks have been coordinated so as to work together "collectively for the enhancement of Africa's development needs". The System-Wide Initiative is being coordinated by a Steering Committee chaired by the Administrator of UNDP. It is estimated that about $US 25 billion will be required to finance the special initiative over a ten year period. Several key sectors are being implemented in this intersectoral programme. The components of the Special Initiative, as outlined in March 1996, will focus international support for priority sectors including basic health and education, water and sanitation, food security, informatics, governance, and peace-building (WHO, 14 March 1996; WHO, June 1996). This initiative consists of 20 main priority activities, and for each of these components one or more lead agencies will be responsible for mobilizing resources and coordinating implementation. WHO is a "cooperating" agency in the area of assuring sustainable and equitable supplies of freshwater, and is a lead agency in the areas of household water security and health sector reform. As a lead agency for two components, WHO will be responsible, *inter alia*, for developing quantifiable goals and indicators to measure the progress of these initiatives (United Nations, February 1996). In the health sector WHO as the lead agency for basic health programmes will coordinate international efforts in 54 Member States in Africa, with 33 of these countries belonging to the world's least developed countries. Towards this end, WHO held coordination meetings in Brazzaville to work out a preliminary health strategy in the context of health care reform. This plan was directed towards achieving better service delivery and to combat major diseases such as malaria, tuberculosis, and HIV/AIDS. WHO is in the process of organizing a regional forum of all partners concerned with follow-up of the agreement reached in Brazzaville. This regional forum, which will also include World Bank, UNICEF, UNESCO, UNDP, and UNFPA, will work out an implementation strategy for the health sector initiative. Similarly, implementation strategies are being developed in other priority sectors mentioned above. Improvements in the overall health status of the African population will "ultimately depend on progress to be made under the Special Initiative" in these other priority sectors (WHO, June 1996).

iii. A working group at WHO headquarters is developing, in the context of the Health-for-All policy for the twenty-first century, a framework for extending the Organization's network of global partnerships. Partnerships for health, which "bring together public, private, and civic sectors for the common goal of improving the health of populations based on mutually agreed roles and principles" are a practical response to a global environment which is undergoing rapid change. In addition to strengthening partnerships with other United Nations organizations, NGOs, local authorities, bilateral aid agencies, WHO collaborating centres, the academic/research community, religious organizations, and private foundations/charitable trusts and organizations, new links with the private sector need to developed. Towards this end, criteria and conditions for collaboration with the private sector have been proposed (WHO,1996f,pp.2,9-12). In addition, WHO's collaboration with NGOs, as outlined in Article 71 of the WHO Constitution, is currently under review. The extension of WHO's formal relations with national, regional and international NGOs to

include NGOs whose work is unrelated to the medical, public health sectors, and allied sciences was discussed in the Ninety-ninth Session of the WHO Executive Board, January 1997 (WHO, 2 December 1996).

iv. Reflecting the overlap between trade and health policy issues a Coordinating Group for WHO/WTO Cooperation has been recently established to identify, *inter alia*, issues which could be subject to WHO/WTO cooperation. In a recent meeting of this group it was pointed out that WHO should influence the formulation of world trade policies in specific areas, for example the tobacco trade, that impact health status, and that WHO should play an "active role" in bridging the gap between governments' health and trade sectors (WHO,14 November 1996).

v. The UNICEF/WHO Joint Committee on Health Policy (JCHP), which was established by the First World Health Assembly (resolution WHA1.120) in July 1948, represents one of the longest standing interagency committees within the United Nations system. The JCHP made major contributions towards the development of primary health care and the health-for-all movement, which eventually culminated in the WHO/UNICEF sponsored International Conference on Primary Health Care in Alma-Ata (September 1978). In 1996 steps were taken to extend the partnership base of the Joint Committee to include UNFPA (WHO,2 January 1997).

vi. WHO, in addition to being a member of the recently creating ACC Task Forces, also plays an active role within the *Inter-Agency Committee on Sustainable Development* (IACSD). In particular, WHO is the task manager for Chapter 6 (Health) of *Agenda 21*. As explained below these initiatives represent recent attempts to coordinate the activities of the United Nations system in several crucial areas of international development.

Institutional Mandates and Comparative Advantage

It is becoming increasingly evident that the reforms currently underway within the United Nations system must address the fact that the mandates[15] of these organizations have become intertwined and have many points of overlap. In times of resource shortages and budget austerity it is important that interagency/intersectoral collaboration between the United Nations organizations, Bretton Woods institutions, and the WTO is accompanied by a clearer definition of who does what. This rationalization of activities within the United Nations system should be based on the recognized strengths[16] of each organization (Lee et al., 1996, p.307). Since the broad determinants of health status (see Annex C) can only be addressed by the mutually reinforcing actions of numerous sectors working together, the combined strengths (Table 4) of International Intergovernmental Organizations working together will lead to greater health gains.

Moreover, as outlined below, it is essential that these joint global activities be coordinated to avoid overlap and inefficiency. The inter-connected problems which the United Nations system must face in the future demand that a "holistic approach" to policy formulation and implementation be adopted. This approach needs to replace the tendency for the Specialized Agencies to resort to a "sectoral approach" whereby they concentrate on "individual fields of competence", and thereby undermine an intersectoral approach to solving complex problems[17].

[15] The term mandate describes "a formalized statement...usually worded in broad terms but may specify certain functions for the organization to carry out in a particular subject or sectoral area". An organization's formal mandate is "usually encapsulated in a constitution, charter, or articles of agreement" (Lee et al.,1996,p.302).

[16] The term comparative advantage is used to delineate the relative strengths of a certain economic unit, company, organization etc. and need not be restricted the economic sphere.

[17] The tendency of the Specialized agencies to employ a "sectoral approach" to addressing economic and social problems has been described as a "liability" to the work United Nations system (*Joint Inspection Unit*, 1985), an approach which is out of touch with the problems of the "real world" (P. Taylor, 1993,pp.8,124).

TABLE 4. UNITED NATIONS ORGANIZATIONS AND COMPARATIVE ADVANTAGE

	Perceived Strengths
WHO	*technical & scientific knowledge *network of experts *links with all Ministries of Health *value system (esp. equity) *constitutional mandate for global instruments for health
WORLD BANK	*financial resources policy advice & technical assistance *links to Ministries of Finance & Planning
UNICEF	*effective at operational level *resources at country level *strong country offices (85% staff at country level) *advocacy role
UNFPA	*resources *strong advocacy role (family planning) *limited technical capacity *effective procurement service
UNDP	*broad development orientation *close ties to government *coordination role

Source: adapted from Walt 1996, p. 28

Institutional Arrangements at the Intergovernmental Level for Intersectoral and Interagency Collaboration

The United Nations reform process has stressed the issue of interagency cooperation. Recognizing the mounting global challenges facing international society, the Member Governments of the United Nations, in 1991, initiated a process of reform (Blanchard,1993,pp.8-9). In order to address the complex, interrelated determinants of health, and given the global context of health development outlined above, it is important that mechanisms within the United Nations system, which facilitate, monitor, and evaluate intersectoral/ interagency collaboration at the global level, be strengthened and streamlined. Further, more efficient mechanisms of collaboration are required to ensure that the objectives of the recent major world development conferences are realized (see Annex D).

According to the United Nations Charter, the Economic and Social Council (ECOSOC) is responsible for coordination within the United Nations system. Article 62 of the Charter of the United Nations (1993,p.40) stipulates that ECOSOC may make recommendations to the General Assembly, Members of the United

Nations and to the Specialized Agencies relating to, *inter alia*, economic, social, cultural, educational, and health matters.

However, ECOSOC's ability to act as a coordinating body for the work of the Specialized Agencies has never been fully realized (WHO Task Force on Health in Development,1996,p.11). Accordingly, the recently published *Nordic Review: The United Nations in Development*, recommends that the consolidation at the headquarters level of the UN Funds and Programmes could be facilitated by a strengthened and more "action-oriented" ECOSOC. This reinforced ECOSOC would provide guidance to all parts of the UN system. In order to address urgent economic and social development issues the Nordic report recommends that meetings of ECOSOC be convened whenever necessary (Nordic UN Reform Project, 1996, pp.10-11).

Despite its recommendations, the Nordic Review concedes that the consolidation within the United Nations system could be a lengthy process. Therefore, in the immediate future other mechanisms for coordinating the work of the Specialized Agencies, United Nations Funds and Programmes needs to be identified. In this regard, WHO's Task Force on Development has recommended that "the most effective mechanism within the United Nations to coordinate activities is the ACC and the Member States themselves" (WHO Task Force on Health in Development,1996,p.11).

The Administrative Committee on Coordination (ACC), which was established in 1946, is charged with the primary responsibility of ensuring interagency cooperation between the Specialized Agencies and the International Financial Institutions within the decentralized United Nations structure. The ACC is the only body that brings together the Executive Heads of all the organizations within the United Nations system. In particular, the ACC, an administrative arm of ECOSOC and the General Assembly, provides the following two major functions:

- The ACC provides the Economic and Social Council and the General Assembly with 'reliable data' for these two institutions to conduct their discussions and arrive at decisions.

- The ACC acts as a "forum for working out jointly the measures required to implement the decisions taken by the deliberative organs of the United Nations and, in particular, by the Economic and Social Council" (Blanchard,1993).

One of the major pillars of this reform process has been to streamline the ACC subsidiary machinery. Attention has concentrated on strengthening institutional arrangements between the Bretton Woods institutions and the United Nations Funds, Programmes, and Specialized Agencies so as to strengthen capacity and infrastructure development at the national level, and to identify important development issues at the interagency level requiring special attention (ACC,1994). The ACC has also created mechanisms by which it will be able to take "interagency initiatives on key global priorities" (ACC,1996). For example, the Inter-Agency Committee on Sustainable Development (IACSD) was created as a follow-up to the Rio Earth Summit.

Also, the following three Task Forces were created to sustain the commitment made in recent global conferences[18]:

- *Basic Social Services for All* (lead agency UNFPA)

- *Enabling Environment for Economic and Social Development* (lead agency World Bank)

- *Employment and Sustainable Livelihood for All* (lead agency ILO)

In addition to these Task Forces an Inter-Agency Committee on Women and Gender Equality has been established and held its first

[18] The lead agency for each of these task forces will be rotated among the United Nations agencies.

session in 1996. This Committee will interact with the three above-mentioned Task Forces (WHO/UN, June 1996). Although health was initially conceptualized as being of special relevance to the *Basic Social Service for All task force*, it is evident that the multiple determinants of health status also intersect with the work of all of these task forces.

Other examples of recent initiatives that have implications for health development and which rely on collaboration within the United Nation's decentralized machinery include the follow-up to *Agenda 21* and the *System-wide Initiative on Africa*. Other joint mechanisms, such as the *Global Environment Facility* (GEF) and the programme on HIV-AIDS (UNAIDS), are designed to "take advantage of existing synergies while avoiding institutional proliferation" (ACC, 1996).

The ACC's reforms are intended to demonstrate that the Specialized Agencies, Funds, and Programmes of the United Nations including the Bretton Woods Institutions are able to work together coherently and cost-effectively. These changes to the United Nations institutional machinery are intended to provide comprehensive solutions to the emerging global challenges facing the development community (ACC, October 1996). Moreover, the ACC's recent attempts to encourage cooperation and consultation between the bodies of the United Nations system and the Bretton Woods institutions represents a meaningful step towards reversing a trend towards "unmanaged, unfocused, and essentially irrational" (P. Taylor,1993, p.133) economic and social arrangements within the "polycentric" United Nations system[19].

Implementation of WHO's Global Health Policy for the 21st Century

The World Health Organization committed itself to responding to global change according to the recommendations of Executive Board resolution EB97.R2. WHO's process of reform and attempts to meet the challenges of new global realities needs to occur in conjunction with reform initiatives within the United Nation's Administrative Committee on Coordination (ACC). The most efficient means by which WHO's future global policy will be able to address the transnational problems outlined in this document is by coordinating and cosponsoring integrated development initiatives within the United Nations system. This represents the most cost-effective means by which an integrated global strategy can be initiated and sustained, and will avoid the inefficiencies of duplicated, overlapping development initiatives. The *United Nations Special Initiative for Africa* is a prototype of this type of strategy; this approach utilizes the comparative advantages of the United Nations' agencies and Bretton Woods institutions to enact integrated development programmes for a particular region. Also, committees, such as the IACSD, represent significant steps towards ensuring that the commitments made at global fora and summits lead to sustainable outputs and achievements.

The ACC has recently adopted several broad objectives on which it plans to concentrate during its future reform process (ACC, October 1996). Accordingly, in the context of globalization, WHO should aim to coordinate its actions with the ACC in high priority areas, including, *inter alia*, the following:

- a "renewed, system-wide effort" to address the consequences of globalization and liberalization of the world's economy;
- mobilizing and coordinating the United Nations systems' contribution to the objectives of "poverty eradication and people-centered sustainable development" in crucial areas including, *inter alia*, "the elimination of hunger and malnutrition, social development and social integration, the environment, health, education, employment and sustainable livelihoods, population, shelter, gender equality, and the special needs of children";

[19] See, for example, the 1985 report prepared by Maurice Bertrand, *Some Reflections on Reform of the United Nations*, for a critique of the shortcomings of the United Nations System and suggestions for future reform (Joint Inspection Unit, 1985,p.10).

- support for democratic governance, human rights, and the social needs of vulnerable groups;
- encouraging the further evolution of international environmental law and mobilizing an "effective international response to global environmental threats";
- initiating a system-wide response to "global problems such as drug trafficking and abuse and emerging and re-emerging diseases". (ACC, October 1996).

The global advocacy role of both WHO and the United Nations system should be utilized to maximum advantage in order to address these global, transnational policy issues. This approach will help to promote a new, integrated global health agenda for the twenty-first century which can tackle the challenges and maximize the opportunities presented by the forces of globalization.

Global Context of WHO Reform

In response to global change, ongoing reforms have been going on within WHO over the past five years. The process of reform has proceeded in close collaboration with the Organization's "Governing Bodies". In May 1992, The Executive Board Working Group on the WHO response to Global Change was established, and has helped to motivate the reform process within the Organization. The Working Group has made 47 recommendations for reform, which have been acted upon and implemented (WHO,1997b,p.1). In the future, it is important, given the dynamic global context in which WHO will be expected to function, that the "culture of reform" which has been set in motion within the Organization continues.

Furthermore, it is important that WHO's future reform efforts consider the potential consequences of global trends in order that it maintains the vision, flexibility and foresight required to motivate the international health development community, and in order to ensure that sustained health gains continue to be realized in the twenty-first century. The implications of globalization and the existence of transnational social, economic, and political problems suggest that WHO's new policy will be implemented within the following global context:

i. Global health policies for twenty-first century will need to address the transnationalization of health risks, which implies that increased interdependence between national policy-making and the international milieux will be required .

ii. The health impacts of globalization will increase the need for new and innovative partnerships for health improvement: these partnerships should involve, *inter alia*, state, non-state, including private, development actors. High levels of interagency and intra-agency cooperation and coordination will be required at the international intergovernmental level.

iii. The challenges associated with globalization will enhance the role for international legal instruments, standards, and norms to facilitate cooperation, coordination, and harmonization of global policies.

iv. These global challenges and opportunities imply that new forms of governance for global health issues, involving shared and complementing responsibilities between nation states, subnational, and international intergovernmental actors, will need to evolve in the future.

v. Many of the transnational health concerns outlined in this document constitute areas of shared interest for WHO's Member States, therefore representing areas of collective security for Member States' foreign policies.

vi. Within this global context, it is important that WHO's future health policy and implementation strategies aim to delineate the role of the state.

vii. The framework for health development outlined herein makes it clear that WHO will not be able to address the broad determinants of health status without extensive collaboration with other partners. In some cases, it

will be appropriate for other international intergovernmental bodies to assume the position of lead agency, in addressing these determinants.

WHO's new global health policy for the twenty-first century should explore the possibilities of translating this altered policy environment into concrete global intersectoral/interagency initiatives for health development. Therefore, WHO's future structural reforms will need to consider its global relationships within the United Nations family, and what fundamental roles that WHO will need to play with its various partners in order to confront emerging transnational challenges . These initiatives will need to address the major global determinants of health status with cost-effective arrangements based on a spirit of collaboration. Furthermore, WHO's future reform initiatives should consider these emerging global priorities in order to put human health at the centre of sustainable human development.

Considering the increasing importance of the transnational dimension of global health development, it is becoming more crucial that WHO explicitly links its technical and normative functions. Towards this end, it is important that WHO explores avenues to more fully utilize the provisions of the WHO Constitution for elaborating international instruments. WHO's Constitution (1996h,pp.7-8) provides for the development of international regulations in certain defined areas (*Article 21*), conventions or agreements "with respect to any matter within the competence of the Organization (*Article 19*), and recommendations "with respect to any matter within the competence of the Organization (*Article 23*). By exercising its underutilized potential to elaborate international instruments, WHO would be able to encourage the development of national health legislation (Taylor,1992,p.331), and in this way the Organization would be able to support its global strategy for achieving Health-for-All in the twenty-first century.

In the twenty-first century it is apparent that WHO needs to think and act globally and intersectorally to address the complex, interdependent, and potentially unpredictable global trends, and to improve national health status. By pursuing a broader range of global partnerships and addressing the transnational dimension of health development WHO will be able to facilitate settings for intersectoral action for health at national/local levels. In order to effectively confront the broad determinants of health it is crucial that WHO's global institutional alliances corresponde with concrete actions and political advocacy at the intergovernmental, national, local and transnational levels of policy implementation. To meet these future challenges WHO will not only have to concentrate on streamlining its partnerships with its various global partners, but will also have to concentrate on intra-organizational coordination so that it can face the global problems of the future as a united Organization with a common purpose and vision of the future.

Outstanding Issues and Conclusions

The health threats and opportunities which will confront world society in the next century suggest that the paradigm of health development for the twenty-first century must include a central place for intersectoral/interagency collaboration. Although past experience suggests that overcoming "turf battles" between specialized groups is not always successful, and is never straightforward, the need to transcend the myopia of rigid boundary-setting between sectors and disciplines has never been greater.

The foregoing review of global trends and actions to address them opens up a number of issues which require further attention. These outstanding issues would include:

i. The need for further research on the impact of global trends on future disease burdens.

ii. The need for a detailed analysis of the health effects of globalization and global trends at the level of national health systems.

iii. Although this document has not concentrated on the issue of monitoring and evaluation of intersectoral initiatives it is important that indicators of success (or failure) are elaborated. Some preliminary suggestions are cited in Annex B.

iv. The implications of globalization for future human resource development in health is particularly important. For example, it is apparent that more resources should be allocated to developing expertise in the area of international public health law.

v. The transnational nature of the problems and opportunities documented herein, provides an impetus for global research programmes which concentrate on developing cost-effective technologies to improve the health status of the world's poor.

In the future, if humanity is to maintain and improve upon the unparalleled health gains of the twentieth century we will have to accept that:

> "We are increasingly confronted, whether we like it or not, with more and more problems which affect mankind as a whole, so that solutions to these problems are inevitably internationalized. The globalization of dangers and challenges - war, chaos, self-destruction - calls for a domestic policy which goes beyond parochial or even national items. Yet, this is happening at a snail's pace (Brandt et al.,1981,p.19)."

To ensure the health and well-being of future generations it is ethically imperative that present generations should not continue to address these transnational issues at "a snail's pace".

Annex A: Global Intersectoral Action Case Studies

The foregoing analysis has outlined the major transnational problems facing humanity in the twenty-first century, and some crucial global actions to address these challenges. This section will outline two case studies of existing global initiatives: one, the FAO/WHO Codex Alimentarius Commission is a longstanding global initiative, and the other the International Forum on Chemical Safety is a recent initiative. These case studies will be analysed in order to highlight possible recommended practices of global intersectoral action for future initiatives.

Case Study "a" WHO/FAO Codex Alimentarius Commission

1.1 What was the Rationale for the establishment of this Intergovernmental Intersectoral Initiative and how has it been implemented?

The FAO/WHO Codex Alimentarius Commission was established so as to provide an internationally adopted set of uniform food standards. These standards are intended to protect the health of consumers and to facilitate the international food trade by establishing a set of definitions and requirements for traded food commodities.

Towards this end the FAO/WHO Food Standards Programme (Codex Alimentarius) was established in 1962 after the sixteenth World Health Assembly approved a joint FAO/WHO programme on food standards, with the principal organ being the Codex Alimentarius Commission (CAC). The primary rationale for the establishment of the Codex Alimentarius Commission was to execute the Joint FAO/WHO Food Standards Programme. The first session of the Codex Alimentarius Commission was held in June 1963. In July 1981 at the 14th session of the Codex Commission it was decided that its standards, "which are sent to all Member States and Associate Members of FAO and/or WHO for acceptance, together with details of notifications from governments with respect to the acceptance or otherwise of the standards and other relevant information", constitute the Codex Alimentarius (WHO,1973,p.157; FAO/WHO,1995,p.ix).

1.2 What are the primary aims and objectives of this global intersectoral initiative?

The primary objectives of the Codex Alimentarius (FAO/WHO, 1995,p.5) are :

"i. to protect the health of consumers and ensure fair practices in the food trade;

ii. to promote coordination of all food standards work undertaken by international governmental and nongovernmental organizations;

iii. to determine priorities and to initiate and guide the preparation of draft standards through and with the aid of appropriate organizations;

iv. to finalize standards elaborated in (i), and after acceptance by governments, to publish them in a Codex Alimentarius either as regional or world-wide standards, together with international standards already finalized by other bodies under (ii.), wherever this is practicable;

v. to amend published standards, after appropriate survey in light of developments."

1.3 What have been the major accomplishments of this initiative?

The Joint FAO/WHO Food Standards Programme has established a normative regime which consists of standards, recommended codes of practice, and guidelines. Codex standards, guidelines and recommendations

relating to food safety, while remaining recommendations of international organizations which Member States may or may not choose to put into public health practice, have, however, now assumed a completely new dimension as the reference or "measuring stick" of national requirements (WHO, April 26 1994).

Indications of the level of development of this international regime for food safety is the scope of the Codex Alimentarius:

- The CAC has existed for 35 years and has grown in membership from an initial 30 countries to more than 150 countries as of March 1997.

- The CAC has elaborated over 240 commodity standards, more than 40 different codes of hygienic and technological practices, and over 3000 maximum levels for a large number of chemicals in food, including food additives, contaminants and residues of veterinary drugs, and pesticides.

Another indication of the success of this global intersectoral initiative is that it has adapted to meet new international challenges. Since its inception steps have been taken to strengthen collaborative links between the FAO/WHO Codex Alimentarius Commission with other relevant international organizations. For example, closer links were developed with the International Atomic Energy Agency (IAEA) and the United Nations Environment Programme (UNEP), following the Chernobyl nuclear accident in 1986, to establish recommendations on maximum levels of radionuclides in food traded across international borders(WHO,1993,pp.85-86). In addition, the standards of the CAC on quality and presentation of food were consulted when WHO prepared an International Code on Marketing of Breastmilk Substitutes in 1980 (WHO,1985,p.91). Close links to the work of the World Trade Organization have also evolved, particularly with regards to the Agreement of Sanitary and Phytosanitary Measures (SPS)[20] and the Agreement on Technical Barriers to Trade (TBT)[21] that were included in the Final Act of the GATT Uruguay Round, and which should have direct impacts on health (WHO,20 April 1993, p.17). Also, measures were taken in the 1980s to enlarge the partnership base of the CAC by promoting "active collaboration on the part of both the public and private sectors and nongovernmental organizations in national Codex work" (WHO,1993,p.85).

Finally, to provide the CAC with the scientific basis for its decision-making, WHO in collaboration with FAO and IAEA (in the case of food irradiation) has organized, *inter alia*, a series of meetings of three scientific bodies on food additives, on pesticide residues, and on food irradiation[22]. Even though these bodies are not part of the CAC they provide ongoing scientific evidence to various CAC committees. Also, on a sporadic basis, other scientific advisory bodies have been convened to address biological aspects of food safety and other issues, such as biotechnology (WTO, 15 November 1995).

1.4 Has this global intersectoral programme been a success?

The stated objectives of the 1962 World Health Assembly Resolution WHA16.42 were to create a FAO/WHO joint programme on food standards under the auspices

[20] The SPS agreement stipulates that sanitary and phytosanitary measures are those which are applied to protect human life from risks resulting from "additives, contaminants, toxins or disease-causing organisms in food or feed; to protect human life from plant- or animal-carried diseases; and to protect animal or plant life from pests, diseases, or disease-causing organisms (WHO,20 April 1993,p.18).

[21] The **Agreement on Technical Barriers to Trade (TBT)** includes "technical regulations on industrial and agricultural products, including packaging, labelling and marketing requirements, and methods of certifying conformity" and are intended to ensure that imported products are treated "no less favourably than domestically produced goods" (WHO, 20 April 1993,p.17).

[22] The three bodies are: the Joint FAO/WHO Expert Committee on Food Additives (JECFA), the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) and the Joint FAO/IAEA/WHO Expert Committee on the Wholesomeness of Irradiated Food.

of the Codex Alimentarius Commission. Since its inception this international body has created an international normative regime to regulate and ensure international food safety, while also facilitating international trade in food. The abovementioned accomplishments indicate that the original objectives of the World Health Assembly in 1962 have been addressed in a very comprehensive manner over the past 35 years. The CAC is a well-developed and sustained global intersectoral initiative, and in summary has been successfully implemented.

1.5 What future challenges does this initiative face?

The fact that recent data indicates that foodborne illnesses are on the rise in many countries indicates that public health strategies founded on regulation alone are not sufficient. As a result, there is now a greater emphasis placed on strengthening and basing Codex recommendations on surveillance and epidemiological information as well as integrating the "science of international risk assessment" (Kaferstein et al., 1997).

The increasing rapidity of globalization underscores the need to link the normative Codex regime with the improved international surveillance of foodborne diseases (Kaferstein et al.,1997), and the monitoring of chemical and biological contaminants in food. In this respect, the WTO has acknowledged WHO's proposal to integrate the *Hazard Analysis and Critical Control Point* system (HACCP) at every stage of the human food chain as one way of implementing the SPS agreement (WTO, 15 November 1995). These future global challenges will require that the CAC integrate its activities with global risk analysis and surveillance and monitoring initiatives.

1.6. Does this initiative suggest any recommended practices for other global intersectoral initiatives?

In view of the transnational challenges outlined in this document the work of the CAC suggests recommended practices which other global actions for health could emulate. This initiative suggests that:

- uniform international standard-setting can be an effective approach to addressing common international problems, and in particular those which have a transnational dimension;
- international normative regimes in health should try to strengthen the basis of their decision-making by resorting to scientific evidence;
- international regulatory instruments in health need to be accompanied by strengthened surveillance and monitoring mechanisms;
- an effective regulatory system needs to be aware of new problems and issues (for example trade liberalization as outlined in this case study) so that new approaches can be developed, which in turn can involve the extension of an initiative's partnership base (for instance, in this case study the strengthening of links with the WTO);
- intersectoral initiatives can build on the strengths of each collaborating sector to produce a synergistic relationship which takes advantage of the respective strengths of each sector; the long-term nature of the FAO/WHO collaboration demonstrates that intersectoral initiatives need not be short-lived and characterised by "turf disputes and rivalries" between competing sectors.

Case Study "b" Intergovernmental Forum on Chemical Safety (IFCS or Forum)

2.1 What was the Rationale for the establishment of this Intergovernmental Intersectoral initiative and how has it been implemented?

The IFCS was established in 1994 in response to a recommendation of the *United Nations Conference on Environment and Development* (UNCED). The IFCS was initiated by the *International Conference on Chemical Safety* (Stockholm, 1994) upon the invitation of the Executive Heads of WHO, ILO and UNEP. The Forum is a "non-institutional arrangement" in which three groups, Governments, Intergovernmental organizations, and Nongovernmental organizations, meet to consider the full range of issues associated with the assessment and management of chemical risks. The IFCS does not represent a "new agency" but rather represents an international means of promoting chemical safety without establishing another formal institution (IFCS,February 1995,pp.14-16; IFCS, 14 February 1997).

2.2 What are the primary aims and objectives of this global intersectoral initiative?

The principal aims of the IFCS include, *inter alia*, to:

- identify priorities for cooperative action on chemical safety and recommend international strategies for "hazard identification and risk assessment" of chemicals, where appropriate;
- facilitate the collaboration of "national, regional, and international bodies" in the area of chemical safety to avoid "duplications" of work;
- support the "strengthening of national coordinating mechanisms and national capabilities for chemical management;
- foster international agreements and commitments on the labelling and classification of chemicals;
- promote information exchange, identify gaps in scientific knowledge, and review the effectiveness of the implementation of international strategies pertaining to chemical safety;
- provide advise to governments on chemical safety, with a particular emphasis on legislative issues;
- encourage the strengthening of "national programmes and international cooperation for the prevention of, and preparedness for, and response to chemical accidents, including major industrial accidents" (IFCS, February 1995, pp.27-28).

2.3 What have been the major accomplishments of this initiative?

Although the IFCS has only been existence since 1994 it has made major progress in, *inter alia*, the following areas:

i. This initiative has expanded and accelerated the international assessment of chemical risks. By the end of 1997 it is projected that over 200 assessments will have been completed.

ii. Significant progress has been made towards the development of a global "harmonized" system for classifying and labelling of chemicals.

iii. The IFCS has utilized the *Global Information Network on Chemicals* (GINC) to promote information exchange using the Internet between "relevant organizations and countries".

iv. The Forum has supplied advice on a number of "priority risk reduction activities", and has promoted coordination amongst its members in this regard.

v. The IFCS, at the request of UNEP's Governing Council, offered recommendations on a "legally binding instrument on persistent organic pollutants"

vi. The Forum has promoted the use of risk management tools such as the *Pollutant Release and Transfer Registers* (PRTRs).

Approximately thirty countries are currently instituting PRTRs (IFCS, 14 February 1997).

2.4 Has this intersectoral initiative been a success?

The IFCS during its brief history has made major progress towards realizing its objectives. Its successes are even more impressive given that the IFCS represents a non-institutional mechanism of international intergovernmental collaboration. In other words, this initiative has addressed many of its aims and objectives without developing another layer of institutional machinery.

2.5 What future challenges does this initiative face?

The Forum faces a number of future challenges and unresolved issues in the future (IFCS,14 February 1997):

- The Forum on Chemical Safety lacks consistent financial support necessary for its future viability.
- In particular, international funding to ensure the full participation of developing countries has not been secured.
- A strengthened commitment from the partners comprising the Forum is required so that it can continue to address problems relating to chemical safety.
- The mechanisms for implementing the Forum's recommendations and initiatives will need to be strengthened in the future in order to fulfil the high expectations of Agenda 21 for the "environmentally sound management of chemicals."

2.6 Does this initiative suggest any recommended practices for other global intersectoral initiatives?

The activities of the Forum on Chemical Safety suggests particular recommended practices for other global intersectoral initiatives addressing determinants of health status.

- The IFCS has shown that global intersectoral initiatives do not necessarily require the creation of new formal institutional structures. The Forum has demonstrated that it is possible to provide answers and assessments for health and environmental problems involving chemicals by means of non-institutional mechanisms of cooperation.
- The Forum has provided a means of following up the expectations of UNCED relating to chemical safety. Similarly, the effective implementation of the recommendations of other recent global conferences (Annex D), which are all related to the broad the determinants of health status, will require that global fora concentrate on finding and implementing solutions to pressing global problems.
- The Forum has provided advice to international bodies, such as UNEP, regarding international legal instruments in key technical areas relating to chemical safety. Since the Forum represents a voluntary, broad-based alliance of global partners it is well placed to provide such advice, and such a fora offers an excellent opportunity for gaining consensus for international normative instruments. Such broad-based global coalitions could provide a mechanism for elaborating international norms and standards in other technical areas relating to the protection of health and the environment.

Annex B
Monitoring and Evaluation

The assessment of health promoting measures in other sectors has been the subject of numerous studies. In a recent paper, *Assessment of health producing measures across different sectors* (1995), Drummond and Stoddart make the following proposals regarding the economic evaluation of intersectoral actions for health:

i. Since health benefits are not confined to measures within the health sector it is important that further attempts be taken to assess non-health sector initiatives which have impacts on health status. Cost-benefit analysis which gives an indication of the "marginal benefits (in improved health)" achieved from resources allocated to different sectors, is one method of increasing the awareness of policy-makers to the benefits of non-health care initiatives.

ii. Although there are several methodological problems associated with intersectoral economic evaluations, pilot studies should be undertaken.

iii. While it is not possible to undertake full economic evaluations of all projects having health impacts, it might be practical to provide "minimum data sets" to justify expenditure plans.

iv. Institutional changes would also be needed to facilitate intersectoral evaluations, given that ministries/agencies always compete for scarce resources.

v. The issue of providing incentives for intersectoral efforts also needs to be considered.

In summary, there is good evidence that better methods of economic evaluation for intersectoral health initiatives can be developed. However, the practical experience with implementing such evaluations is rudimentary. Therefore, it is evident that further "pilot studies" to test methods of evaluation need to be undertaken. Initially, these "pilot studies" would likely be most practical at the local or national level, rather than the global level of analysis which has been the subject of this document. Nonetheless, such evaluations could provide supporting evidence for the benefits of national/local intersectoral actions for health, which could also indirectly support the need for intersectoral actions at the global level, as well.

It is important to note, however, that evaluations of intersectoral initiatives should not be limited to economic analyses. As suggested in Annex A, process indicators are also important measurements of intersectoral collaboration. For example, the sustainability of intersectoral programmes, as well as evaluations of the outputs of such actions, are also important indicators of the overall success of cooperative arrangements. Since the success of intersectoral efforts is heavily reliant on dismantling the psychological barriers which prevent groups from interacting, measures of the effective collaboration of different sectors will provide an indication of the successful implementation of intersectoral strategies for health.

In addition, certain benchmark indicators could be used to target intersectoral initiatives. For instance, since health status is dependent on numerous underlying determinants, it is important that a wide range of benchmark indicators, in addition to core health indicators such as maternal and infant mortality rates, be used to direct intersectoral strategies. For instance, anthropometric data on the nutritional status of under five-year olds can be used as an indicator of inequity in order to target maternal and child health care services and nutritional programmes. Moreover, this indicator could be used as a method of targeting intersectoral action initiatives, for example microcredit schemes. Other indicators, such as the Gini coefficient, which measures the distribution of income within a population[23] and chronic unemployment rates, should be used to target health promoting programmes to vulnerable populations.

[23] A Gini coefficient of zero indicates that the distribution of income within a population is equal, and the closer the coefficient is to a value of 1, the more unequal is the distribution of income.

Annex C. Determinants of health status: Key intergovernmental alliances

The following typology relates the work of various international intergovernmental organizations to the principal determinants of health status. Addressing the broad determinants of health status should structure WHO's collaborative relationships with its various health partners in the twenty-first century. The following is a possible representation of how WHO's future relations at the intergovernmental level may be conceptualized. These alliances would need to be coordinated in conjunction with the ACC Task Forces and Inter-Secretariat Committees such as the IACSD.

FACTORS	KEY INTERGOVERNMENTAL ALLIANCES
***MACRO FACTORS:**	
POLITICAL (e.g. human rights,gender)	WHO + United Nations System-wide Advocacy
ECONOMIC	WHO + World Bank, IMF, UNICEF, UNDP, ILO, UNCTAD, Regional Development Banks
EDUCATIONAL	WHO + UNESCO, UNICEF, UNDP, UNFPA, World Bank, UNIFEM
ENVIRONMENTAL	WHO + UNEP, UNDP, WMO, World Bank, FAO, IFAD
TECHNOLOGY	WHO + UNESCO, ITU, WIPO, UNCTAD, WTO, UNAIDS
DEMOGRAPHIC/ MIGRATION	WHO + UNHCR, UNFPA, UNCHS
GLOBAL TRADE	WHO + WTO, UNCTAD, World Bank, UNDP, FAO, UNIDO, Regional Development Banks
COMMUNICATIONS/ GLOBAL MONITORING	WHO + UNHCR, ITU, UNAIDS, UN/OOSA
***BIOLOGICAL FACTORS:**	
GENETIC	WHO/CIOMS + UNESCO, WIPO
***PROXIMATE FACTORS:**	
SAFE, SUFFICIENT FOOD	WHO + FAO, WFP, IFAD, UNDP, World Bank, UNEP, WTO
WATER/ SANITATION	WHO + UNICEF, UNDP, World Bank, UNHCR, UNEP
INDUSTRY ACTIONS	WHO + ILO, UNDP, UNIDO, World Bank

SOCIAL NETWORKS AND SOCIAL CAPITAL	WHO + UNDP, UNICEF, UNESCO, ILO, World Bank, Regional Development Banks UNIFEM
SOCIAL BEHAVIOUR AND CULTURE	WHO + UNESCO, UNICEF, UNDP, UNFPA UNIFEM
HEALTH SERVICES	WHO + World Bank, UNICEF, UNFPA, UNDP, UNAIDS

In order that WHO's institutional alliances at the international/regional intergovernmental level facilitate tangible health gains it will be important to consider how this might be accomplished in a world of sovereign states. In this regard, the research of political science theorists in the area of international organization may be useful. In particular, it has been suggested that in a world of sovereign states confronted by global problems "the collective good appears to be best served by a sharpening of the realization of self-interest". In other words, in order to address transnational problems, the future policies of *global international organizations* will need to complement and reinforce Member States' enlightened self-interests to confront these issues. In support of this conclusion, the political theory of *consociationalism* and *symbiosis* suggests that "the level and style of international organization is a function of sub-units' (governments') perception of how their separate interests are to be reconciled with those of the collectivity (the regional or international system) rather than of the emergence of any transcendental common interest" (P. Taylor, 1993, pp.113,201). In this respect, WHO's global health policy for the twenty-first century should aim to, *inter alia*, engage Member States' interests to address shared global health policy issues which represent areas of collective/shared security for Member States' foreign policies.

Annex D
Major world development conferences since 1990

1.	The World Conference on Education for All	Jomtien, Thailand 1990
2.	The World Summit for Children	New York, NY, USA 29-30 September,1990
3.	United Nations Conference on Environment and Development (UNCED)	Rio de Janeiro, Brazil 3-12 June, 1992
4.	International Conference on Nutrition	Rome, Italy December, 1992
5.	The World Conference on Human Rights	Vienna, Austria 14-25 June, 1993
6.	The World Conference on Natural Disaster Reduction	Yokohama, Japan 23-27 May, 1994
7.	The International Conference on Population and Development	Cairo, Egypt 5-13 September, 1994
8.	The World Summit for Social Development	Copenhagen, Denmark 6-12 March, 1995
9.	The Fourth World Conference on Women	Beijing, China 4-15 June, 1995
10.	The Global Conference on Sustainable Development of Small Island Developing States	Bridgetown, Barbados 6 April-6 May, 1996
11.	The United Nations Conference on Human Settlements	Istanbul, Turkey 3-14 June, 1996
12.	The World Food Summit	Rome, Italy 13-17 November, 1996

These conferences represent an attempt to enhance the effectiveness of the United Nation's international programmes in an environment of mounting global problems. These special conferences, which all have implications for the improvement of the health status of the world's population, provide an important vehicle for arriving at solutions for transnational problems. On the other hand, considering the current momentum for reform within the United Nations system it is important that these conferences do not lead to the proliferation of new institutional machinery which adds to the "problems of managing the United Nations' economic and social activities according to a rational and comprehensive strategy" (P.Taylor,1993,p.132).

Bibliography

ACC. Administrative Committee on Coordination (Second Regular Session of 1994). United Nations Document ACC/1994/26.

ACC. *ACC Joint Statement: Reform and Strengthening of the United Nations System*. October 1996.

Addison T, and Demery L. "Labor Markets, Poverty and Adjustment," in *Journal of International Development*. Vol.5, No. 2, pp.135-143.

Bijlmakers L et al. *Health and Structural Adjustment in Rural and Urban Zimbabwe (Research Report No. 101)* Uppsala, Nordiska Afrikainstitutet,1996.

Björkman JW, Altenstetter C. "Globalized Concepts and Localized Practice: Convergence and Divergence in National Health Policy Reforms (Chapter 1)", in *Health Policy Reform, National Variations, and Globalization*. London, MacMillan Press Ltd,1997.

Blanchard F. *Preliminary report prepared by Mr. Francis Blanchard on the functioning of ACC*. United Nations document ACC/1992/CRP.7,1992.

Boutros-Ghali B. Letter from UN Secretary-General to Executive Heads (Annex II). United Nations Document ACC/1993/FB/R.12, 24 February 1993.

Brandt W. et al. *North South: A Programme for Survival: Report of the Independent Commission on International Development Issues*. London, Pan Books,1981.

Bryant J and Khan K. "The Challenges of Vulnerability," in *Poverty, Vulnerability, and the Value of Human Life: A Global Agenda for Bioethics*. Z. Bankowski and J. Bryant eds. Geneva,CIOMS,1995.

Canadian International Development Agency (CIDA). *Strategy for Health*. Ottawa, CIDA Policy Branch, November 1996.

Cossar and Reid. Health hazards of international travel. *World Statistics Quarterly* (1989), Vol. 42.

Chandler W. *Worldwatch Paper 68: Banishing Tobacco*. Washington DC, Worldwatch Institute, 1986.

Chisholm B. Organization for World Health, in *Mental Hygiene* (1948), 32:364-371.

CIOMS/WHO. *CIOMS-WHO Initiative on Ethics, Equity and Health-for-All*, unpublished paper from CIOMS International Conference on Ethics, Equity and the Renewal of WHO's Health-for-All Strategy, 12-14 March 1997, Geneva.

Claeson M, de Beyer J, Jha P, and Feacham R. The World Bank's perspective on global health, in *Rapid Science Publishers (1996)*, Vol.2:264-269.

Collishaw N. *Presentation given at a WHO Technical Seminar entitled Global Health Threats: The Role of International Legislation and Other Instruments*, 29 October 1996, Geneva, Switzerland.

Connolly G. Worldwide Expansion of Transnational Tobacco Industry, *Journal of the National Cancer Institute: Monographs No. 12*,1992, pp.29-35.

Cornia GA, Jolly R and Stewart,F, eds. *Adjustment with a Human Face: Protecting the Vulnerable and Protecting Growth*. Oxford, Clarendon Press,1987.

Cornia G, and Sipos S. "Introduction," *Children and the Transition to the Market Economy: Safety Nets and Social Policies in Central and Eastern Europe*. Giovanni Cornia and Sandor Sipos. Aldershot UK, Avebury Academic Publishing Group, 1991.

Council on Scientific Affairs. The Worldwide Smoking Epidemic: Tobacco Trade, Use and Control, in JAMA, June 27, 1990, Vol. 263, No. 24, pp.3312-3318.

De Onis M. *Background Information of the Global Database on Child Growth and Malnutrition*, unpublished WHO document prepared by Nutrition Unit (1997).

De Schryver A, Meheus A. International Travel and Sexually Transmitted Diseases, *World Health Statistics Quarterly (1989)*, Vol. 42, No. 2.

Degeling P, Apthorpe R. *Can Intersectoral Co-operations be Organised?: Uncovering some implications of 'sectors' in calls for 'intersectoral' co-operation*, 26 November, 1992.

Drummond M, and Stoddart G. "Assessment of health producing measures across different sectors," in *Health Policy*, Volume 17, Number 4.

Fidler,D. *Globalisation, International Law, and Emerging Infectious Diseases, in Emerging Infectious Diseases*, Volume 2, Number 2, April-June 1996.

FAO. *Towards Universal Food Security: Draft of a Policy Statement and Plan of Action*, (World Food Summit, 13-17 November 1996, Rome, Italy). FAO document: WFS96/3 (provisional version - Rev.1), 1996.

FAO. *Food Security Assessment*, FAO document WFS 96/TECH/7 (provisional version), January 1996.

FAO. *Overall Socio-Political and Economic Environment for Food Security at National, Regional and Global Levels*, FAO document WFS 96/TECH/5 (provisional version), November 1995.

FAO. *This is the Codex Alimentarius (Second Edition)*. Rome, FAO,1994.

FAO/WHO. *Codex Alimentarius: General Requirements (Volume 1A)*, Second Edition. FAO/WHO,Rome,1995.

FAO/WHO. *Biotechnology and Food Safety: Report of A Joint FAO/WHO Consultation (Rome, Italy, 30 September-4 October 1996)*. Rome,FAO,1996.

Frankel G. How Tobacco Firms and U.S. Smashed Barriers to the East, in *International Herald Tribune*, Zurich, Monday November 18 1996.

Frankel G, and Mufson S. Vast China Market Key to Smoking Disputes, in *The Washington Post*, November 20 1996.

Frenk et al. *Health Systems in an Era of Globalization: Challenges and Opportunities for North America*, Julio Frenk, Phyllis Freeman, Octavio Gomez-Dantes, eds. Washington, DC, US National Academy of Sciences,1995. Friedman M. "Internationalization in the U.S. Economy," in the *Fraser Forum*, February,1989. Garrett L. The Return of Infectious Diseases, in *Foreign Affairs*, January/ February 1996.

Garrett L. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. New York, Farrar, Strauss, and Giroux, 1994.

GATT, "*Multilateral Trade Negotiations The Uruguay Round: Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*," (Geneva, GATT Secretariat, 15 December 1993.

Gill S. "Structural Change and Global Political Economy: Globalizing Jlites and the emerging world order," in *Global Transformation: Challenges to the State System*, edited by Yoshikazu Sakamoto, Tokyo, United Nations University Press, 1994.

Griffin K. *Globalization and Regionalization: An Exploration of Issues (Chapter Three)*. New York, United Nations Publications,1992.

Huntington S. *The Clash of Civilizations and the Remaking of the World Order.*, New York, Simon and Schuster,1996 .

Huntington S. "The West Unique, Not Universal", in *Foreign Affairs*, Vol. 75, No.6, November/December 1996.

Hurrell A, and Woods N. "Globalisation and Inequality," in *Millennium: Journal of International Studies (1995)*, Volume 24, Number 3.

Husain I. Structural Adjustment and the Long-Term Development of Sub-Saharan Africa (Chapter 10), in *Structural Adjustment and Beyond in Sub-Saharan Africa*, Rolph Van Der Hoeven and Fred Van Der Kraiij, eds. Heinemann, Portsmouth, N.H.,1994.

IACSD. *Draft Report of the Ad Hoc Intersessional Working Group of the Commission on Sustainable Development*, (New York 24 February - 7 March 1997).

IFCS. *Intergovernmental Forum on Chemical Safety: Background, purpose, functions*, WHO,Geneva, February 1995.

IFCS. *Forum II: Second Session of the Intergovernmental Forum on Chemical Safety: President's Progress Report (1994-1997)*, IFCS document IFCS/Forum-II/97.21.w. WHO: Geneva,14 February 1997.

ILO. *Child Labour: Targeting the Intolerable*. Geneva,ILO,1996a.

ILO, *World Employment 1996/97: National Policies in a Global Context*, Geneva,ILO,1996.

ILO, *UN ACC Task Force on Employment and Sustainable Livelihoods: A Framework for Country Reviews*, July 1996.

Institute for Sustainable Development. "*The World Trade Organization: An Independent Assessment.*" Winnipeg, Canada,1996.

Intergovernmental Panel of Climate Change (IPCC). *1995 Report by Working Group*, Geneva,WHO/UNEP,1995.
Jing Jie Yu. "A Comparison of Smoking Patterns in the People's Republic of China with the United States: An Impending Health Catastrophe in the Middle Kingdom," in JAMA, September 26, 1990, Vol.264, No. 12,pp.1575-1579.

Johnson S,ed. *The Earth Summit: The United Nations Conference on Environment and Development (UNCED)*. London, Graham & Trotman/Martinus Nijhoff,1993.

Joint Inspection Unit, *Some Reflections on Reform of the United Nations*, prepared by Maurice Bertrand, UN document JIU/REP/85/9. Geneva,1985.

Kaferstein F and Motarjemi Y. "Foodborne Diseases as Related to Travellers: A Public Health Challenge," in *Catering and Health*, Great Britain, Academic Publishers, 1991.

Kaferstein F, Motarjemi Y, and Bettcher D. *Foodborne Disease Control: A Transnational Challenge*, (1997), In press.

Kamel W. *"Health Dilemma at the Borders: A Call for Global Research and Action,"* A paper delivered to the Advisory Committee on Health Research,(ACHR), Thirty-fourth session, Geneva, 15-18 October 1996.

Kaplan R. *The Coming Anarchy*, in the Atlantic Monthly, February 1994.

Kapstein EB. "Workers in the World Economy," in *Foreign Affairs*. Volume 75, Number 3, May/June 1996.

Karlsson M. *Tomorrow's Global Health Organization: Ideas and Opinions*. Stockholm, Ministry of Foreign Affairs,1996.

Last J. *Ethical Dimensions of Global Ecosystem Sustainability and Human Health*, Paper presented at CIOMS International Conference on Ethics, Equity, and Renewal of WHO's Health-for-All Strategy, Geneva, Switzerland, 12-14 March, 1997, (Also, In press. To be published as "Human Health in a Changing World (Chapter 11)," in Last, JM, Public Health and Human Ecology, 2nd Edition. Stanford CT, Appleton and Lange, 1997.

Lee K. *Global Telecommunications Regulation: A Political Economy Perspective*. London, Pinter,1996.

Lee K et al. "Who should be doing what in international health: a confusion of mandates in the United Nations", in BMJ, Volume 312, 3 February 1996.

Lloyd F. *The Financial Times*. London, Monday, February 14 1994.

Mandil S. *"Telemedicine-The Challenge to the Telematics Industry and to International Cooperation,"* (Paper presented to the 7th World Telecommunications Forum: Strategies Summit, Geneva, 3-11 October 1995).

Marmor TR. "Global Health Policy Reform: Misleading Mythology or Learning Opportunity (Chapter 16)," in *Health Policy Reform, National Variations, and Globalization.* Bj`rkman JW and Altenstetter C, eds. London, MacMillan Press Ltd.,1997.

Martikainen P, and Valkonen T. Excess mortality of unemployed men and women during a period of rapidly increasing unemployment, in *The Lancet*, Vol.348, October 5 1996.

Mc Michael AJ, Haines A, Sloof R, Kovats S eds. *Climate Change and Human Health: An assessment prepared by a Task Force Group on behalf of WHO,WMO, and UNEP.* Geneva: World Health Organization, 1996.

Murray C, and Lopez A. *The Global Burden of Disease (Summary): A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020.* Geneva, WHO,1996.

Nakajima H. *Cloning and Human Reproduction: WHO Calls for the Establishment of Minimum Safeguards.* Press Release WHO/96, 29 November 1993, Geneva.

Nakajima H. *High Level Segment of the Economic and Social Council: Statement by Dr Hiroshi Nakajima,* New York, 25 June 1996.

National Centre for Health Promotion, *"Working Together: Intersectoral action for health,"* Department of Public Health & Community Medicine, June 1995.

Neufeld V, Bergevin Y, and Tugwell,P. "The role of academic health services in international health," in *Canadian Medical Association Journal*, 148(9), 1 May 1993.

Nordic UN Reform Project 1996. *The United Nations in Development: Strengthening the UN through Change: Fulfilling Its Economic and Social Mandate.* Oslo, GSCM AS, 1996.

Ottawa Charter for Health Promotion. Oxford, Oxford University Press,1986.

Pannenborg CO. "Shifting Paradigms of International Health," in *Asia-Pacific Journal of Public Health (1991)*, Volume 5, Number 2.

Plotkin B, and Kimball A. *"Designing the International Policy and Legal Framework for Emerging Infection Control: First Steps."* In press.

Prigogine I, and Stengers I. *Order Out of Chaos: Man's New Dialogue with Nature.* New York, Bantam Books,1984.

Richburg K. "Free Trade Helps Lift World Poor," in *International Herald Tribune*, December 30 1996.

Riley L. *"Address to the Third Committee of the UN General Assembly on the Item of International Drug Control (1996).*

Roemer MI, and Roemer R. Global health, national development and the role of government, *Am J Public Health (1990)*, Vol. 80, No.10, pp.1188-1192.

Ruggie R. "At Home Abroad, Abroad at Home: International Liberalisation and Domestic Stability in the New World Economy," in *Millennium: Journal of International Studies (1995).* Volume 24, Number 3.

Sakakibara E. "The End of Progressivism: A Search for New Goals," *Foreign Affairs.* Volume 74, Number 5.

Sakamoto Y. "Editor's Introduction," in *Global Transformation: Challenges to the State System,* edited by Yoshikazu Sakamoto. Tokyo, United Nations University Press,1994.

Shafaeddin M. "The Impact of Trade Liberalization on Export and GDP Growth in Least Developed Countries," in *UNCTAD Review 1995.*

Sindall C. Intersectoral Collaboration: the best of times, the worst of times, *Health Promotion International* (1997), Vol. 12,No. 1.

Sipos S. "Current and Structural Problems Affecting Children in Central and Eastern European Europe," in *Children and the Market Economy: Safety Nets and Social Policies in Central and Eastern Europe*. Aldershot UK, Avebury Academic Publishing Group, 1991.

South Centre, *Liberalization and Globalization: Drawing Conclusions for Development*. Atar, Geneva,1996.

Stanley K, and Stjernsward J. Lung Cancer in Developed and Developing Countries, in *Basic and Clinical Concepts of Lung Cancer*. Boston, Kluwar Academic Publishers, 1989.

Stebbins K. Tobacco, Politics and Economics: Implications for Global Health, in *Soc.Sci. Med.* Vol.33, No.12, pp.1317-1326.

Taylor AL. "Making the World Health Organization Work: A Legal Framework for Universal Access to the Conditions for Health", in *American Journal of Law and Medicine* 1992, Volume XVIII, Number 4.

Taylor P. *International Organization in the Modern World: The Regional and Global Processes*. London,Pinter,1993.

Tolba MK. *Saving Our Planet: Challenges and Hopes*, London, Chapman & Hall, 1992.

Toye J. Structural Adjustment: Context,Assumptions,Origin, and Diversity (Chapter three), in *Structural Adjustment and Beyond in Sub-Saharan Africa*, Rolph Van Der Hoeven and Fred Van der Kraaij,eds. Heinemann, Portsmouth, NH,1994.

United Nations. *Charter of the United Nations and Statute of the International Court of Justice*. New York, United Nations,1993.

United Nations. *Draft ACC Statement to the 1997 Special Session of the General Assembly*. New York, United Nations,1997.

United Nations. International Migration (Chapter X), in *Report of the International Conference on Population and Development* (Cairo, 5-13 September,1994), UN document A/CONF.171/13/Rev.1. New York, United Nations,1995.

United Nations. *Report of the United Nations System-wide Special Initiative on Africa*.
New York,United Nations, February 1996.

United States Environmental Protection Agency . *Respiratory Health Effects of Passive Smoking: Lung Cancers and Other Disorders*, Document EPA/600/8-90/006F, Office of Research and Development, Washington, D.C., December 1992.

UNCED. *Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992)*, UN document A/CONF.151/26, Volume I.

UNDP. *Human Development Report-1993*, Oxford, Oxford University Press,1993.

UNCHS. *Report of the United Nations Conference on Human Settlements (HabitatII)*, Document A/CONF.165/14/7 August 1996.

UNICEF. The State of the World's Children 1997. Oxford, Oxford University Press,1996.

UNRISD. Adjustment, *Globalization and Social Development: Report of the UNRISD/UNDP international seminar on Economic Restructuring and Social Policy* (New York, 11-13 January 1995), UNRISD, Geneva, 1995a.

UNRISD. *States of Disarray: The social effects of globalization*, Dharam Ghai et al., ed. UNRISD, Geneva,1995.

UNRISD. Adjustment, *Globalization and Social Development: Report of the UNRISD/UNDP international seminar on Economic Restructuring and Social Policy*, (New York, 11-13 January 1995). Geneva, UNRISD, February 1995.

Walt G. International Organization in Health: The Problem of Leadership, in Pocantico Retreat, "*Enhancing the Performance of International Health Institutions*," February 1-3, 1996.

Wapenhans,W. The Political Economy of Structural Adjustment: An External Perspective (Chapter Four), in *Structural Adjustment and Beyond in Sub-Saharan Africa*, Rolph Van Der Hoeven and Fred Van Der Kraaij, eds. Portsmouth, Heinemann, 1994.

WHO/UNICEF. *State of the World's Vaccines and Immunization.* Geneva, World Health Organization,1996.

WHO. *Basic Documents* (Forty-first edition). Geneva,WHO,1996h.

WHO. *Biotechnology and World Health.* Press Release WHO/87, 8 November 1994, Geneva.

WHO. *Changes and Reform: WHO for the 21st Century*, WHO Draft Document WHO/GPC/97.1. Geneva, WHO, 1997b.

WHO. *Collaboration within the United Nations System-General Matters: provisional agenda item 31.1, Forty-Sixth World Health Assembly*, WHO document A46/25, WHO, 20 April 1993.

WHO. *Collaboration with nongovernmental organizations: Review of overall policy on collaboration with nongovernmental organizations (1994-1996)*, WHO document EB99/35, Geneva, WHO, 2 December 1996 .

WHO. *Communicable disease prevention and control: new, emerging, and re-emerging infectious diseases*, WHO Document A48/15 (22 February 1995).

WHO, *Consulative Document: Renewal of Health-for-All, Outcome of Second Interregional Meeting*, unpublished document Geneva, 26-30 August 1996.

WHO. *Contraceptive Method Mix: Guidelines for Policy and Service Delivery*, Geneva, WHO,1994b.

WHO. *Essential Public Health Functions: A new initiative in support of Health-for-All*, unpublished document. Geneva, WHO, October 1996.

WHO. *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board (Volume I:1948-1972).* Geneva, WHO,1973.

WHO. *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board (Volume II:1973-1984).* Geneva, WHO,1985.

WHO. *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board (Volume III:1985-1992).* Geneva,WHO, 1993.

WHO. *Health informatics and Telemedicine (Provisional agenda item 17)*, WHO document EB99/INF.DOC./9, 7 January 1997, Geneva,WHO, 7 January 1997.

WHO. *Health Informatics and Telemedicine: Report by the Director-General*, (Provisional agenda item 17), WHO document EB99/30. Geneva, WHO, 7 January 1997.

WHO. International Framework Convention for Tobacco Control, *Resolution WHA49.17*, 25 May 1996.

WHO. *New, emerging, and re-emerging infectious diseases, and revision of the International Health Regulations*, WHO document A49/6. Geneva, WHO, 29 February 1996.

WHO. *Normative functions in WHO: Standard-setting in priority areas*, unpublished WHO document.

WHO. *Partnerships for Health in the 21st Century 2+2=5: Working paper prepared by the Working Group on Partnerships in the Context of Health for All Renewal (Draft #3)*, unpublished document. Geneva, WHO,1996f.

WHO, *Primary Health Care Concepts and Challenges in a Changing World: Alma-Ata revisited*, Geneva,WHO,1994a.

WHO. *Protecting and Promoting Human Health: Task Manager's Report*(Draft Copy), WHO,Geneva,1996g.

WHO. Reflections of the past-visions of the future: Report by the WHO Task Force on Health in Development, *WHO document EB99/40.* Geneva, WHO, 1997a.

WHO. *The International Response to Epidemics and Applications of the International Health Regulations: Report of a WHO Informal Consultation (Geneva, Switzerland, 11-14 December 1995).* Geneva,WHO, 1995a.

WHO. The Role of Intersectoral Cooperation in National Strategies for Health-for-All: Operational Issue, *WHO document A39/Technical Discussions/2*, Geneva, WHO, 1986.

WHO. *The World Health Report 1996: Fighting disease and fostering development*, Geneva, World Health Organization, 1996a.

WHO. *Minutes of the Third Meeting of the Coordinating Group for WHO/WTO Cooperation: 14 November 1996*, unpublished WHO document.

WHO. *Tobacco Alert: The Tobacco Epidemic-A Global Public Health Emergency*, Geneva, WHO,1996b.

WHO. *Tobacco or Health: First Global Status Report*. Geneva, WHO, 1996c.

WHO. *Trends in Substance Use and Associated Health Problems*, Fact Sheet No. 127. Geneva, WHO, 1996d.

WHO. *UN Special Initiative on Africa: The Health Dimension*, WHO Press Release WHO/18. Geneva, WHO 14 March 1996.

WHO. *UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development, and Research Training in Human Reproduction: Biennial Report 1992-1993*. Geneva, WHO,1994c.

WHO. *World Health Organization/World Bank Partnership: Recommendations for Action for Health Development*. Geneva, WHO,1995.

WHO, *World Health Quarterly: Health Consequences of the Chernobyl accident and other radiological events* (1996e), Vol.49, No.1.

WHO/ Rockefeller Foundation. *Intersectoral Action for Health: The Way Ahead*, Report of World Health Organization/ Rockefeller Foundation Meeting (3-6 March,1986). New York, Rockefeller Foundation, 1986a.

WHO Task Force on Health in Development. *Health in Development: Prospects for the 21st Century: Report of the first meeting of the Task Force on Health in Development*. Geneva, World Health Organization, 1994.

WHO Task Force on Health in Development. Report of the fourth meeting of the Task Force on Health in Development, *WHO document WHO/HPD/96.6*. Geneva, WHO,1996.

WHO. UNICEF/WHO Joint Committee on Health Policy, *WHO document EB99/22 Add.1*. WHO,Geneva, 2 January 1997.

WHO/EMC. Communicable Disease prevention and control: new, emerging and re-emerging infectious diseases. *WHO document A48/15*. Geneva, WHO, February 22 1995.

WHO/EMC. *EMC Annual Report 1996*. Geneva, WHO,1997.

WHO/EMC. *Emerging and other Infectious Diseases: Partnerships to Meet the Challenge*, Draft unpublished document, 1996.

WHO/EMC. *The International Response to Epidemics and Applications of the International Health Regulations: Report of a WHO Informal Consultation (Geneva, Switzerland 11-14 December 1995*, WHO document WHO/EMC/IHR/96.1, WHO,Geneva,1996a.

WHO/IBRD. *Final Report of Joint WHO-IBRD Workshop on "Banking for Health" : Improving the Health Status of Vulnerable Groups through increasing Availability of Credit, Particularly to Women*, WHO document WHO/DGH/ICO/BfH/1994. Geneva, WHO, October 1994.

WHO/ILO. *Internal correspondence between the Policy Action Coordination Team and the International Labour Organization*, unpublished document August 1996.

WHO/PAC. *Minutes of the Intersectoral Actions Group Meeting*, unpublished document 29 August, 1996.

WHO/PAC. *Poverty and Health: An Update*, unpublished document prepared for the August 1996 Interregional Meeting on Renewal of Health-For-All, Geneva (1996a).

WHO/SIDA. *Equity in health and health care: a WHO/SIDA initiative*, WHO document WHO/ABA/96.1. WHO, Geneva,1996.

WHO/UN. *Semi: Annual Review (January-June,1996)*. Office of the United Nations,New York.

Wilson ME. Travel and the Emergence of Infectious Diseases, in *Emerging Infectious Diseases*, Vol. 1, No. 2, April-June 1995.

Winslow CEA. The Economic Values of Preventive Medicine, in *The economic Value of Preventive Medicine: The Methodology of Health Protection for Local Areas (Technical Discussions at the Fifth World Health Assembly.* Geneva, WHO,1952.

Woodward D. *Debt, Adjustment, and Poverty in Developing Countries (Volume 1): National and International Dimensions of Debt and Adjustment in Developing Countries*, London, Pinter Publishers, 1992.

World Bank. *Adjustment in Africa: Reforms, Results, and the Road Ahead*, Oxford, Oxford University Press,1994.

World Bank. *Egypt: Alleviating Poverty during Structural Adjustment*. Washington DC,World Bank,1991.

World Economic Forum. "Communiques: The growing gap between `knows' and `know nots'", *Report of the Annual Meeting, Davos 1-6 February*.

WTO. *Selected World Health Organization Activities relevant to the implementation of the WTO Agreement on the application of Sanitary and Phytosanitary Measures*, WTO document G/SPS/W/37. WTO,Geneva, 15 November 1995.

Yach D. *Health as a Priority for Development in South Africa: Lessons and Implications for Renewing the Health-for-All Strategy*, Heath Clarke Lecture, London School of Hygiene and Tropical Medicine, November 1995.

Yach D. *Health-for-All in the Twenty-first century: A Global Perspective*, South African Medical Journal, 1996b. Volume 86, pp. 1474-1478. Yach D. *Globalization and Health: The Search for Levers to Promote and Protect Health (1997)*, unpublished paper.

Yach D. *Poverty and Health: An Update (1996a)*, unpublished paper prepared for WHO's Interregional meeting on Renewal of Health-for-All, Geneva, Switzerland.

Yach D. "Redefining the Scope of Public Health Beyond the Year 2000", in *Rapid Science Publishers (1996)*, pp.247-252.

Yach D. *Renewal of the Health-for-all strategy*, 1996b, Volume 17, Number 4.