

'An important step in promoting global peace and prosperity.'

MIKHAIL GORBACHEV

UNCOMMON OPPORTUNITIES

An Agenda for Peace and Equitable Development

THE REPORT OF THE INTERNATIONAL
COMMISSION ON PEACE AND FOOD

*'This Report brings together many of the development issues on which
the UN is encouraging reflection ... once again we see the inescapable
relationships between peace, development and democratization.'*

BOUTROS, BOUTROS-GHALI

United Nations Secretary-General

PREFACE TO THE SECOND EDITION

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MESSAGE BY THE UN SECRETARY- GENERAL

The broad range of topics examined by the International Commission on Peace and Food demonstrates the interrelated nature of the challenges of peace and development. Your collective endeavour illustrates the fact that no longer can global peace and security remain the preserve of political and military specialists. Without an adequate development effort, there can be no lasting peace security. Conflicts over resources, ultra-nationalism exacerbated by the tensions of unemployment, poverty and despair at home will inevitably lead to resentment, and resentment turns only too easily into armed conflict. The establishment of secure foundations for peace will be aided by development and post-conflict peace-building.

Yet if there is a growing international consensus on the peace operations undertaken by the United Nations, there is no such consensus on its developmental work. Indeed, this lack of a consensus reflects a worldwide crisis in the field of development economics. As development becomes imperative, as we approach the turn of this century, we are faced with the necessity of giving new meaning to the word. Reflecting on development is thus, in my opinion, the most important intellectual challenge of the coming years.

Already, it seems clear that macro-economics growth can no longer be deemed sufficient for development purposes. Countries pursuing macro-economics growth paths have the necessary foundations for development, but that is only the first part. There can be no lasting development with the exclusion of social groups from the fruits of growth. Nor can there be long-term prospects for development when the environment is pillaged and the rights of future generations ignored. Finally, growth which is not accompanied by the improvement of the social fabric of society will be only a hollow shell. For economic and social development to take place, it is important to promote the expansion of employment opportunities, the improvement of educational and health networks, support for the role of women in development and the pursuit of equality between the sexes.

A hitherto ignored dimension of the development challenge is democratization: what I have chosen to call political development. There have been cases where development was accompanied by an authoritarian political system. But, we have invariably seen that if the participation in the market place is not accompanied by political participation, development efforts are brought to naught by social and political instability. Political, economic and social development must be closely related, mutually supportive, deriving sustenance from one another. Once again, therefore, we see the inescapable relations governing the goals of peace, development and democratization--these are the goals of the United Nations.

The United Nations has, over the years, devoted great time and attention to the issues before the Commission on Peace and Food. In the research, analysis, debate, consensus-building and actual operational activities of the United Nations System, the issues of peace, development and democratization have been at the forefront. The Members of the International Commission on Peace and Food have interacted closely with the United Nations' Funds, Programmes and Specialized Agencies. The reports of the Working Groups bring together many of the issues which are central to the reflection on development which the United Nations is trying to encourage, leading to the World Summit on Social Development to be held in 1995.

Boutros Boutros-Ghali
Secretary General
United Nations

FOREWORD BY THE DIRECTOR GENERAL OF UNESCO

The report of the International Commission on Peace and Food focuses on the "uncommon opportunities" that have arisen as the world shifts into new alignments. These include the chance to tackle the problems of hunger and injustice at the root of so many of the global challenges confronting us--not the least, the overriding challenge of nurturing a worldwide culture of peace.

The Commission has put people first, recognising that the greatest potential for change is within us, that with education and information we can mobilize the vast amounts of energy and skill which are currently wasted in the scramble for survival. It, nevertheless, also accepts that there are no easy solutions and that concerted action is necessary on many fronts in order to untangle the tortuous connections between, for instance, defence spending and food security, for no country can truly be said to be at peace while the violence of hunger blights the life of its citizens.

ICPF has no hesitation in putting forward ideas that are bound to unsettle, and it should be encouraged since imagination and daring are precisely what we need at the present time. Its calls for a standing world army, for the recognition of full employment as a fundamental right and for the elimination of protectionist trade policies--to mention but a few examples--will cause some sharp intakes of breath among world leaders. Indeed, the report contains many ideas that merit and should stimulate further reflection.

The situation of the countries in transition in Eastern Europe, highlighted in this report, illustrates perfectly the need for an integrated approach to development considered as a total human process. The Commission's report contains specific proposals in this regard as well as an overview pointing to existing domestic assets of various kinds which could help the countries concerned. It addresses the topic of job creation with innovative ideas on the roles of technology and trade, and emphasizes the significance of the

developing countries and agriculture in the world economy. Its global education programme proposal--placing appropriate emphasis on the key issue of girl's and women's education--is one that particularly commends itself to UNESCO, which is already actively engaged in efforts along similar lines in conjunction with its UN partners.

This timely report should help to promote the idea of human-centered development within a culture of peace as a way forward to a better world. We are gratified that ICPF should have assigned UNESCO, as the intellectual arm of the United Nations, a prominent role in its recommended agenda for action, and we reaffirm our commitment to working with all possible partners in pursuit of the goal of global peace and sustainable human development.

Federico Mayor
Director General
UNESCO

PREFACE TO THE FIRST EDITION

The International Commission on Peace and Food began its work at a time of uncommon opportunities for rapid transition on a global scale to democratic ways of life, freedom of the media, and an independent judiciary; food, literacy, health and jobs for all; and sustainable life styles based on harmony between mankind and nature. The end of the Cold War and the consequent shift of expenditure from defense to development, the onset of the Information Age and the organization of information superhighways, the growth of mechanisms for regional cooperation, a renewed faith in the United Nations, and commitment to multilateral negotiations and action--all provided new opportunities for achieving global peace and prosperity. Rapid progress in the application of science and technology in agriculture, industry, and human health strengthened the hope that the concept of "food, education, health and employment for all" can be converted from rhetoric into reality, provided that the peace dividend can be deployed to achieve these goals.

ICPF had the advantage of building on the work of earlier independent commissions, particularly those chaired by Willy Brandt, Gro Harlem Brundtland and Julius Nyerere. We began our work with the conviction that, as Willy Brandt said, "the problems created by men can be solved by men." The ancient Indian scripture, *Bhagavad Gita*, expressed the same sentiment by stressing, "Whatever man aspires to, that he can accomplish". The achievement of food self-sufficiency by India--in a period when famine threatened millions of lives--through the power of political will and action in a democratic society illustrates this truth.

In spite of such uncommon opportunities for a better common present, during the last six years the world has been witness to an escalation of ethnic and mini-conflicts, growing intolerance of diversity, the spread of small

arms, an increase in violence--starting with violence to oneself through drug addiction and AIDS--and damage to the life support systems of land, water, flora, fauna and the atmosphere. In addition, the current pattern of economic and technological growth is leading to gross social inequity and rising joblessness. The rich-poor divide is widening both within and among nations. At the same time, the spread of knowledge and information, particularly through the electronic media, has led to an era of rising expectations. The economically and socially underprivileged sections of the human society are now aware that their future is not a question of fate, but of political and technological choice. If they are not given access to the information superhighways and other technological highways to progress, a new form of social and economic apartheid will spread, which will be even more serious in its consequences to the future of human civilization than the skin-color-based apartheid which has just ended.

True education is leadership in thought. There are periods in human history, when the progress of decades can be accomplished in a few years. It is the view of the commission that we have arrived at one of these great, creative moments. Can the political leadership of all countries seize this moment and convert it into an opportunity for promoting job-led economic growth, rooted in the principles of ecology and equity? Can we make an anachronism of the past, the gender inequity and the co-existence of extreme poverty on the part of a billion children, women, and men, and extreme affluence and unsustainable lifestyles on the part of another billion? Can we foster love of diversity and pluralism in terms of religion, race, language, color or political belief?

In our view, there are uncommon opportunities now to find the solutions to these basic challenges facing contemporary human society. We have tried to deal with them in a concise manner in this report, which concludes that commitment to the principles of democracy and human diversity, equity in term of gender, economic condition and sustainable lifestyles, is fundamental to achieving both a better common present and future.

Personally, it has been a privilege working with a highly distinguished group of women and men, whose sole concern has been a better life for all. I wish to thank every member of the Commission, as well as the many others who have helped us, for their time and vision. The Member Secretary, Mr. Garry Jacobs, however, merits a special mention for his total dedication to the principles which inspired the setting up of ICPF. Throughout the last five years, he has devoted his time and extraordinary talent to the work of the Commission. He has been the principal catalyst of the Commission's work. In his heavy responsibilities, he has been ably supported by Robert J.

Macfarlane and Robert van Harten. I wish to record our sincere gratitude to this unique trio.

Our work has been largely supported by grants from UNDP and UNESCO. UNESCO also provided the services of Dr. Maurice Goldsmith, Director, International Science Policy Foundation, to edit this report. It has been a privilege working with Dr. Goldsmith, an editor of extraordinary wit and wisdom. I am indebted to Mr. Boutros Boutros-Ghali, Secretary General of the United Nations; Dr. Federico Mayor, Director General of UNESCO; and Mr. James Gustave Speth, Administrator of UNDP, for their support and encouragement. A special word of thanks is also due to Mrs. Robin La Brie-Jackson, who has helped throughout in managing the work of the Commission with great competence and courtesy. Finally, I must acknowledge the inspiration and encouragement provided by Mr. T. Natarajan, Secretary, The Mother's Service Society, Pondicherry, India, from the very inception of the idea of the Commission. His emphasis on leadership in thought that leads to action has served as a guiding principle for the work of the Commission. A more complete list of the many individuals and institutions who have contributed generously of their time and resources to our work is contained in the Acknowledgements appended to this volume.

During 1994 and 1995, several major international events will take place. The International Conference on Population and Development at Cairo in September 1994, the World Summit for Social Development at Copenhagen and the Fourth World Conference on Women at Beijing in 1995, and the designation of 1995 as the International Year for Tolerance--all provide unique opportunities for promoting sustainable and equitable development. The past 50 years since the birth of the UN have marked striking progress in every field of human endeavor, except in the areas of ecological and human security. We should now concentrate on these aspects of security, so vital for sustained human happiness and fulfillment. It is our hope that this report will be of some help in accelerating the pace of progress in the evolution of a new human ethic conducive to human beings living in harmony with nature and with each other.

*M. S. Swaminathan, Chairman
International Commission on Peace and Food
Madras, India, July 6, 1994*

PREFACE TO THE SECOND EDITION

Unprecedented Opportunity, Unfinished Agenda

Humanity is on the threshold of unprecedented opportunities to promote peace and accelerate human development. Yet, as in the past, our vision of these opportunities is obstructed by conceptions and attitudes inherited from a bygone era. To fully appreciate the emerging opportunities, we need to more clearly comprehend the events of the past two decades that are the seeds from which these opportunities spring.

Restructuring the UN

The formation of the International Commission on Peace & Food was conceived in 1987, a time when mutual suspicions, escalating military expenditure and confrontational Cold War rhetoric blinded the world to the possibility of radically transforming the global security environment. Yet, fuelled by the bold initiatives of Mikhail Gorbachev, by the time ICPF conducted its first meeting on the border of the rapidly vanishing Iron Curtain at Trieste in September 1989, the Berlin Wall had fallen, Cold War hostilities had melted, and the prospect of ushering in a more peaceful and prosperous world for all seemed within reach. The euphoria of those heady days generated high expectations of a peace dividend that would help to wipe away much of the world's suffering.

At the same time, the withdrawal of the confrontation between East and West resulted in a gradual shift of attention from the threat of imminent global self-destruction to lesser but very real problems, among them – the unresolved danger arising from huge stockpiles of nuclear weapons; some 26 on-going localized military conflicts within and between developing nations, aggravated by increased trafficking in small armaments; the persistence of hunger and malnutrition, especially among the poorest populations of South Asia and politically unstable regions of Africa; progressively rising levels of unemployment in both industrialized and developing countries; and the turbulence and hardship of political, economic and social transition in post-Communist Eastern Europe. These challenges,

coupled with the outbreak of the first Gulf War, the disintegration of Yugoslavia, and the horrendous civil wars that wracked Somalia and Rwanda, clouded the world's vision of a brighter future.

It was in this context that the Commission undertook five years of research that led to the publication of its report in the fall of 1994. The report was released at official functions at UN headquarters in New York, UNESCO in Paris, a global congress of the World Academy of Art and Science at Minneapolis, and in the restored capital of a reunited Germany at Berlin, then formally presented to the UN Secretary General and to all UN member nations by a member of the Commission, Her Majesty Queen Noor on behalf of the Government of Jordan.

In the decade since then, much has happened to belie the expectations of post-Cold War optimists and pessimists alike. On the positive side, the sudden emergence and explosive growth of the Internet and the World Wide Web have fuelled a global revolution in communication, education, economy and a wide range of human activities reaching from corporate board rooms in North America to rural towns and villages on every continent, abridging the time, distance and differences separating countries, classes and people. The end of Apartheid in South Africa completed a century-long struggle, ridding the world of a horrible scourge. Democratic systems of governance characterized by the rule of law, an independent judiciary and a free media replaced dictatorships around the world. The establishment of the World Trade Organization paved the way for expanded markets for both developing and developed countries, fuelled a rapid expansion in World Trade, and wove strong bonds of interdependence between erstwhile antagonists across the globe from the Chinese mainland to North America. Larger private investment flows invigorated economic growth and made capital more accessible to larger numbers of people than ever before in human history. The European Union expanded to embrace newly democratic countries and blazed a path right through the former heartland of nationalism for the integration of the united peoples of Europe. Most important of all, the erstwhile very real and imminent threat of global confrontation and nuclear destruction radically diminished, spurred by negotiations between Russia and USA that have led to a 75 per cent reduction in the number of nuclear warheads stockpiled by both sides.

ICPF's report projected a vision of *Uncommon Opportunities* for rapid and radical advances in global peace and development. Its central thrust is the inextricable linkage between peace, employment, food security and human development. As peace is a sine quo non for development, creation of

employment opportunities for all is essential for maintenance of peace and social stability, food security and eradication of all forms of poverty.

The experience of the past decade strongly supports the view that a more peaceful global environment is more conducive for development. Military spending declined by a third in the years immediately following the end of the Cold War, partly due to real cuts in defence spending and partly due to the collapse of the Russian rouble and changes in the value attributed to Soviet arms spending. These real gains did not translate into a significant increase in foreign aid, which was what many hoped and expected. But that does not mean there has been no peace dividend. A comparison of the performance of the world economy over the past two decades reveals that after an initial recessionary period of economic dislocation, economic performance has improved on the whole in all regions and almost all countries. According to IMF, the growth rate in emerging and developing countries rose from 3.7 per cent annually during the period 1985-94 to 5.1 per cent over the following 10 years and is projected to reach 5.9 per cent in 2005. In Sub-Saharan Africa, the rise was from 1.9 per cent to 3.9 per cent and it is expected to reach 5.8 per cent in 2005. In the former Soviet republics, growth has accelerated from 0.1 per cent to 4.1 per cent and projected to touch 6.6 per cent next year. These trends are likely to continue throughout the decade. While foreign aid to developing countries as a percentage of GDP has fallen by 50 per cent since 1990, it has been offset to some extent by a 150 per cent rise in foreign investment. In the least developed countries, foreign aid has declined by 24 per cent but this has been offset by a 29-fold increase in foreign investment, so that the combination of foreign aid and foreign investment as a percentage of GDP has remained constant. If the rich countries, particularly USA, had met the UN development assistance target of 0.7 per cent of GDP, progress in improving the human condition in countries characterized by a high incidence of poverty would have been faster.

These real and significant gains have been offset and to a large extent obscured in our minds by the persistence and aggravation of problems that constitute the other side of the post-Cold War ledger. Far from vanishing, the nuclear danger has been aggravated by the continued proliferation of nuclear weapons, the increasing danger of these weapons falling into the hands of terrorists, and the stubborn refusal of the existing nuclear powers to seize the opportunity to totally eradicate this pernicious arsenal of self-annihilation. Reduced confrontation between nation states has been followed by an aggravation of internal conflicts within countries as well as a dramatic increase in threats of violence by disenchanting minorities. Violent local conflicts continue to flare around the world. Terrorist acts have intensified

against civilian populations on every continent. While the worst fears about rising unemployment in the West have been dispelled, the challenge of generating sufficient employment opportunities for all people around the world remains a pressing concern. The rich-poor divide has increased within and between nations. Inadequate job/livelihood opportunities resulting in inadequate purchasing power have now become the most important cause of endemic and hidden hunger. Most regrettable has been the failure to enhance the powers and strengthen reliance on effective multilateral institutions. The emergence of the USA as the sole superpower has brought with it a reduction in the role and influence of the UN in international affairs, precisely at a time when the world should be striving to build a viable multilateral cooperative security system.

The Unfinished Agenda

The Commission's report was never intended to predict *what would happen* in the years to come, but rather to project *what could be made to happen* by a concerted, determined effort of the world community. The report highlighted many of the opportunities that did emerge as well as some of the dangers that have grown in intensity in the absence of effective action. The events of the past 15 years may not have followed the course predicted by either the optimists or the pessimists, but they certainly confirm that this has been a period of unprecedented opportunity for rapid progress – what Sri Aurobindo termed an “Hour of God”. While the gains have been significant, all of us will acknowledge that we have not taken full advantage of this opportunity to build a better world. Though great dangers have receded, old and new threats still loom large, demanding courageous action. The door remains ajar. The hour is still in progress. *There is still time and that time is now*. The world today has far greater opportunities than ever before, far greater degrees of freedom within which to act to accelerate progress and eradicate suffering. The Millennium Development Goals adopted at the UN Millennium Summit in 2000 represent the essential minimum needs for building a stable, secure, free and prosperous global community. We confront once again an unprecedented opportunity and an unfinished agenda.

Disappointed by our failure to achieve all that seemed possible or disillusioned by the emergence of new, more dreadful challenges, some may feel prompted to curb mind's contemplation of the greater potentials, dispense with lofty plans and resign themselves to the slower, circuitous pace of progress that characterized earlier periods. That choice would be unfortunate. For everything in our experience of the past two decades points to the fact that humankind is now capable of more rapid and radical action to

to build a better common present and future for all. We may have become habituated to the astounding magnitude of the events since 1989 and still feel unsatisfied with the results, but we can no longer deny that we collectively possess the capacity to create the world that we choose to create. This is still the hour in which anything can happen, provided we are determined to make it happen. It is not a question of possibility or prediction, but of decision and determination to walk the talk.

Peace & Security

Nuclear Disarmament: The threat of a nuclear holocaust remains very real so long as stockpiles of these weapons remain in existence – their very existence constitutes a threat – and so long as nations or groups insist on the prerogative of manufacturing, possessing and using them. While the number of nuclear missiles and bombs has been dramatically reduced, both the USA and Russia retain thousands of such weapons. The number of nuclear weapons states has increased and the threat of first use has been extended to Israel, the Indian subcontinent and the Korean peninsula. South Africa and some former Soviet republics have voluntarily relinquished their claims as nuclear weapons states. Few realize that the catastrophic damage caused by the atomic bombing of Japan at the end of World War II dwindles into insignificance when compared with the destructive power and radioactive fall-out that would result from the explosion of even the smallest nuclear device today. Until the last nuclear weapon has been destroyed, the threat of accidental or intentional usage remains very real and very serious. The nuclear weapon states must come forward to fulfil the commitments made in the non-proliferation treaties by taking active and immediate steps leading to total nuclear disarmament by all powers within the shortest possible time. Year 2005, which is the 60th anniversary of the atomic bombing of Hiroshima and Nagasaki, presents a real opportunity for concrete steps toward eradication of nuclear stockpiles.

Cooperative Security System: Ten years ago the Commission was adamant in its call for a fundamental shift from a competitive to a cooperative global security system. The present competitive system depends on the ability of each individual nation to defend its own borders and interests against external threats. Such a system necessarily demands massive investments by each country in military capabilities. These investments are inevitably perceived by other nations as real or potential threats to their own security, thus fuelling compensatory escalation of military capabilities by other states. Calls for disarmament alone cannot and will not eliminate the problem. They must be complemented by concrete measures to establish an alternative mechanism to ensure the security of nations. This is one of the major reasons

major reasons why expectations of a massive peace dividend have not been fulfilled. World military spending has not declined significantly because the competitive security paradigm remains in tact. Steps being taken by the members of the European Union to build a truly cooperative security system indicate the right direction for the world as a whole. It is no wonder that the first such initiative comes in Europe, which has been the leader of thought for the past 500 years – from the birth of modern science and parliamentary democracy to nationalism, socialism and universal education – and which has been working for the past five decades to evolve a viable working model of fully democratic, voluntary supra-nationalism.

Democratization of the UN: The phenomenal advance of Europe's multi-dimensional unification is a clear indication that in future international institutions will play a more important role than national governments. But this can happen only to the extent that these institutions are living proponents of democratic functioning and individual freedom. Ten years ago ICPF called for the democratization of the United Nations by abolition of the veto power in the Security Council, induction of new members to make that body more representative, and establishment of democratically-elected representative government as an essential condition for membership or active participation in the UN system. The nexus between democracy and prosperity is undeniable. The democratic revolution that has so effectively penetrated Eastern Europe in recent years and extended its roots in other regions must be taken to its logical conclusion at the level of nations and at the level of international institutions.

World Peace Army: The most far-sighted of ICPF's proposals sought to evolve a practical mechanism to promote the objectives of cooperative security and democratic freedom. It called for the establishment of a World Peace Army, to be constituted by and open to all democratic countries willing to renounce the right to aggression against other nations and willing to contribute personnel and resources to an international multilateral military force capable of defending its members from external threats. Such a mechanism, so long as it is inclusive, would provide a real and viable alternative to national militarization, whether or not it was constituted by or within the UN system. The success of NATO in maintaining peaceful relations among the democratic states of Western Europe and North America for more than half a century is a viable model which is limited primarily by the exclusivity of its membership. The recent measures taken by the European Union to constitute a European Army are evidence of the practicality of establishing a similar mechanism open to all nations. The unfortunate situation now witnessed in Iraq could have been avoided, if ICPF's plea for a World Peace Army had been heeded.

Eradicating the Roots of Terrorism: Terrorism is not new to the world, but with the withdrawal of national rivalries between East and West, violence by non-nation states has increased in intensity and is viewed as a far greater security concern by the entire world. This has spurred an unprecedented international effort to control and suppress terrorist activity. But there is little hope of abolishing this menace without simultaneously comprehending and addressing the root causes of terrorism in the world today. In a sense, the human urge for violence has neither increased nor decreased. It has simply shifted the field of expression from confrontation between nation states to confrontation between powerful governments and disenfranchised groups of individuals who respond to the application of superior power by nation states with the application of indiscriminate violence against the public-at-large. Terrorism thrives in the absence of effective democratic institutions to give voice to the will of its citizens. At the same time, lifting the tyranny of state terrorism has itself become the occasion in some instances for an outburst of violence by long suppressed groups.

Eradication of terrorism is possible, but it demands a comprehensive and integrated approach and concerted, collective action. The commercialization of the arms trade – which benefits some countries economically at the expense of the security of all nations – must be subject to rigorous monitoring and control by international agencies. Vested economic interests that thrive on conflict must be placed under UN surveillance and regulation. International institutions must be strengthened to eradicate arms smuggling, narcotics, offshore money laundering and other criminal activities that serve as seedbeds and instruments for terrorism. However, no final solution to the problem of terrorism can be arrived at by force alone. While terrorism is frequently attributed to religion and ideology, it sprouts and thrives most readily among populations that lack opportunities for gainful employment and economic development. Social unrest is an expression of the upward aspiration of those who have been left out of the political and development process or who feel threatened by the rapid pace and stress of social change and inequity. Those who lack the opportunity or the ability to labour intensely for their own upliftment express their productive energies through the intensity of violence. The international community cannot afford to be silent spectators of the growing violence. Peace, democracy and development are inseparable and interdependent. Liberal democracy and economic opportunity for all are essential ingredients for winning the war against terrorism. Accepting the spiritual principle which tells us that there is an element of truth even in the most outrageous or misinformed viewpoint, we must not only vehemently condemn but also sincerely recognize the unaddressed issues that underpin the urge for violence. In this sense,

sense, terrorists crudely expose the mental insincerity prevalent in international politics. Those who wield national power must come to realize that force of compulsion will not bring about a permanent reconciliation and amelioration of relationships in human affairs. Superior power must bring with it a superior sense of fairness and a commitment to constructive dialogue and action to attack the root causes of terrorism. It must shed its own accretion of mental insincerity cloaked as diplomacy. Then and then only these movements of violence will shrink and finally disappear. The period following September 11th, as US National Security Adviser Condoleezza Rice put it, is one “not just of grave danger, but of enormous opportunity.”

Resolving Local Conflicts: The Commission concluded that the end of the Cold War made it possible to successfully resolve problems that had resisted solution for decades, such as the many violent communal and ethnic conflicts occurring in the world. The near total cessation of violence in North Ireland during the past 10 years is proof that rapid progress can be made on issues involving apparently intractable communal sentiments. This achievement appears astounding to those who lived through the earlier decades of religious violence and until recently found it nearly impossible to imagine a mitigation of the conflict in the foreseeable future. We would do well to examine closely this instance to draw lessons that may aid in addressing those conflicts that continue to defy resolution.

The most striking lesson of the Irish experience is that rapid development absorbs and dissipates the urge for violence. The dramatic economic advancement of the Republic of Ireland – whose per capita GDP rose within the past 20 years from less than 60 per cent that of UK to 95 per cent in dollar terms and 130 per cent in terms of purchasing power parity – has eliminated the disparity between Ireland and Ulster and fostered among the Irish in both countries a sense of pride, an expansion of employment opportunities, and a more focused channelling of social energies into productive activities. Economic growth in the region was augmented by the systematic efforts of the British government to eliminate the active discrimination against the minority Catholic population of North Ireland in housing and employment as well as the segregation of Catholic and Protestant education. Violence has subsided, yet a political solution still defies the policymakers, because some of the root causes of the problem buried far in the past have not yet been adequately addressed.

A steady and concerted effort for permanent solution in Ireland will demonstrate the possibility and provide the knowledge necessary for addressing other intractable communal problems around the world. A

comprehensive approach to a permanent solution must include social, economic, education and cultural elements. The principle illustrated here is that long-standing military conflicts can be resolved by political initiative and obstinate political conflicts can be resolved by economic strategies rooted in the principles of equity and ethics. The opening up of economic relations between the USA and China by President Nixon has made war between the two countries almost unthinkable. There are no serious conflicts in the world today that cannot be resolved through consultation, consensus and 'win-win' formulas.

Full Employment

The fading spectre of nuclear annihilation gave way in the 1990s to the rising spectre of chronic unemployment. The end of the Cold War brought with it some wrenching transitions, among them the break-up of the USSR and Comecom, the reunification of Germany, the downsizing of defence manufacturers in America as the result of reduced orders for war materiel, the collapse of Japanese financial markets and onset of a decade-long recession, and displacement of millions of migrant Asian workers following the invasion of Kuwait and the first war in Iraq. These events violently disrupted expansion of the world economy and creation of employment opportunities for an expanding labour force in both industrialized and developing countries. Near panic levels of concern rippled across the world during this period about rising levels of joblessness, prompting one doomsday author to prophesize the 'end of work'. The situation became particularly acute in developing countries, because of their predominately young populations and high population growth rates.

Trends and Prospects

ICPF refused to side with the pessimists who viewed unemployment as a terminal illness spreading rapidly through the entire world economic system. Its report presented evidence to dispel the twin myths that technological development and trade were net job destroyers. ***It traced the growth of employment opportunities through the 20th Century, a century of unprecedented technological development and commercial expansion, to show that this period has also been an era of unprecedented growth in the quantity and quality of employment opportunities.*** The report argued that the current surge in joblessness was a temporary result of the mismatch between the rates of surging population growth and expanding economic activity. It concurred that rising levels of unemployment constituted a serious problem that needed to be urgently addressed, but rejected the notion

notion that it is an inevitable and incurable disease which the world must resign itself to passively suffer and endure. The Commission, therefore, developed and presented a comprehensive strategy for job-led economic growth.

Over the past decade, changes in the employment picture lend credence to ICPF's perspective. The American economy experienced a decade-long expansion, fuelling high levels of employment at home, while stimulating job growth throughout East Asia, attracting a massive influx of foreign technical workers and setting the stage for a global outsourcing boom which is still in its infancy. Among the advanced economies, unemployment declined from an average of 6.9 per cent in the period 1985-94 to 6.5 per cent during the last 10 years. It fell by 10 per cent in France, 25 per cent in Italy, a third in Netherlands, 50 per cent in Spain and 70 per cent in Ireland. It is declining but remains 10 per cent higher than the average for 1985-94 in Germany, which is still recovering from the economic impact of reunification. The new market economies of Eastern Europe are growing rapidly. But these positive trends are no grounds for complacency. While they may dispel fears of an irreversible shrinkage of the job market in OECD countries, the proportion of long term unemployed remains at an unacceptably high 29 per cent of the total, indicating that these countries have not yet evolved successful strategies to address the issue. Left to itself, unemployment may continue to deprive large numbers of people in these countries from enjoying basic economic rights, unless concerted steps are taken to remove the perceptual and structural barriers to full employment.

While data on unemployment levels in most developing countries is of doubtful accuracy and recent data are difficult to obtain, there is no question that the problem remains severe, especially among youth and the educated. ILO estimated that at the end of 2000 approximately 110 million workers in developing countries, excluding Central and Eastern Europe, were unemployed, most of them first-time jobseekers. Unemployment rates among young workers are almost everywhere at least twice as high as the average. In addition another 500 million workers in the developing world earned less than a dollar a day. Although the growth rate of the world's labour force is slowing down, approximately 460 million additional jobseekers will enter the global labour force between 2000 and 2010, two-thirds in Asia. ILO has concluded that the prospects for an improving global employment situation depend mainly on continued expansion of the world economy. While that expansion is likely, economic growth alone will not be sufficient to provide opportunities for sustainable livelihood for all those who need it. Jobs or livelihood for all must be the bottom line of all development, technological and trade policies. It will be necessary for

governments to elevate employment to the top of their policy agenda and dedicate themselves to the vital task of achieving full employment.

The Right to Employment

The Commission's report called for urgent action to address the problem of rising unemployment and presented a comprehensive set of strategies designed to promote full employment in both developed and developing countries. *The centre-piece of ICPF's approach is the assertion that employment must be recognized as a fundamental human right, the economic equivalent of the right to vote. As the electoral franchise is the basis for the legitimacy and operation of democracy, access to gainful employment constitutes the economic franchise that lends legitimacy and functionality to a market economy.* The right to employment must be constitutionally guaranteed to enable all citizens to exercise their fundamental right to food and health security and a share in national well-being.

ICPF's view called into question the blind faith in the wisdom of the unregulated market that was prevalent during the heady days of radical free-market economic doctrine following the collapse of the Soviet system. Critics claimed that achievement of full employment was impractical and therefore guaranteeing it was impossible. In response, the Commission argued that the level of employment in any society is the direct result of a nation's laws, policies and modes of implementing them, not the result of impersonal forces of nature beyond human control. Employment is a product of human decisions and can be controlled. As the world has made enormous progress in halting and reversing environmental degradation, it can also eradicate the spectre of unemployment. What is required is genuine commitment enshrined and enforced as national policy. The Commission called on the nations of the world to recognize this right and enforce this guarantee.

It is most appropriate that a meeting of the Commission is taking place during November 2004 in India, where the Government of India has proclaimed their recognition of this right and their commitment to enforce it through an act of parliament. This meeting provides an opportunity to review the technological and public policy instruments now available to fulfil the human quest for "education, health, food, water and work for all and forever."

Strategies & Recommendations

Recent developments may be sufficient to dispel dire forecasts of a world without work, but by themselves they are not adequate to address the real and pressing need to accelerate job creation throughout the world, the essential condition for the world's billion poor to escape from poverty. For that, the Commission argued that concerted action is both necessary and possible to immediately improve employment opportunities for the poor. Chapter Four of this report presents a comprehensive package of strategies for both industrialized and developing countries that are as relevant and valid today as they were at the time of publication.

In order to document the potential for accelerated job growth, ICPF conducted a special country study of India in 1991 and drew up a strategy for creating 100 million jobs in the country within a decade. The strategy, which focused on utilizing agriculture and agri-business as engines to stimulate rural incomes and employment opportunities, was endorsed and adopted by the then Government of India, but not implemented for a variety of reasons. A review of this strategy one decade later indicates that the potential for achieving full employment in India is fully alive and the current Government's commitment provides the right circumstances to achieve it in practice. This will also serve as an example and model for other countries to emulate. Backed by this commitment, the main elements of a successful employment strategy for India have been identified in a separate report prepared for the New Delhi meeting. The strategy focuses on giving an income and employment orientation to Indian agriculture, increased support for expansion of enterprises in the informal sector, broadening the on-going self-help group revolution and fully extending it to agricultural operations, upgradation and expansion of the country's vocational training system, promotion of entrepreneurship and full utilization of information technology as a catalyst for development.

Prospects and Emerging Opportunities

Viewing the global employment situation as a whole, there are strong grounds for confidence in a brighter future.

Resurgent Asia: The nations of East Asia, which went through rapid expansion followed by a major financial crisis, are back on the growth path. The Japanese economy is once again growing and creating new jobs, both at home and abroad, especially in China, which has become the largest destination for Japanese foreign investment and a key supplier base for

Japanese manufactured goods. China's economy continues to expand at more than eight per cent annually and India's may soon achieve that rate of growth. Fuelled by very rapid expansion of automotive, financial services, IT, pharmaceuticals and telecommunications, India has emerged as one of the fastest growing economies in the world, the third largest destination for foreign investment, and a key player in IT and IT-enabled services. According to a recent study, by 2040 China and India will be the first and third largest economies in the world. Together with Russia and Brazil, they could account for a larger portion of world GDP than today's six largest industrialized nations. Population, which was perceived as a liability not long ago, now appears to be an asset. In reality, population, like nuclear energy and so many other things, is neutral. Its value depends on what we human beings make of it.

Changing Demographic Profile of the West: Demographic studies indicate that steep declines in the growth of population in Europe, Japan and USA will create acute labour shortages and unprecedented long-term demand for migration of foreign workers or transplantation of work to developing countries. UN and other studies estimate that Europe would have to accept 150 million new immigrants over the next 25 years in order to maintain the present levels of working population and Japan would need to admit 600,000 immigrants annually for the next 50 years in order to maintain the size of its working population at the 1995 level. The US labour force is projected to stop growing by 2013. These findings support the view of the India Vision 2020 report that "This trend will further accelerate the outsourcing of production of goods and services to locations where infrastructure, ease of doing business, quality, costs and availability of labour are most attractive, which will be beneficial for many labour surplus countries like India."

Expanding World Trade: Trade is playing an increasing role in the economic growth of developing countries. Economic integration with the global economy has become a compelling necessity for every country. The share of trade in global GDP rose from 12 per cent in 1970 to 29 per cent in 2001. While the effects of expanding world trade on employment are complex and can lead to displacement of workers and destruction of jobs in some cases, available evidence strongly indicates that the overall impact of freer trade on the global economy will be to promote significantly faster growth of employment opportunities. The emerging liberalization of textile trade in 2005 is an example of the potential positive impact of freer trade. In India the textile industry provides employment to 18 per cent of the entire workforce, accounts for 8 per cent of the country's GDP, 17 per cent of its manufacturing capacity, and 27 per cent of its export earnings. A recent

projection indicates that with the lifting of quotas under the WTO Agreement on Textiles and Clothing in January 2005, India's textile exports could rise from the current \$16 billion to \$40 billion by 2010, creating as many as 12 million new jobs in the process, five million jobs through direct employment in the textile industry and another seven million jobs in allied sectors. The global manufacturing strategies of multinational corporations will further spur the exponential growth of contract manufacturing opportunities in developing countries. Already China exports \$300 billion a year in manufactured products, while Taiwan and Mexico export more than \$140 billion each. According to a recent study, India has the potential to create 25 to 30 million new jobs in the manufactured exports sector.

Shift to Services: One would hardly expect to find the decline of manufacturing jobs as a source of employment opportunities, but historical data supports this conclusion. Fear over the destruction of manufacturing jobs due to adoption of capital intensive technology has been prevalent for the past 100 years. Every new technology that automates a process or increases worker productivity has been perceived as a threat to the future of work. The reality has proved to be quite different. Technological development propels a spiral of economic development that creates many more jobs than it destroys. The most striking testimony to this fact is the history of employment in USA, arguably the country that has most readily and fully adopted new technologies over the past century. Employment in manufacturing and mining grew to a peak of about 40 per cent of the workforce after World War II before beginning its downward spiral to 15 per cent by 2000, about the same proportion as in 1850. Yet, during this same period total employment in America has expanded phenomenally, from a mere 13 million workers in 1870 to 68 million in 1955 and more than 136 million in 2002. In spite of all the automation and all the export of jobs to lower wage economies, the percentage of the American population employed has continued to rise over time.

Several factors are responsible for this result, among which population growth and technological development are most prominent. Rising levels of technological sophistication certainly displace workers in most fields of manufacturing. But at the same time they stimulate growth of employment in many different ways – increasing demand for the products thus manufactured by a factor of 10, 100 or even 1000 fold as in the case of automobiles, TVs, cell phones and computers; increasing the demand for research workers to support technological innovation and for teachers to meet the rising demand for education; and rising living standards, which increases consumption of other goods and services due to the falling prices made possible by rising productivity. Over the past two decades the US

economy lost nearly 4 million manufacturing jobs but added a net 37 million jobs through expansion of the service sector, which now accounts for 84 per cent of total employment. It is time that we stop resisting or resenting this trend, but rather strive to adapt by shifting our focus toward those fields of employment which are most directly stimulated by technological innovation. Export of commercial services already accounts for 20 per cent of world trade. The shift from manufacturing to services is a positive and inevitable expression of the elevation of human activity from the physical to the mental level, which is the central reason for the phenomenal rise in global living standards over the past century.

Rich nations have become rich through a shift of workers from the primary farm sector to value-added, non-farm secondary and tertiary sectors. Poverty and hunger persist so long as a majority of the population depend upon the routine operations of farming for their livelihood. This is also the cause of the growing feminization of poverty in developing countries. Today's developed nations arrived at their present position by a long, slow migration from agriculture to manufacturing to service sector, but that does not mean developing countries must follow the same path. The growing demand for services in the developed world coupled with rapid strides in telecommunications has created the possibility of skipping steps to abridge the development process. Even within developing countries, surging demand for education, health care, tourism, communication, financial and retail services has opened up opportunities that were available to the developed countries only at a much later stage in their development.

Outsourcing: During the last decade enormous attention has been focused on the lucrative employment potentials generated by Information and Communication Technology (ICT), particularly the high paid jobs in computer software and hardware and the less technical jobs in business process outsourcing. Countries such as India have shown that they can leapfrog into the technological vanguard by developing qualified human resources to meet the ever-expanding shortage in these sectors. Information Technology and IT-enabled services stand out as the most important new fields of employment to emerge since the popularization of the automobile. While the Commission's report anticipated the importance of the information superhighway even before the World Wide Web radically transformed global communications, information exchange and commerce, ICPF did not foresee the dramatic impact that the Internet would have on the future export of service jobs to developing countries. The West has been exporting manufacturing jobs in large numbers for half a century, fuelling the growth of Japan, the East Asia tigers, and more recently China; but until the emergence of the information superhighway, the scope for export of

service jobs was limited. Technological development has changed that. As a result, business process outsourcing has become one of the fastest growing sectors of the world economy. As growth of the labour force slows in high-income countries, there will be increasing pressure for export of service jobs. Public concern in the West over the rapid growth of outsourcing is fuelled by the common misconception that employment is a zero sum game. A recent authoritative study of the impact of IT outsourcing found that the direct gains to the US economy in the form of additional jobs in other fields, higher real wages, higher real GDP growth, contained inflation and expanded exports far outweigh the losses. While global IT software and service outsourcing displaces some IT workers, total employment increases as the benefits ripple through the economy. The net additional number of jobs in the USA added as a result of outsourcing is projected to exceed 300,000 by 2008. They will be generated across all sectors of the economy, most especially in construction, transportation and utilities, education and health services, wholesale trade, and financial services. Employment is not a zero sum game.

Computerization: The exciting growth of ICT-based service exports by no means exhausts the potential contribution of computers to growth of employment opportunities. Computerization is not merely a field or sector of commercial activity. The computer is an instrument and a catalyst that can stimulate creation of employment and self-employment opportunities in virtually every field – from farming, fishing and textile designing to lean manufacturing, financial services, bio-informatics and genetic engineering. While the application of computers has already been extended to all these fields, there has not yet been a systematic effort to assess the employment potential that can be tapped by fully extending and accelerating this movement. The recent initiative in India to establish knowledge centres in every Indian village by 2007 is one example of a pioneering effort to harness ICT as a means to catalyze a whole range of on-farm and off-farm rural activities, which will inevitably translate into more and higher productivity and greater employment generation. These centres can be utilized to deliver technological expertise to upgrade farm yields, vocational training and education, purchasing and marketing information to raise incomes. The experience of India also shows that bridging the digital divide helps to bridge the gender divide in the area of knowledge and skill-intensive work. As the construction of rural roads acts as a stimulus to agricultural development of isolated communities by connecting them with sources of inputs and markets in the outer world, ICT can be a catalyst for stimulating the entire gamut of economic activities in rural communities throughout the developing world. At the other end of the spectrum, ICT is opening up unparalleled opportunities for self-employment and new

business creation for the educated. Today more than 50 per cent of American workers utilize computers in their work. The growth of the World Wide Web has given rise to on-line global markets in which individuals can bid for a broad range of projects involving activities such as research, translation, technical writing, proofreading, desktop publishing, and business consulting. A new publication identifies a few hundred self-employment opportunities of this kind. The future of work will offer increasing opportunities for people throughout the world to match their specialized knowledge and skills with specialized employment opportunities wherever they may originate.

Meeting the Skill Shortage: Perhaps the single greatest opportunity for employment growth lies in addressing the growing mismatch between the skills of job seekers and the skills required for expanding economies. In both industrial and developing countries, workers may be in surplus, but the skills needed are in deficit. In the most prosperous nations, the deficit is concentrated in high technology and professional sectors, in electronics, biotechnology, health care, pharmacology, mathematics, marketing, financial services, and the like. The adoption of new technologies even in traditional occupations has resulted in a growing demand for higher skill levels in these fields as well. Unemployment is highest among the least educated, least skilled categories, such as machine operators, fabricators and labourers. The poor are poor both because they have no assets and because their time and labour have low or no economic value. Poverty persists wherever the human resource is under-valued. To eradicate it, there is need for a paradigm shift from unskilled to skilled work.

While educated unemployment is high in many developing countries, in most cases the quality and relevance of the education to employment opportunities is far from adequate. Here too, fully qualified technical and professional workers are in short supply. There is even a shortage for educated workers with a high level of general language and communication skills to fill the job opportunities being created for business process outsourcing. On an average, 50 per cent of firms surveyed in a cross-section of developing countries report that skill shortages are a serious constraint on their growth. Firms that adopt new technologies report even more serious problems. In addition, the work force in many developing countries also lacks advanced productive skills for agriculture and a broad range of other basic vocations. The proportion of the labour force in the 20-24 age category that have undergone formal vocational training ranges from a low of 5 per cent in countries such as India and 28 per cent in Mexico to as high as 96 per cent in Korea. Vocational training systems need to be substantially strengthened to close the gap, including training for farmers, skilled crafts,

self-employment and entrepreneurship. Advances in multimedia technology now makes it possible to utilize computers, internet and even television broadcasts to deliver a wide range of educational information and vocational skills that otherwise would be unavailable or very costly to disseminate. Upgrading the quality of education and enhancing the skills of the work force will accelerate job creation the world over. Distance education provides new opportunities for achieving the goal of education for all within a span of a few years.

The Challenge and the Opportunity

The problem of unemployment is of relatively recent origin. The very idea of employment as opposed to livelihood is a recent conception born of the Industrial Revolution. In principle, every human being born creates at least the potential for his own employment, because his very birth generates demand for additional products and services and because each individual possesses the innate capacity to acquire productive skills and creative knowledge capable of generating new products and services to meet new and existing social needs. That is why, in spite of rapid strides in the mechanization of agriculture and mass production in manufacturing, the six-fold multiplication of human population since 1800 has been accompanied by a more or less equivalent growth of employment opportunities. The present job gap is small compared with the enormous expansion of the labour force.

As people develop, their aspirations rise and higher level needs emerge – needs for education, health care, balanced diet, entertainment, travel and communication – multiplying demand for new workers to provide them. Of course, there can be and are temporary dislocations and disorientations, sometimes severe, resulting from the rapid speed of social transformation that makes existing attitudes and skills obsolescent within a lifetime or less and compels human beings to learn to adapt faster and further than ever before in human history. This is the challenge posed by the evolution of humanity from the physical to mental stage, the flip side of the process that has given birth to all the miraculous achievements of the past few hundred years. It is a challenge posed to all humanity to expand our minds and acquire more flexible attitudes, to learn and adapt faster, to convert the stress of change into the joy of higher accomplishment.

The world that is emerging is one of unprecedented opportunity to tackle the problem of unemployment that emerged with the Industrial Revolution, the massive movement of people from the land into the cities, massive migrations from one country and continent to another in search of economic

opportunities, and the lightning speed of technological development that has eradicated traditional occupations while spawning whole new types and fields of human activity. Thus, we are faced with the paradox: an employment problem of unprecedented dimension coupled with an opportunity of unprecedented magnitude; a problem that is not going to be eliminated any time soon by the force of market mechanisms alone, but one which can be dramatically diminished by the appropriate action of governments around the world. Opportunities, strategies, instruments and mechanisms are not lacking, provided there is a commitment and determination of commensurate strength, a commitment that is best formulated and enshrined by a recognition of employment as a fundamental human right supported by constitutional guarantees, a commitment that must be translated into a determination by all countries to implement a broad spectrum of available strategies to address the issue today. Among these strategies, the greatest necessity is for every country to continuously upgrade the quality, quantity and, most importantly, relevance of educational and vocational training programs to equip its citizens with the knowledge and skills needed for productive engagement in a rapidly evolving world.

Food Security

The world produces more than sufficient food to amply provide for all of humanity. Still, more than 800 million people spread throughout the developing world lack sufficient and secure access to nutritious food and clean drinking water. Between 1990 and 2000, malnutrition declined from 21 per cent to 18 per cent of the population of developing countries, but it actually increased marginally among the least developed nations, particularly in Africa. Incidence of malnutrition among children under five years of age remains severe in both Africa and South Asia. But the problem is more complex than these numbers suggest. Although India is considered a food surplus state, it is home to the largest number of undernourished people in the world and access to a balanced diet and clean drinking water is far below the basic requirements for sound health.

Projections indicate that over the next decade growth of the world's food supply will be adequate to meet the needs of all human beings. The UN Millennium Development Goal of halving the number of human beings suffering from hunger and malnutrition between 1990 and 2015 is highly commendable, yet achieving it would still leave an unconscionably large number of people without adequate food. More can and must be done in the next decade to eradicate the scourge of hunger.

The problem of water scarcity is even more pervasive and challenging. Studies indicate that by 2015 more than half the world's population – mostly in Africa, the Middle East, South Asia and Northern China – will be living in countries that are 'water-stressed'. In the developing world, more than 80 per cent of the water is utilized for agriculture, an unsustainable level that is depleting water tables, increasing soil salinity and accelerating erosion. Although historically water has often been a source of contention between communities, it has never been the cause of an open inter-state conflict. However, nearly one-half of the world's land surface consists of river basins shared by more than one country and more than 30 nations receive more than one-third of their water from outside their borders. Therefore, the danger of confrontation and conflict will escalate unless concerted measures are implemented urgently. Water shortages occurring in combination with other sources of tension — such as in the Middle East — will be particularly worrisome.

Famine remains a persistent threat precisely because the world no longer feels that threat to be severe. India's last major famine occurred in Bengal in 1943 during World War II. Although the deficit in food production was only marginal that year, three million died for lack of strong administrative intervention to improve distribution. A marginal deficit could work havoc in the absence of an efficient and equitable public distribution network. While there is no scarcity of food in the world, there is also not a sufficiently organized effort to promote food security, precisely because the sense of urgency is lacking. Abundant opportunities exist to eradicate hunger, but in the absence of a catastrophic event, serious effort is lacking. Famine attracts media coverage, political and public attention, but chronic hunger does not. With global food surpluses accumulating, an organized effort can ensure food security for people everywhere.

The challenge of achieving food security for all human beings is complex, for it depends on the interaction between multiple factors – technological initiatives to produce sufficient food; economic initiatives to stimulate sufficient employment opportunities and increase purchasing power; political initiatives to maintain a peaceful and stable environment, undisturbed by war or social unrest that can interfere with food distribution; and administrative initiatives to provide for those who are unable to provide for themselves due to poverty or during times of emergency.

Peace, democracy, employment and food security are mutually interdependent. The efforts proposed to promote peace, democracy and employment generation will mitigate the problem of food security to a considerable extent. In addition, Chapter Five of the Commission's report

highlights direct interventions that are needed to address the problem at the level of agricultural productivity, among which the following are particularly relevant in the present context:

Farm Productivity: The attraction of high technology service industries should not blind us to the fact that a large section of humanity still depends on agriculture as its main source of income and livelihood. Farm productivity in these countries is typically less than a fourth or fifth the average attained by other countries. Low agricultural productivity results in high cost food, low rural incomes and limited employment opportunities, both on farm and in downstream industries. As a revolution in agricultural productivity provided the impetus for rapid industrialization in Britain and later USA in the 19th Century, rapid modernization of agricultural technology, a shift to commercial crops, improved linkages for credit, marketing and processing can act as a catalyst for employment generation and economic growth in many developing countries today. As some countries have already proven, high productivity does not necessarily require large tracks of land or high levels of mechanization, but it does require quality inputs, adoption of advanced cultivation practices, efforts to improve the productivity of water, access to credit, infrastructure for storage, producer-oriented marketing and industries for processing.

Information Empowerment: The poor quality, slow speed and inadequate reach of extension services is the bane of farming in many developing countries. ICT can be harnessed to provide farmers with access to state-of-the-art technical advice, quality inputs and market information. The proper analysis and replenishment of soil nutrients by itself can double or triple crop yields. Utilizing ICT, it is possible to deliver custom-tailored instructions for soil improvement in a timely manner at low cost. It can help to promote quality and trade literacy among farm women and men.

Organizational Linkages: In much of the developing world, agriculture suffers from intense fragmentation of land holdings among small and marginal farmers. These farmers tend to have lower levels of education, poor access to technology for upgrading productivity, less access to quality inputs and credit, poor access to storage and processing facilities, and higher losses due to post-harvest crop spoilage. Their problems are further aggravated by environmental degradation due to soil erosion, deforestation and depletion of water resources. Lack of effective organization and management is a common denominator linking all these deficiencies. More effective forms of organizations can eliminate or compensate for these deficiencies to a large extent. For example, in India more than 10 million farmers are successfully engaged in sugarcane cultivation, precisely because

an established system of contract farming provides them with access to technology, quality inputs, credit and an assured market for their produce. India became the world leader in milk production only because of the power of scale conferred on small producers through the dairy cooperative movement. A similar organization is presently lacking for most other crops. The successful establishment of more than one million Self-Help Groups (SHGs) in India over the past three years providing access to credit for 15 million small farmers illustrates the power of organization. It is an indication that the phase of society's predominant dependence on government initiatives for development is coming to a close. An organization combining the advantages of SHGs and contract farming through the agency of an NGO or an agri-business centre operated by farm and home science graduates or entrepreneurs can be successfully extended to other crops, providing the technical knowledge and essential inputs that small farmers need to raise productivity and farm incomes.

Crop Diversification: Eradicating hunger necessitates shifting production from traditional crops to higher value added crops that can improve nutrition, while generating higher on-farm incomes and greater off-farm employment. Fruits and vegetables can remove micro-nutrient deficiencies, while dairy and poultry can eliminate protein deficiencies. The soaring price of petroleum, which has reached historical highs this year, presents an additional opportunity for countries such as India to become large scale producers and exporters of bio-fuels and bio-mass energy, thereby substituting imported petroleum with lucrative markets, higher incomes and greater employment opportunities for the rural population. Contract farming arrangements between small producers and agri-business centres can stimulate rapid development of this field. Ethanol, bio-diesel and bio-mass power from agricultural produce could generate the equivalent of 15 million additional employment opportunities in India, while raising rural incomes by US \$10 billion annually.

Water Conservation: Improving access to safe drinking water requires a combination of public education and government action. In addition, the rapid depletion of water resources can be mitigated to a large extent by upgrading practices in agriculture, which is the single largest consumer of water. Productivity of water in agriculture remains extremely low in most developing countries. In India irrigation accounts for 80 per cent of total water usage. A comparison of cotton cultivation under similar climatic conditions in California and South India, both utilizing extensive methods of irrigation, revealed that on average the Indian farmer consumes 35 times more water per unit of cotton produced than his counter-part in California. Water productivity can be enhanced by raising crop productivity as well as

by adoption of deep chiselling technologies that enhance water retention in the soil. It can also be improved by shifting to more water efficient crops, such as replacing sugarcane wherever possible with sugar beet, which consumes 60 per cent less water per unit of sugar produced.

Safety Nets: Long-term solution to the problem of food security requires efforts that will make people food self-sufficient. But until those efforts can be put in place and made effective, continued reliance will have to be placed on public programmes such as India's highly successful Mid-Day Meal scheme for school children and Food for Work programs that combine employment and food security. The traditional concept of Food for Work needs to be enlarged to include skilled work related to human and social development. A Global Food Guarantee scheme should be put in place, which combines Food for Work and Employment Guarantee in a systematic manner.

Human Development

Development is a human process. It is the result of human aspirations turned into action, human energies expressed in thought and work, human imagination and creativity turned toward the upliftment of life, the invention of processes and products to enhance human productivity, the accumulation of knowledge and wisdom passed on from one generation to another, the acquisition and perfection of skills transmitted from parent to child, the conversion of talents into capacities, the pursuit of ideals, an ever widening of attitudes, and the evolution of more complex and productive forms of organization. As this evolutionary process unfolds, each element of human personality -- physical skill, vital relationship, mental understanding, spiritual values -- is enhanced in a progression without end, bringing with it greater material fruits, richer life experience, and higher knowledge. The unfolding and flowering of the human being is at once the source and the goal of development.

Thus, in all our efforts to elevate human society, our primary endeavour must be to enhance these human endowments and expand individual freedom of self-expression. Peace, democracy, employment opportunities, food security, education, training, access to information, cooperation, freedom of action and a spirit of innovation are the essential conditions and means for this process to advance. There was a time when humanity's progress was primarily the result of the collective efforts of the community, demanding and obtaining the strict obedience and conformity of its individual members to preserve what it had created and further the progress of the collective. That point is now past. In the century now commencing,

the individual human being must come into his own as a free and creative force. The groundwork has been prepared by the spread of democracy, human rights, universal education, gender and social equality and, more recently, information empowerment. The power of individual awakening is responsible for the revolution of rising expectations that has fuelled unprecedented rates of growth and social transformation during the past half century. That same power can be seen among the talented youth of developing countries today, who are awakened to the prospects of a better life and aspiring for higher accomplishment, either at home or in ever increasing numbers abroad. The process of upward social mobility that took off in the USA after the Civil War is now occurring in countries around the globe.

One important expression of this movement is the growing trend toward entrepreneurship and self-employment. It is prompting more and more talented individuals to decline the security and prestige of salaried employment to strike out on their own and seek higher accomplishment by their own effort and merit. Training programs and courses are needed to promote entrepreneurship at all levels of society – from that of the craftsman and skilled industrial worker to the engineer and the MBA. The mental outlook and psychological attitudes for entrepreneurship should also be inculcated through the mainstream educational system. As India's Freedom Movement worked to awaken the population to the possibility of independence from foreign rule and its Green Revolution worked to awaken farmers to the possibilities of higher productivity, the future lies in awakening each individual in society to his or her own greater human potential.

Chapter Seven of the Commission's report examines some of the principal means at our disposal to enhance and accelerate the development of these human capacities. It called for efforts to re-examine our development experience over the past few hundred years in order to arrive at a deeper and clearer understanding of the process and principles that govern human evolution, individually and collectively. Since the publication of the report in 1994, ICPF's successor organization, the International Center for Peace and Development, and The Mother's Service Society in collaboration with the World Academy of Art and Science have worked to formulate a broader theoretical framework for understanding human development. Strategies arising from this approach were presented at international conferences co-sponsored with the Gorbachev Foundation in Moscow and with the Noor al Hussein Foundation in Jordan, and were effectively applied to stop hyperinflation in Yugoslavia. A full and conscious application of strategies arising from this framework can help to condense the period of transition of

East European countries and the take-off of less developed countries from decades into a few years.

From this perspective, the single most important agent of human development is not the institutions of government or those of private enterprise. It is the educational system that imparts to future generations the accumulated knowledge, skill and capacity acquired in the past. The quality of that education will determine the quality of the human beings who build our future world. Until now, too much emphasis has been placed on transfer of information from teacher to student, too little on the development of thinking and critical faculties by the student. Too much reliance has been placed on the capacity of the teacher to teach, too little on the inherent natural capacity of human beings for self-motivated learning and self-discovery.

It may be fair to say that the state of our educational systems throughout the world is an accurate reflection of the state of human development in different societies. In this context, the UN Millennium Goals of achieving universal primary education and eliminating gender disparities in primary and secondary education represent the bare minimum commitment that every society must make to enhance the capacities of its youth. The great Tamil poet, Subramanya Bharati, rightly emphasized that nutrition and education are the two legs of a human being. Pre-school education should receive as much attention as post-graduate education. At the other end of the development spectrum, no society has yet developed the knowledge and expertise to impart the best of what it has acquired to a broad cross-section of its citizens. Few have been able to ignite the aspiration for continuous learning and the capacity for original creativity that are the most profound characteristics of human consciousness. Measured in these terms, even the most developed nations still have a long way to go and much that can be done to further the development of their people.

To sum up, 10 years ago when we presented the report of the International Commission on Peace and Food, we were optimistic that humankind will grasp the uncommon opportunities provided by democratic systems of governance and technological and knowledge revolutions for achieving a world without hunger and where every individual has an opportunity for a productive and healthy life. The onward march of technology is still in full swing, but the political commitment to foster cooperative human security worldwide is yet to emerge. The Information Age has given meaning and content to the concept of a global village. The threats associated with climate change and biodiversity loss also underline the fact that while humankind may be segregated by political frontiers, our fates are

intertwined ecologically. Economically also, islands of prosperity cannot co-exist forever in the midst of oceans of poverty. Both unsustainable lifestyles and unacceptable poverty must become features of the past, if we are to curb the growing violence in the human heart. Ten years after presentation of our report, we remain convinced that universal health, harmony and happiness are still within our reach, if only we imbibe the eternal truth contained in the following message of Lord Krishna delivered on the battlefield of life called Kurukshetra:

We human beings can become whatever we sincerely aspire to become.

Garry Jacobs, Member-Secretary, ICPF and Director, International Center for Peace & Food (USA)

M. S. Swaminathan, Chairman, ICPF
and Chairman, Pugwash Conference on
Science & World Affairs

November 20, 2004 – Chennai, India

ORIGIN AND CONTEXT OF ICPF'S WORK

Looking back, it is astonishing how much the world has changed since the idea of establishing the International Commission on Peace and Food was first conceived in 1987. Who had the foresight to imagine the monumental changes which have so radically altered the political, economic and social complexion of the world community--the end of the nuclear arms race and the opposing military alliances of East and West, the rising tide of democracy that dramatically and irreversibly transformed the USSR and countries of Eastern Europe, the growing importance of the UN in peace keeping and peace making, the peaceful end of Apartheid in South Africa, the first tangible steps toward lasting peace between Arabs and Israelis in the Middle East, the completion of global trade negotiations and founding of the World Trade Organization, and concerted actions to stem degradation of the environment?

The mid-1980s was a time when global military spending reached an all-time high of \$1.2 trillion. Economic growth had slowed or stalled in much of the developing world, prompting some to term the 1980s as the 'lost decade' for development. While there was little agreement on what steps were needed to reverse the arms race and provide a stable basis for world peace, a consensus was emerging that something must be done to address the urgent problems of hunger, famine and endemic poverty that continued to plague much of the developing world and constituted a gnawing source of instability that refused to be contained by national boundaries. The unconscionable loss of lives due to hunger in an age of plenty generated growing concern over the issues of food and famine. Starvation forced millions of people, particularly in sub-Saharan Africa, to flee their homes in despair. It undermined social stability, fueled violence and in some cases led to war between neighbors and fellow-countrymen. The effort to glean more food from desiccated earth further ravished the environment and aggravated shortages. To this was added the galling sight of hunger amidst plenty,

when adequate food production was not matched by sufficient job opportunities to provide incomes to all who needed to buy food because they could not grow their own. These concerns motivated and were symbolized by the institution of the World Food Prize in 1987.

It was in this context that a small group met in Washington DC on World Food Day in October 1988, and proposed the launching of a new initiative to utilize the growing consensus over food in order to press for more rapid and substantial progress on peace, disarmament and development. Without that peace there could be no stable basis and fertile soil for development and without that development there could be no lasting and assured peace. The inextricable linkage between war and famine, economic dislocation and unemployment, violence and social instability, fleeing refugees and migrating populations, high military spending and growing indebtedness argued compellingly against any uni-dimensional approach to resolving the problems of peace and development. In the rapprochement between the superpowers we saw an opportunity that demanded new perspectives, new attitudes and new approaches.

In constituting its membership, the Commission has brought together a highly diverse group of political leaders, scientists, economist, government administrators and businessmen, drawn from 20 industrial and developing nations, with a wide range of experience presiding over government ministries, administrative departments and agencies, international development and research institutions, prominent non-governmental agencies, and private companies.

The first official plenary meeting of ICPF was held in Trieste, Italy, in October 1989 within a few days following the fall of the Berlin Wall. Overtaken by the staggering pace of developments arising from the end of the Cold War, the world was being radically altered almost beyond recognition. Our ambition to slow the arms race appeared almost insignificant in the light of unfolding events. While we contemplated strategy, COMECON and the Warsaw Pact were breaking up, the USSR began to dissolve, democratic institutions began to spread, and command economies started transforming themselves into free market systems.

These monumental achievements were not purchased without cost. Peace was accompanied by partial economic collapse in Eastern Europe. It was evident from the outset that the transition of these countries would not be smooth or easy and that the destiny of the world in the 21st Century would be largely influenced by their success. Severe food shortages in the Soviet Union, which angered the long suppressed population and compelled the government to radical actions, once again highlighted the linkages between

peace and food. Production dropped precipitously as frantic efforts were made to reverse economic decline by radical measures. Although these events were closely observed and strongly assisted by top international experts, the world lacked both the conceptual knowledge and practical experience needed to guide these nations through their crisis. On invitation from the Soviet Academy of Agricultural Sciences, the Commission's next meeting was held in Moscow in November 1990, to examine the challenges facing the USSR during the shift to democracy and a civilian market economy and to identify steps to improve the food supply, speed military conversion and economic transition.

The immediate euphoria over the rapid reduction in tensions between East and West freed public attention to focus on other pressing problems and generated great expectations that a 'peace dividend' would usher in a period of rapid economic progress for developing countries. Yet, despite a remarkable one-third reduction in worldwide defense spending from peak levels in the 1980s, foreign aid budgets continued to shrink. This prompted us to examine the potential benefits that could be derived from transferring or redirecting scientific, technological, educational, productive resources from military applications to support development and the environment. At the same time, increasing pressure was mounted by donors on aid-dependent developing countries to reduce their own defense spending, often without consideration for the genuine security concerns of these countries. The need for improving mechanisms to protect all nations from external aggression has stimulated a rethinking of the competitive security paradigm, which has governed relations between nations throughout the century, and to the formulation of an alternative approach.

The slow expansion of world trade and economic growth in developing countries during this period, attributable to prolonged recession in industrialized nations and a drastic decline in demand from Eastern Europe, underlined the need for more effective and better coordinated development strategies to address the problems of the world's one billion people who live in hunger and absolute poverty. Increasing the production and availability of food to meet the nutritional needs of a still rapidly expanding global population led us to propose steps to double food production in deficit regions.

In many countries, the problem of hunger has less to do with insufficient food production than with distribution or entitlement. The poor lack remunerative employment opportunities to generate the purchasing power needed to obtain the minimum essential requirements of food. In 1990, the Commission undertook a study of alternative strategies to eradicate poverty

among the 300 million extremely poor in India, representing about 30% of the poor worldwide, by more extensive development of commercial agriculture and agro-based industries. Following ICPF's third plenary meeting in Madras in October 1991, ICPF's 'Prosperity 2000' plan for creating 100 million jobs in India was presented to the Government of India, which incorporated them in its Eighth Five Year Plan. The findings of that study and the strategic recommendations that emerged from it convinced us that eradicating the spectres of hunger, unemployment and poverty was possible even on the massive scale prevalent in many developing countries.

Events continued to accelerate with the breakup of the USSR later that year, followed by the collapse of the East European economies in 1992. Simultaneously, the slow-down in trade within this region and the high cost of Germany's re-unification were having an unexpected and unwelcome impact on economic recovery in the industrial countries. Reduced military spending, large budget deficits, and declining imports from Eastern Europe slowed growth and aggravated the already acute problem of unemployment in Europe and North America. Rising anxiety over prospects for employment in the 1990s posed a serious threat to global trade negotiations and to the prospects for growth in the developing world. Examination of the rising problem of unemployment in industrial nations led us to the formulation of a comprehensive strategy for full employment in the West. The Commission's fourth plenary meeting in Oslo during September 1992 focused on the issues of employment and transition.

Our effort to examine each of these problems both in depth and in relation to each other was aided by the constitution of six working groups to study a wide gamut of issues related to peace, disarmament, food, employment and human development in the emerging global context. This report is based upon the findings and recommendations of these groups, which were presented and discussed during the fifth and final plenary meeting at the Carter Presidential Center in Atlanta in October 1993.¹

This narrative of ICPF's brief history illustrates the complex array of interrelationships that inextricably link the issues of peace, social stability, disarmament, democracy and environment with economic transition in the East, employment in the West, poverty elimination and population

¹. Most of the data cited in this book has been drawn from the seven papers prepared by working groups on the main issues covered in the report and from several special reports prepared by ICPF for UN agencies--to be published as a separate volume.

stabilization in developing countries. The necessity for understanding and addressing these issues as a complex whole rather than as disparate and independent parts has been an underlying principle of our work.

From the outset, it has been our intention to build upon the work of previous international commissions that have done so much to generate greater public awareness and support for coordinated global action. This report contains specific operational strategies for implementing many of their recommendations. Much of their work can come to fruition in the changed international climate, if only we shift the emphasis from preoccupation with cataloging the problems to focusing on the opportunities available to eliminate them.

The work of an independent self-constituted commission has the advantage of being unfettered by the necessity of conforming to any official policy lines. It is also faced with the challenge of making a real further contribution on issues which engage so many excellent minds and institutions worldwide. In formulating the ideas and recommendations incorporated in this report, it has been our objective to avoid utopian and idealistic prescriptions that are incapable of being translated into practice in the foreseeable future. At the same time we have refused to be confined by what is presently considered 'realistic' and 'practicable', because both intuition and recent experience confirm that our conception of what is real and achievable are themselves often the expression of limited and short-sighted perceptions.

Disclaimer

Due to the diversity and complexity of the issues examined by the Commission and the heterogenous mix of Commission members, drawn from a wide range of countries, backgrounds, and professions, it has not been possible to arrive at a consensus on all the views set forth in this report. Five years of research and discussion have created a much greater commonality of perspective, but there are still significant differences among members regarding specific recommendations. However, all the Commissioners agree with the basic emphasis on social and gender equity, job-led growth, and human security. Members share the conviction that a candid and challenging discussion of these issues is more valuable than presentation of a consensus view.

UNCOMMON OPPORTUNITIES

The Next Millennium

We are on the threshold of a new millennium. All civilizations have recognized the special significance of new beginnings--the dawn of a new day, a new year, a new century. These are moments of new birth when fresh vision and greater energy are available for setting out on a new direction or accelerating progress along our chosen course. The dawn of a new millennium brings with it a tremendous power for renewal and advancement. It can mark a decisive transition or staging ground for speeding humanity's evolutionary progression.

The remarkable events of the past few years – the fall of the Berlin Wall, the turn to democracy in the former USSR and other countries of Eastern Europe, the peaceful end of apartheid in South Africa, and concrete steps toward lasting peace between Israelis and Palestinians – confirm this truth. In an age of incredibly rapid and revolutionary change, who can confidently claim the wisdom to predict what can or cannot be accomplished in the coming decade? Looking back on this moment ten years from now, we may well be able to chronicle what now appear as equally extraordinary achievements.

The glimpse of possible changes in the world over the next decade afforded in the box on pages 7–8 may appear outlandish and unrealistic to some. It is an indication of what is possible, not a prophecy or projection of what is inevitable. It presents a set of real opportunities that can be tapped, provided that we take best advantage of the present situation. The progress it heralds is no more inconceivable and remarkable than the chain of recent achievements seemed seven years ago – yet those we have already come to take for granted and, underinsistent prodding by the media, to replace in our consciousness with ever new concerns.

Prospects for Year 2005

Looking back on this moment ten years from now, we may well be able to chronicle the following achievements:

- According to the provisions of international treaty, the final batch of nuclear weapons has been destroyed, ushering in a world free of nuclear, chemical and biological weapons.
- Global military spending has fallen by nearly 50 percent since 1994 to \$400 billion per annum (in 1990 USD), half of which is now contributed to a global military force responsible for enforcing a total ban on war between nations.
- Not a single inter-state or civil war is raging due to the extension of the UN's mandate to prevent all forms of war and its vastly strengthened military capabilities.
- International drug trafficking has declined by more than 80% since the signing of the UN declaration granting the UN special powers to eradicate the drug trade.
- An accelerated schedule for dismantling trade barriers and the formation of regional economic unions, such as the Middle East Economic Area that incorporates Israel and the Arab states, and other initiatives to promote larger bilateral trade between countries and regions, have contributed to a more than doubling of the growth rate in world trade.
- With the assistance of the UN's World Development Force, proposed in this report, food shortages have been eliminated from the last famine danger zones in African and total food production on that continent has doubled within a decade.
- Poverty in its direst forms has been eradicated in China and India by strategies that have led to the creation of hundreds of millions of new jobs.
- Rapid economic growth in developing countries has acted as a powerful engine for vigorous expansion among the industrialized nations.
- In partial fulfillment of their common commitment to generate Full Employment Economies, the member states of the OECD announced that unemployment among industrialized countries has dropped to the lowest level in half a century.

- Most of the nations of Eastern Europe and Central Asia have achieved a significant measure of political and economic stability combined with unexpectedly high growth rates ranging from 5-10%. This region has emerged as an important source of trade and economic growth for the industrial nations.
- Global expenditure on education and training as a percentage of GDP has doubled during the decade. One remarkable result has been the complete eradication of illiteracy and universal enrollment in primary education.
- Scientists report that the ozone layer is being restored to pre-1970 levels far more rapidly than had been anticipated. This has been aided by a worldwide rush to renewable energy power generation led by such regions as California, which now produces 10,000 megawatts of electricity from wind power and has mandated an increase in pollution-free motor vehicles from the present level of 5% to 25% by 2010.

Common sense tell us it is not possible simply to wish away the serious problems barring these achievements. We need the technology vastly to improve productivity in poor countries. We need the organizational know-how to create effective administrative and political systems in transition states and to restructure international institutions. We require enormous investments in constructive economic activities--as opposed to lavish arms spending--to generate jobs and higher incomes for hundreds of millions of people in the developing world, and by extension to stimulate further economic growth and job creation in the West.

All these essential ingredients are available in abundant measure, if only we choose to employ them for our common benefit. Yet, even this is not enough. Otherwise, we would already have accomplished many of these things. Above and beyond these material, social and financial resources, we need a new vision, a new perspective and new attitudes about what can and must be done. If the events of the past seven years prove anything, it is that a massive change of attitude and perspective, such as the one brought about between East and West, is imminently possible and incredibly powerful. The one we have all been party to has immensely altered the world's political and economic landscape--sweeping away at a single stroke the, until recently, very real danger of another world war and widespread nuclear extermination.

The recommendations formulated in this report call for profound changes in

the way we think, feel and act to meet the challenges and tap the opportunities of the coming decade. We should not underestimate the magnitude of the changes required or the collective effort needed to bring them about. Nor, as recent events confirm, should we underestimate the capacity of humankind to make that change and realize the benefits.

During the 20th Century, humankind has achieved an unprecedented mastery of its physical and social environment--soaring into space and landing on the moon, exploring the ocean floors, harnessing the power of the atom, delving into the secrets of the human brain and creating machines that imitate many of its functions, unraveling our own genetic code, generating unimagined wealth for many, proliferating national and global institutions, evolving the rudimentary foundations of world governance. Yet the very magnitude of these accomplishments has generated a sense of dependence and even helplessness. Our own creations have cast a spell over us. Impressed by the power of our works, we feel obliged to submit to our own incomplete and sometimes faulty constructions, rather than to complete or modify them to better meet our needs.

Instead of marveling at the wondrous achievements of the modern era, we should marvel at the unlimited human capacity for invention and progress. The beginning of the Third Millennium is an opportunity for us to rediscover the ancient truth that human beings, individually and collectively--not material resources or the technology we invent or the institutions we fashion--are the primary resource, driving force, center-piece and ultimate determinant of our development. The key lies within us.

Some Common challenges

Listing future achievements does not mitigate the very real and pressing problems that confront us now. A brief catalogue suffices to indicate the magnitude of these challenges.

- *Population:* In spite of the continued decline in birth rates, world population is expected to rise by nearly three billion people or 50 percent over the next three decades, making the tasks of achieving food security, employment and education for all, even more daunting than it is today.
- *Poverty:* The incidence of poverty continues to increase both in relative and absolute terms. Presently, 1.4 billion people constituting 26 percent

of the total population of developing and developed nations live in poverty. The poorest 20 percent of the world's population shares a minuscule 1.4 percent of the world's income. According to current projections, 300 million people representing nearly 50 percent of the population of Sub-Saharan Africa will live below the poverty line at the turn of the century.

- *Environment:* Population growth, along with rising levels of production and consumption in developing countries, will place strenuous demands on the environment of the planet. Growing damage to the basic life support systems of soil, water, flora, fauna and the atmosphere is taking place in all parts of the world.
- *Unemployment:* In the West, rising levels of unemployment have increased resistance to free trade and immigration. Rising levels of long term unemployment and youth unemployment in inner cities are associated with the increasing incidence of crime. In developing countries, rapid population growth continues to outpace job creation in most regions, resulting in high levels of unemployment, increasing social unrest and large scale migration.
- *Gender Discrimination:* Gender remains a major determinant of privilege and discrimination worldwide. Women still suffer from unfavorable sex ratios, lower wages, restraints on property ownership, as well as higher levels of illiteracy and lower educational attainments.
- *Rising Violence:* Violence is on the increase, especially violence within society in the form of civil wars, crime and drugs. In 1992, 54 armed conflicts reportedly resulted in 70,000 deaths. During the past one year, more than half a million people perished in Somalia and Rwanda alone. Nearly 100 less known conflicts rage at the present moment.
- *Refugees:* Violence, poverty and environmental degradation are displacing people on a massive scale. Today there are more than 18 million refugees, far more than the number immediately following World War II. A rising tide of immigration is increasing ethnic tensions and intolerance in both industrial and developing countries.
- *Debt:* Outside the industrial countries, global growth in the last two decades has come from a limited number of countries in East and

Southeast Asia. Income inequalities are increasing rapidly even between developing countries. Many are facing high indebtedness and depressed prices for primary commodities, upon which they rely for their export earnings and debt servicing

- *Economic Collapse in Eastern Europe:* The enormous spread and depth of economic decline among the former communist countries of Eastern Europe during the period 1990-93 exceeds in magnitude the catastrophe that engulfed the capitalist economies during the Great Depression of the 1930s. Falling production and incomes coupled with soaring prices are combining to cause political instability, social unrest and extreme hardship to the populations of these nations. If not remedied, it could result in a reversal of the remarkable progress toward world peace achieved during the past seven years.
- *Arms Exports:* The cutting of defense budgets has generated increasing pressure on arms manufacturers to seek export markets. Although the value (in 1992 US \$) of arms exports fell by more than 50 percent from 1988 to 1992, it still represents nearly \$20 billion annually. These weapons, over 80 percent of which are supplied by the five permanent members of the Security Council, directly contribute to the growing instability and violence. During the last decade, 40 percent of these weapons were sold to trouble spots, such as Afghanistan, Iraq, Somalia and Sudan.

These are, indeed, severe challenges that call for urgent and determined action by the global community on a scale unprecedented during times of peace. But the lessons of the past decade should caution us against accepting as *fait accompli* statistical projections that predict the outcome of our effort over the next ten years before it has even begun. *No such determinism exists, except in our minds.* Given the right leadership, we can change the course, amend the rules, alter the structures and accelerate action to achieve an entirely different and more favorable set of outcomes. Our future is not a question of fate. It is a question of choice.

Evolutionary opportunities

What then is the justification for envisioning a bright future? There are political, economic, social and technological forces active in the world today that can override the causality of past trends and combine together to make this a time of unprecedented opportunity.

- *Intellectual Synthesis:* War is the result of a conflict that leads to a forceful resolution that is followed by a fresh period of progress. The end of World War II marked the defeat of fascism giving birth to the United Nations, followed by the dissolution of colonial empires resulting in freedom for more than forty subject nations. The end of the Cold War marks the end of a seventy year confrontation between two opposing ideologies--socialist and capitalist--that reflected a more profound conflict between two fundamental aspects of human existence--individual freedom and social responsibility. The posing of these two as opposite and mutually exclusive forces has for long limited our freedom of thought and action and prevented us from fully and boldly experimenting with new ways to reconcile them. The peaceful termination of this confrontation has lowered the mental barriers that had prevented either side from critically evaluating their own and opposing viewpoints from a wider, integrated perspective. It provides us with an opportunity to synthesize these forces in a manner which balances individual freedom with collective action to eradicate the blatant manifestations of poverty, social injustice and inequity.
- *Economic Liberalism & Rising Investment in Developing Countries:* One immediate result of this reconciliation has been the recent movement of economic liberalization spreading throughout the developing world accompanied by the relaxation of bureaucratic constraints that impede growth. This trend has stimulated a dramatic increase in these countries in foreign investment, which has risen nearly six-fold during the past seven years. Private loans and foreign direct investment together are now approximately twice the level of total overseas development assistance. This investment provides additional benefit in the form of increased transfer of technology and management skills, increased access to export markets and a reduction in the cost of capital.
- *Defense Cuts:* The monumental and extravagant waste of human, material, scientific and financial resources resulting from the preparation, execution and consequences of armed conflict are too staggering to quantify. In financial terms alone, direct expenditure on defense over the past decade was roughly equivalent to the value of the entire world's gross annual product. The \$400 billion reduction in global military expenditure achieved during the past seven years can be matched by a further saving of equal or greater magnitude, representing four times the current combined annual levels of foreign aid and international capital flows to developing countries. The freeing of an additional \$400 billion a year for development would be sufficient to finance the eradication of poverty worldwide. Less than 3 percent of

this saving is sufficient to eradicate the diseases that now claim the lives of 25,000 children every day.

- *End of War:* Cessation of war and of the threat of large scale warfare are essential preconditions for more rapid progress. The end of East-West confrontation and withdrawal of support for proxy wars fueled by superpower rivalry provide us with the opportunity to build upon and extend peace in the Middle East and South Africa to all regions, to eliminate the use of war as an instrument of policy, and to impose peace within and between nations as a condition for membership and participation in the world community.
- *Expansion of World Trade:* The end of international political confrontation has given a strong impetus to global economic cooperation. The successful conclusion of the international trade negotiations culminating in the establishment of the World Trade Organization opens up vast potential for nations to increase mutually beneficial economic activity, predicated on the understanding that more trade is good for everyone. Studies cited by the World Bank estimate that the removal of trade barriers by the industrial nations would increase the exports of many developing countries by as much as 50 to 100 percent, representing a gain in real income of \$40 to \$80 billion annually. For the least developed countries, these gains could be double the amount of official development assistance. The IMF has cited reasons for concluding that actual gains may be significantly higher than these estimates.
- *New Engines for Global Economy:* Economic growth in the developing world is projected to remain strong throughout the decade, averaging 4 to 5 percent per year in low- and middle-income countries. At a time of slackened demand and low levels of growth in most industrial nations, developing countries have become the principle engine driving expansion of the global economy and employment generation, whereas until recently the Third World was perceived primarily as a drag on the world economy or a threat to jobs in the West. The potential for much higher rates of growth in these countries, as recently achieved by China, can result in much larger flows of capital, technology and organizational know-how. Recognition of this opportunity should be central to the strategy of industrial nations for stimulating their own job growth.
- *Advancing Technology:* The pace of technological development continues to accelerate. The application of biotechnology in agriculture offers significant opportunities to raise productivity in agriculture and

generate higher incomes for farmers. Medical biotechnology is opening up the prospect of longer, healthier, better quality lives for the elderly. Over the next forty years child mortality is expected to fall to half its present level and life expectancy is projected to rise by 10 percent. The shift to renewable energy sources and reduced material consumption in manufacturing can lighten the environmental burden of economic growth. Concerted action now could bring these benefits much sooner.

- *Information Superhighways:* Information is a catalyst and stimulant to social development. The speed of information, like the speed of transportation, is a critical determinant of economic activity. Innovations brought about by the marriage of computers and telecommunications will make possible more, faster and better communication in developing countries at substantially lower cost through global computer networks and satellite-linked telephone systems. In some areas, such as finance, news and sports, the barriers to the flow of information are already crumbling. The increasing quality, quantity and speed of information flows about markets, technologies and significant events are quickening growth of the global economy. One consequence has been the globalization of financial markets, resulting in increased financial transfers to developing countries. The technology exists for similar achievements in many other fields related to development.
- *Global Consciousness:* The impact of the 1992 Earth Summit goes far beyond the decisions taken to protect the global environment. By focusing on critical threats that can only be met through common action, it has changed the way people and nations think about the world and each other. A consciousness of One World is emerging above the din of individualistic and nationalistic self-interest. This new perspective will enable us to generate effective strategies for addressing many problems that have thus far defied solution.

In addition to these nine factors, two powerful revolutions are re-drawing the landscape of the global society and generating an unparalleled dynamism for rapid progress on the issues of critical concern to humanity.

Democracy, Peace and Development

The first is a revolutionary movement from authoritarianism to democracy that has traveled around the world during the past decade. The initial wave

swept through Latin America in the early 1980s, replacing military regimes in Peru, Argentina, Brazil, Uruguay, Chile, Paraguay and Bolivia. In 1979, 12 out of 19 Latin American countries had authoritarian governments. By 1993, every country except Cuba and Haiti had a democratically elected government. *Glasnost* and *perestroika* in the USSR initiated a second and more powerful tide of freedom that expanded rapidly through Eastern Europe and then to other continents, in the same way that India's attainment of freedom from colonial rule gave birth to a host of freedom movements and new nations after the second world war. The number of single-party or military states and people under autocratic rule has fallen dramatically since 1980 and the trend continues.

This shift to multi-party democracy, when coupled with a free press and an independent judiciary, vastly reduces the threat of large-scale wars similar to those that have twice shaken the world in this century. Three factors are at play in most conflict situations: the absence of developed democratic institutions, the absence or abuse of fundamental human rights, and the inability to make those choices in the management of public policy on which good governance depends. Authoritarian governments find justification for their existence in the presence of external threats to national security, in times of war and during periods of imperialist expansionism. They have a vested interest in maintaining a state of tension or initiating conflicts. In contrast, empirical evidence shows that liberal democracies do not go to war against one another. A study by Dean V. Babst of 116 major wars from 1789 to 1941 revealed that 'no wars have been fought between independent nations with elective governments'. The reasons for this are several. Democracies tend to be more prosperous and better educated. They share common political cultures based on individual rights and liberties. They establish orderly and peaceful processes for conflict resolution within society. In addition, elected governments find it extremely difficult to win public support for initiating and sustaining wars in which the country's own citizenry must fight, except in order to rebuff or forestall external aggression, as illustrated by domestic opposition to America's role in Vietnam.

War is the engine of dictatorial power. Peace is the social dividend of democracy. Peace is not merely the absence of war. It is a settled, stable, secure condition which thrives on a foundation of political maturity, social freedom and economic well-being. A world in which all major military powers--with the present exclusion of China--have democratic governments removes the ideological basis and political pressure for confrontation between states. If it is maintained, the adoption of democratic forms of

government by the nations of Eastern Europe and the developing world will help ensure peaceful relations between states, which is the most fundamental precondition for accelerated economic development. The marriage of democracy and disarmament can transform the world--abolishing wars, eliminating nuclear arsenals, liberating hundreds of billions of dollars for building a better common future.

Economically, the shift to democratic government presents an opportunity for more rapid development in these countries. During the post-war period of technology-driven industrialization, there is a strong correlation between a representative form of government and rapid economic development. This relationship is reciprocal. The freedom of expression and exposure to an independent media in democratic countries awaken people to expectation of a better life and encourage them to take initiatives that lead to prosperity. At the same time, the democratic tendency is substantially strengthened by rising standards of living. As democracies widely distribute political power, they also tend to distribute most generously the benefits of science, technology, information and education, which are the essential building blocks of economic development. Democracies provide greater access to resources, permit greater social mobility, and encourage institutional innovation. Not surprisingly, today all of the high income industrial nations as well as the top 25 ranked nations on UNDP's Human Development Index are liberal democracies. In contrast, only eight of the 43 poorest nations have multi-party democratic political systems.

Even among the poorest countries, democracy has served to protect the population from the worst scourges of war and poverty that have ravished many authoritarian countries. Economist Amartya Sen was one of the earliest to observe that no country with a democratic government and a free press has suffered from famine during the last four decades. India, the world's most populous democracy, suffered its last major famine prior to Independence in 1943. Although a major famine threatened ten million lives in India during the mid-1960s, it was averted by the government's emergency measures and timely launching of the Green Revolution. In contrast, as many as 30 million persons may have died of famine in China during the late 1950s. The political necessity of maintaining popular support and the threat of exposure by the media force elected governments to take all necessary steps to ensure sufficient food supplies.

Modern democracy is the political counterpart of the market economic system. Historically, democracy broke the monopoly of the aristocracy over governance of the people, giving freedom and rights to the individual

politically. The market system--basing itself on property rights and self-determined initiatives of the individual producer and consumer--is an economic expression of the same principle. Both democracy and market-oriented economies decentralize authority and decision-making, providing the essential legal and regulatory framework and empowering the individual to choose and act with minimum direction or interference from above. Both depend for their success on the quality of those choices, which means on the quality of education and information possessed by the mass of people, and on the freedom and dynamism of the population.

In contrast, authoritarian systems and command economies centralize decision-making, restrict the flow of information to the public, foster vast unresponsive bureaucracies, limit individual freedom and initiative within narrow bounds, and encourage obedience and conformity rather than innovation. The spread of education, which fosters independent thinking, and dissemination of information through the media were important factors in undermining public acceptance for communism in Eastern Europe. In a real sense, it was Gorbachev's policy of *glasnost* that brought down the Iron Curtain. It opened up an insular society and exposed it to an avalanche of new information, new ideas and new possibilities, which released a fervent aspiration in the people for a better life.

Over the last few years, democratization has been especially dynamic in Africa, where it has been dubbed as Africa's Second Liberation. During the first three decades of post-colonial independence, almost all of the continent's 54 states had come under either single-party or military rule. The preference for authoritarian rule was often justified by the need for rapid economic development, which could be impeded by opposition to government policies and by the need to contain regional and tribal conflicts. Neither of these claims have proven true. Living standards have actually declined in most African countries during the last two decades. Regional and tribal politics have flourished. Dozens of civil and inter-state wars have been fought accounting for millions of lost lives. Food production and employment have lagged far behind population growth. In the absence of legal channels of protest, opposition parties have frequently resorted to violence. By the end of the 1980s the lack of material progress and the emergence of young educated professionals in leadership positions fostered a revolt against single-party rule and popular pressure for multi-party democracy that has resulted in a democratic domino effect, similar to the spread of communist rule which Western democracies had feared would overwhelm South Asia twenty years ago.

As recently as 1989, only four African countries could be considered stable democracies and three more were moving in that direction. Only three years later, 18 African nations could be classified as democratic and a number of others were in the midst of far-reaching political change. The peaceful end of apartheid in South Africa is one remarkable outcome of this process. There are even winds of change in the Middle East where Jordan has recently shown the way by conducting free elections.

The role of democracy in development would be even more compelling were it not for the apparently contradictory evidence posed by the recent experience of Russia and China. Russia hastened to introduce democratic reforms in the hope they would lead to rapid economic advancement. China preferred to postpone political reforms until the economic transition was much further advanced. As an immediate result, China has the highest economic and employment growth rates among the nations of the world, while Russia has experienced three successive years of steeply declining national income. These differences are of vital importance, but they center around the issue of the best strategy for the transition in human terms, not on the ultimate importance of democracy to continuous economic development. The opening up to foreign trade and investment, the spread of higher education which is essential to achieve global competitiveness and the rising living standards which the market system will generate--all serve to undermine the legitimacy and staying power of the single-party system. China has released a social movement that is rapidly shifting power from the Party to market-responsive institutions and special interest groups, which include wealthy entrepreneurs, provincial officials, workers and peasants. Final assessment of China's strategy will be determined by the further response of the political system to rising social expectations and growing pressure for greater individual freedom.

Restructuring the UN

The movement toward democracy is not merely a question of idealism. In some countries, particularly in Africa, it is an essential step toward overcoming the desperate economic conditions that pose an imminent threat to the lives of millions of people. In many others, it can vastly accelerate the development process by releasing greater social initiative. In his message to ICPF, the UN Secretary General, Boutros Boutros-Ghali, emphasized the importance of democratization--what he chose to call political development--

-as an essential foundation and complement to peace, economic and social development.

"There have been cases where development was accompanied by an authoritarian political system. But, we have invariably seen that if the participation in the market place is not accompanied by political participation, development efforts are brought to naught by social and political instability...Once again, therefore, we see the inescapable relations governing the goals of peace, development and democratization--these are the goals of the United Nations."

In order for this revolution to have full beneficial impact on the world's political and economic affairs, its principles need to be extended to cover all nations and international institutions. The end of the confrontation between democratic and autocratic superpowers within the UN system opens up the possibility of finally translating the idealistic aims of the UN into practical realities. First and foremost is the prospect of extending representative government to all nations. This effort will be given strong impetus by establishing democracy as a minimum condition for membership and participation of states in the affairs of the UN. It is true that the UN stands for the diversity and pluralism, but not when it comes to freedom and human rights. True pluralism and diversity can only be exercised and enjoyed by people in freedom.

Recognizing the considerable effort that will be needed to prepare still subject people and to train national leaders in democratic institutions and processes, all possible support should be extended by the international community to make available the knowledge and skills needed to build viable political institutions. The UN should establish a graded, time-bound program for the transformation of authoritarian states. Should the people of any country themselves prefer an alternative system, let them freely make that choice by electoral process. Suspension of voting rights or of the privileges of membership should be the ultimate penalty for failure of countries to comply with this condition within a reasonable period of time.

The affirmation of democratic principles cannot and will not stop with the domestic governance of member countries. It is inevitable that the same principles be extended to the relationships between the nations that make up the international community. The present structure of the UN system is a product of the second world war, just as the League of Nations was of the first. The allied powers conceived it at the height of the war and evolved its structure to reflect the immediate post-war realities. Russia, USA, France and UK emerged from the war as the arbiters of the world order. The

defeated axis powers, Germany and Japan, were relegated to the background. Mainland China had become communist and was therefore excluded from the power structure. India and the other colonies had not yet gained their freedom. In recognition of the mutual suspicions between Russia and the Western powers, the rule of unanimity usually adopted by political conferences was applied to decisions made by the five major powers that became the permanent members of the Security Council. The rest of the world was poorly represented. Only 50 nations--including only two African states, two East Asian nations and three Soviet republics--out of the current total of 184 UN members were present at its founding. This structure is based on political realities that no longer hold true. As the limitations of the League led to renewed conflagration two decades later, the arrangements underlying the establishment of the UN contained within them the seeds of the confrontation between the superpowers and the Cold War.

The present international system of governance is as far from being truly representative and democratic as many erstwhile authoritarian governments that incorporated that adjective in the names of their parties or states. The UN Charter assigns primary responsibility for the maintenance of international peace and security to the 15-member Security Council, of which five are permanent members with veto power over all matters. In no other constitution or organization founded on democratic principles is it accepted that some few members alone may invalidate the decisions of the majority. The General Assembly, in which all members are represented and which is headed by an elected Secretary, is only an advisory body, constituted to "discuss any questions relating to the maintenance of international peace and security" and to "make recommendations with regard to any such questions to the state or states concerned or to the Security Council or both." This authorization is restricted by the provision that in regard to any dispute or situation in which the Security Council is exercising its functions under the Charter, the General Assembly will not make any recommendations with regard to the dispute or situation unless the Security Council so requests.

It may have been the wisdom of the great powers to fashion this non-democratic structure and maintain it, so long as the superpowers and the military blocks stood in firm opposition to each other and so long as military power was a primary factor in world affairs. Equally so, it will be wisdom now to recognize that this system is no longer justifiable or tenable. The end of the East-West confrontation, the rise of economic power and economic issues to a dominant position in international relations, the proliferation of new member countries from the developing world, and, most importantly,

the emergence of development along-side of peace as a primary mission of the UN system argue for radical change.

The same rationale that warrants an insistence on the adoption of democratic institutions and democratic rights within all member countries, also justifies their adoption by the international community. A system that is not truly representative will not have the credibility and cannot generate the necessary participation and cooperation required for effective action on issues of crucial importance to the whole world. The rule of unanimity or veto power cannot be an effective principle for governance in a world of such complex and diverse interests, as the recent conflict of interests within the European Community also illustrates. Those nations that regard themselves as the standard bearers of democracy and human rights *within* nations cannot justify denying it *between* nations. World peace and prosperity in the coming decades will depend on our willingness boldly to confront this issue. At the end of World War II the victorious nations joined together to found the UN. At the end of the Cold War, the organization needs to be re-founded, restructured according to democratic principles, to give a more active role and more equitable representation to people of all nations.

To deem such considerations unrealistic given the present alignment of power in the world is a short-sighted view. It ignores the incredible speed and scope of changes that have radically transformed international relations over the past half decade. It assumes that the present system has the backing of the international community and that it can and will sustain itself regardless of whatever steps we may contemplate. A fundamental change in structure is essential and inevitable. The breakup of the Soviet Union and the end of the Cold War have resulted in the demise of the bipolar system which dominated international relations since 1945. The United States is now recognized as the sole superpower and the primary determinant of actions by the UN Security Council. But neither America's culture nor its historical economic and political development and present outlook will permit it to take on the extraordinary responsibilities and overseas commitments which fulfillment of this role necessitates, as its reluctance to get involved in Bosnia and Rwanda, and its quick withdrawal from Somalia illustrate. Indeed, no one nation can or should assume such responsibilities on behalf of the whole world. The rapid shift of East European and former Soviet republics to radically different political and economic systems demonstrates that changes of even greater magnitude than this can be brought about rapidly.

There is likely to be far greater support for this change than may at first appear possible. Russia may actively support and China offer only nominal resistance, once a clear conception of the new structure has emerged. Ironically, the major opposition to this change is most likely to come from the past defenders of democratic principles in the Western world, rather than from the newly liberated nations of Eastern Europe. If so, this will follow the normal law of social development in which the vanguards of previous revolutions become the principal opponents of the next stage of progress. Even here it is likely to come primarily from entrenched vested interests, not the general public.

A mere tinkering or modest amendment to the structure of the UN will only perpetuate the inherent inadequacies of the present system and postpone its maturation into a truly effective instrument for global political, economic and social integration and collective accomplishment. Many proposals are being floated to modify its workings, mostly by expanding representation on the Security Council. As an interim measure and first steps, the immediate addition of five more permanent members to the Security Council, based on the criteria of population and economic status, and the abolition of the veto power are fully justified. However, these changes do not go far enough in furthering the interests of global peace and development. They will not fundamentally alter the out-dated, non-representative structure which perpetuates the status quo. It is time to devise a new formula and a new structure for international governance that will reconcile and harmonize the political rights and economic interests of all the world's peoples. The institution that had come to symbolize the Cold War must be restructured in such a manner as to symbolize the abolition of all war and the establishment of peace and democracy as the foundations for global development.

Global Social Revolution

A second revolution also possesses tremendous transforming power to accelerate human progress--the revolution of rising expectations. This revolution is not new in conception or expression, but what is new is its rapid extension to encompass people and nations around the globe. Although the term was first applied to describe the growing aspirations of the middle class in North America forty years ago, it is now widely applicable to all social and economic groups in both developed and developing countries.

After countless centuries of slow, often imperceptible progress, humanity

everywhere is on the move. A rising tide of technological advancement has brought with it wave after wave of social innovation. Democracy has liberated long suppressed populations from military or political oppression. With the passing of colonialism, a new generation of youth has come of age in developing countries that never lived under the fear, compulsion and humiliation of colonial rule. The knowledge imparted by the spread of universal education has removed much of the ignorance and superstition, the submissiveness and sense of inferiority that limited people's mental and social horizons in the past. The elimination of deadly epidemic diseases has replaced an ever looming shadow of fear with vibrant health and prolonged vigor for billions. Improved methods of cultivation have converted food shortages into abundance or surplus in many countries which until recently suffered from chronic hunger. Advanced production technologies have made accessible to greater numbers the comforts and conveniences that till recently were exclusively in the purview of the elite. Vast sections in developing countries now have access to wristwatches, bicycles, televisions, travel, houses and motor vehicles of all descriptions. Although China produced only 178,000 refrigerators between 1949 and 1979, production has now soared to the highest level in the world to meet the surging demand. More than 39 million households, representing 56 percent of all urban households, have acquired them in the last fifteen years. Similarly, between 1981 and 1990 India's production of televisions rose more than ten-fold from a 450,000 per year to 4.8 million. Exposure to life styles elsewhere through the media, cinema and travel has created greater awareness of possibilities and generated higher hopes. The enormous recent achievements of East Asian countries, which are quickly closing the economic gap that separates them from the wealthiest nations, act as a constant reminder and goad to those who have achieved less. In the new atmosphere of peace and greater freedom brought about by the end of the Cold War, all these factors combine to add urgency and intensity to the aspirations of the lower and middle classes everywhere.

Not long ago most people expected to end their lives in the same place and largely the same position as they and their predecessors began them. In previous centuries the primary aim of society was survival, stability and maintenance of the status quo. Growth was confined to the advancement of a small number of individuals, mostly within existing levels of the established social order. Development was a slow, haphazard and largely unconscious result of countless individual efforts. Today, people in most developing countries are motivated by an expectation, an urge, a feverish drive for rapid advancement that has acquired the characteristics of a social revolution. The aspiration for greater comfort, convenience, security and enjoyment

motivates entire societies to embrace progress as their primary goal and collectively dedicate themselves to achieve it, encouraging and supporting the initiative of individuals to advance their own position and in that way contribute to the general progress. The race for development has become an intense preoccupation of every nation. The slow pace of trial and error growth is no longer adequate to meet the rising demands of the people.

The awakening of this compelling urge has unleashed a powerful social force for human progress. That force refuses to be bound by either rationality or morality. Revolution means to bring future results more quickly, sooner than they would come through normal evolutionary processes. In earlier ages, people revolted when their most basic needs were not met, when they were denied rights or oppressed. Today, vast sections in developing countries are stirred to action because their expectations are not fulfilled. Economic liberalization has unleashed people's expectations in China and India: witness the rush of Chinese peasants to invest in the stock market and the increasing demand of Indian villagers for a range of consumer goods. The same movement continues in the West as increased physical and social mobility, the growing demand for higher education and the widespread urge for travel.

These expectations are the seed and driving force for social progress. They provide the energy and create the openness and willingness for change. But they also increase the danger of frustration, disappointment and violence. The end of the Cold War was expected to usher in an age of peace, but actually violence is on the rise in both developing and developed countries because of the widening gap between human expectations and achievements. In spite of dramatic growth in rural incomes during the 1980s, Chinese peasants are exhibiting increasing restlessness and discontent. This discontent is partly the result of rising farm productivity combined with recently stagnating rural income growth, which have created a huge mobile population of displaced rural workers.

This growing gap between expectations and achievements is at the root of contemporary turbulence worldwide. The popular and sometimes violent demand for freedom and participatory democracy, the return of religion in politics, surging ethno-nationalism and intolerance, and rising urban crime are disparate expressions of this phenomenon.

In Eastern Europe, where a peaceful revolution from within has broken the shackles of statism that long confined the energies and aspirations of their people, these energies now surge forward in high and eager expectations of a better life. Already there are growing signs of impatience, disappointment and frustration arising from the greater hardships that have come in place of the greater benefits that all expected. It is essential that these energies be channeled into constructive pursuits that generate tangible improvements. Otherwise they may recoil from the effort and look backwards to a failed system or be guided by false prophets of a path that once again poses a threat to other nations.

The phenomenon of growing violence in an age of increasing affluence seems to contradict the thesis that poverty is one of the major causes of

violence, until we realize that the increasingly visible signs of prosperity the world over raise the expectations and aggravate the sense of deprivation and revolt among those that have been by-passed by the general progress. Greater political and social freedom can only further magnify this tendency. This suggests that international, national and community level violence can not and will not be eradicated before poverty itself has been abolished, and, that if left unaddressed at its source, further economic progress is likely further to aggravate conflict in society, unless we are able to extend the benefits of progress to everyone. This realization would be quite disconcerting were it not for the fact that we are fast approaching the time when both these persistent ills of humankind can be banished forever--the way slavery and colonialism were banished in the past. The recognition that it is neither desirable nor possible to go backwards adds urgency to our efforts to move forward.

Revolutions of the past have been partial and localized negative reactions against an existing social order and benefited only a small part of society that blindly resisted change. They resulted in war and usually much destruction. The revolution of rising expectations is a positive, constructive movement spreading to encompass people at all levels of all societies around the globe and pressing for establishment of a higher social organization that can meet the expectations of all humanity. But the energies liberated by this revolution have to be properly converted into an evolutionary effort for development, otherwise they will fly off in unwanted directions. Society must provide the conditions and opportunities for these energies to express themselves positively and constructively in pursuit of their own fulfillment.

Education is the most essential ingredient for this transformation. It is a great leveler of social hierarchy. It has the power to transform the propensity for violent revolution into ordered evolution. It can temper and mature the aspiration and enlighten the expectations by an understanding of what can be reasonably sought after and achieved. It can impart knowledge of opportunities, attitudes that support constructive initiative and skills for productive application. Production technologies that make consumer goods available at lower and lower cost to more and more people is another leveler of social differences by extended the benefit of development more widely and evenly.

The soaring of human aspirations is a natural and irresistible result of goals that humankind has been striving for over the last century. It is a direct product of the great advances in freedom and democracy, human rights, social equality for women and minorities, health and education, science and

technology, rule of law, social institutions and social welfare. Society has no alternative but to meet these growing expectations by channeling the awakened energies into productive pursuits. For that we need to acquire a greater understanding of the social and psychological process that has already enabled so many to achieve so much. *The challenge and the opportunity now presented is to make conscious the previously unconscious process of development, to accelerate it and to convert the revolution of rising social expectations into a positive energizing movement of the entire global society.*

This is the all-powerful driving force that has so radically transformed the social landscape during this 'century of the common man'. This is the ultimate 'rationale' behind the inevitable claim of the poor everywhere that will demand with ever growing insistence and impatience until it is finally granted--as a birth right of every human being--*freedom, food, employment, prosperity and fulfillment for all.*

Perspectives for the New Millennium

The individual effect, complex linkages, mutually supportive interactions and consequent cumulative impact of these two revolutions and the nine other factors propelling global change are incalculable. They make this a fortuitous moment in history for a quantum leap forward, which many have dreamed about but few believed achievable. Seizing this opportunity requires, most importantly of all, a change in awareness, attitude and perspective. Several ideas will be of abiding value in our endeavor to make the most of this rare moment.

- Our present problems and achievements can only be understood when viewed from an historical perspective that avoids getting lost in the media-driven drama and intensity of momentary crisis and short term trends. As recent global action to protect the environment amply demonstrates, public awareness and understanding are growing too rapidly and becoming too important in global affairs for us to rely on the present positions of governments or current public sentiment as a gauge for what may be realistically achieved in the near future. Identification of the underlying currents that are rapidly raising the value of the human being, bringing nations together in ever closer cooperation and mutual interdependence, and pressing the international community to raise its goals are more reliable indices of what is possible.

- The world is blind to the measure of its own accomplishments. We need fully to recognize the astonishing magnitude of the achievements of the present century and fully to understand the process that made them possible. This process expresses itself as scientific, technological, commercial, political, economic, social and cultural development. But its driving force is social and psychological. Its prime mover is human beings. Becoming conscious of the process of society's past achievements is a key to more rapid future progress.
- There needs to be a two-fold shift of our attention and emphasis from solving problems to tapping opportunities and from seeking to meet minimum needs to achieving our maximum potential. Preoccupation with studying problems often becomes an excuse for not dealing with them, while sapping our enthusiasm for action. Recognition of opportunities releases fresh energy and constructive initiative. Setting goals to achieve minimum needs assures that the minimum is the most we will accomplish. Seeking to tap the maximum potentials challenges us to strive unceasingly for higher goals.
- The world possesses the technology, resources and organizational abilities needed to eradicate poverty from the globe. Positing material constraints becomes a justification for non-action. The true constraints are not material, they are psychological and social. Recognizing the real barriers will help us overcome them.
- Human beings are our most creative, productive and precious resource. Human capacity increases the more it is drawn upon. It can never be fully exhausted. Developing the human resource should be the centerpiece of all development strategy.
- We can solve today's most pressing problems if we adopt a total approach which takes into account all the interrelated factors – political, economic, technological, social and environmental – rather than relying on partial strategies. Partial remedies, however welcome or desirable, can always generate side-effects – such as the increase in social tensions and violence observed when increasing political and social freedom are not matched by increasing economic opportunity, or the rise in unemployment and arms exports that accompany a reduction in defence expenditure. The success of the Green Revolution was due to its integration of technological, institutional, commercial and public policy measures, while its short comings arose from its failure to integrate environmental factors, which are now being incorporated in agricultural development strategies. Comprehensive measures can eliminate the side-effects of partial progress.

- The progress of the whole depends on the progress of all its parts. Humankind is infinitely enriched by the qualitative diversity of culture and individual expression, but it is immeasurably impoverished by the quantitative abyss which separates the more fortunate from the rest of humanity. The higher levels of society cannot fully and finally rise to higher levels of accomplishment and enjoyment without first ensuring that the less fortunate and less productive are helped to obtain the full fruits of life at the present level of social achievement. Social equity, apart from its moral value, is an essential condition for continued progress.
- A proper balance has to be found between the principles of competition and cooperation and between public good and private profit. Competition is the stimulus that propels us to strive for more, but cooperation is the essential foundation of all social existence and lasting human accomplishment.
- All individual achievement is based on prior social accomplishment. The courageous pioneer and talented individual who achieve more for themselves always draw upon a rich social legacy and build on the ideas, knowledge, discoveries, inventions and innovations of countless people and societies who have come before. Policies should be formulated to reflect the contribution of the collective to all individual achievement.

THE PEACE IMPERATIVE

The most essential prerequisite and condition for the fulfillment of the world's multitudinous potentials is peace. As democracy supports peaceful relations between states, economic prosperity and fuller development of people, peace makes possible the development of stable political institutions, more productive economic activity and a more civilized and enlightened social life. Without establishing a stable climate of peace, democratic society human rights cannot be safeguarded, democratic institutions cannot function effectively, prosperity cannot flourish, and human beings cannot discover their higher capacities for external achievement and inner fulfillment. Peace is imperative for a thriving democracy. A comprehensive perspective and integrated approach to these interrelated issues can lead to a major breakthrough on multiple fronts.

We are poised at what can become a turning point in the role of war in human affairs. The momentous consequences at stake call for decisive action. Historically, war has been a means of territorial expansion and economic conquest that strengthened and enriched the conqueror while draining the energy and diminishing the wealth of the conquered. War and economic development co-existed and sometimes complemented each other. Technological progress increased defensive and offensive capabilities. The demands of war and the associated destruction stimulated greater economic activity and spurred organizational innovation, especially for the benefit of those not directly engaged in the conflict. Guns were one of the first products of mass production.

In the modern era, society has become the principle target and victim of war. With the advent of the Industrial Revolution, technology and economic activity in support of fighting forces became an increasingly significant factor. As a result, more and more effort was directed to eliminating or crippling the enemy's economic and industrial capacity and the "national will" to wage war. Targeting of civilian populations became increasingly

common. In the two world wars in this century, opposing sides waged all-out war against the military, political, economic and social resources and capacities of the enemy society. The strategic bombings of World War II, the fire-bombing of Tokyo, and the nuclear devastation of Hiroshima and Nagasaki took this concept to the extreme. As a result, the ratio of military to civilian casualties in military conflicts changed dramatically. In World War I, there were 20 military casualties for each civilian death. In the World War II, the ratio was one to one. In the Korean War, civilian deaths outnumbered military losses five to one. In the Vietnam War, this ratio rose to 20 to one. Advances in the sophistication and dissemination of modern military technology have fueled this trend. The Iran-Iraq War, the war in Afghanistan and the Gulf War involved the use of ballistic missiles against civilian centers. In all, over 5,000 surface to surface missiles have targeted population centers during the last five decades.

The devastating effect of even conventional weapons on economic activity and society in general is so great that today no developed nation can afford the costs of military confrontation, either at home or overseas. No longer can non-combatants sit quietly on the sidelines or work productively undisturbed. War both between and within states has come to involve and effect all of society. Infrastructure and production facilities have become a principal target of military action. Food supplies are frequently the first major casualty and most lethal weapon. A single explosion can paralyze a major metropolis or contaminate an entire region with toxic material, dwarfing the devastation caused by the industrial accidents at Chernobyl and Bhopal. The disruption of trade resulting even from regional conflicts such as the Gulf War or the war in Bosnia, impacts not only on the economies of the belligerents, but also on neighbors, trading partners and global economic performance. Neither the victor nor the victim can any longer afford to resolve conflicts violently.

Political states may still be able to survive wars, but developmental achievements cannot. So long as the benefits of development are confined to one or a few sections of society, the costs of militarization and war may not prevent economic and social progress. But when the need is to fulfill the rising expectations of the masses by extending the benefits of development to the entire society--thus enabling the society as a whole to move to the next higher level of collective affluence and fulfillment--every social resource must be garnered and harnessed for this purpose. The colossal costs of armaments and the colossal destruction of war are incompatible with the achievement of prosperity for all. *Peace has become the fundamental imperative for development.*

War as an Instrument of Policy

Humanity has lived with war for so many millennia that it is difficult to imagine a world without it. Even in the four decades of 'peace' following World War II, approximately 160 inter-state and intra-state wars, including 100 major conflicts, have been fought in developing countries, leading directly to 20 million deaths--half of them caused by the armed forces of developed countries in Korea, Indochina, Algeria and other anti-colonial wars--and to another 20 million war-related casualties. These massive casualties during a time of 'peace' are roughly equal to the total casualties incurred by all the countries of the world during the last world war.

An equally disturbing phenomenon has been the expansion of violence within society for political purposes. Of the 82 armed conflicts between 1989 and 1992, only three were between states. During 1993, 42 countries were involved in 52 major conflicts, and another 37 experienced political violence. Terrorist type warfare, whose principal aim is to threaten social peace, has become the model for conflicts in North Ireland, the Middle East and the drug war in Colombia. Modern means of communication, increased vulnerabilities of inter-dependent, integrated civil societies, and modern instruments of violence make these forms of war extremely destructive.

The expansion of war to encompass society poses one of the most serious challenges to national and international security and development and raises fundamental questions regarding war as an instrument of policy. For more than two centuries, war has been rationalized as an appropriate instrument in international affairs. The increasing destructiveness of violent conflict to society in general has resulted in a shift in military strategy from actual fighting to preventive diplomacy. The Helsinki process, Stockholm Document, the Conference on Security and Cooperation in Europe, the Warsaw Treaty's adoption of the doctrine of 'non-offensive defense', and most recently the UN Secretary-General's "Agenda for Peace"--all give highest priority to war prevention.

While welcome, these incremental measures do not fully recognize either the extent of the danger of the continued application of violence to achieve political ends or the extent of the opportunity which the end of the Cold War has brought for radically altering the way in which humanity settles domestic and international disputes. There was a time when war could be justified as a necessary expedient. Now the potential human and economic costs of even limited terrorist type war--especially if it involves the use of nuclear or

nuclear or biological weapons, but even otherwise--are so great that the risks are no longer tolerable. Because the potential risks far out-weigh the possible advantages of continued reliance on this means of achieving national and international security, *war has become obsolete as an instrument of policy.*

At the same time, there is no longer an insurmountable political conflict within the UN system to prevent all member countries from agreeing to a total ban on the use of violence against each other. *It is time for the UN to declare war itself as a crime against humanity and to ban from membership any nation that engages in aggression against another.* Even if this intention cannot immediately be made effective, the adoption of this *Peace Imperative* marks a milestone in human affairs. There is no rational or practical obstacle to the immediate adoption of this measure. *As a starting point, it can be demonstrated that with the right perspective, courage and commitment, practical immediate solutions are possible for any and all of the conflicts presently raging.* Recent failures of international diplomacy do not contradict this assertion, they confirm it. War must, and can, be abolished.

Nuclear Weapons

The threats to future peace come in many forms and at many levels, but unquestionably the most pernicious and potentially devastating is the peril from nuclear weapons. The end of the nuclear arms race between the superpowers may have removed the looming fear of all-out nuclear war and annihilation that surfaced in the artistic drawings of young American school children in the mid-1980s. The horrible genie of Hiroshima and Nagasaki will continue to haunt us until every nuclear weapon has been destroyed. The very existence of the nuclear stockpiles carries its own inherent dynamism for their utilization, which is likely to be expressed intentionally or accidentally sooner or later.

There have been repeated efforts by the non-aligned nations to move a resolution in the UN General Assembly that the use of nuclear weapons should be declared a crime against humanity and outlawed. One hundred and twenty-six nations have voted for the resolution. It is ironic that the opposition to this resolution and justification for the continued possession and possible use of nuclear weapons comes solely from the most militarily, politically and economically powerful group of nations, which are militarily without adversary and at the same time in the best position to afford and institute alternative means for their national security. Here lies the real key:

the insistence of the few most powerful nations to perceive security in their own terms, and their insatiable urge to achieve ever more of it for themselves at the expense of greater insecurity for others and the world as a whole, even though their goal can never be achieved on this unilateral basis.

During the Cold War, nuclear weapons were legitimized by the five permanent members of the Security Council which are the nuclear weapon states. Now that it is over, the governments of these nations seek to justify continued possession and the option to use these weapons, even while exerting every possible pressure to stop proliferation to other countries. But the very logic which the nuclear weapon states rely on to support this policy makes the acquisition of these weapons extremely attractive to non-nuclear powers. So long as their possession and possible use is tolerated and justified, the relatively low cost of production and high threat potential of these weapons offer strong incentives for other states to acquire them. It is unrealistic to expect that any system of international controls or inspections can prevent their eventual acquisition by states with advanced scientific capabilities that decide to develop them.

From the inception of nuclear weapons, two things have been clear. There can be no victors in a nuclear war and there is no credible defense against these weapons. Confidential studies by NATO in the 1960s concluded that the costs of a nuclear exchange to either party would be so great that the weapons were essentially unusable. No satisfactory answer has ever emerged for the question: Where and under what circumstances can these weapons beneficially be deployed? The continued expansion of nuclear stockpiles over three decades may have added to the psychological self-importance of the military, political leadership and general public in states that possessed them, but there is little evidence that it ever added to national security. The unusability of these weapons helps to explain why predictions of rapid spread of these weapons to other states proved to be so wildly exaggerated. The irrelevance or unusability of nuclear weapons is evident in all the wars involving major powers during the past four decades. A greater understanding of the environmental impact of these weapons has further strengthened the perception of unusability. It is time that psychological posturing gave way to a mature recognition that these weapons have no place in the civilized world and must be banished from it.

The continued build up of nuclear arsenals was an attempt by the superpowers to maintain parity or superiority over each other as a deterrent against being attacked. Although the nuclear powers may argue that their arsenals have protected them from any such danger, there is little rationality

in a strategy that compelled adversaries continuously to take steps to offset each other's measures, without either party actually achieving greater real security. In addition, this strategy was pursued at the cost of increasing insecurity to other nations. The acquisition of nuclear weapons generates a ripple effect to other countries, which is a powerful force for proliferation.

The arms build-up has been reversed, but at least 40,000 nuclear weapons are still in stockpiles with a combined explosive force at least 1,000 times greater than all the fire-power used in all the wars since the introduction of gunpowder six hundred years ago. START-I and START-II will bring down the number of warheads of the United States and the former Soviet Union by 90 percent from a combined 55,500 total to 6,500 over a ten year period. But they could, in fact, be achieved within months rather than years by deactivating delivery systems and separating their warheads, which could then be stored under multilateral control. Nor do these agreements, long overdue and greatly welcome, remove the fundamental dangers and legitimacy of these weapons. Even without a decision to abandon completely their use under any circumstances, a further drastic reduction to somewhere between 20 and 200 warheads is more than sufficient to meet any security need. Immediate steps can, and should, be taken to negotiate reductions to this minimum level.

The relaxation of tensions has drawn public attention away from this issue and reduced the momentum for progress at the very time when there is the greatest opportunity finally to eliminate this threat completely. The Nuclear Non-Proliferation Treaty, which ensures the military superiority of the nuclear powers against other signatories, is an instance of rule by strength forcibly imposed by the major powers on the rest of the world community in the name of peace. It is neither equitable nor justifiable. Already, 156 countries have signed the treaty, either due to coercion or indifference, and the number is expected to increase to 170 out of 179 states by 1995. The acceptance of NPT by these countries further de-legitimizes the continued possession of nuclear weapons by any country. All of the treaty non-signatories can be persuaded to sign in exchange for annihilation of these weapons by those that now possess them. Under these circumstances, refusal to sign NPT could be considered sufficient grounds for expulsion from UN membership. Without a universal ban, the efforts of the nuclear powers to stop proliferation lack moral authority.

Arguments are often advanced that nuclear weapons cannot be "dis-invented", and that the danger of a rogue state or terrorist group acquiring

and threatening use of these weapons necessitates that the present nuclear powers retain them for such a contingency. With the massive conventional firepower already available, nuclear weapons are not needed for defense, even against a rogue state with nuclear capability, and they do not represent a credible defense against terrorism under any circumstances. How could nuclear weapons conceivably be used to retaliate against terrorism? Alternative solutions can be found to address these threats far more effectively.

Similar arguments were made in the past against complete eradication of chemical weapons. The new treaty for the abolition of chemical weapons provides a useful model. Chemical weapons technology is far more readily available, easier to acquire and violations are far more difficult to verify. The fact that a comprehensive universal treaty to abolish one category of weapons of mass destruction is now a reality proves that political will rather than technical factors is the crucial element. The Chemical Weapons Treaty also shows that negotiation of such a treaty need not take decades.

The demise of the Cold War offers a unique opportunity to eliminate nuclear weapons while the political atmosphere is favorable. If the post Cold War world intends to uphold democracy and human rights as inalienable values, then the human right to live without the threat of a nuclear holocaust must be proclaimed and made inviolable. A durable non-proliferation regime can only be constructed on the basis of universal abolition of nuclear weapons. Manufacture and possession of nuclear weapons must be banned. Use of such weapons must be outlawed as a crime against humanity. First use of such weapons by any power should automatically invoke the strongest collective security measures under the UN Security Council.

The decision on whether to permit the continued existence of nuclear weapons is of too great importance to the future of humanity to be left to the discretion of one or a few member nations of the international community. Under the present structure of the UN, the only body with authority to act is the Security Council, but the veto power of the five permanent members deprives other nations of an effective voice. *The proposal to ban completely the possession and use of nuclear weapons should be put before the Council. The right of veto should be rescinded with respect to this most crucial issue. A time bound plan should be drawn up by the UN for complete and total nuclear disarmament by all nations.*

Ban on Ballistic Missiles

Nuclear devices are the most lethal class of weapons, but much of their threat arises from the development of ballistic missile technology which can deliver them to distant targets unmanned and without risk to the aggressor.

Even if nuclear weapons are eliminated, these vehicles can be utilized to carry large conventional payloads that strike terror in a distant population. The danger to all nations of unexpected and unprovoked attack from near or distant powers can be vastly reduced by declaring an immediate ban on the use of ballistic missiles of all types, including those carrying conventional rather than nuclear warheads.

This proposal, first put forth by US President Reagan in 1986, would eliminate the discriminatory provisions that deny missile acquisition to some, while preserving the right of others to maintain and develop this purely offensive capability. It would also eliminate the need for missile defense systems, which no nation can afford and which is the only possible defense against ballistic missile weapons. The ban on use should be followed by urgent measures to dismantle and scrap this entire class of weapons worldwide. Technically, a prohibition on testing and deployment of ballistic missiles would be far more verifiable than any limits on nuclear proliferation. Monitoring stations at missile production facilities and existing surveillance systems can restrain manufacture and detect test flights. Evading a ban on testing would be practically impossible.

Small Arms, Drugs, Crime and Terrorism

Four decades of preoccupation with nuclear weapons have blinded policy makers to an extremely dangerous and de-stabilizing threat to both nations and their citizenry from the other end of the weapons spectrum--the proliferation of small arms. The shift in the nature of conflicts from massive wars between states by regular armed forces over a wide region or encompassing the globe to small, inter-state or intra-state warfare by irregular forces, insurgents, criminal or terrorist groups infiltrating and often indistinguishable from the general population has led to a frighteningly swift and widespread proliferation of small arms. This category includes weapons up to 50 mm caliber, high powered automatic personal weapons such as the AK-47 Kalashnikov, sophisticated explosives, and shoulder-fired rockets, grenades and surface-to-surface missiles.

The transfer of small arms takes place through diverse channels--formal and clandestine, legal and black or gray markets, and local manufacture. These weapons provide the means to support and sustain conflict at low intensity but high lethality. The contemporary international scene is replete with examples--Peru, Central America, Northern Ireland, Bosnia, the Caucasus, Angola, South Africa, Somalia, Middle East, Afghanistan, Tajikistan,

Kashmir, Sri Lanka, Myanmar and so on. Recently they are being used more widely to support ethnic conflicts around the world.

These weapons are often targeted against the society itself. The high rate of violence in Washington DC and other American cities, Mafia and other criminal operations all involve the use of these deadly weapons, of which there are more than 200 million in the United States alone. Coping with this threat is made more difficult because, more often than not, such weapons in the hands of non-state actors, especially militants and terrorists, are superior to those available with security forces and law enforcement agencies of the state and because detection and control of their distribution poses serious problems. No serious efforts are being made to stop this cancerous proliferation. In fact, many states have actively fostered proliferation as instruments of their own policies.

One of the most serious consequences of this trend is the linkage between small arms proliferation and the drug trade. The use and trade in narcotics represents a menace not only to the health and well-being of individuals and societies, but also to international security. The scale of the problem can be judged by the reported fact that Americans, who represent five percent of world population, consume fifty percent of the world's cocaine. In Pakistan, where there were virtually no drug addicts a decade ago, it has been reported that as much as three percent of the population is addicted and thrice that number use drugs frequently. The CIS has now been added to the traditional drug routes emanating from the Peru-Colombia-Panama, Pakistan-Afghanistan, and Myanmar-Thailand-Laos regions.

The drug menace is transnational in character with far reaching implications for societal and international peace and security. The countries and regions which produce these drugs and through which they flow have been afflicted by endemic violence and social turbulence. A similar impact occurs at the point of concentrated consumption, especially in the inner cities of America, where crime and murder rates have soared due to drug-related violence. Inevitably, drug trafficking is linked with illicit arms, terrorist groups and the Mafia. Criminal elements are increasingly gaining control over the administrative structure and political power of drug producing states, where drug-related corruption permeates the military and government.

Neither the proliferation of small arms, nor the proliferation of drugs, nor the growth of terrorist and criminal activity can be solved in isolation from each other or by the independent initiatives of individual states. No country is exempt from the danger, which will continue to multiply unless checked

and eradicated by concerted international action. Urgent steps are needed to classify and register small arms production and trade, to monitor and control their manufacture and limit their export. Agreements are needed to reduce production and severely restrict sales. Strong sanctions must be instituted to discourage states from actively or passively aiding or abetting small arms proliferation. The scope of the UN Conventional Arms Register should be expanded to cover small arms, but at the same time its provisions must be greatly strengthened in order to make this an effective mechanism. Reporting must be made mandatory rather than voluntary, and an independent surveillance system should be established to monitor compliance. The five permanent members of the Security Council, which together account for 80% of the world's arms sales, should also set up a system for mutual consultation on all large weapons orders.

Mahatma Gandhi once explained that his efforts to suppress the natural aggressiveness of the people during India's freedom struggle resulted in an explosion of violence between Hindus and Muslims when the country was partitioned. Today, in the absence of opportunities for venting aggression in global wars, pent-up aggressive energies are finding other outlets for expressing violence. The only possible way to manage these innate aggressive forces is to handle them strongly. The international community has already shown in the case of airline hijacking that it is capable of effective action on a global scale when the necessary political will and commitment are forthcoming. By concerted measures, the rapid proliferation of hijackings has been virtually eliminated. Similar results can be achieved today drastically to curtail small arms proliferation and the drug trade. The anti-social forces supporting these activities must be handled with the same firmness and determination applied to hijackers, regardless of whether they are governments, military, criminal or terrorist groups, corporations or banks. *The power of these measures lies not in the enactment of laws but in their enforcement. Enforcement should be made mandatory and automatic.*

At the same time, it must be recognized that force alone can never eliminate these problems at their roots. The aggressive energies must be given constructive channels through which to express positively for economic development. Unless and until famine and poverty are eliminated both in developing countries and in the inner cities of the North, these energies will continue to find negative expression through violence. Therefore, a comprehensive approach is called for. The measures proposed here must be viewed in conjunction with recommendations made elsewhere in this report to eradicate hunger and unemployment.

Linkages to Commodity Trade

Isolated and independently pursued, which appeared highly beneficial at the time enacted result in unexpected and unwanted consequences that negate the benefits of the original measures. The refusal of high income nations to meet the demands of developing countries for protection of commodity prices is an example. During the 1980s, the debt crisis forced many developing countries to increase exports of basic commodities--often at great cost to the environment--in an effort to make loan repayments. This resulted in a self-defeating downward commodity price spiral. The increased exports of these commodities pushed world prices lower, thereby forcing debtor nations to export ever larger quantities to earn the same amount of foreign exchange to repay debts. Defaults on these loans have resulted in huge losses by the world's major banks and write-offs of billions of dollars by donor governments.

One consequence has been to increase the attractiveness of drug cultivation as an alternative source of income for farmers in developing countries. At the height of the drug wars, the then President of Colombia, Virgilio Barco, argued that farmers in his country would readily give up cocaine production if the international price of coffee could be stabilized at its former price level. His call unheeded, the United States has been forced to spend billions of dollars fighting drug crimes and expanding prisons due to the rapid increase of drug consumption in America. By a strange circuitous mechanism, the savings to consumers in developed nations by the refusal of their governments to negotiate international commodity agreements favorable to developing countries has cost these governments and their economies tens of billions of dollars in the form of loan write-offs and crime fighting. If an international commission in the 1970s had tried to point out this linkage between low agricultural incomes in Colombia and drug related crime in New York, London or Moscow, it would have been readily dismissed. But this is the type of understanding and perspective needed by governments and international agencies today to formulate effective policy measures in an inter-dependent world.

Cooperative Security

Eliminating nuclear weapons, ballistic missiles and small arms proliferation are practical measures whose time has come. But by themselves these steps will only mitigate the most pernicious threats to international security.

They will not provide an effective system for ensuring the peace and security of all nations that is so vitally needed and now so imminently possible for accelerating the political, economic and social development of humankind. The end of the Cold War provides us with the opportunity--and pressing global issues provide the urgency--for more significant measures. These measures cannot be conceived based on the perspective of international security that has dominated our thinking in the post-war period or from a half-hearted desire to modestly improve what to some still appears an adequate and acceptable system. This is an occasion that hungers for--indeed demands--visionary and courageous leadership to usher in a better world. The children of the next millennium will judge us by our response.

Historically, all landmark changes in the international political and security system have been the result of armed conflicts, wars and revolutions. In each case the new paradigm that emerged from the ashes of war sought to build on a static formula for enforcing peace in a dynamic world based on the complexion of forces at the time. In each case, the arrangements for conflict termination contained their own dynamism for future tensions, disputes and conflicts. These in-built limitations and imbalances resist adjustment until a new round of fighting sweeps away the old framework and replaces it with another, fashioned in much the same way.

This has been true of the arrangements for international security which have governed international affairs during the present century and which provided the underlying dynamism for World War I--and after the failed attempt at forming a League of Nations left the world unprepared to deal with fascism--for World War II as well. The skewed division of powers allotted under the UN Charter contained the seeds for the bipolar, intensely adversarial relationship between the two military blocks that resulted in the Cold War and the arms race between the superpowers.

All these arrangements have been based on the concept of competitive security. The competitive security paradigm is a state-centered, egocentric approach in which the security of each nation is perceived in terms of its military superiority over potential adversaries. The push of each nation for unlimited security through military power is inherently de-stabilizing, since it inevitably increases the level of insecurity of other sovereign states. In practice, the effort of nations to arm themselves against perceived external threats generates a sense of insecurity among other nations and compels them in turn to increase military preparedness, thus initiating a vicious spiral, as it did during the Cold War. When NATO and the Warsaw Pact had armed themselves to the point where direct confrontation became too risky,

mutual suspicion and insecurity led them to fight each other through proxy wars in the developing world. Every move by either side was perceived as a potential security threat, engendering a counter move by the other. Compounded by the inherent instability of nuclear weapons, this doctrine led to the anomaly of increasing military power and steadily decreasing national and international security.

This highly militarized approach contains an in-built mechanism for escalation that was responsible for the growth of global military expenditure to an all time peak of \$1.2 trillion in 1988. Even when effective in controlling direct aggression between major powers, it encouraged proxy wars and it completely ignored the security needs of countries not aligned with one block or another. This is one of the reason why all the wars in the last forty years have taken place in developing countries. Taken to its extreme in the nuclear competition of the superpowers, it 'logically' led to the astonishing doctrine of mutually assured destruction (MAD) as the corner-stone of national security policy.

While there have been efforts by the West to claim 'victory' in the Cold War and arrogate to themselves the right to determine the post-Cold War dispensation, in reality it is not either side that won or lost, but a failed international security system that was intelligently abandoned because it was extravagantly wasteful of resources, dangerously unstable and actively promoted violence in other regions.

Failure to anticipate the future and to structure policies and instrumentalities to meet future needs has been the dominant characteristic of all previous attempts at forging an international security framework. Now, once again, there is a manifest tendency to forge a framework based on the supremacy of might, rather than right, and determined by the present balance of powers. This framework is likely to be even more tenuous and short-lived than previous compromises, because it ignores revolutionary forces that are reshaping the world for the 21st Century. *We now have the opportunity and responsibility to evolve a more flexible and far-sighted framework. This requires a fundamental shift in perspective, a new vision of global security.*

Clearly, the competitive security paradigm cannot provide a stable basis for global peace and security. A significant reduction in global military expenditure, which has already fallen by a third to \$800 billion annually, is a welcome development. Reducing the quantity and destructive power of weapons arsenals will certainly reduce the actual and perceived risks of conflict. But, at the same time, a tendency is emerging to perpetuate the "we-they" syndrome of competitive security by shifting the axis from East-West to North-South. This has resulted in increasing pressure on developing

countries by multilateral and bilateral aid agencies seeking to bring down military expenditure among aid-dependent countries even further. In doing so, *it ignores the right and responsibility of these nations to provide for their own legitimate security needs at a time when no alternative mechanism exists at the international level to ensure the inviolability of their borders.*

There is truth in the claim that military spending by developing countries increased dramatically during the past thirty years. This increase is partially explained by the fact that more than 100 new sovereign nations have emerged, many of which were protected by the colonial powers prior to independence that have now withdrawn. The acquisition of even modest defensive capabilities may consume a significant portion of national income when the economic base is small, as it is for many of these nations. In addition, the increasing incidents of war, terrorism and drug-related violence in the developing world have heightened the sense of insecurity among these countries. However, a closer analysis reveals that half of military expenditure of the developing world is incurred by a small number of oil exporting countries in the Middle East and North Africa, and another quarter is incurred by other high-income developing nations, mostly in East and Southeast Asia. Whereas the 84 lower and lower-middle income developing nations, including such large nations as China, India, Indonesia, Pakistan and Bangladesh, comprising 72 percent of the world's population, incur roughly six percent of global military expenditure, on average less than 3 percent of the total GDP of these countries.

International pressure for defining acceptable levels of military expenditure and reducing defense budgets is entirely warranted, provided that it is applied equitably to all countries, takes into account the varying conditions between regions and nations, and also places corresponding limitations on arms exports by industrialized nations. Placed under the control of an impartial international agency specialized in security issues, rather than being left to development banks or being made an instrument of bilateral policy by donor nations, these measures could effectuate a further 50 to 75 percent cut in global defense spending and thereby generate \$400 to 600 billion per year for non-military purposes, equal to roughly ten times current levels of overseas development assistance. The international community should commit itself to a minimum goal of reducing global military expenditure to \$400 billion (in 1992 constant dollars) by 2000 AD.

Military expenditure mitigates, but does not resolve the underlying problem of security. *Today the most pressing security threats are social, not military. The appropriate response to them is greater investment in sustainable human development, not more arms.* However, preservation of physical

security against external aggression is a primal instinct of nation States that cannot be rationalized away. Nations will continue to arm themselves as long as that is the only effective means to ensure their security. What is needed is a quantum shift from the competitive security paradigm to a cooperative security system in which countries mutually and collectively agree to refrain from acts of aggression and to protect each other from such acts by any nation. This principle served to protect the NATO and Warsaw Pact countries in the past, but on an exclusive basis which promoted a polarization of alliances into military blocks and, most importantly, left more than one hundred countries outside the security orbit and vulnerable to proxy wars. It should now be restructured on a global basis as a collective security system that offers protection to all nations from external aggression.

A whole range of new security challenges is rising to confront the global society. The increasing number, complexity and unpredictability of security threats cannot be managed effectively and in time without international cooperation based on a fundamental change of attitude. *We are now at a historic crossroads: one path leads us back to a static, unstable and exclusive competitive security paradigm; the other leads to a far more stable and dynamic cooperative security paradigm inclusive of all nations and responsive to future needs and challenges.* A global cooperative security system is needed that seeks to strengthen national security without increasing the insecurity and threat perceptions of other states. It should be based on the fundamental principle that force will no longer be tolerated by the international community as a legitimate instrument of national policy.

World Army

The limitations of the competitive security system have given rise to numerous calls for establishment of various types of standing international military force. The role of UN peacekeeping forces has been dramatically expanded in recent years to maintain peace in Eastern Europe, the Middle East, Africa and Asia. At the same time, the scope of its activities has been enlarged to include limited forms of peacemaking as well--disarming guerrillas, conducting elections and enforcing human rights. Articles 42 of the UN Charter also empowers the Security Council to take direct military action where necessary to maintain or restore peace and guarantee international security. Article 43 pledges member states to make armed forces available to the Security Council, not only on an *ad hoc* basis but also as a permanent standing military force. This provision has never been

activated due to the intervention of the Cold War. In the wake of the invasion of Kuwait, a proposal was placed before the UN General Assembly on behalf of a group of small and militarily weak nations seeking the protection of an international 'security umbrella' against the threat of invasion by mercenary forces, terrorists, drug traffickers and warlike neighbors. The proposal was unanimously supported by all 166 UN members.

In *Agenda for Peace*, the UN Secretary General has recommended broadening the peace-making, peace-keeping and peace-enforcement capabilities of the UN by establishment of a standing UN military force. With the end of bipolar confrontation within the Security Council, this proposal is practicable and should be acted upon immediately by establishing a strong permanent force drawn from 20 to 30 member states, trained and equipped for rapid deployment. But such a force, if established, is likely to be relatively small and unequal to the task of dealing with threats from a major army equipped with sophisticated weapons. In addition, its deployment would always be subject to veto by any of the five permanent members of the Council. For both these reasons, it cannot constitute a reliable mechanism for guaranteeing the security of UN member countries. Although a strengthening of the UN peacekeeping capabilities is highly desirable, it cannot serve as an adequate foundation for a cooperative security system unless the UN's political structure is radically modified. Because it is essentially an addition to national forces rather than a substitute for them, funding will be a perennial difficulty and there will be strong resistance on economic grounds to its expansion. Furthermore, as recent events have demonstrated, nations contributing their forces will have a strong propensity to resist their active deployment in situations that involve significant risks. Even after the Security Council decided to send a peace-keeping force into Rwanda for strictly humanitarian purposes, with the exception of France, none of the leading military powers were willing to contribute the modest amount of military equipment urgently needed to protect UN troops.

Similar efforts are in various stages of maturity for establishing standing international forces at the regional level in Western Europe, Latin America and other places as part of collective security arrangements. The limitation of these proposals, like that of NATO and the erstwhile Warsaw Pact, is that they are fundamentally exclusive in nature and could easily become competitive with other forces as the East and West blocs have in the past. The strong resentment voiced by Russia at the proposal of some East European nations to join NATO illustrates the danger of expanding exclusive military clubs. For NATO to overcome these legitimate concerns,

it would have to be thrown open to all nations that seek to join and abide by its charter. The equally great reluctance of the West to shoulder the burden of responsibility for security enforcement in Eastern Europe under a widened NATO umbrella highlights the basic inadequacy of exclusive blocs for meeting global security needs.

If the structural limitations of the UN cannot be immediately overcome, the alternative would be to build a cooperative security mechanism in parallel with the UN but structured along more democratic lines similar to NATO. *A World Army could consist of an international peace force that would unconditionally guarantee the security of its members against external aggression based on the following provisions:*

- Membership in the World Army is voluntary and open to all countries, provided that they have and maintain democratic, multi-party political systems. Since membership is not exclusive, it could be merged at any time with other like-minded organizations such as NATO or be integrated into a UN military force when the necessary changes in UN political structure have been made.
- As a condition for membership, each country would by legal enactment forego war as an instrument of policy and undertake not to commit any act of external aggression against any other member or non-member for any reason whatsoever. Any violation would be grounds for immediate expulsion.
- Members would agree to contribute an assessed sum of money, equipment and military personnel toward the maintenance of a standing military force under the command of a centralized military leadership. In addition, the peace force could be granted the right directly to recruit personnel from member countries.
- Members would also agree to limit their own overall military spending within norms fixed by the organization.
- Members would be banned from possession of nuclear weapons and ballistic missiles. Existing weapons would be destroyed or turned over to the peace force.
- As in NATO, members would agree by treaty to consider an attack on one member as an attack on all. The peace force would commit to automatically and unconditionally intervene defensively and, if necessary, offensively to protect the sovereignty and international borders of any member country, provided that it conformed to the rules under the charter.

- The organization could also assist members with fighting drug trafficking and terrorist activities.

The benefits of this cooperative peacekeeping mechanism would be manifold:

- Since the charter would bind members and the alliance to eschew the use of force and aggression for any reason, it would represent a stabilizing, non-provocative, non-offensive defense. Its charter could also include specific provisions for close association with other international forces.
- Its combined strength and technological capabilities would excel those of any of its members and constitute a substantial deterrent to aggression against any member country.
- It would significantly reduce the costs of security for members, possibly by up to 50 or 75 percent, without compromising their legitimate security needs. The more the number of countries that join, the lower the defense expenditure level required by each, both because the collective force would be larger and because the number of potential adversaries would be proportionately reduced.

The organization of a World Army, run on well-defined and transparent lines with appropriate mechanisms for control and responsiveness, would help eliminate the need for countries to maintain their own large standing armies. Ultimately this could enable other nations to follow the lead of Costa Rica, which abolished its military forces several decades ago.

National Sovereignty and International Responsibility

The recent calamities in Rwanda and Somalia following the outbreak of civil and ethnic war, and in Bosnia following the break away of several Yugoslav republics, demonstrate the need for substantially improving international mechanisms for war prevention, peace-making and peace-keeping and for protection of basic human rights both between and within states. The effort of the international community to deal with these events has brought to the fore fundamental issues regarding national sovereignty and the responsibilities of the world community. The very definition and sanctity of the state have been blurred by the determination of ethnic groups in various nations to declare independence from their parent bodies, and the inability or unwillingness of national governments to maintain law and order and

provide basic security for their citizens. The role of other states, regional organizations and international agencies in giving explicit or implicit support to these movements have further complicated the task of formulating just and practical solutions.

These events raise questions about the rights of both nations and their citizens that have to be addressed theoretically before the role of international organizations in these affairs can be properly determined. Does a minority group within a country have the right to proclaim itself independent on the basis of its desire for self-governance and in defiance of the claims of the majority on the property and resources they possess? Does a national government, whether elected or in power by force, that is unable to protect its citizens against famine and civil strife have the right to insist on its sovereignty and independent action in the face of the persecution or extermination of its own people? What is the responsibility of the international community for preventing or alleviating crises within societies? What should be the limits placed on international involvement in the internal affairs of countries that, at least momentarily, are unable to help themselves?

The sanctity of the sovereign state, like the sanctity of private property in a capitalist society, is a fundamental principle of the nation-state system on which the world community presently is based, and like private property its guardians vigorously resist each attempt to limit its scope or qualify its power--although in both instances there are obvious and well-recognized limits and qualifications. The sensitivity over the issue of sovereignty is quite understandable--especially among former colonies and victims of imperialist aggression--in view of the fact that the emergence of modern nation states over the last two centuries occurred during a period when imperialist wars and colonial conquests were accepted as part of the normal conduct of international relations. It is a measure of the world's progress in this century that this standard of conduct is no longer tolerated by the international community. But the formulation of current policy on racial memories of past exploitation or persecution is no more appropriate or conducive to human progress than the false conception of policies based on an exaggerated sense of pride or ego-centric self-importance derived from the glory of forceful conquest in the past. In both instances, attitudes of the past must give way to fresh attitudes oriented to the future.

Some member states are understandably wary of raising these issues out of concern that their reexamination could become an excuse for outright political interference in the internal affairs of sovereign nations, a concern

which is reinforced by the non-representative character and lack of impartiality of the Security Council. Other nations are reluctant to assume the greater responsibilities that a clearly enunciated doctrine may impose on them. However, all would agree that both an infinite fragmentation of nation states along ethnic, cultural, religious or linguistic lines or a blind indifference to persecution or unconscionable neglect of its own citizens by a State government cannot be justified by either reason or lofty legal principles or be permitted by the human heart and conscience to go unchecked.

The UN is precluded under article 2(7) of the Charter from intervening in 'matters which are essentially within the domestic jurisdiction of any state'. It must be possible to define objective criteria for identifying instances in which action in apparent disregard of this provision is fully justified. The deaths of hundreds of thousands of people in Rwanda and Somalia due to famine, ethnic strife and civil war surely qualify, even if errors in the method of intervention and lack of public support among nations that contribute troops complicate these precedent-setting initiatives.

The sovereignty of a nation derives ultimately from the fact that it represents the will of its own people and the right of those people to freedom of action over their own lives and territory. National sovereignty is limited on two sides: on the one, by the inalienable human rights of a country's citizens and, on the other, by the rights of other member nations of the world community and the citizens they represent. In past centuries the sovereignty of nations may have been based on the principle of might is right. But in our more enlightened age, the only acceptable basis for a nation's sovereignty is that it expresses the will of its own people and this condition can only be met under a freely chosen form of government that enables people to express their own free will and determine their own destiny. Therefore, *the decision of the UN to insist on the operation of democratic processes in member countries is an essential step toward resolving the dilemma of sovereignty*. When the representative nature of a national government is in question, its claim to sovereignty over its own people under all circumstances is also questionable. Hitherto, it has not been possible to address this issue forthrightly, because the evolution of the international community had not yet come to accept in practice, as opposed to merely in principle, the fundamental human rights so frequently espoused in constitutions and ignored in actions. This situation has changed, especially after humanity's bitter experiments with totalitarian regimes during this century. It is now recognized that the democratic principles of political freedom, social

equality, self-determination and related human rights are inalienable and must be extended to all people everywhere.

The second factor that naturally imposes limits on national sovereignty--the rights of other nations and their citizens--has also gained substantially wider acceptance and has been enshrined by international law and become accepted doctrine governing many facets of international relations. Common security against trans-national threats and common prosperity for all humankind cannot be based on a 250 year old concept of nation sovereignty. Over the last half century, *national sovereignty has been maturing into international sovereignty*. As the evolution of the international community proceeds toward establishment of an effective system of world governance in one form or another, the collective rights of the international community of nations must inevitably come to be regarded as another inalienable truth, alongside the individual human rights and the rights of each nation. The right of the nation state to self-determination has to accommodate the rights of other nations and the common shared rights of every human being.

This approach establishes criteria for determining when claims of national sovereignty must be ignored. Every right is accompanied by a responsibility. A government that fosters external aggression or cannot contain domestic violence and civil strife, that cannot create conditions in which its people can feed themselves or even receive outside assistance, fails the test of sovereignty. *Under these circumstances, the international community through the UN should have the right and accept the responsibility to intervene appropriately.*

The need of the hour is not to undermine the legitimate right of nations to self-determination, but rather to protect that right by more clearly demarcating its legitimate boundaries against the highly visible challenges being posed by forces of disintegration and fragmentation from within. The current tendency for fragmentation of states along ethnic lines cannot be handled by any abstract principle of international law. It depends on the understanding and will of people. The evolution of larger, heterogeneous nation units functioning under principles of equality is an outstanding product of civilization that should not and cannot be reversed without great damage to the general welfare of humanity. The only solution is to work constantly to educate the public in all countries to understand the benefits of national integration and international cooperation. The implications of this view will be endorsed by some and opposed by others. Acceptance must be fostered through education and discussion rather than unilateral forced initiative.

Preventive Diplomacy, Peace-Making and Peace Building

The answers to the questions regarding national sovereignty and international responsibility will determine the scope of UN preventive diplomacy, peace-making and peace-building in years to come. They must be addressed with the view to evolving valid principles of international law, rather than remaining subject to frequent reversals of public policy by member states based on the short-term impact of the media on current public opinion.

Granted that a consensus is reached regarding these larger issues of principle, there still will remain immense problems relating to implementation, as illustrated by the recent failure of international intervention in Somalia. Whatever may be the limits placed on the UN's mandate for action, it is clear that it cannot carry out that mandate effectively under the current constraints imposed on it by the indecisiveness, narrowly defined interests and lack of political commitment by member states. Once again the inherent weaknesses in the structure of the UN organization impact negatively on its capacity to perform the tasks rightfully allotted to it. The absence of a unified chain of command for national forces placed under UN command, culminating in the outright refusal of field forces to follow the commands of UN field staff, inadequate training and equipping of both military staff and fighting units, poor co-ordination between field units from different countries and between member states and UN headquarters, and overall lack of authority vested in the UN Secretary-General are among the most blatant weaknesses of the present system.

Substantive measures are needed to strengthen the UN's capabilities to handle crises of this nature. First and foremost, the position of the Secretary-General, who now has the diplomatic status equal to that of a prime minister of a member State should be upgraded to that of a head of state, with full authority over the forces placed under his command by member states to carry out the decisions of the Security Council. Problems of control over the armed forces of member states argue for the constitution of a standing international military force, as described in the previous section of this report.

Lesser measures can be immediately implemented, such as provision of appropriate training to UN Secretariat personnel responsible for conflict prevention, expanding the staff of the Department of Political Affairs, and establishment by the UN of its own independent international surveillance capability, including a satellite system to monitor its work worldwide. Meanwhile, advanced computer, satellite and communications technology

should be made available to the Secretariat by member states. A comprehensive system is needed to monitor military movements. Through its resident representatives, the UN should openly monitor political, ethnic nationalist and religious developments that increasingly lie at the heart of conflicts in order to understand the complexities of local events and to anticipate potential turbulence. The right to sovereignty should not include the freedom to privacy in cases which involve support for terrorist groups, instigating border conflicts, arms build ups, torture and genocide. In addition to the role of the UN in consensus fact-finding, it must also acquire the jurisdiction to order fact-finding missions relating to both domestic and regional conflicts in which this type of violation is suspected.

Cessation of violence and conflict settlement often leave unresolved the root causes of conflict, resulting in potential for renewed fighting or social turbulence. Peace building activities should address underlying economic and social factors that prevent the establishment of a stable and secure peace. In instances such as Cambodia, Rwanda and Somalia, the vacuum created by the complete collapse of political and economic institutions necessitates a broader role for the UN in re-establishing the peace. Peace-building has thus far been defined as post-conflict actions to support reconstruction and to strengthen and solidify peace. The concept needs to be broadened to include pre-conflict actions and expanded to encompass a wider array of potentially de-stabilizing factors that lead to conflicts. The Commission supports the establishment of an International Center jointly operated by the UN Security Council and UNESCO to implement peace-building programs.

Peace-building activities should be expanded to address security threats issuing from environmental degradation, poverty, migration of population and refugees. Many cases of ethnic conflict have an underlying basis of economic deprivation that must be addressed before tensions will permanently subside. Others can be mitigated by introduction of positive economic incentives for cooperation. Economic cooperation is already dissipating ethnic tensions and conflict in the Middle East. It can be creatively fostered in the Balkans and elsewhere. In other cases, the modification of the electoral and constitutional systems in a culturally appropriate manner can reduce or eliminate tensions in ethnically divided countries. International assistance is also needed for coping with tensions arising from the sharing of natural resources--particularly water resources--and chemical or radioactive pollution of air, soil and waterways. Resolution of these issues requires the mediation of international experts for impartial assessment and formulation of equitable recommendations. Regional security organizations can play a leading role in this capacity.

An effective international judicial system is vitally important to the expanded role contemplated for the UN in dealing with arms and drug trafficking, terrorism and crimes against humanity. This requires as a minimum step that either the jurisdiction of the International Court of Justice be granted by member states mandatory jurisdiction over such cases, or that an International Criminal Court be established with jurisdiction over these offenses and other crimes under international law, thus strengthening both the preventive and enforcement capabilities of the international community against non-traditional threats to security.

Alternative Use of Military Resources

National and international security can no longer be conceived in narrow military terms. Ethnic conflict, drugs, environmental degradation and pollution, famine leading to civil unrest or massive migrations of refugees, high levels of unemployment, urban crime and violence constitute threats to both social stability and the preservation of a productive material base. Curbing drug traffic, preventing nuclear and chemical contamination, stopping soil degradation and deforestation, augmenting food production capabilities in deficit areas--all directly and substantially contribute to the security of society.

The attention given to the anticipated monetary savings from reduced military spending has directed attention away from the potential benefits of utilizing other resources controlled by the military for addressing these threats to security, particularly for the alleviation of poverty, protection and restoration of the environment, and management of natural disasters. The military possesses a vast array of resources--human, educational and training, engineering and production, scientific and technological, communication and transportation, medical, organizational and logistical, construction, land, housing, building and other facilities--that can be employed to meet non-military security challenges. Many of these resources can be utilized for these purposes without necessarily removing them from control by the military. Especially in many developing countries, the organizational and managerial capabilities of the military far excel those of other agencies and represent a precious resource for addressing these other security threats. Participation of the military in these activities necessitates a wider conception both of security and the role of the military in meeting security needs.

Coping with the serious challenges from environmental and development security threats requires the mobilization of a wide range of scientific, technological and physical resources presently utilized for military purposes.

There are significant precedents for the utilization of the military to support the environment and development--for construction of roads in Ethiopia and Yemen, bridges in Guatemala, as well as harbors, canals, railways and airfields; for afforestation projects and monitoring wildlife in India; for training of mechanics, electricians, and other productive skills; for urban renewal projects and drug enforcement in the United States, harvesting of crops in USSR, flood rescue operations in Bangladesh, nuclear clean-up at Chernobyl, damage limitation after the vast oil spills and oil fires in Kuwait, humanitarian relief for Kurdish refugees, distribution of food and medicine in Bosnia and a host of other activities.

In many developing countries the military can assist with efforts to improve social services in rural areas on a war footing--to spread literacy, primary education, basic vocational skills, health care, access to safe drinking water. The military have at their disposal scientific and technological resources which in many cases have dual use capability that can be applied to environmental protection with the minimum of alteration, such as information and monitoring systems that track changes in the atmosphere, oceans and earth's surface. These resources can be applied for environmental monitoring, environmental impact assessment, protection of endangered species, quick response to disasters and accidents, energy conservation, waste minimization and management. The appropriate role for the military in these various activities will depend on the country, the urgency of the circumstances, and the cost-effectiveness of military involvement compared with available alternatives. In some instances, it may be feasible to establish international Earthcorps units, specially trained and equipped to carry out certain types of environmental protection and restoration, such as India's eco-battalions, which seek to conserve the Himalayan habitat by restoring tree cover, constructing small dams and canals.

International Development Force

The goals of peace, prosperity and fulfillment for every human being represent formidable challenges--intellectual, attitudinal, organizational and technological. We cannot hope to reach such lofty achievements if we waste and squander the precious and abundant resources--mental, psychological, social and material--placed at our disposal. A massive reduction in emphasis on weapons production and military establishments made possible by recent political events and demanded by the pressing unmet needs of people everywhere represents both a great opportunity and a considerable challenge. The opportunity is not only further to reduce the threats of war by

reducing the capacities for waging war, but also to redirect and utilize the resources now dedicated to war-making and prevention for other purposes. The challenge is to do so at a time when rising unemployment and economic stagnation in many countries makes further cuts in the size of the military unpopular domestically. Since 1990, the total number of military personnel worldwide has declined by two million or about six percent. By 1998, a further decrease of at least two million is anticipated. A large proportion of these demobilized people have already joined or will soon join, the forces of the unemployed. Some may be tempted to market their military skills elsewhere.

Just as the present efforts of the UN to make and keep the peace are severely constrained for the lack of a standing professional military force under its own direction, so also the prodigious efforts of the UN's development agencies to accelerate development among member countries is hampered by a lack of well-trained, disciplined and highly organized personnel for implementation, especially in those countries with the greatest need of assistance. The Commission recommends that as a complement to the establishment of an International Force for Peace, that an International Force for Development be constituted, comprised of former military personnel, who after appropriate training, will work to accelerate economic development to provide food, health, literacy and jobs for all. A UN Peace Force and UN Development Force functioning under a democratically restructured UN can make a lasting contribution to achievement of the major goals of the UN system.

Conclusion

Seven years ago the threat of nuclear war between the superpowers loomed large in the minds of people everywhere. The euphoria generated by the end of the Cold War led to high expectations of peace and a 'peace dividend' the world over. Yet excitement soon turned to disappointment as the full anticipated results of these magnificent accomplishments did not immediately materialize. Then, as attention turned to more mundane problems closer to home, the sense of relief and celebration was replaced by growing concern over the increasing prominence of other threats to international security, which were either aggravated by these positive developments or by comparison with the threat of nuclear annihilation had not previously seemed so serious. The end of political confrontation between East and West, the sudden conversion of authoritarian communist

states into democratic market economies, and substantial cuts in global defense spending were accompanied by increasing political instability and ethnic violence in the many parts of Eastern Europe and the former Soviet Union, by the horrendous loss of life due to civil and ethnic strife in several African countries, by growing concern over drugs and violent crime in the West, by the danger of nuclear terrorism resulting from potential theft of Soviet weapons, and by pressure on defense producers to compensate for reduced domestic defense budgets by increasing arms exports.

This surprising turn of events has led some to re-examine the incredible achievements of the period and conclude that they were either vastly overstated or, perhaps, even illusory. Others have come to take these achievements for granted. Still others have simply forgotten how much things have really changed. But the most important realization to be derived from these events is of the inherent defect in attempts to address the factors underlying international security in a piecemeal manner. Over the past five years the Commission encountered reminders of this truth in virtually every field that it took up for examination. It is this experience that has convinced us of the need for wider perspectives and total solutions. The marvelous achievements of the past few years are neither fortuitous or illusory. The Berlin Wall has been brought down and demolished. The Iron Curtain has been lifted and obliterated. But we still proceed with our heads turned back looking for shadows behind us at a time when the future demands our full attention, in order to fully capitalize on what these events have prepared and made possible.

In this report, the Commission is calling for a comprehensive, multi-pronged approach to the problems of international security that defies and will continue to defy partial solutions. That approach recognizes the critical importance of the linkages between the establishment of democratic political systems at the national and the international level, the abolition of war as an instrument of policy, the elimination of highly de-stabilizing weapons of mass destruction, substantial additional cuts in defense spending *by all parties*, and the constitution of a non-state-centered, cooperative international security system supported by a standing international peace force. Taken separately each of these elements can substantially contribute to improving the international political and security environment. Taken together as a cohesive whole, they can radically transform global political affairs and create a highly conducive atmosphere for the eradication of the pressing economic problems confronting us.

Recommendations on the UN, Peace-Keeping, Arms Control

1. Establishment and maintenance of a multi-party democratic government should be made the minimum condition for membership and participation in the UN. A graded, time-bound program for the transformation of authoritarian states should be drawn up by the UN in cooperation with concerned governments. The UN should provide assistance to nations in making the transition.
2. A major UN Conference should be convened to examine UN institutional reform, including the composition and powers of both the Security Council and the General Assembly. The objective should be to restructure the UN according to the same democratic principles advocated by its members for national governments.
3. As an interim step in this necessary restructuring, the Commission recommends expanding the membership of the Security Council from 15 to 20 members, by adding five new permanent members. The veto power of the five permanent members of the Security Council should be abolished and the diplomatic status of the UN Secretary General should be elevated to that of a head of State.
4. A detailed plan should be drawn up by the UN for a further 50 percent reduction in global defense spending before the end of the decade to a maximum of \$400 billion. Spending quotas for member states should be established according to the principle of non-offensive defense.
5. The peacemaking, peacekeeping and peace enforcement capabilities of the UN should be strengthened substantially. A permanent, well equipped UN force made up from 20-30 member states should be placed at the disposal of the Secretary General for rapid deployment in conflict zones under Article 43 of the UN Charter to enforce the decisions of the Security Council. Either the Military Staff Committee of the UN could be re-vitalized to give strategic direction to any enforcement action, or a new structure should be created of member states supplying troops to any UN operation, chaired by the Secretary General. Member States should earmark national troops for use

use in UN Chapter VII enforcement action, the scope of which should be expanded to include humanitarian intervention under circumstances when national governments are either unable or unwilling to protect their population from imminent threats to their survival.

6. A cooperative collective security frame work must be evolved that is inclusive of all nations and guarantees their security against acts of external aggression. A standing international military force or World Army should be established under a democratic framework to provide unconditional security guarantees to member countries against aggression by other nations. If such a force cannot be established at the present time under the UN, then there is need for a separate organization similar in constitution to NATO but open to all nations that practise democratic principles of national governance, contribute financial and defence resources to a common armed force, accept ceilings on national defence expenditure and eschew the possession of nuclear weapons. The army should consist of both a directly recruited standing force and forces placed on call by member nations.
7. The use of nuclear weapons should be declared by the UN a crime against humanity. First use by any nation must automatically invoke the strongest collective security measures by the UN Security Council. Based on the precedent of the Chemical Weapons Treaty, the proposal for a universal ban on the possession of nuclear weapons by any nation should be placed before the Security Council for a vote. The five permanent members should agree to the suspension of their veto power on this issue so crucial to the future of humanity.
8. The danger to all nations of unexpected and unprovoked attack from near or distant powers can be vastly reduced by declaring an immediate ban on the use of ballistic missiles of all types, including those carrying conventional warheads. This would eliminate the discriminatory provisions that deny missile acquisition to some while preserving the right of others to maintain and develop this purely offensive capability. It would also eliminate the need for missile defense systems, which no nation can afford and which are the only possible defense

against ballistic missile weapons. The ban on use should be followed by urgent measures to dismantle and scrap this entire class of weapons worldwide.

9. Highest priority must be given to controlling and reversing the proliferation of small arms on a parallel with the determined international measures employed to curb hijacking. As an immediate first step, these weapons should be classified and a UN register created to monitor their manufacture and sale. Agreements should be negotiated between major arms suppliers to severely restrict production and sales. Strong sanctions must be instituted to discourage states from actively or passively abetting small arms proliferation, especially to non-state actors.
10. UN action to curb the international trade in major armaments needs to go further than the existing Arms Register. Arms exports to areas identified by the UN as trouble spots should be banned by international law. An independent agency should be established to verify the submissions from arms exporting States. Major arms exporters should agree to consult the Security Council in advance about large orders received for de-stabilizing weapons and, where appropriate, co-ordinate actions to limit the size of arms transfers.
11. Narcotic drug production and trafficking must be treated as threats to international peace and security. The strongest possible sanctions should be instituted under the UN against countries that permit or support these activities. UN forces must be made available to assist member countries with eradication of these activities within their borders. Economic measures must be supported internationally to provide attractive commercial alternatives to drug growers through special trade agreements for agricultural commodities. International criminal proceedings should be instituted against violators under a new International Criminal Code.
12. The UN should create its own international surveillance system, including its own satellites, to monitor and report on potential trouble spots and troop movements. It should also develop its own appropriate and effective logistics units. Criteria to allow UN fact-finding missions in respect of intra-

state conflict should be negotiated and codified by the General Assembly. At the same time, the UN should integrate fact-finding into enforcement action taken under Chapter VII of the UN Charter. A UN Staff College should be established to develop and maintain administrative procedures for governing UN peacekeeping, peacemaking and peace enforcement operations and to train an effective corps of personnel for these purposes.

Utilization of Defense Resources for Development and the Environment

1. The concept of "peace dividend" should be expanded to include manpower, educational and training capabilities, scientific and technological resources, production facilities, land and abandoned military bases that can be re-deployed to combat rural and urban poverty as well as national and global environmental degradation. An inventory of these resources should be compiled and efforts made to identify alternative uses through the UN's specialized agencies and by national governments. All nations should advise the Secretary General of the human, technological and productive resources it is willing and able to place at the disposal of the UN.
2. Each government should draw up an inventory of its military manpower, science, technology and plant resources which could be used to sustain the natural resource base, prevent environmental degradation and co-operate with other countries in combating regional and global threats to environmental security. The information should be shared with the UN Environmental Program and the Sustainable Development Council. In each case it will be necessary to show how action implemented by the military will be more cost-effective than using traditional resources.

3. A UN International Force for Development should be constituted under a democratized UN structure, consisting of demobilized military personnel and young professionals from different countries, which will be trained and equipped to promote people-centred, environmentally sound development initiatives that integrate political, social, economic and cultural factors.
4. Global security is threatened by mass population movements, potential changes in sea levels, drought and famine. Greater international cooperation is needed in the sharing of national military manpower, under the auspices of a new UN Earth corps. Article 43 of the UN Charter, which was originally drawn up for dealing with the threat of conventional war, can be interpreted to apply to threats to environmental security as well. In parallel to a UN Earth corps, national Earth corps units should be constituted to operate within each state and for service internationally under the UN. Vocational skills imparted through these agencies will be of subsequent use to the community at large.
5. A greater degree of co-operation in the sharing of environmental data is essential if global security is to be enhanced, particularly that gained from military remote-sensing devices. This is especially relevant to the majority of nations which do not have such equipment at their disposal. The need for secrecy, always stressed in the Cold War period, has been superseded by the need for openness.
6. An international system should be instituted by the UN to assist in the transfer of environmentally-beneficial technology, as recommended by the Royal Society and the United States National Academy of Sciences, both from the developed to the less-developed nations, and from the military to the non-military sectors. This applies in particular to the field of information technology, where there is scope for dual-use of existing military capabilities. Closer links should be established between research and development teams in the military and civilian sectors at national the level.

7. A greater degree of regional co-operation is desirable between states which share natural resources and common environmental interests. This is of particular importance where regional peace and stability is at stake, as in the Middle East, over the question of access to water supplies. Where national environmental resources may lead to dispute and conflict, agreements should be drawn up between potential belligerents and the good offices of the UN's specialized agencies used to anticipate and avert future conflict.

Peace and democracy can only provide the foundation for stable and productive social life, not its fulfillment. For that, political security has to be complemented by economic security and a blossoming of individual and cultural potentials. Yet here our optimism seems to flag. Our thoughts of the new millennium do evoke images of greater peace and stability internationally, more individual freedom and democratic rights, growing international cooperation, exciting new technologies, increasing cultural interaction. But they also evoke images of more people and less work--meaning fewer jobs! No sooner than the threat of nuclear annihilation has receded, has the specter of chronic unemployment and unrelenting poverty risen to replace it, giving renewed justification to humanity's deepest anxieties by transferring them to a new source of apprehension.

In recent years, unemployment has emerged as a major cause of concern for governments around the world. In industrial countries, the subject evokes pessimistic prophesies of a fast approaching future in which tens of millions of people will never find jobs, technology eliminates the needs for human labor, cheap imports replace domestic jobs, welfare systems collapse under an unbearable burden, children have less economic opportunity than their parents, a widening abyss divides the rich and poor, and both markets and governments are powerless to do anything about it. In developing countries, it dashes hopes of ever conquering hunger, eradicating widespread rural and urban poverty, and bridging the gap that separates them from the prosperous West.

The very same deterministic mentality that until recently made us feel that a nuclear war was inevitable now leads many to conclude that rising unemployment, chronic poverty and social alienation are unavoidable. Yet the enormous gains of peace and democracy that we contemplate cannot be

secured and brought to fruition, if this other apprehension is allowed to become a settled reality, as war between nations has been during past millennia. The peace and security we seek internationally depend directly on our ability to promote and maintain domestic peace and tranquillity within nations, which in turn are dependent on the ability of countries to provide food and economic security to their people. Poverty and unemployment are closely linked to most instances of social unrest--tribal wars, civil wars, urban crime, drugs and violence. There is clear evidence from the US and UK that crime is economically related to lack of job opportunities. Unemployment is also a major cause of massive migrations, both to urban areas within countries and across borders, which has become a highly destabilizing factor in many regions. Without sufficient purchasing power for food and other material essentials and non-essentials, there can be no assurances of lasting social peace and political stability.

The linkage between peace, political stability and economic development will be even stronger in the future than in the past, due to the democratic and social revolutions that are in the course of encompassing the globe. The greater access to information and freedom of expression which characterize democratic societies and the rising expectations of people at lower economic levels combine to generate a powerful pressure on society to provide economic opportunities as well as social freedoms to every citizen. If the greater freedom and higher expectations are unable to find means for their positive fulfillment, they can lead to rising frustration, tension and violence, which threaten the prosperity of those at higher levels and the stability of the society as a whole. Democracies can only thrive and the revolution of rising expectations can only fulfill itself peacefully, when economic opportunities are provided to every human being. The recent rise of the political right, ethnic unrest and opposition to immigration in Western Europe and the surge of crime in the United States are sufficient evidence of the corrosive impact that unemployment can have, even on mature democracies. Increasingly, those excluded from the benefits of modern society reject its standards of justice and ignore its laws.

The end of the ideological confrontation between capitalism and communism leaves the market system exposed at its weakest point--its impersonality and insensitivity to human needs and suffering--with no longer any lesser alternative to point at in self-justification. Having rejected the inadequacies and abuses of authoritarian socialism as a solution, we are compelled to find other methods to achieve social equity. In the present context, employment is the most effective way to distribute the fruits of development among people. The world is now capable of producing

sufficient food and other basic necessities to feed, cloth and house everyone, but without opportunities for employment, people lack the purchasing power needed to buy them. Economic entitlement, rather than a shortage of food or food production capacity, is the key to global food security. Lack of employment opportunities is also directly linked to destruction of the environment, both rural and urban. The destruction of tropical rain forests has been one result. The greatest security challenges of the 21st century are economic, not military or political. Employment is a *sine qua non* for meeting these challenges.

A thorough examination of facts and a dispassionate analysis reveal grounds for hope and opportunities for action. The possibilities for more rapid economic growth and rising incomes in both developed and developing countries spurred by further substantial reduction in defense spending, the diffusion and application of new technologies, economic liberalization leading to growth of international trade, the globalization of financial markets, and emergence of new engines for global expansion among developing countries indicate that our apprehensions need not prove justified, provided society acts courageously and decisively to meet the challenge. A global overview of employment cannot do full justice to the special circumstances, problems and potentials of specific regions and countries, but it can dispel the growing concern that employment has become a problem beyond the means of governments or the global economy to eradicate or even contain.

In the final analysis, creation of jobs for all is not a question of possibility. It is a question of necessity. Neither logic nor self-interest justify a detached attitude or half-hearted effort to address this issue. As in the case of the recent global response to the threat of global warming from depletion of the ozone layer, it simply is not acceptable for us to remain indifferent or claim that we are powerless to act where the entire world's vital self-interests are at stake. When war threatens a nation's borders, technology threatens its environment or unemployment threatens the livelihood of its people and the fabric of its social existence, there is only one acceptable response--that is, action.

The greatest achievement of this century has not been technological, economic or political, but rather the growing concern and intolerance for the slaughter, persecution or impoverishment of other human beings. This marks the awakening of our collective, human consciousness to the full value of human life and the consequent rejection of physical strength, political power and money as the governing values of society. This evolution of

consciousness has led to monumental changes in the accepted rules of social existence. Slavery and colonialism were abolished because society evolved to the point where it would no longer tolerate them--not for economic reasons, but because they were a disgraceful blot on the conscience of humanity. Similarly, the acceptance of famine, poverty and unemployment as necessary or inevitable by-products of economic life should no longer and need no longer be tolerated. Social charity and welfare were necessary inventions to mitigate the worst effects of economic development over the past few centuries, but they are signs of a defective system that humiliate the recipients and deprive them of self-respect, rather than equipping them with the capacity and self-confidence to help themselves. *As freedom has finally been recognized as an inalienable right of every human being, we are fast approaching the time when society must recognize and ensure the right of every individual to gainful employment.* Given the right leadership and policies, "Jobs for All" is an achievable goal for all industrial nations within a decade and for all of humankind early in the 21st Century. A change of attitude is the prime necessity for this accomplishment.

Global Survey

A survey of unemployment in different regions of the world makes evident the reason for the mounting concern over this issue. Unemployment in the industrial countries is at the highest level since the Great Depression. The official figure is around 6.4 percent in the United States, but the actual number including those who have given up seeking jobs is probably above 10 percent. More than 35 million Americans constituting 14 percent of the population are living on incomes below the poverty line, including 30 percent of all blacks and Hispanics. West European unemployment rates are at the highest level in 30 years. They are projected soon to reach 12 percent or 18 million people and remain high throughout the decade, prompting the European Union President, Jacques Delors, to call employment Europe's "Achilles heel". Youth unemployment rates (aged 16-19) in the European Community average nearly 20 percent and nearly 50 percent of the unemployment is long term (more than one year). The emerging situation poses a challenge to the European concept of the welfare state.

Employment in Eastern Europe and the republics of the former Soviet Union has been severely disrupted by the breakup of the COMECON, the dissolution of the USSR and the movement of these countries from centrally

planned to market economies. From the beginning of 1990 up to March 1992, registered unemployment grew from 100,000 to over 4 million and it has continued to rise steeply since then. The unemployment rate for ten East European countries now averages around 17%. Recent projections indicate that joblessness in Russia could reach 15 million persons or 18% of the work force in the near future.

By far the most serious problem lies in the developing world, where unemployment rates average 40-50 percent in many countries. In Latin America, 192 million people representing 46 percent of the population live under the poverty line, out of which 22 percent are considered "extremely poor". Urban unemployment is around 8 percent, but average industrial wages in the region fell by 17.5 percent during the 1980s and the number of workers in the lower wage informal sector doubled. Although population growth has slowed, a 72 percent increase in labor participation rates for women is causing the work force to continue to expand rapidly. This region needs to double its employment growth rate to create 89 million new jobs during the 1990s in order to provide full employment opportunities for all its people.

In Sub-Saharan Africa--home to 20 of the 25 poorest nations in the world--urban unemployment afflicts some 14 million people, representing 15-20 percent of the workforce, and is projected to more than double in the next ten years. Typically, youth comprise 65 to 75 percent of the total unemployed. With its population still growing at 3 percent annually, these countries need to create 100 million new jobs in the coming decade just to maintain their present levels of unemployment.

High population growth coupled with a severe economic slowdown have generated high rates of unemployment in the Arab countries, estimated to exceed 25 percent during the 1990s, in spite of the very low labor participation rates among women in this region. In the aftermath of the Gulf crisis, labor supplying countries such as Jordan, Lebanon, the Sudan and Syria have suffered the most. Returnees swelled Jordan's population by 8.4 percent and caused unemployment to rise above 20 percent. Unemployment among Palestinians in the Gaza Strip and on the West Bank are among the highest in the world.

A dramatic exception to this gloomy trend comes from the countries of Asia and the Pacific, which have made great strides in job generation during the 1980s and are poised to continue expanding rapidly. The Newly Industrializing Economies (NIEs), Hong Kong, S. Korea, Singapore and Taiwan-China are all facing severe labor shortages, with Malaysia, Thailand

and Indonesia also moving into labor shortage situations. But other Asian countries continue to face major challenges in creating sufficient jobs for all. China has created a phenomenal 100 million new jobs since 1985 and continues to grow rapidly, but the country still has a pool of 130 million surplus rural workers. Joblessness in Chinese cities is projected to reach 5 million by the end of 1994. India needs to create at least 100 million new jobs in the next ten years in order to raise all its poor above the poverty line.

Factors Contributing to Rising Unemployment

Although the problem of unemployment is not new, a variety of factors have combined to aggravate the difficulties confronting most regions of the world in recent years.

- As a result of the decline of global military spending by one-third in real terms since 1988, employment in defense industries has fallen steeply and is expected to decline by at least 3 to 4 million jobs or roughly 25 percent by 1998. In addition, 4.5 million military personnel will be demobilized during this period.
- The breakup of COMECON and the USSR has had a strongly negative impact on trade within Eastern Europe and with the industrialized West and developing countries.
- The relatively high interest rates in Europe, resulting in part from tight monetary policies pursued by Germany to offset the enormous costs of re-unification, have had adverse effects on investment, growth and employment in the region. More recent rate increases in the US. threaten to halt the declining trend in unemployment observed over the past year.
- The extreme disruption of the centrally planned economies of Eastern Europe during the early stages of their transition to market economies has led to high domestic unemployment in most cases.
- Slow recovery from the recent global recession has restrained growth of foreign trade.
- Down-sizing by major corporations in response to intense competitive pressures has eliminated many jobs which are not being restored, even after the recession is over.

- Privatization and restructuring of public sector companies in response to fiscal pressures has had a similar effect. In the United Kingdom alone, more than 500,000 jobs will be lost for this reason in the coming year.
- The impact of structural adjustments programs has slowed economic growth and new job creation in a number of developing countries.
- Gains in productivity due to new technology, particularly delayed gains from the micro-computer revolution of the 1980s and the growth of factory automation, have slowed job growth in some industries.
- The increasing competitiveness of the Newly Industrialized Economies of Asia and most recently China has displaced jobs in the West, primarily unskilled jobs.

The major impact of several of these factors has already been felt and is now beginning to subside. Some will continue for several more years. Still others may entirely reverse their direction and contribute to job growth later in the decade. None is an irreversibly negative factor that will continue to exert a downward pressure on job growth for the foreseeable future.

Job Creation during the Twentieth Century

A long term, global perspective is needed to understand fully the employment problem and the prospects for eliminating it. Over the past four decades, the world economy has generated more than one billion jobs, more than were created during the previous four centuries. If past trends continue, it will create another 1.3 billion during the next 35 years. The current anxiety in the West is similar to that which the United States passed through in the 1890s when agricultural mechanization displaced 4.4 million farm workers, generated double digit unemployment and visions of a dismal future. Yet since then, employment in the United States has expanded by nearly 100 million jobs or 400 percent. Between 1990 and 2005, it is projected to increase by another 25 million. The same process of structural transition is repeating itself today and raising the same anxieties. Contrary to common belief, the US. employment rate, the percentage of total population with jobs, has risen steadily throughout the century from 38 percent to 46 percent of the total population and is expected to reach 51 percent by 2005.

This trend is true for the industrial nations as a whole. Between 1960 and 1992, total employment in OECD countries rose by 110 million jobs or 44 percent, including a 22 percent increase in the participation of women in the work force. During this same period, unemployment rose by 23 million persons, representing a 259 percent increase in the overall unemployment rate. More people are working than ever before, yet at the same time more people are unemployed, because a larger proportion of the population seek jobs. Growing anxiety about employment prospects in the West were aggravated by a sudden 50 percent increase in unemployment after 1990, which displaced an additional 10 million workers in the OECD and equaled only by the previous high of 1983. This increase is now showing signs of reversal.

These average figures disguise significant differences in performances of countries within the OECD. Since 1950, Japan's employment rate has risen from 43 percent to around 50 percent, while unemployment has remained in the 1 to 3 percent range. The overall proportion of the population employed in the European Community has declined by 1 percent since 1965 and is presently just under 41 percent, but the percentage of the working age population employed has remained more or less constant over the past three decades, at 67 percent, whereas in other OECD regions it has risen significantly--to exceed 75 in North America, Scandinavia and Japan.

The lower labor participation rate in the European Community than in America is attributable to a number of factors. A far higher percentage of the European work force was engaged in agriculture 25 years ago and has since shifted to non-agricultural sectors, an adjustment that occurred in the United States during earlier decades. During the 1980s Europe chose a high wage path to growth, passing on the benefits to the existing work force but creating relatively few new jobs; whereas the United States, with a similar growth rate over the decade, showed lower income growth per worker, but steadily raised the employment rate. Europe is now confronted with the need for structural adjustment to compensate. In the United States, the extent of the unemployment problem is partially disguised in the form of low wage jobs. Twenty percent of all full-time US workers had incomes that fall below the official poverty line for a family of four, though only one-fourth of these lived in households whose total income was below the poverty line. Real wages in the United States have not risen significantly over the last 20 years due to the dramatic increase in the supply of labor as a result of a 62 percent increase in female participation since 1960 and the entrance of the baby-

boom generation into the work force. However, America's 'family living standard' has still risen by 40 percent since 1970. Within the next decade, the aging of the population is expected to reduce job pressures and even lead to labor shortages in some European countries.

Job growth has been quite rapid in the developing countries over the last forty years, more than doubling total employment. The single most important factor behind rising numbers of unemployed persons and increasing absolute numbers of families below the poverty line in developing countries has been the 2.4-fold expansion of population in the Third World, and more than doubling of the economically active population since 1950, which have resulted in a 4 percent decline in the overall employment rate. Population growth rates continue to fall steadily in most countries, with the exception of Africa, providing an opportunity for economic growth and job growth to catch up with the population explosion of recent decades.

Along with rapid quantitative job growth, the global economy has achieved dramatic qualitative gains in the nature of employment. During recent decades, there has also been a marked movement away from subsistence level manual occupations, primarily in agriculture, to more skilled and remunerative forms of employment. Worldwide, the percentage of the work force engaged in agriculture has fallen by 24 percent since 1950, from 67 percent to 51 percent.

Unemployment is of growing concern today primarily because population has expanded in recent decades even faster than job creation and because a larger percentage of the population, principally women, seek employment now than at any time in the past. The shortages of jobs and the resulting poverty represent the most pressing social problem in the world today. But viewed in historical perspective, it is clear that substantial progress has been made during the post war period, making humanity as a whole more prosperous than at any previous period in recorded history. Over the past five decades, global GDP has multiplied seven fold. In spite of unprecedented population growth, per capita income has more than tripled. Between 1965 and 1985, real per capita consumption in the developing world rose by 70 percent. *Despite the paramount concern raised by the persistence of high rates of unemployment in recent years, available data does not confirm a long term trend towards rising global unemployment.*

Prognosis for Employment in the 21st Century

Although it is difficult to make reliable employment projections based on past trends, there are some things we can say with a fair degree of certainty.

- In order to provide employment for every job seeker, the world needs to create approximately one billion new jobs during the next decade. This will require a job growth rate of more than 4 percent per annum compared to the less than 3 percent achieved during the 1980s.
- About 95 percent of the growth in the world labor force over the next 35 years will take place in developing countries. An additional 260 million people will enter the workforce during the 1990s.
- Employment in the East Asian economies is projected to grow by 37 percent between 1990 and 2000, while the labor force will increase by only 17 percent, leading to an increasing shortage of labor in the region.
- In contrast, employment growth is projected to lag behind labor force growth in South Asia, Latin America and Sub-Saharan Africa.
- Although job growth has once again started in many OECD countries, economic growth alone will not be sufficient to bring down unemployment rates significantly, especially among youth and the long-term unemployed. Changes in values, attitudes, structures and policies will be necessary.
- Unless concerted action steps are taken, global unemployment will increase by 130 million during the 1990s.

Our thesis is that there is a great deal that can be done to prevent this outcome and even reverse the trend, leading to sharply reduced levels of unemployment and progressive eradication of poverty over the next decade.

How can we make such an optimistic prognosis in the face of the rising number of unemployed and rising concern of governments everywhere? Before presenting our case, it is necessary to challenge several basic concepts about job creation and unemployment.

Destroying Myths About Job Destruction

Two common, but pervasive, myths have gained ground that add an aura of scientific determinism to the fatalism regarding rising unemployment: the first relates to technology, the second to trade. The notion that science and technology will eventually eliminate the need and, consequently, the opportunity for human productive labor has been gaining ground since the early years of the Industrial Revolution, and, with the advent of automated production lines, computers and industrial robots, it has attained the status of

of accepted truth. Each generation welcomes with foreboding the advent of new technologies, attracted by their potential benefits and frightened by the immediate costs they impose. But contrary to popular conception and empirical observation, *there is little evidence to support the thesis that technological development is responsible for rising levels of unemployment in the medium to long term.*

In spite of widespread anxiety that machines are progressively replacing people in the workforce, *historically there has been a strong positive correlation between technological development and job creation.* It is certainly the case that the commercial application of each new phase of productive technologies does displace people from traditional occupations, reduce the number of workers required to carry out specific tasks, and can in the short term lead to fewer jobs in specific industries. In the process, a larger number of low-wage, unskilled jobs are replaced with a smaller number of higher-wage, more skilled jobs resulting in rising levels of worker productivity and rising personal incomes. But that is only the most direct initial impact of improved technology. Seen from a wider perspective and traced patiently along the course of its myriad consequences, the introduction of new technology acts as a catalyst that generates a positive ripple effect which, on average, results in the creation of many more jobs--more skilled, more productive and higher wage jobs--than it destroys. The rising productivity made possible by technology reduces production costs and thereby lowers the price of products and services to customers and consumers. The lower prices result in increased demand, greater consumption, higher levels of production and even greater cost reductions due to economies of scale.

This represents only the first cycle of job creation. While jobs are being eliminated in low skilled manual or assembly operations, simultaneously they are being created in industries that manufacture and service the more sophisticated machines as well as in R & D laboratories that develop the new machines, materials and manufacturing processes. The workers who operate the improved machines require higher levels of skill, which demands more education and training, thus creating demand for jobs in the service sector. The more productive and higher paid industrial workers utilize their enhanced purchasing power to buy more goods and services than before--spending more on travel, consumer goods, housing, leisure, health and the education of offspring--thus, creating demand for more jobs in other industries. Rising incomes generate higher standards and expectations, bringing changes in life style that create new needs and new commercial activities.

This process can lead to enormous growth in new jobs. The best

documented example of this process is the automotive industry. Inspired by the idea of making a car affordable by the working class masses at the turn of the century, Henry Ford adopted new manufacturing technology, the automated assembly line, to produce the first low priced automobile. Ford's technology increased worker productivity more than seven-fold and reduced production costs by two-thirds. As an immediate result, thousands of small, custom-built manufacturers of cars and horse-drawn carriages were put out of business. But the growing demand for low cost vehicles generated explosive growth for the industry, creating tens of thousands of new jobs in the process. Globally, production rose from less than 250,000 vehicles in 1910 to 42 million in 1980. Nine decades later, the automotive industry is still the largest manufacturing industry in the world and the single largest source of jobs in the American economy. Every job created in automotive manufacturing has spawned roughly ten more in related occupations. Thus, about 9 percent of the entire US workforce is employed in occupations directly related to automotive manufacture, sales and services, road construction and maintenance, and transport of freight and passengers. Globally 7 to 9 million workers were employed in automotive manufacturing in 1980 and perhaps as many as 50 to 80 million in related occupations. In addition, the spread of automotive technology has had tremendous impact on the growth of other industries stimulated by the greater mobility of the public--retail trade, hotels, restaurants, tourism, recreation--and indirectly on agriculture, as well as every other service and manufacturing industry that benefits from lower cost and greater speed of passenger and freight transport.

Advances in technology provide society with greater conveniences and in the process endow the society with greater creative and productive abilities. Over time, these new abilities spur the creation of new activities in many different fields distantly related to the original point of innovation. The process results in improvements in health, which raise the level of physical energy; higher standards of education, which raise the level of mental energy and culture; and higher levels of social skills and organization, which raise the energy level of the entire society, making it ever more creative and productive. A comprehensive study of this wider process of job creation and destruction arising from technological innovation is needed to develop specific coefficients for measuring the impact of technological advances in different fields on total employment. Finally we may hope to dispel the widespread fear and sense of helplessness that this issue evokes.

The notion that there are a fixed or inherently limited number of jobs that can be created by the economy is a fiction. It is not just advances in

technology that work in this fashion. Every major advance in social attitudes, institutions, values and life style has a dual effect on employment, creating jobs in some areas and destroying them in others. Higher standards of education not only raise productivity. They stimulate higher expectations that lead to greater consumption as well. Changing attitudes toward the environment have created entirely new industries and generated new jobs in every field where impact on the environment is of concern. New types of organization such as fast food restaurants, franchising and hire purchase or leasing create new jobs by hastening the growth or expanding the activities of the society. Shifting attitudes toward marriage and the role of women create greater demand for jobs but also more opportunities for employment, because working women consume more and require additional services, e.g. the dramatic increase in demand for day-care services in industrial nations.

Anxiety regarding the impact of technological development on jobs has been aggravated by the belief--largely a hangover from the Industrial Age--that in the industrial nations automation is rapidly eliminating replacing high wage manufacturing jobs with low wage jobs in the service sector. Actually, services have had a dominant place in Western economies for most of the 20th Century. In America, they now account for 79 percent of all jobs, 74 percent of GDP, and generate a \$56 billion trade surplus, compared to a \$132 billion deficit for goods. Technological development, such as advances in computers, telecommunications and medical technology, have played at least as great a role in the growth of the service sector as in manufacturing. New service jobs in banking, foreign trade, research, design and engineering, computer software, education, health, law, finance, business management, communications, transportation, media and entertainment demand higher levels of education and skills and offer higher pay. In 1992 the median manufacturing job in the US paid only \$19 per week more than the median job in manufacturing. The growth of technology is freeing workers from the drudgery of the production line, while providing consumers a quality of life previously available only to the most wealthy.

The organization of production is also a major determinant of the number of jobs created. The Western pattern of mass production by monolithic corporations that emerged during the first three quarters of this century is no longer the inevitable or even the obvious pattern for either industrial or developing countries in the coming decades. Smaller, technology intensive firms are faster at adapting new technology, more flexible in meeting specialized customer needs and generate more skilled, better paying jobs. Recent experience, such as in the Prato region of Italy, indicates that proper blending of new technologies in existing productive sectors can be utilized

to preserve a geographically decentralized, small scale pattern of production and enable small firms to match the competitiveness of countries with much lower labor costs. This offers an attractive alternative for preserving the small-scale decentralized pattern of production still prevalent in developing countries and for the future development of enterprises in new industries.

Each advance in attitudes, life styles, social institutions and forms of commercial organization has ultimately expanded the scope of economic activities and raised living standards substantially. Jobs are created by our innate capacities for human resourcefulness and ingenuity which expresses as invention, innovation and social imitation. The ultimate determinant of the numbers and quality of jobs in future will not be physical or even financial constraints, but rather--“science, technology, values and social organization--in a word, the human imagination.”²

Trading Jobs

Those in the West that do not blame rising unemployment on technological advancement, usually blame it on trade. Business and economic literature is replete with articles stating that the high-wage industrial nations will suffer rising levels of unemployment due to the growth of imported goods from low-wage developing countries. The completion of the Uruguay round of GATT trade negotiations was delayed for years because this view fostered protectionist sentiment in the bastion of free trade Western nations. This issue elicits heated emotional debate that often overlooks obvious facts. For instance, increasing trade with East Asia and with low-wage developing countries is cited as a major cause for the fall in the wages of unskilled workers in the United States. As in the case of technology, there is evidence that free trade destroys jobs in some industries, especially unskilled or low-skilled jobs in high-wage economies. In some instances the devastating impact of increasing imports may justify a gradual approach to removing trade barriers. However, the overall impact of manufactured exports from developing countries has been vastly exaggerated. Exports by the Newly Industrial Economies to the United States have risen from 1.1 percent of US GNP to 2.1 over the past decade. America's share of trade with low-wage countries represents only 3 percent of GDP, compared to 2 percent in 1960. For OECD as a whole, imports from low-wage countries represent only 1.5

². Cleveland, Harlan., Knowledge Executive: Leadership in an Information Society, E.P. Dutton, New York, 1989,p.190.

percent of total expenditure on goods and services.

On the other hand, there is irrefutable evidence that expanding international trade creates large numbers of jobs, even in high wage economies. Therefore, the real issue is whether the overall balance favors net job creation or net job destruction for each nation and for the global economy as a whole. On this issue the evidence is clear. Protectionism reduces overall economic welfare, often hurting those with the lowest incomes. In the long term greater international trade, like technology, expands overall employment opportunities substantially. Trade also counters the tendency of prices to rise along with incomes in more developed countries. Living standards increase as consumers benefit from the availability of lower priced imported consumer goods.

One of the greatest barriers to solving the world's employment problem is the perception that trade destroys jobs. As in the case of technology, the interactions are complex and must be viewed in their entirety, rather than in isolated industries. The global economy is not a zero sum game in which increased production by one country must necessarily result in reduced production by another. Trade opens up new opportunities. It permits each country to specialize in industries where it possesses a "comparative advantage". This specialization enables it to evolve improved processes to achieve higher levels of quality and productivity, larger production volumes and lower costs. This results in higher incomes for its workers and makes their products more affordable to people in other countries, which in turn raises standards of living abroad. The resultant rise in real incomes domestically and overseas stimulates demand for more of these products as well as for other products that can be produced locally or imported from overseas.

Trade also tends to raise the quality of jobs in an economy. It forces higher wage countries and their workers to specialize in technology-intensive and skill-intensive occupations that pay higher wages. At the same time, it also raises the wages of less skilled jobs in low-wage countries by increasing the demand for workers to produce for overseas markets. The problem in the more developed countries is that the demand for low skilled jobs declines and the gap in wages between skilled and unskilled jobs tends to increase, resulting in a decline in incomes and employment opportunities for lower levels of the population in these countries. This is a natural, healthy process of social development in which different sectors serve as engines for growth at different stages. The upward job displacement that earlier shifted job opportunities from agriculture to industry and now shifts them to higher-skilled jobs in manufacturing and services. The negative side-effects of this

process on some sections of the population alert us to areas where society must make special efforts to speed their development. As in the case of technology, research is needed to document this complex process across industries, between countries and over time. One product of these studies could be the development of specific job coefficients measuring the impact of growth in trade in different industries on overall employment.

Trade becomes of even greater potential benefit to industrial nations during the coming decade when economic growth in these countries is expected to be significantly slower than in the developing world. The pent-up demand generated by the destruction of Europe during the second world war, the rapid expansion of population during the baby boomers' generation, and the explosion of new technologies in the past few decades generated strong internal demand in the OECD countries resulting in strong economic growth. The slow growth of population and productivity in more recent years means that these factors cannot be expected to drive further economic expansion at the same rate. In contrast, average growth rates in developing countries are expected to be two to three times higher than in the industrial nations. The increase in dollar output of developing countries was actually bigger than that of most economically advanced nations in 1992 and 1993, and this trend is expected to continue. Measured in terms of purchasing power parity, developing countries now represent more than one third of the world economy. More than 40 percent of US exports now go to developing countries and two thirds of the increase in US exports in recent years has gone to these nations.

The rising expectations and upward mobility of millions of people in developing countries represent a vast potential source of demand, higher incomes and jobs for the West. Increasing incomes among the poorest countries has the greatest multiplier effect on global aggregate demand, because even small increments in per capita income can lead to large increases in the number of households with incomes above the threshold for buying consumer goods. Asia is expected to generate half the growth in gross world product and world trade during the 1990s. This region will have one billion consumers of televisions, refrigerators and motor vehicles by the year 2000 and a rising appetite for both imported consumer and capital goods. East Asia alone, excluding Japan and China, will spend about \$900 billion on infrastructure between 1992 and 2000. During this decade, China and India will add 21,000 megawatts of electricity generation every year and more telephone switching capacity than the United States and Japan combined. Latin America's annual requirements for investment in power,

water and sewage, telecommunications and transport infrastructure are estimated at \$60 billion. Rising incomes and increasing exports to the dynamic economies of Asia and Latin America could generate as many as 1.7 million jobs by the end of the decade in the United States alone.

The growth of the developing economies is the greatest potential engine for economic expansion and job creation in both developed and developing countries. Government policies based on recognition of this fact can considerably improve the climate for development of these nations and correspondingly stimulate further growth in the West. Freer international trade will generate a flood of cheaper goods from the developing world that will give rise to not only greater purchasing power and higher standards of living for the Western consumer, but also to a “demand boom” for sophisticated Western goods and services to improve infrastructure and meet the needs of billions of consumers in developing countries. The vast inequalities in living standards that continue to persist within both developing and industrial nations and between the most and least economically developed countries result in an enormous global loss of incomes and jobs. Accelerating the development of poorer nations and poorer sections of the population in each country is the most powerful instrument and the surest guarantee of continued growth of jobs and incomes for everyone in the next century.

Strategies for Developing Countries

For the developing countries as a whole, the most critical question is how to create quickly hundreds of millions of jobs for the poor with limited purchasing power and limited capital for investment. The idea that most of these jobs could be created in the corporate sector or by government sponsored activities has been put to rest. Currently, there are nearly one billion self-employed and unpaid family workers in the world, most of them self-employed farmers in developing countries. The self-employed represent 48 percent of the workforce in low-income economies (less than \$500 per capita GDP). For any strategy to be successful, it must give central importance to self-employment and entrepreneurship, with emphasis on agriculture, agro-industry and small firms in the informal sector. While a single approach will not be applicable to countries and regions of the world in different stages of development, a number of common principles and strategies are widely applicable.

Agriculture as an engine

Slightly more than half the world's workforce is still engaged in agriculture, of which 30 percent are women. Agriculture will remain the largest single occupation for the foreseeable future. For too long this sector has been regarded by planners primarily as the source of essential food production. Historically, agriculture has also played a major role as an engine for economic growth and employment. The Industrial Revolution in 19th Century England was spawned by rising productivity and incomes in agriculture that increased demand for manufactured goods. In post-war Japan, South Korea, and more recently Thailand, rising agricultural productivity and a shift to commercial crops have been dynamic engines for economic growth, job creation, higher incomes and rural purchasing power, wider markets for produce and stimuli for the growth of down-stream industries. In Taiwan, this was the result of a conscious strategy to utilize agriculture to stimulate job creation and domestic demand.

The vast technological gap between the levels of agricultural productivity achieved by most developing countries and the highest yields achieved globally represents an enormous untapped potential for stimulating economic growth and job creation. The reduction in agricultural subsidies to farmers in industrial nations called for in the recently signed GATT trade agreements will generate far higher international demand for agricultural exports from developing countries. In the next chapter, we argue strongly for an agriculture led job creation strategy and cite evidence to show how it can generate sufficient jobs to eradicate poverty in many countries.

New Deal for the self-employed

Excluding agriculture, there are 104 million self-employed and unpaid family workers in developing countries representing 37 percent of the non-agricultural workforce. Self-employed persons and the small firms which they establish have enormous potential for rapidly generating large numbers of new jobs and raising productivity to increase incomes, provided the right policy measures are in place to support them. Japan's economic growth has relied heavily on the proliferation of small rural enterprises. Today, 74 percent of the Japanese workforce is employed by small and medium size firms. China created 101 million jobs between 1985 and 1991, 70 percent in "Township and village enterprises", of which 44 million are privately or collectively owned. In many countries, a large proportion of small enterprises are established by women and employ predominately women. An

appropriate mix of policies focusing on access to technology, training, credit, marketing and distribution channels can substantially accelerate self-employment, particularly in the informal sector and rural areas and among women.

Expand Services

The service sector represents only 25 percent of the labor force in developing countries compared with more than 67 percent in the industrial nations. Contrary to common conception, services can be a major contributor to job growth even in countries at earlier stages of development. This sector is as amenable to stimulation by government policies as agriculture or manufacturing and it also provides impetus for the growth of these other sectors. Supportive policies have enabled trade, transport and other services to generate more than 50 percent of all jobs in Japan, Hong Kong, S. Korea and Singapore. Services have produced more than half of all job growth in many other Asian nations, including private day care centers, nursery schools and computer training institutes, which are multiplying rapidly in many countries, but can be expanded much further. India has adopted an innovative, low-cost, self-employment strategy to expand availability of long distance telecommunications services by setting up small private phone and fax centers throughout the country. Informal private service enterprises in construction, commerce, food catering, repair and transport have vast growth potential. Rapid expansion of education, training and public health, especially rural health and education, can also serve as a conscious strategy for employment generation.

Technology of Organization

Much emphasis is placed on the widening gap in technology between North and South, but the gap in the technology of organization is even greater. Creation of new types of systems and organizations can create markets and jobs in many ways. The Dutch system of flower auction cooperatives is so successful that 68 percent of the entire world's exports of cut flowers pass through markets in the Netherlands. The franchise system has led to a rapid proliferation of new businesses and new jobs in the West in such widely diverse fields as food services, home remodeling, dry cleaning and real estate. Industrial estates, export processing zones, export promotion councils, export insurance, warehouse receipts, quality standards, and

thousands of other organizational innovations have been either created or borrowed by developing countries to accelerate social progress. A comprehensive study of successful systems and institutions that can be transferred and adapted to local conditions will document the enormous untapped potential for stimulating faster economic and job growth by inventing, imitating and further improving social systems.

Action Plan to Stimulate Employment in Developing Countries

Employment generation is a product of multiple factors that combine together. Stimulating job creation requires a comprehensive approach, rather than partial policies or piecemeal strategies. The achievements of the Newly Industrializing Economies (NIEs) of East Asia demonstrate that tremendous increases in employment generation can be achieved based on comprehensive strategies. While broad prescriptions should not be indiscriminately applied to the widely disparate situations confronting different countries, the availability of a number of tested methods underlines the fact that effective and proven policy measures can be formulated to meet the employment needs of every developing country. A number of the strategies briefly listed below are enlarged upon in subsequent chapters of the report, but listed here for the purpose of comprehensiveness.

1. *Emphasize Agriculture:* Utilize agriculture as an engine for economic growth and job creation by a shift to high value-added, commercial crops supported by policy measures to upgrade technology, improve skills, raise productivity, ensure supply of essential inputs, establish marketing and distribution channels, create linkages between agriculture and industry, and cater to export markets. .
2. *Promote Small Enterprises:* Promote small enterprises by policies to make technology, training, credit, marketing and distribution channels more easily accessible to small business and by forging linkages between universities, research institutes and small enterprises. The creation of micro-enterprise banks and credit union specifically designed to cater

to the needs of the self-employed and small firms can be especially effective. There are a growing number of these institutions targeting clients that lack access to commercial lending institutions, particularly women, providing unsubsidized loans, and achieving very low levels of default.

3. *Upgrade Skills:* Absorbing new technology, raising productivity, improving the quality and competitiveness of exports--all depend on the skills of the workforce. Labor productivity has been increasing in E. Asia by 10 percent a year, half of which is attributable to investment in education and technical skills. Training institutions and programs in most developing countries provide only a narrow range and low level of skill acquisition to a small portion of the population. Raise skills to increase productivity by vastly expanding the lower tiers of the agricultural, craft, technical and vocational training systems at the local level to provide practical training in job-related skills to the saturation point. Imbalances between supply and demand for skills exists at all levels in developing economies. Make a careful assessment of present supply and demand for key skills. Compare the density of different types and levels of skill in countries at the next higher stage of development and evolve programs to raise the quantity and quality of skills to that level.
4. *Improve Marketing:* The organization of marketing is typically one of the weakest links and, therefore, one of the greatest barriers to economic growth and job growth. Brazil set up a distribution system for export of citrus fruits that has enabled it to become the world's largest exporter of this commodity. Improve distribution and marketing systems, especially for agricultural produce, by identifying missing links and establishing successful model programs that bridge the gap between rural producers and urban or overseas markets.
5. *Expand Services:* Actively encourage and support growth of the service sector through programs similar to those utilized to support expansion of small industry.

6. *Develop Exports:* The new GATT treaty ensures that, contrary to earlier projections, export-led growth is far from over. After agriculture, the textile and clothing industry is one of the largest employment sectors in developing countries. The industry's global exports are \$250 billion a year, of which Asian countries command 40 percent. Trade in clothing is expected to rise by 60 percent and textiles by 34 percent over the next ten years. As labor costs have risen in East Asia, greater opportunities are emerging for lower-wage developing countries to take a larger share in growing international markets. In order to take advantage of the increasing opportunities opened up by liberalization of world trade, developing countries should accelerate steps to expand export-oriented markets by forging foreign collaborations and overseas subsidiaries, acquiring technology, creating an attractive commercial environment for foreign investment, and continuously building the skills of the labor force.
7. *Innovate Organizationally:* Significant improvements in the competitiveness and growth of businesses in developing countries can be achieved through raising organizational efficiency and dynamism through better internal management practices and better commercial systems in the marketplace. Conduct a comprehensive study of successful management practices, systems and institutions from both developing and developed countries that can be transferred and adapted to local conditions in order to accelerate development in each field of activity. Evolve new organizational patterns for existing industries based on adaptation of new technologies in small, geographically decentralized, labor intensive production units in order to make these industries more responsive, flexible, efficient and competitive.
8. *Extend Basic Education:* A distinguishing feature of the East Asian countries has been their emphasis during the early stage of industrialization on primary and secondary education, especially in rural areas. This strategy increases the productivity of the mass of the workforce, helps promote income equality, consumer spending power and broad support for high growth and pro-business policies. Raise the educational qualifications of the workforce to the level per-

taining in more economically advanced nations. Place particular emphasis on primary and secondary education, rural education and education of young girls.

9. *Disseminate Information:* Encourage the establishment of new institutions, programs and systems to speed and extend the dissemination of practically useful information as a powerful catalyst for more rapid social progress. Encourage a national climate of open-mindedness to foreign ideas, influences and success stories.
10. *Increase the Velocity of Money and other Transactions:* Increase the speed of commercial transactions, especially money flows, in the economy by streamlining government and banking procedures, ensuring rapid utilization of funds by all government agencies, setting strict limits on the time taken for bank transfers, introducing agencies for credit verification and collection of unpaid bills, and improving the telecommunications infrastructure.
11. *Revamp Higher Education:* Educational systems which "manufacture graduates" compound the problem rather than alleviate it. The problem of the educated unemployed is not so much the amount of education they receive, but the type of knowledge and attitudes imparted. Reorient the educational curriculum at all levels, especially higher education, to impart the knowledge and attitudes needed to promote self-employment and entrepreneurship rather than salaried employment.
12. *Employment Planning:* Studies of Japan and the NIEs indicate that conscious employment planning is a essential requirement for generating full employment. Place the employment objective high on the national agenda and evolve a comprehensive plan to achieve full employment by identifying untapped growth potentials in agriculture, industry, exports and services. Launch a nationwide program to implement all employment-related strategies on a highest priority basis.

Comprehensive Strategies

While most of the prescriptions listed above are known to all, very few are systematically and efficiently applied. Africa can benefit enormously by applying strategies that have worked in Asia. The "Prosperity 2000" program evolved by ICPF for India and presented in the next chapter seeks to utilize a combination of these strategies to generate 100 million new jobs within a decade or less, which will be sufficient to raise 30 percent of the world's poorest billion people above the poverty line. Given a comprehensive approach, the right mix of policies, good government and a conducive international environment for trade, technology transfer and investment, every nation has the capacity to develop and meet the employment needs of its people within the next one or two decades.

The Right to Employment

The transformation of social life in this century has drawn hundreds of millions of people away from a subsistence level existence in agriculture to urban areas and industrial employment. In the process it has brought about an unprecedented advancement in living standards around the world. But it has also engendered a way of life in which the livelihood of individuals is far more dependent than in the past on external conditions--the state of the national and global economy, trade policies, interest and exchange rates, levels of military spending and overall consumer demand. Modern society, even in the most liberal democracies, has become so structured that it leaves less and less freedom for truly independent individual initiative. Today, government intervenes in virtually every aspect of society's economic existence, restricting the freedom of the individual to seek his or her own livelihood and determining the type and number of job opportunities available. Employment opportunities are directly linked to government tax policy concerning capital gains, depreciation, energy, wages and salaries, as well as by policies governing minimum wage laws, interest rates, budget deficits, imports and exports, environmental regulations and restrictions, defense spending, immigration, industrial development, investment, licensing of practitioners, zoning laws and countless other public policy issues.

Without access to jobs, people lack the ability to ensure their own survival and support in modern society. As government has assured the right to

education--indeed, compels it--it can and must also ensure the right of every person to gainful employment. Our very concept of the rights of the individual and the responsibilities of the society must undergo radical change. UN Secretary General Boutros Boutros-Ghali has called for a broader definition of human rights to include economic as well as political rights. The essential basis for meeting the world's employment needs is the realization that employment is an absolute necessity for survival in modern society and must be recognized as a fundamental right of every human being. Pragmatism as well as idealism compels this step. *Recognizing the right of every citizen to employment is the essential basis and the most effective strategy for generating the necessary political will to provide jobs for all.*

What is needed is not another job generation program, but a change in social values that will accelerate the natural and inevitable evolution of society, from one in which labor is regarded as a dispensable resource to one based on full human rights and the enormous productive potential of the human being. The type and magnitude of change needed today is comparable to that embodied in President Roosevelt's New Deal for the American people during the Great Depression at a time when 25 percent of the work force was unemployed, to the Indian Government's decision to launch the Green Revolution in the mid-1960s to achieve self-sufficiency in food grains at a time when the country was highly dependent on imported food to stave off famine, and to Mikhail Gorbachev's initiatives late in the 1980s to end the Cold War and transform Soviet society.

Is full employment possible?

Few will argue with the compelling logic, justice or idealism of this view, but many will question the feasibility of practically implementing it. *As long as we continue to believe that society is truly helpless to manage job growth, there will be strong resistance to the full employment goal.* We must recognize that the present status and functioning of our economies is the result of specific choices that have been made in the past, based on priorities and values that were relevant or dominant at the time, but which we certainly are not obliged to live with indefinitely and, in fact, are continuously in the process of discarding in favor of new values and priorities. The rapid adoption of environmentally-friendly policies around the world is positive proof of how quickly the rules, even economic rules, can change when there is a concerted will for a breakthrough. So too, the

welfare policies of the European Union that have resulted in 70 percent rise in national income over the past two decades, but only a 9 percent increase in the number of jobs, were due to conscious choices that favored the employed over the unemployed, not the inevitability of the market.

Recent economic debate in the United States has brought this truth to the fore. At a time of historically low levels of inflation and high levels of unemployment, the US Federal Reserve has pursued a policy of raising interest rates in order to prevent a potential rise in inflation some time in the future, which has had the immediate effect of dampening growth and slowing job creation, just at the time unemployment rates were beginning to fall toward normal levels. This has prompted some economists to question the notion of a 'natural' rate of unemployment. *The current high level of structural unemployment is the result of policies that can be changed.*

Every social condition is the result of current social values, attitudes and policies. The values, attitudes and policies underlying the present state of the US economy give highest priority to conserving the value of existing wealth, rather than creating new wealth through faster economic growth and higher rates of employment. The apparent obsession of central bankers supported by international financial institutions to raise interest rates in anticipation of rising prices and, thereby, sacrificing job growth in order to prevent even modest levels of inflation illustrates negatively to what extent it is human *choices*--based on superstitious fear and a clinging to money value at the expense of human value--that prevent us from resolving this crucial problem. The current level of unemployment is one among several of its natural results. People's jobs are a variable being manipulated in the operation of economic policy. Through its acceptance of government policy, society has chosen the present system and, if it chooses, can alter it in preference for another.

The commitment to jobs-for-all is also undermined by the false impression that the total employment available in society is inherently limited by the finite, material needs of the community. Modern economic history is witness to an ever-expanding growth in human needs to match the ever-increasing productive capacities of the post-industrial age. Creating more jobs is an expansive movement that generates more purchasing power, increases aggregate demand and consumption, stimulates further job creation, and moves the whole economy toward higher rates of growth. The expansion is not merely horizontal. It also involves the emergence of higher order, non-material needs for education, health, recreation, entertainment, environmental protection and artistic fulfillment. The entry of women into the workforce

has substantially increased the demand for day care and house care services, travel, recreation, automobiles, fashion and consumer goods. The raising of environmental consciousness has led to a rapid proliferation of new technologies, products and services.

A radical change in values, priorities and policies at countless points is required. It can only be done by the conscious initiative of government compelled by the expectations and demands of an electorate educated to understand the impact of government on economic life and the scope for increasing employment opportunities in a market economy. *If society decides that useful jobs must be created, then they will be created. Full employment can be achieved by any country that has the will and determination to achieve it.*

This does not mean that every country can accomplish the goal immediately. Nor does it mean that government should try to spend their way out of unemployment by creating artificial jobs for all who seek them. But the high current costs of the unemployed--which average nearly \$14,000 per jobless person in the United Kingdom--certainly suggest that there are more constructive ways to spend available resources to solve the problem. Instead, it represents a commitment of the government to reexamine and where necessary alter the nature of its priorities and policies and the structure of its economic system in order to make achievement of this goal possible. The magnitude of the task and the prescription may vary, but the goal and determination can be shared by all.

Employment Strategies for the Industrial Nations

In the industrial countries, the phenomena of jobless growth coupled with persistently high rates of youth unemployment and of chronic unemployment among the poorer sections will not be eradicated by even the most optimistic rates of economic expansion or mere incremental adjustments within the context of present attitudes and policies. Although the problem has been aggravated by a variety of short and medium term factors whose effects will gradually dissipate over time--defense cuts, recession, East European economic crisis, German re-unification, etc.--the present job crisis among Western nations is largely structural in nature. Although conditions vary from country to country, it impacts most heavily on the unskilled, youth, urban poor, ethnic minorities and older workers. Specific programs to effect structural changes will have to be introduced in order to ensure a fair opportunity to all, especially minority youth, to lead economically active lives. It is in this context that the European Union, the

United States, and other Western governments have been considering ambitious proposals for addressing this issue. The Government of Australia has unveiled a \$4.6 billion jobs package to reduce unemployment from 10 percent to 5 percent by the end of the decade by encouraging training for the young, unskilled and long term unemployed. The OECD recently has presented the main planks of an employment strategy to stimulate economic growth in the industrial nations, make labor markets more flexible, increase productivity, and revamp employment and unemployment security provisions.

The relative success of the US economy in creating jobs during the past decade has prompted other countries to emphasize the importance of policies to increase the flexibility of wage rates and bring down the price of labour by reductions in the statutory minimum wage. But the main effect of this policy is likely to be a movement of jobs between nations, not a significant increase in the total number of jobs available. In fact, measures which reduce wage incomes could have the perverse effect of reducing aggregate purchasing power and employment.

Economic growth is recognized as an essential, though not sufficient, condition for higher rates of job growth. However, fears of inflation constrain industrial countries from trying to stimulate faster expansion of their economies. The primary impact of moderate levels of inflation would be to encourage an outflow of investment to more stable currencies. However, if the industrial nations all agreed to relax their monetary policies, this effect could be minimized.

The real constraint on job creation in the industrial nations is not the price of labour, but the need for increased capital investment, partly to counter the effects of reduced military spending and the drastic fall in output and demand in Eastern Europe. Increasing public investment to stimulate employment is constrained by widespread concern about rising levels of public debt. Recent reports state that the gross debt of OECD countries has risen from 35 percent of GDP in 1970 to 70 percent in 1993. But this figure is of questionable significance. The gross debt includes the debt held by government departments and public agencies as well as by private institutions and individuals. When the government-held portion is deducted, the actual net debt of these countries is approximately half the gross debt, which means the net interest burden for servicing the debt is also only half. Furthermore, it is not clear that a comparison of debt to GDP is a very meaningful index. Debt is a cumulative measure of stock, while GDP is an annual measure of flow. When the total debt of OECD countries is compared to the total capital stock of these countries, the debt is equal to a relatively modest 15 percent of the current capital stock of these nations.

In contrast to the recommendations made by OECD, the Delors Plan for stimulating employment in Western Europe, which was recently rejected by member countries of the European Community, called for a large increase in public investment in expensive communication and transportation infrastructure projects as a means of creating more jobs in the near term and increasing the competitiveness of European economies by improving their infrastructure. Instead of investing in ambitious, high tech projects whose future impact on job creation is unclear, the industrial nations should make substantial increases in public investment to improve the tools of the workforce by lending to promote small enterprises together with increased public investment in education and training, which will stimulate short, medium and long term job growth.

The recommendations set forth in this report are based on the conviction that nothing less than a legal commitment of the society to guarantee employment is justified and nothing less will be sufficient to solve the problem. Only then will the requisite political will be generated to push through effective measures. We do not advocate a return to state socialism or expansion of the public sector. As in the case of the environment, the changes needed are in the priority given to achieving different social objectives in the formulation of government policy.

Recommendations to Achieve Full Employment in Industrial Nations

Earlier we noted long term trends that suggest the recent rise in unemployment in the West does not necessarily forebode, and need not necessarily result in, chronically higher rates of unemployment in these countries. Granted that the necessary political and social commitment is forthcoming, there are a range of strategies which taken in the proper measure and combination can dramatically accelerate job growth and reduce unemployment. Each of these strategies has proven effective in stimulating employment, though none by itself may be sufficient to solve the problem. A comprehensive, total approach, rather than partial and half-way measures is needed. No industrial country can claim that it systematically exploits all the potential benefits of the strategies in this list. This should be the highest priority of every Western government today.

1. *Promote small businesses:* All the publicity given to the impact of down-sizing by major corporations has obscured the fact that the top 500 US firms employ less than five percent of the US workforce. It is also the smaller firms that are responsible for job growth. Businesses employing fewer than 20 workers presently account for 57 percent of new job creation in Europe. Based upon the successful examples of many developing countries that have stimulated growth in this sector, there is vast scope for expanding services to support new enterprises through better access to management and employee training courses, credit and R & D facilities; by testing and certification for those who want to start businesses; and by establishing business incubators to provide work space and shared services as well as technical, financial and marketing expertise to start-up companies.
2. *Reduce business failures:* New businesses create most of the jobs, but they destroy most of them too, by going out of business. The failure rate of new businesses is extremely high in most industrial nations. In Italy, roughly 50 percent fail the first year. Of the more than 600,000 new business startups in the UNITED STATES. each year, 40 percent close within 12 months, 80 percent within five years, and 80 percent of the remainder in the subsequent five years. Expanding programs for management training, small business education and counseling, marketing assistance and financial management can bring down the failure rate dramatically.
3. *Voluntary Part-timism:* Increasing the flexibility of working hours will serve the interests of both businesses and workers. Encouraging voluntary part-timism by removing the artificial barriers to job-sharing created by employment laws, social security tax laws, administrative procedures and trade unions would raise the morale and productivity of those who prefer to work less, while creating openings for many who are now without jobs. In the Netherlands, voluntary part-timism has been identified as the biggest single potential for creating new jobs, capable of reducing the country's unemployment by up to

50 percent. Proportionately reducing working hours and salaries can spread the existing work more evenly over more people. Evidence suggests that reduced working time can raise productivity significantly. Extending vacation time and medical leave in the UNITED STATES, nearer to levels which the Europeans enjoy would create many more job openings. Work or job sharing is not an ultimate answer in itself, but it can have beneficial short term impact, allowing time for longer term measures to take effect. As a minimum, governments should remove the artificial barriers to job-sharing created by employment laws, administrative procedures and trade unions. Social security tax systems should also be modified to remove the in-built bias that increases the taxes of those who hold multiple, part-time jobs, rather than one full-time job. Such constraints limited part-time jobs to around 10 percent of the total in Belgium, France, Italy and Spain compared to around 25 percent in Britain and Denmark.

4. *Modify tax policies:* The present income and payroll tax system raises the real cost of labor relative to other resources, such as capital and energy, and thereby discourages job creation. It heavily taxes people for working, which indirectly raises the cost of labor and reduces the number of jobs. At the same time the system provides investment and depreciation incentives that encourage industry to shift from labor intensive to capital intensive modes of production. Much of the shift from labor to capital may not be economically justified were it not for the in-built bias in this system. Low levels of taxation on the depletion of non-renewable energy resources in the UNITED STATES, is another distorting influence that makes machine-driven activity more cost effective than it would otherwise be.
5. *Analyze job impact of government policies:* Almost every government policy has a direct or indirect impact on employment. Often the relationship is not recognized or intended. An analysis of the impact of major public policies on employment at the local, state and nation level can result in avoidance or removal of significant legislative and administrative road-blocks to job growth. Require employment assessment of new policy initiatives prior to adoption.

6. *Re-orient social security programs toward re-employment:* OECD countries spend 2-3 percent of GDP on labor market policies, most of it to support the unemployed. The United Kingdom spends nearly \$14,000 a year on every unemployed person. The United States spends three times as much on welfare payments as it does on retraining the unemployed. For three decades, Sweden achieved the highest employment rate among OECD countries based on “the passionate belief in full employment” and “the right to work” and on active policies to generate work for all, rather than payments to the unemployed. Drawing lessons from the Swedish model, introduce a comprehensive program of education and vocational preparedness for the unemployed, compulsory retraining for those who are unemployed for more than six months, and a strictly managed penalty system for unemployed persons who refuse successive job offers and do not seek retraining.
7. *Improve labor market information and job placement systems:* Labor markets are becoming more and more fluid. One in ten jobs is now replaced in OECD countries every year. This makes the strengthening of job placement systems a crucial element in any full employment strategy. Lack of access to information about job or training opportunities retards re-employment. Sweden operates one of the most extensive and efficient employment services in close cooperation with business that is responsible for filling 60 percent of total job vacancies. Improve labor market information systems within and between countries by increasing the accuracy and comparability of data, requiring mandatory reporting by businesses of all sizes, and freely exchanging information between cities, states and countries on successful employment generating strategies.
8. *Raise minimum standards for education:* Higher education increases productivity, raises personal expectations and consumption, and generates additional jobs in education and elsewhere. Lack of qualifications, inadequate and out-dated skills commonly characterize the long-term unemployed. There is a strong positive correlation between higher education and higher incomes. The employment rate for college graduates in

the United States is 75 percent versus 48 percent for high school dropouts; and at the height of the recent recession, 3.2 percent of college graduates were unemployed compared to 11.4 percent of high school drop-outs. Only 57 percent of 18 year olds in OECD countries are pursuing formal education. The Japanese built their highly competitive workforce by raising the educational attainments of the bottom half of its primary and secondary school population. Raising the minimum compulsory level of education, as Belgium did in the mid-1980s from 16 years to 18, slows the entrance of young people into the labor market, better equips them for employment and increases the demand for teachers. Raising the compulsory education by two more years or doubling the teacher-student ratio in the United States could generate several million additional jobs in teaching. *A national commitment to raise the minimum standard, the average level and the quality of education can act as a great medium term stimulus to job creation.*

9. *Continuous Training:* Technological development is dramatically speeding up the rate at which old skills become obsolete and new ones are needed. Education and training must become a life-long process for workers. In a number of countries, high levels of unemployment co-exist with shortages of particular skills, reflecting significant mismatches between the supply and demand for skills. The deficiencies in government operated training programs can be partially overcome by providing greater incentives to private firms to invest in training new and existing employees. Studies have found that a 10% increase in expenditure on training can boost productivity by an average of 3 percent over two years and by as 30 times the cost of training. Yet even today, only a relatively small number of companies conduct regular, on-going training programs. Launch a nationwide public educational program on the tremendous potential gains in productivity from increased training. Support initiatives by providing incentives to intensify training programs for all employees by every type of commercial and non-commercial institution in order systematically to upgrade the technical, vocational, organizational and managerial skills of the workforce.

10. *School-to work apprenticeship programs:* The transition from school or college to work can be long and difficult. Germany's apprenticeship program covers nearly 70 percent of all teenagers to equip them with employable skills before they enter the workforce. Two-thirds of the UK workforce have no vocational or professional qualification, compared to only 25 percent in Germany. There is growing support in the United States for establishment of a national youth apprenticeship training program that combines classroom schooling with on-the-job skills training to ensure a smooth transition to employment for those who do not pursue higher education.
11. *Link demilitarization to urban employment:* The military possesses both the expertise and the physical infrastructure for training large numbers of people in a wide range of technical, vocational and social skills. Building upon successful US Defense Department programs that re-deploy soldiers to assist troubled inner city youth, closed military bases can be converted into large training centers operated by military teaching staff for instructing and housing urban unemployed youth during an apprenticeship period.
12. *Promote integrated urban development programs:* The Atlanta Project is a bold attempt to evolve a new type of organization to address the problems of inner city poverty and unemployment. The inner city of Atlanta, Georgia, has been divided into clusters in which members of the local community work closely with the staff of major corporations, voluntary agencies, religious groups and a wide range of government agencies to identify and promote employment opportunities and other poverty-alleviation activities.
13. *Promote Organizational Innovation:* In recent years, large firms have made significant strides in improving their speed, efficiency and flexibility of response to changing market conditions by restructuring operations into independent companies and autonomous profit-centers. Small firms need to develop new types of organizations to help them acquire some of the benefits of larger size. An innovative experiment has been launched by two dozen small precision-manufacturing, defense contractors in Kansas, with the support of the US

Defense Department, to combine their technical, organizational and marketing resources for diversification into non-defense production. Initiatives of this type can help strengthen the 12,000 small tool and die-making companies in the United States as well as millions of other small companies in other industries and other countries.

14. *National service organizations:* National service programs can be very successful vehicles for providing training and valuable work experience to youth before they enter the labor market. Service in activities designed to improve education, health, and the environment can be of immense benefit to the country, while slowing the pace of new entrants to the workforce. The United States recently established AmeriCorps to strengthen and expand service and educational opportunities by providing educational grants to youth in exchange for community service in the fields of education, environmental, human services and public safety. Participants receive a limited wage while serving plus a post-service educational award for higher education.

15. *Pay the unemployed to work, rather than not work:* The high costs of welfare programs, the negative incentives they provide to job seekers and the harmful psychological consequences of unemployment can be mitigated by modifying welfare programs to require that the able bodied unemployed either train or work in exchange for welfare payments. The type of work given may be varied depending on both the qualifications and the training needs of the individual, e.g. as assistants in child education, care for children and the elderly, and environmental protection. If properly administered, these program have proved successful in reducing costs, imparting new skills and identifying false welfare claims. Redirect welfare expenses for creating jobs, rather than encouraging idleness, by paying welfare recipients to carry out public service activities in return for welfare payments. This requires the identification of employment-intensive programs that provide clear benefit to the community without interfering with existing business, such as the US Civilian Conservation Corps that built the US National Parks system in the 1930s. Expanding or upgrading the educational system would be a priority area.

16. *Make income distribution more equitable:* The number of jobs available is directly related to patterns of income distribution. In Japan and other dynamic Asian economies, the ratio between the bottom and top pay is as much as 5 or 10 times lower than in the United States. A highly skewed income distribution results in lower overall demand, growth and job creation. Lop-sided incomes distribution fuels speculative investments, more and more of which goes overseas. The average wages for production workers in the United States are the lowest they have been since 1967, with 18 percent of full-time workers not earning enough to keep a family of four out of poverty, up from 12 percent in 1979. Income redistribution in the industrialized countries requires structural adjustments similar to those which the West has advocated for developing countries. A 'maximum wage' law can be introduced requiring firms to pay taxes on exorbitant executive compensation.

Agenda for a Global Employment Programme

Employment is a global problem that cannot be fully solved by individual countries in isolation. Policy measures at the national level influence trade and investment flows and employment rates in other countries. Economic growth and expansion of employment in one country enhance employment opportunities in other countries as well. Therefore, co ordination of policies is in the interests of the global community. A comprehensive and coordinated international effort is called for to improve the global climate for economic growth and job creation by evolving stable and supportive policies to regulate capital flows, foreign trade, debt, commodity pricing, immigration and labour movements, transfer of technology, investment, military spending and the arms trade. We set forth below a broad policy framework to stimulate global job growth with the aim of achieving full employment early in the twenty-first century.

1. *World Employment Program:* Raising incomes and creating jobs in the developing countries is the best way to promote global economic growth and employment generation in the coming decades. The World Summit on Social Development should call for a comprehensive World Employment Program to stimulate more rapid growth in developing countries as an engine for global economic expansion. The International Labor Organization has operated a program for the past two decades, but solution of the employment problem requires an integrated approach that transcends the scope of any single international agency. The program should establish specific objectives and coordinate efforts to stimulate international investment, increase labor market flexibility, promote productive skills, diffuse technology, eliminate protectionist trade policies that retard growth, increase trade between developing countries, and promote international cooperation on taxation systems to encourage more labor-oriented tax codes.

2. *Coordination of Macro-economic policies:* The efforts of the industrial nations to achieve higher rates of economic growth and job creation are stymied by the need to maintain macro-economic stability at the same time. Due to the competition between OECD members to attract financial resources, rising interest rates or falling inflation rates in one country influences the inflow and outflow of financial resources from other members of the community. The efforts to curb inflation at the expense of slower economic growth and job creation need not be so rigorous, if OECD members more closely coordinated their policies to support macro-economic expansion. A modest, relatively uniform rise in inflation rates within the OECD would not then result in a significant movement of resources or fluctuation in exchange rates.

3. *Shift Investment from Defense to Education and Training:* Reduce global defense spending by an additional 50 percent before the end of the decade to below a maximum threshold of \$400 billion. Invest at least 10 percent of the global savings from defense cuts on education and training.

4. *Liberalize Agricultural and Textile Exports:* Utilize agriculture as an engine of industrialization, international trade and employment generation by reducing the barriers to a major expansion of agricultural production and exports from and between developing countries. More than two billion people in developing countries, representing about 35% of the entire world's population, are dependent on agriculture as a primary source of livelihood. This compares to 45 million people in industrial countries, which represents less than 1% of the world's population. Agriculture is the most heavily protected sector of world trade. In 1991 the industrial nations spent more than \$180 billion on agricultural subsidies to support their farm population, which is three times the total world overseas development assistance. These subsidies cost Western consumers another \$135 billion annually in terms of higher food costs. Agricultural protectionism in the North not only places powerful constraints on exports from developing countries, but also directly interfere with the livelihood of one third of the entire human race living in developing countries.

The elimination of the system of quotas and subsidies to Western farmers can dramatically reduce the budget deficits of industrial nations and bring down food prices, while stimulating large-scale expansion of agriculture, industrialization and job growth in developing countries. Existing trade barriers by the industrial nations of trade barriers to textile exports cost developing countries an estimated \$50 billion annually. The complete elimination of these barriers could result in a doubling of textile exports by developing countries. This labor intensive industry can be another engine for job creation in developing countries and rising demand for technology and capital goods from the industrial nations. *The progressive reduction, leading to the eventual elimination, of barriers to trade in agricultural products and textiles is an important step that can substantially improve the employment opportunities for people in developing countries.*

5. *Improve Access to Markets:* The most important structural change in the world economy over the past 35 years has been the five-fold increase in the world share of manufactured exports from the developing countries as a group, which have risen from 4 percent to 19 percent, compared to a current

market share of about 13 percent each of the United States and for Japan. Although 54 percent of these manufactures come from five top exporting countries, a large number of countries export more than \$1 billion in this category annually. This has opened the door for self-reliant growth in many developing countries.

This growth could have been considerably more impressive, but for constraints placed on it by both tariff and, particularly, non-tariff barriers. The latter have proliferated in recent decades and affected almost half of OECD imports during the 1980s. By the end of 1990, there were more than 200 export-constraint arrangements involving product groups of importance to developing countries. The incidence of anti-dumping cases against developing countries rose substantially in the late 1980s. The more recent effort by the industrial nations to impose 'fair labour standards' on exports from developing countries could well become another form of constraint, unless carefully formulated to focus on the basic rights of workers, rather than on arbitrary minimum wage levels. Efforts to accelerate the dismantling of both trade and non-trade barriers should be viewed as a central element of a global strategy to stimulate employment generation.

6. *Debt Repayments:* The debt problem is a major obstacle to the development and welfare of at least 60 heavily indebted, developing countries, which includes two-thirds of the world's poorest nations. Most of these countries suffered a decline in per capita income over the past decade and are now in arrears for more than 20 percent of their debt obligations. The debt burden discourages new foreign investment and lending to these countries and prevents them from stimulating economic growth through additional domestic savings and investment. International debt relief has helped ten, mostly middle income, debtor countries significantly reduce their commercial debt. Past actions to relieve the debt burden on low income countries have been relatively small in relation to the amount of debt, which has continued to rise under the combined impact of accumulated interest arrears on old loans, falling export commodity prices, and new compensatory loans, frequently given on expensive terms. Unrealistic pressure to repay debt undermines debtors' capacity for constructive initiative. Past

initiative. Past experience has shown that mere debt rescheduling in these countries does not solve the problem and may in fact aggravate it.

The extent of the problem is reflected in the heavily discounted prices of the debts of low and lower middle income countries in the secondary market and in negotiated buy-outs of the debt owed to commercial creditors. In 1993, the average market price of the debt was about 30 cents on the dollar. This market discount was a major factor in the decision to scale down the debt of Latin American countries by an average of 15 percent and of Egypt and Poland by 50 percent. The aggregate debt of the 61 low and lower-middle income debt-affected countries is roughly equal to that of the half-dozen mostly middle income countries assisted under the Brady plan. Scaling down the debt of these poor countries by an average of 70 percent would be appropriate in view of their economic plight, though the actual reduction would have to be negotiated on a case by case basis. In order to be of sufficient magnitude, debt reduction should be applied to all three major classes of creditors: bilateral official creditors, private sector lenders and international organizations. Debt reduction should be linked to each country's specific programmes for poverty eradication and meeting the minimum needs of the people.

7. *Commodity Prices:* The problem of debt is closely linked to that of international commodity prices. The majority of developing countries are dependent on export of primary products for their welfare and growth. These products account for 80-90 percent of the exports of African countries and 65 percent for Latin American nations. The extreme price volatility of commodity markets is especially damaging to low income countries, which, regardless of the price, are forced to sell their products to meet minimum needs and pay debts. The obligation of the poorest developing countries to repay debts forces them to produce and export excessive quantities of basic commodities, which has been a principle cause of falling commodity prices. The more these countries export, the faster prices fall, making it impossible to generate sufficient funds for debt repayment by this means, which is often the only

source of foreign exchange available to them. Distress sales by the poorest countries force even financially stronger countries to drop their prices in order to maintain market share, which encourages buyers to postpone purchases in expectation of still lower prices.

The growth of agricultural incomes in developing countries is critically important to global job creation and economic growth. The expansion of agricultural exports under the new GATT agreement is likely to exasperate the falling commodity price syndrome to the great detriment of the entire world economy, unless effective mechanisms are introduced to stabilize international commodity prices. Of the many efforts in the past, some were tried and failed, many were proposed but never implemented. The recent success of coffee producing countries in lifting prices from a disastrously low level has been an exception to the rule. Collective and coordinated international action is essential to address this problem. Despite past failures, new efforts must be made to revive international commodity agreements, preferably covering both producing and consuming countries. This will be possible only if developing countries first arrive at a consensus approach among themselves, including the economic costs and benefits, and a financing plan. Financing for international commodity stocks could be partly supplied by producer countries in the form of building national stocks under collective supervision. Partly it could come from bank commercial loans against commodity collateral, loans from regional development banks, the World Bank and IMF's Buffer Stock Facility, which has remained almost unused.

8. *Technology transfer:* Accelerate transfer of technology to and between developing countries. One or more profit-making commercial organizations should be established as a public sector joint venture of developing countries to promote the commercial transfer of technology to, within and between developing countries and to channel the profits from this activity toward research in these countries.
9. *Global Employment Model:* Our efforts to promote employment are constrained by a lack of detailed knowledge of how global labor markets actually work. We still do not understand the impact of technology, trade, macro-economic

policies, multi-national corporations, shifting patterns of foreign investment and many other factors on job creation, severely hampering effective policy formulation and coordination. An international research program should be organized under the ILO to construct a truly global employment model, that monitors the impact of technological developments, expanding world trade, plant closings, movement of industry to low-wage countries, agriculture-led industrialization, economic growth, immigration policies, refugee movements and other factors on employment opportunities around the world.

10. *Shift Focus of Technological Development:* The number of jobs created or destroyed by technology depends on the priority given to various objectives in the process of technological development. Presently, there is an in-built bias in technological R & D toward replacing human labor with capital and energy, even when similar levels of quality and efficiency could be achieved by alternative means. A conscious shift of focus can lead to development of more labor-intensive production processes.

5 FOOD FOR ALL

The production of more food to meet the needs of a burgeoning population has been one of the outstanding global achievements of the post-war period. It has demonstrated the extraordinary capacity of humankind to meet a collective challenge of monumental proportions. It has harnessed the power of science and technology for the most cherished of purposes--preserving human lives. It has released the initiative and pride of long suppressed peoples to achieve self-sufficiency and determine their own destinies. It has finally lifted the suffocating blanket of pessimistic economic determinism that has stifled human hopes and aspirations for nearly 200 years since Thomas Malthus first set forth the thesis that human population will always outrun the growth of food production, thus ensuring the perpetual poverty of humankind. The remarkable achievements of countries such as India, which at a time when famine threatened to claim millions of lives launched a massive national program that increased food grain production by three-quarters, and China which nearly doubled foodgrain production over the last two decades, are outstanding testaments to the accomplishments of people in many countries. Worldwide, production increases in major cereal crops are estimated to have provided enough food for more than a billion people.

Food has become a symbol of our collective human endeavor to create a better world for all. But the victory has been partial and neither the challenge nor the opportunity which food presents have been fully addressed. It is of crucial importance not only to the poor, but also to the peace and stability of global society that we complete the task of banishing famine and hunger once and for all. *Hunger anywhere threatens peace everywhere.* Hunger leads to political instability, social unrest, massive migrations, rebellions, civil war, crime and violence. Prosperity which eliminates hunger also tends to eliminate violence. Even in war-ravished Africa, experience shows that where food is in plenty, war is avoided. The converse is also true. Historically, war and civil strife have been the single

greatest cause of famines. In addition to destroying crops and food supplies, it disrupts food distribution through the use of sieges and blockades. In the past decade, war has had a greater impact on food supplies in Africa, particularly the Sahelian region, than have the severe droughts that periodically plague the continent.

Freedom from hunger and political freedom go hand in hand. As subsistence agriculture and periodic famine were the economic foundations of monarchy and feudalism, the generation of agricultural surpluses that stimulated commercialism, and later industrialization, have formed the basis for the rise of democratic institutions. Greater freedom for individual action and ownership both stimulate and are supported by greater productivity in agriculture. Authoritarian government is frequently either the result or the cause of food shortages--its use of force justified on the one hand to meet a crisis situation or necessitated on the other to restore order and initiate emergency measures. *Only in democracy is government compelled to pay attention to the needs of people at the lowest levels of society.* The dual pressures of a free press and electoral system have helped a free and democratic India to avoid famine for nearly 50 years, despite the recurring incidence of widespread famine in previous centuries up to as recently as four years before the country gained independence. Even in China, which appears a blatant contradiction of this thesis, it was the liberalization of the agricultural sector and greater freedom given to the peasant community that were responsible for the remarkable increase in food production. For countries still in an early stage of political development where government lacks even the force of authority to govern, the first essential steps may necessarily be toward greater centralized authority and control, a common stage in the political evolution of the nation state. But that central authority cannot release the full initiative of its farmers or tap the full potentials of agriculture without first instituting broader democratic measures. Recent events in Eastern Europe demonstrate that where states attempt to use authority as the lever for agricultural development, the achievements are likely to be limited and short-lived. The inability of the authoritarian system to produce enough food for its people was one of the major factors contributing to its downfall. *Democracy is the most potent fertilizer to ensure food security at the household level.*

ICPF was founded at a time when a consensus was emerging worldwide that drastic steps were needed to wipe out the hunger and famine that were ravishing parts of the developing world and afflicting to a lesser extent poorer sections of the industrial nations. Recognizing that the problem of

food was inextricably intertwined with the problems of peace, political and social stability, and employment and that no comprehensive solution to one was possible without substantial progress on the others, it was our hope and intention that this growing consensus on food could be harnessed to accelerate progress on arms control and disarmament. Ironically, events have unfolded in the reverse. Rapid progress has been made during the intervening years to reduce international tensions, but little has yet been done effectively to address the food issue. Now that opportunity is before us and compels us to act, for without significant progress on abolishing hunger from the earth, our efforts at arms control and peace-making may come to naught. Increasing the availability of food and jobs form essential components of a comprehensive strategy to eradicate hunger, poverty and violence from the world.

Food Security

Despite great achievements in the post-war period, we live in a world of persistent hunger amidst plenty. Presently, around 800 million people living in 46 countries are malnourished and 40,000 die every day of hunger and hunger-related diseases. Widespread famine currently threatens nine African countries, where the lives of 20 million people are at risk.

Hunger and famine are usually associated with a physical shortage of food. Yet, even where food supplies are adequate, absence of opportunities for gainful employment to generate the purchasing power needed to buy food can result in hunger. Lack of food and employment are the basis for the poverty that still afflicts one-fifth of humankind. When it comes to food there can be no justification or excuse--everyone must have enough to eat, and can have enough. A world dedicated to upholding the political rights and property rights of nations and individuals cannot fail to recognize and enforce the most fundamental of all human rights--the right to live.

Contrary to the fears raised in earlier centuries and revived in recent decades, today the world does possess the capacity to feed everyone, even at current levels of food production--subject as it is to disincentives, quotas, restrictions and trade barriers that food surplus countries impose to curtail food production, while other nations remain in perpetual deficit. In spite of a doubling of population in the developing countries since 1960, their average food supplies have increased from 1950 calories to 2475 calories per capita

per day, i.e. from an average of 90 percent to 107 percent of the minimum caloric requirement. During the past 12 years alone, per capita food production in developing countries has risen by 15 percent. Overall, the proportion of people in developing countries suffering from hunger and malnutrition has dropped dramatically both in relative and absolute terms, from 941 million people constituting 36 percent of the population of these nations in 1970 to 781 million constituting less than 20 percent of the population in 1990.

Current projections indicate that the growth rate in world agricultural output will continue to exceed population growth over the next two decades. By 2010, foodgrain production is expected to reach four times the level in 1960. Increased production of other food crops is expected to raise per capita availability in the developing world to 2700 calories per day. Per capita meat production is expected to grow by 60 percent and milk production by 20 percent. During the same period, malnutrition is projected to decline to 640 million persons constituting 11.6 percent of the population of developing countries, a little over half the level in 1990.

Yet the achievements have not been uniform throughout the developing world. Per capita food production has actually declined in more than half of all developing countries over the past 15 years. In 18 countries with high rates of population growth, primarily in Africa, it has been deteriorating for the past three decades. While the Near East, North Africa, East Asia and Latin America/Caribbean regions are expected to achieve average food supplies of 3000 calories per day by 2010, 200 million people will still be malnourished in South Asia and 300 million, or one-third of the population of Sub-Saharan Africa, will suffer from severe food deficits. Due to rapidly expanding population, agricultural production in Sub-Saharan Africa would have to grow at a four percent annual in order significantly to improve per capita availability of food. Thus far, only East Asia has sustained such high growth rates in agriculture, which averaged 6.1 percent from 1970 to 1990. This trend, if not halted and reversed, casts a renewed spell of gloom over the hopes of hundreds of millions of people to escape from hunger, and over all our hopes for peace in the 21st Century.

The projection of future prospects based on past trends is especially questionable with regard to food. Not even some of the most prominent agricultural economists expected the gains in food production which have occurred in the past several decades. An international team of experts visiting India in 1963 projected a mere 10 percent growth in foodgrain production by 1970, whereas growth actually achieved during this period was 50 percent. Neither technology, financial or natural resources pose

insurmountable obstacles to achieving dramatically more over the next 15 years than is indicated by past trends or current projections.

The idea that hunger cannot be conquered because we are running out of land to support rapidly burgeoning populations is contradicted by the facts. Globally, there is no correlation between population density and hunger. China, with only half the arable land per capita as India, produces 13 percent more foodgrains per capita. Taiwan and South Korea have only half the farmland per capita of Bangladesh, yet they produce 40 percent more food per capita. Tiny Netherlands with the highest population density in the world, produces more than sufficient food to feed itself and remain a large net food exporter. Currently 11 percent of the world's land surface is used for agricultural crops, just 4 percent more than in 1960. A comprehensive theoretical study of soils, climate, vegetation and topography conducted by Buringh, van Heemst and Staring (1975) indicated that both land and water utilized for agriculture could be doubled, if necessary, and that the earth could support 36 times the 1975 level (18 times the 1990 level) of cereal production using the same share of cultivated land for cereal production. There would be severe practical obstacles to such a vast expansion of croplands, but these findings suggest that physical limitations to food production are not the primary constraints. A more commonly accepted estimate indicates that the world's land and water used for agriculture could more than double.

Agriculture's Dual Role

Achieving food security necessitates increasing food production and employment opportunities. In the previous chapter, we presented strategies to achieve full employment. In this chapter, we examine the prospects and strategies for producing sufficient food for all.

Agriculture plays a dual role in the abolition of hunger--it produces the food and it can also produce a great many of the jobs needed by households to buy food in developing countries. Since agriculture is the world's single largest employer, raising production and productivity in this sector can immediately place additional purchasing power in the hands of the rural poor, who will in turn utilize the additional income for purchasing more food, clothing and other basic consumer goods that will create more jobs and higher incomes for countless others. The increased agricultural produce becomes raw material for a wide range of agro-based industries and services that stimulate formation of new enterprises, and create down-stream jobs as well as products for further processing, domestic sale or export. This is the

rationale behind the Prosperity 2000 strategy for India, which forms a viable model for many other countries to emulate.

Promoting job creation in agriculture appears at first glance to contradict the global trend of the past hundred years, in which employment in this sector has declined steadily from historic highs of more than 70 percent in the industrial nations to the point where, today, only two percent of the workforce in UK, three percent in United States and four percent in Germany are directly engaged in farm operations, although a much larger percentage of the workforce in these countries is involved with businesses and industries linked to agriculture. But this strategy follows the natural course of development that has occurred in many countries, which now have a relatively small portion of their work force in agriculture. *Agricultural surpluses and rising farm incomes are preconditions and stimuli to economic growth and industrialization.* For most developing countries with the vast majority of people still residing in rural areas, the most cost-effective and practical strategy to generate more jobs and raise personal incomes is through agriculture. *Today, more than 1.1 billion people in developing countries, constituting 58 percent of the economically active population, work in agriculture. The decline in proportion of the workforce in this sector must necessarily be gradual. An employment strategy which generates a large number of new jobs in the non-farm rural sector could contribute substantially to diversification of rural employment opportunities.*

A similar strategy has proved highly effective as an engine for growth in a number of East Asian countries, which employed crop intensive and labor intensive technologies to achieve increasing levels of employment and productivity in agriculture. *Empirical evidence from these countries confirms that wherever agriculture becomes prosperous, labor becomes scarce.* Between 1952 and 1968, land reform in Taiwan increased the number of cultivators five-fold, leading to dramatic increases in output and productivity, a shift from food grains to higher value-added fruit and vegetable crops, and the creation of more than 100,000 jobs in post-harvest and processing activities. These changes in employment led to enhanced rural incomes and purchasing power, growing domestic demand for goods and services, including manufactured goods, and further job growth. Land reform in S. Korea during the early 1950s increased the number of owner cultivators from 50 percent to 90 percent and led to a 4.7 percent annual growth in labor productivity per hectare over a 15-year period. Then, as agricultural technology improved and industrialization gained momentum, the proportion of S. Korea's work force engaged in agriculture fell from 55 percent to under 16 percent over the following three decades. Thailand,

which has had the fastest growth of the East Asian economies in recent years and still employs 70 percent of its work force in agriculture, has also attained high rates of production and employment in the rural sector through diversification in agriculture from traditional cultivation of rice and rubber to high-value crops and agro-based industries.

Economic Potential of Increasing Demand for Food and Agricultural Products

There are powerful social forces active in the world today that can stimulate significantly greater growth in both food demand and production. Liberalization of world trade, especially trade in agricultural products; emphasis on aggressive strategies to expand employment opportunities in developing and developed countries; advances in technology for agricultural production, food processing and dissemination of information; rising levels of education, which spurs rising expectations; and the energizing impact of democratization can substantially raise growth rates in supply and demand for food above those currently projected for the next two decades. Current projections, made at a time when Eastern Europe was in the depth of its transition crisis would also prove too conservative if demand were to recover more rapidly in some of these countries. Already Russia's cocoa imports have risen to four times the level in 1991.

The gap between the availability of food in industrial nations and developing countries remains large. Food supplies per capita, measured in terms of total calories available, for all developing countries are only 72 percent of the levels in the industrial countries. The availability of protein for consumption is 40 percent lower in developing countries than in industrial nations. Viewed from another perspective, this gap represents a huge potential for the growth of agriculture and through it for more rapid industrialization and job creation in developing countries and rising exports from industrial nations. Rising incomes are accompanied by a diversification in diet which generates greater demand for wheat, meat and dairy products, fish, vegetables and fruits and processed foods. Projections for the year 2010 anticipate a 60 percent increase in cereal consumption in developing countries, a 52 percent increase in meat consumption, and a 69 percent increase in milk consumption. Meat consumption in China has tripled since 1978 and is expected to more than double again over the next two decades. Sugar consumption in developing countries is currently less than half the average of industrial nations. In India, sugar consumption is projected to rise

from 13 kg to more than 25 kg, generating a demand for a 100 percent increase in sugarcane production, the establishment of 300 to 400 new sugar mills in the country and the creation of 3 to 4 million new jobs in this industry alone. Worldwide, raising the average level of sugar consumption in developing countries could generate tens of millions of additional jobs in agriculture, industry and services.

Viewing the future demand for food from this perspective reveals a tremendous opportunity. Vast sections of humanity now aspire for the higher quantity, wider variety and greater nutritional content of food once consumed only by the wealthy. An effort to raise nutritional standards in the developing countries nearer to the levels prevalent among industrial countries will not only eradicate hunger, but also dramatically spur economic growth, employment, and purchasing power among the rural poor, stimulating growth of production and jobs in industry and services, as well as increasing exports and imports. Raising the entire world population to the level of the prosperous nations would require a 72 percent increase in total world food production, measured in terms of calories. In order to meet the people's nutritional requirements for fruits and vegetables, India's production of these crops needs to double within the next decade. Achieving that high level will generate more than six million new jobs in the country.

Broadening the scope to include other agricultural products, particularly textiles, the potential for accelerating global economic growth by an agriculture-led strategy is even greater. Cotton is a crop with a very high income and employment multiplier effect. Per capita cotton consumption in poorer developing countries such as India is less than half the level in China and less than a third the level in industrial nations.

Measures of the gap between the prevailing levels of nutrition in developing countries and the levels achieved in the West reveal a huge potential for increasing demand for agricultural production, which can serve as an engine to drive growth of the world economy. Extrapolation from ICPF's studies of employment potential from expanding agricultural production in India suggests that more than one billion jobs can be created worldwide through a strategy that focuses on raising agricultural productivity as an engine for improving diets, employment and industrialization.

Challenges in Agriculture

The ratio of growth of foodgrain production to population growth has entered into a period of decline over the past decade--increasing at just one percent per year compared to three percent during the previous two decades.

There is a similar trend for other staple crops and meat. For fish, there has actually been a net decline of seven percent in per capita world production. To a large extent, this slowdown is the result of slower growth in demand--especially in industrial countries--underlining the fact that food security is predominantly an economic problem rather than a technological one. But the decline in the growth of global agricultural productivity over the past decade is also attributable to a variety of political, economic and environmental factors.

Political Priority

After World War II, developing countries that had suffered from recurring famine in early periods struggled to increase food production as an urgent national priority to keep up with surging population growth and spiraling demand for food. India's Green Revolution was spurred by the imminent threat of severe famine in the mid-1960s. China was compelled by the loss of perhaps as many as 30 or 40 million lives to famine in the late 1950s. But the very motive which stimulated these achievements moderated them as well. For while these governments took concerted steps to meet the minimum needs of the population for food, they tended to overlook the equally great potential to utilize agriculture as an engine for economic growth and job creation. Once minimum food needs were met, attention was diverted to other sectors of the economy. Politically, the elimination of the famine threat arising from food shortages is one of the reasons for slower growth in agricultural productivity in recent years. This has resulted in a marked decline in investment by developing countries in government-sponsored agricultural research and rural techno-infrastructure. This tendency has been compounded by the false notion that in order to achieve economic growth, new jobs must be created in industry and services.

Economic Policy

The resurgence of faith in the free market and liberalized trade has placed developing countries under increasing pressure from donors and international financial institutions to abandon special types of economic assistance to the agricultural sector in the form of subsidies for supply of critical inputs such as fertilizer and seeds and price supports for marketable crops. This pressure has recently been aggravated by the impact of structural adjustment programs that usually involve drastic reduction in government subsidies.

In Ghana, for instance, the cost of fertilizer as a percentage of total cultivation cost has risen ten-fold in recent years. The impact of macro-economic reforms on agriculture has been most severe in the countries of Eastern and Central Europe, where production in this sector has fallen drastically over the past few years.

Technology

Slower growth in productivity can be attributed to a slow down in the development of improved hybrid varieties, shortages of quality seeds and fertilizers, and the absence of techno-infrastructure facilities needed for storage and processing, expansion of markets, transport and distribution.

Environment

A number of factors are posing serious obstacles to productivity growth and threaten even current levels of production. Of the poor, 80 percent in Latin America, 60 percent in Asia and 50 percent in Africa live on marginal land of low productivity and high susceptibility to environmental degradation. Raising productivity on these lands can be extremely difficult. Quality farm lands are being lost at an astonishing rate to diversion for non-farm uses, desertification, deforestation, soil erosion, and the depletion and pollution of water resources. These factors have resulted in the degradation of nearly one billion hectares worldwide since World War II. In addition, climatic changes resulting from the increased emission of carbon dioxide into the atmosphere are expected to exert additional negative impact over the long term, the extent of which is difficult to assess.

Opportunities in Agriculture

Rapid and sustained expansion of food and agricultural production cannot be achieved without concerted efforts to address these factors. At the same time there are a number of positive factors that offer opportunities to increase significantly productivity in the near to mid-term.

Closing the Productivity Gap

A survey comparing the levels of productivity for major crops between countries reveals a wide disparity between proven technological potentials

and actual field results for every crop. Cereal yields in Western Europe and North America average 4.5 tons per hectare, compared to three tons in Asia, 2.3 tons in Eastern Europe and the former Soviet Union, two tons in Latin America and slightly greater than one ton in Africa. FAO projects a 40 percent increase in wheat yields in 92 developing countries, excluding China, by 2010. In rice, countries with widely differing climatic conditions, such as Australia, Korea, Egypt, Spain, Japan and Italy, achieve average yields nearly double the world average and two to three times the yields achieved in countries such as India, Malaysia, Philippines and Thailand. Total rice yields in 92 developing countries are expected to rise to 37 percent by 2010. Maize yields in Greece, Chile, Austria, Italy and Germany average more than double the world average, and five to six times the averages achieved in large maize producing countries such as India. Even comparing areas under irrigated maize, average yields range from 1.5 to 8.4 tons per hectare. New varieties of maize are under development that yield 30 percent more grain in a drought season than conventional varieties. They could be especially effective in lowland tropics, including much of Africa. Potato yields in Belgium and the Netherlands are roughly three times the world average. This productivity gap between what is routinely achieved by different countries represents a vast immediate potential for improving yields that does not require significant additional investment of time or money in R & D. The world already possesses the knowledge, technology and organizational capacities to raise considerably average world yields in major crops.

Emphasizing Cultivation Practices

The phenomenal increases in productivity achieved over the past three decades through the development of improved and hybrid varieties of seeds has overshadowed and distracted attention from the equally great potential of raising yields through improvements in methods of cultivation. This is especially true since much of the slowdown in productivity growth is attributable to depletion of soil and water resources, which can be partially rectified or offset by improved practices. Growing environmental concerns in the West have generated pressure for reducing fertilizer consumption in developing countries, when in most instances fertilizer application levels are lower than those in Western Europe by a factor of five or ten times. Increased, rather than reduced, use of chemical fertilizers will be essential to the expansion of agriculture in these countries and can considerably increase crop yields.

Total fertilizer consumption by developing countries is expected to double by 2010. Furthermore, replacing macro-nutrients lost during intensive cultivation does not compensate for the depletion of more than a dozen micro-nutrients that also determine the quantity and quality of crops. Even in such agriculturally diverse countries as the United States and India, it has been demonstrated that better management of micro-nutrients can raise productivity substantially--in some intensively cultivated areas by as much as 50 to 100 percent or more on a wide variety of crops--without significant changes in the structure or method of cultivation. Greater attention is needed to conserving and applying organic sources of manure and raising nitrogen-fixing crops, as well as to the use of bio-fertilizers. Unlike the creation of new irrigated lands, application of such environmentally sustainable field practices is neither very costly nor technology intensive and can be widely propagated through improvements in agricultural training and extension.

Increasing Exports

Over the next six years, the agreements reached during the Uruguay Round of GATT negotiations are expected to reduce the tariffs levied by the industrial nations on agricultural products by 37 percent and on tropical food exports by 43 percent. Developing countries will cut agricultural tariffs by an average of 24 percent. In addition, North American and West European countries have agreed to cut agricultural subsidies by one-third. Together these cuts are expected to result in a 20 percent rise in exports of agricultural and processed foods by 2005. Developing countries share of this increase has been estimated at \$20 to 60 billion annually. Increased trade can act as a strong stimulus to growth of agricultural, agro-industry and rural employment, provided that these countries respond dynamically to the opportunity by raising productivity and strengthening rural infrastructure for storage, processing and distribution. However, *rising demand within developing countries themselves will limit overall growth of exports and increasing exports will push up domestic food prices, unless much greater priority is given to matching production with opportunities for home and external trade.*

Increased Private Investment

The modernization of the farm sector very much needs the investment, technology, professional management and marketing expertise which private

firms can bring. Wherever land reforms have resulted in the division of farms into small parcels, farms need to be supported by well-organized services, particularly for post-harvest handling, provided either by companies or cooperatives. Economic liberalization offers expanded opportunities for private enterprise to work with small producers in a wide range of agro-industries to combine the social benefits of small holdings with the economies and modern of corporate management. The contract system of agricultural production introduced in backward regions of Thailand has enabled small farmers to work closely with private businesses to produce labor-intensive, value-added crops, with technology, training and marketing provided by the companies, resulting in a rapid rise of farm incomes and job opportunities. Developing countries possess significant advantages in terms of climate, year round production and low labor costs that are conducive to foreign investment. With private capital flows on the rise, there is an opportunity for developing countries to upgrade technology and obtain direct access to foreign markets by providing a conducive atmosphere for foreign investments and collaborations in agri-business ventures, such as hybrid seed production, flowers, processed fruits and vegetables, fresh and salt water aquaculture and sericulture.

Shift from commodity-based to resource-based planning

The responsibility of governments to achieve dramatic increases in foodgrain production to keep pace with population growth naturally led to a commodity-based approach to agricultural development in many developing countries. Governments projected demand, set production targets for specific crops, and instituted programs to help farmers produce the food needed to meet the minimum needs of the population. But once shortages are eliminated, the focus on specific commodities becomes a barrier to further agricultural development, because there it retards diversification into more profitable commercial crops. Contrary to free market theory, farmers in many countries have tended to continue production of traditional crops, for which prices have fallen as supplies increase.

There is still a need for government to educate and encourage farmers to adopt resource-based planning, oriented to national and international market potentials and based on principles of economics, employment and ecology. Resource-based planning examines how the available land and water resources can best be utilized to achieve maximum and sustainable economic return to the farmer, which is only rarely the priority of

governments in developing countries that tend to focus on production targets for specific commodities. This shift can lead to diversification into commercial crops, such as fruits and vegetables, that generate significant increases in on-farm employment and incomes and act as a stimulus to downstream agro-industries.

From minimum needs to maximum potentials

The factors which have perpetuated commodity-based planning in agriculture have also fostered an emphasis on minimum targets, rather than maximum goals. Often government has perceived that its responsibility was to ensure sufficient food to prevent famine, not maximum output and profitability. Government machinery has proved effective in forcing through radical measures to disseminate new technology, seed and production methods in the face of crisis, but it usually lacks the driving impetus to work for the highest benefit of individual farmers. The shift needed is for planners to study the potentials of the agricultural sector to serve as an engine for job creation and higher incomes, a stimulus to industrialization and exports, and then to formulate national goals to maximize exploitation of these potentials.

Integration of Agriculture, Marketing and Processing

Conscious efforts can be made to foster the natural linkage between agricultural and industrial development by placing emphasis on crops that have the greatest potential for stimulating the growth of agro-industries, services and exports. Filling in the missing links in the chain of processing and distribution, such as pre-cooling for fruits and vegetables, can enable small farmers to produce for national and export markets, results in higher at-farm prices and creates alternative forms of rural employment.

Empowerment of Women

The vast majority of women living in rural areas are engaged in agriculture. Therefore, upgrading productivity, skills and incomes in this sector is the single most effective means for improving the livelihood of women in developing countries. Skill development programme in areas such as hybrid seed production, floriculture, inland aquaculture, vegetables and poultry can be particularly beneficial. Promotion of micro-level credit institutions and savings programmes can generate capital for establishment by women of small rural enterprises.

Food Security in Africa

The present prognosis for Africa resembles the pessimistic assessment of Asia in the 1960s that projected most Asians would face starvation in the 1970s. Over the past two decades, total food production in Africa has grown at exactly the same rate as for the world as a whole, but high levels of population growth have resulted in declining availability of food per capita in many countries, particularly in the Sub-Saharan region. This suggests that a grim outcome is not inevitable, if concerted action is taken now.

Several factors have impeded achievement of higher agricultural growth rates in the region: political instability and civil unrest, poor macro-economic and agricultural policies, drought, and physical difficulties in farming in some areas. The ravishes of war have had the most devastating effect, but inadequate and counter-productive policies have also had major impact. Low mandated prices for agricultural products have acted as a disincentive to producers. State control of farm support systems including marketing, transportation and input supply is highly bureaucratic, inefficient, and, often, corrupt. Overvalued exchange rates encourage import of low priced farm products, depress local farm incomes, and make exports uncompetitive. Underdeveloped infrastructure results in high transport and marketing costs. The slow rate of technological development and diffusion have slowed growth in agricultural productivity. Irrigation potential is underdeveloped and poorly managed.

A major international commitment is needed to reverse the trends and end the famine threat in Africa. The region possesses considerable potential that could be converted into higher rates of growth. Africa has the world's largest reserve of arable land, one billion hectares, of which only 20 percent is presently cultivated. Fertilizer use in Sub-Saharan Africa is very low relative to other developing countries. Per hectare consumption averages just 13 percent of the level in India and 3.5 percent of the level in China. Recent studies indicate that the area under irrigated crops could be expanded four to five times, primarily through small, private irrigation systems. Improved farm systems have demonstrated that they can raise the yields of most crops in the region. Changes in agricultural policy can improve the efficiency in factor and output markets, raise the incentives of private small farmers, and improve technology generation and dissemination. Institutional reform can improve marketing and distribution services. Investment in infrastructure can significantly lower marketing costs. Indigenous technological capacities can be strengthened to develop location-specific technologies, rather than relying on direct material transfer of crop varieties unsuited to local conditions. Greater emphasis on training of local manpower can significantly improve the effectiveness of agricultural extension systems and integrated rural development projects.

Special Status of Agriculture

The obvious limitations of government directed agricultural development coupled with the resurgent popularity of free-market policies following the collapse of communism in Eastern Europe and the successful completion of the GATT negotiations, raise fundamental issues about the status of agriculture and the role of government in this sector. Advocates of private enterprise contrast the failures of East European agriculture with the achievements of the industrial nations as ample evidence of the free market's superior capacity to achieve high levels of agricultural productivity. Recently, the market is being propagated by international and bilateral financial institutions as the most effective instrument for managing agriculture throughout the world.

This view leaves two questions unanswered. First, if the market is so effective, why is it that every major capitalist economy utilizes such a vast array of subsidies, incentives, controls, production quotas and fixed pricing mechanisms to govern production and trade in agricultural products? Even after GATT, protection for this sector by industrial nations will remain high. Second, granted that the market works effectively for mature capitalist societies with high levels of technology, education, productivity, living standards and food surpluses and relatively small portions of the workforce dependent on agriculture, is the same necessarily true for countries at an earlier stage of development, in which a majority of the workforce is dependent on agriculture for sustenance, levels of education, productivity and incomes are low, and any increase in food prices can have devastating impact on food consumption levels in the country? The answers to these questions are relevant both to the countries presently making the transition from centrally-planned to market economies in Eastern Europe and to poorer developing countries striving to achieve food security.

Nations accord special status to their agricultural sector for several reasons. Continuous supplies of food are absolutely essential to the welfare of the population. Food prices are extremely sensitive to changes in the supply of foodstuffs. Even a small increase or decrease in supply can lead to a very wide fluctuation in prices. A bumper harvest can depress prices to the point of bankrupting large numbers of farmers. A poor harvest can send food prices soaring beyond the purchasing power of large numbers of people. Buffer stocks, subsidies and incentives are used to protect agriculture from sharp price fluctuations. Although the principles of free trade argue that

countries should produce only those items in which they possess a competitive advantage and procure the rest from overseas, few nations are willing to entrust their food supply entirely or even substantially to foreign parties. Therefore, for decades Japan maintained trade barriers to keep the price of rice at more than six times the international level in order to protect and preserve domestic rice producers, the US government exports subsidized American wheat, and the European Community sells subsidized milk powder and butter internationally at prices up to one-third below the domestic level.

The debate over the legitimate role of government in protection of the agricultural economy is partially a question of timing. Market institutions and competitive strengths are normally built up over decades. Advanced nations with highly mechanized and efficient agricultural sectors are in a much better position to withstand the impact of foreign competition than countries in an earlier stage of development. Countries suffering from food deficits and those in the midst of a radical economic reforms, are ill-advised to make a sudden, wholesale shift to market mechanisms to stimulate growth of this sector.

ICPF strongly favors a movement toward liberalization of world trade in agricultural products because it can be of immense benefit to job creation, industrialization, and economic growth in developing countries and thereby act as an engine for growth and employment generation in the industrial world as well. The liberalization of domestic policies for this sector are also needed in developing countries where government controls and populist policies have often retarded growth of agriculture. However, the timing and extent of these measures should be dictated by the relative strengths and needs of each particular country, not by strict adherence to any economic policy.

Role of Government

Agricultural subsidies and protection are subsets of a larger issue--the role of government in agricultural development. The experience of the past four decades strongly supports the view that government can play a vital role in stimulating agriculture up to the stage where the rural economy demonstrates the dynamism needed to take off on its own. Although the Green Revolution has been widely heralded as an achievement of modern technology, the hybrid seeds and chemical-based cultivation practices that formed the technological basis for the breakthrough in foodgrain production constitute only one essential part of the Green Revolution strategy. New production formed part of a comprehensive, integrated development strategy

in which government played a central and crucial role. This strategy included massive, country-wide demonstration programs to introduce farmers to new technology, establishment of new public sector agencies for rapid multiplication and distribution of seeds, assured markets and guaranteed floor prices for food grains to eliminate fear that higher production would result in crashing prices, construction of additional storage capacity to house the increased production, import or manufacture of fertilizers, and, most importantly, for transport, distribution and marketing of surplus grains in food deficit areas. Few developing countries--perhaps few countries at any stage of development--could have marshaled resources on such a massive scale and instituted such widespread changes so rapidly without heavy reliance on the government for both planning and execution. *In the majority of developing countries, government is still the most organized and efficient agency and the only one capable of such significant initiative. In formulating strategies, it is essential to take fully into account both the stages and steps of the development process. At this stage in their development, it is highly unlikely that food-deficit African nations can make rapid progress toward food self-sufficiency without strong government support and investment to improve technology, training, techno-infrastructure and trade.*

Once the rural sector begins to exhibit its own dynamism, as in the majority of developing countries, there is strong justification for a shift in the role of government from that of prime mover, planner and controller of development to that of a catalyst and pioneer. Government agencies can tap the potentials of agriculture identifying new commercial opportunities, educating farmers, demonstrating new potentials, assisting in the transfer and dissemination of new technology, and promoting the establishment of effective organizations--preferably privately or cooperatively owned by farmers or at least with their participation--to process, distribute and market what is produced.

Coping with the environmental problems to preserve the ecological foundations essential for sustainable agriculture is an area in which government has special responsibilities and must play a leading role on an on-going basis. Regulating the diversion of prime farm land for non-farm uses, expansion of irrigation capacity, control of groundwater exploitation, major programs for reforestation and to prevent or reverse desertification, and regulation of pesticide use can only be effectively planned, monitored and regulated by governments.

Comprehensive Strategies

In this and previous chapters, we have tried to present an integrated

perspective of the political, economic and technological factors that need to be taken into account in formulating a comprehensive approach to the issues of peace, food and employment. In an effort to illustrate the potential efficacy of this approach in a country representing nearly 25 percent of the world's poor, ICPF conducted an in-depth country level study in India to evolve a strategy for stimulating massive increases in job growth and food production (see box).

PROSPERITY 2000 STRATEGY FOR INDIA

The potential for accelerating job creation and increasing food production through a mix of the strategies discussed in this report is illustrated by the strategy which ICPF has proposed to achieve full employment in India and thereby to raise the entire population above the poverty line by generating additional employment opportunities for 100 million persons in the coming decade. This strategy utilizes agriculture as an engine for growth by accelerating the development of commercial agriculture, agro-industry and agro-exports. It calls for a shift in thinking concerning agriculture from production for survival and subsistence to production for maximum and sustainable profit, from emphasis on meeting minimum needs to realizing maximum potentials, from commodity-based to resource-based planning. It seeks to tap the country's competitive advantage in labour-intensive agricultural crops and allied industries to double agricultural production - raising the annual growth rate to 4 per cent (versus 2.3 per cent in the 1980s) - achieve complete nutritional self-sufficiency, raise rural incomes and double India's total exports.

Creating new jobs through this low-cost strategy can be accomplished entirely with the country's own resources, though foreign firms will find investment in India's agro-industrial sector very attractive. Initially, about half of the new jobs will be generated on farms by raising productivity through methods to improve management of micro-nutrients and water, expanding the total irrigated area by more complete utilization of the substantial additional capacity that has already been created, emphasis on more labour-intensive commercial crops such as sugar, cotton, fruit, flowers, and vegetables, sericulture, inland and coastal aquaculture, reclamation of wastelands for forestry and fodder, and increasing subsidiary incomes from animal husbandry and poultry.

The expansion and intensification of cultivation of these products will raise agricultural output by \$25 billion and generate approximately 45 million equivalent full-time unskilled and semi-skilled jobs in agriculture for unemployed and under-employed farmers and landless labour.

The additional agricultural production will form raw material for expansion of rural industrialization and non-farm employment. Another 10 million jobs will be created in downstream agro-industries located in rural areas - in sugar mills, cotton and textile mills, processing units for fruit, fish and silk, and in marketing and distribution - thus serving as a counter-magnet to urban migration. Growth of agro-industry will stimulate demand for industrial machinery and services. The multiplier effect of skyrocketing rural demand will stimulate demand in a broad range of consumer industries and create an estimated 45 million rural and urban jobs in industry and services.

Funding for the strategy would come from a mix of public sector and private sector investment. The funding requirements are within the range of current five-year projections: 84 per cent of additional planned investment in agriculture and 25 per cent of additional planned expenditure in industry. The average cost per additional job is less than \$1,000, roughly one-tenth the average cost of jobs in India's private sector and one-hundredth the cost of new jobs in the public sector.

Implementation of the strategy will require a substantial investment in training of both on-farm and industrial workers, but the plan is based on the recognition that enhancing the skills of the nation's rural work-force will take time and must be done incrementally. As the programme gains momentum and rural incomes rise, the demand for industrial products and services will grow, resulting in a shift to greater farm mechanization and gradual movement of more and more workers to non-farm employment.

Organization is a crucial issue in a country of more than 90 million small farmers. The strategy envisions the establishment of several new types of organization to bring together small farmers for processing, marketing and distribution and to promote more active linkages between farmers and the private industrial sector, both Indian and foreign.

In order to implement such a massive strategy within a ten-year period, government must play a central role as catalyst and pioneer, rather than owner or manager, to generate widespread public awareness about the technological and commercial opportunities, identify optimal and sustainable resource-based potentials for specific regions, facilitate the transfer and dissemination of technology, provide training and

demonstration, invest in the techno-infrastructure needed for transport, storage and distribution, offer management education to rural enterprises, and promote the establishment of new organizations.

The Prosperity 2000 strategy has been adopted by the Indian government and incorporated in India's Eighth Five Year Plan. A Small Farmer's Agri-Business Consortium, a specialized agency for implementation of the strategy, has been established by the government to coordinate implementation. In order to evolve a detailed methodology for implementation and to demonstrate the feasibility of the strategy model, district programmes are being organized in 12 districts around the country. A detailed study of Pune District in the State of Maharashtra has documented the potential for creating 750,000 jobs through this strategy. Extrapolation of these results suggests that the 100 million jobs that India needs to create and the 1 billion needed in the developing world are, indeed, achievable, provided that industrial countries adopt trade policies on agricultural products designed to enhance export opportunities for developing nations.

International Agenda for Food Security

The crucial importance of food security to world peace and economic development demands that the international community take collective responsibility and initiative to eradicate hunger and famine on a global basis as a complement to the initiatives of individual countries to deal with the problem domestically. The growth of food production in developing countries can be accelerated dramatically by the application of resource-based, location-specific strategies that incorporate a proper blending of traditional and frontier technologies and integrate all the links in the chain of production, processing, transport and distribution. Conditions vary too widely from country to country for detailed recommendations to be broadly applied. However, a number of strategies are relevant to the majority of developing countries. Some of the components of an Action Plan designed to achieve this goal are given below.

1. *Elimination of Agricultural Trade Barriers by Industrial Nations:* The agreements reached for liberalizing agricultural trade in the Uruguay Round of GATT are an important step forward, but they will not release the full dynamism of the agricultural sector, which is so critical for more rapid growth of incomes and employment in both developing and developed countries. In the previous chapter, we have called for rapid reduction leading to a complete elimination of agricultural subsidies and other trade barriers by industrial nations, which can generate a positive multiplier effect. It has been estimated that complete liberalization of trade in agricultural commodities would yield an annual gain (in 1992 dollars) of about \$25 billion for OECD countries and \$22 billion for developing and formerly centrally planned countries. Actual gains could be very much higher. These subsidies cost Western consumers several hundred billion dollars annually. In addition, they lead to dumping of surplus sugar, cereal, milk and beef in developing countries, often pushing down the prices which farmers in these countries receive for their produce to far below their production cost. The benefits of eliminating these subsidies would be multiple. For instance, eliminating subsidies to sugar-beet growers and dairy farmers in Europe would stimulate greater demand, not only for imported sugar from developing countries, but also for cocoa, which combined with sugar and milk is the basis for the chocolate industry. Measures of this type will result in substantially increased demand for agricultural products from developing countries, the first step in an upward spiral of global economic growth that will stimulate industrial exports and job growth in both East and West.
2. *Global, Environmentally-Sustainable Green Revolution:* The term 'Green Revolution' has been praised for its positive impact on crop productivity and criticized for its likely adverse effects on the environment and social equity. It is often overlooked that one of the most beneficial consequences of the Green Revolution has been its 'forest-saving' nature. If agricultural production had not been increased through higher productivity, more forest land would have been diverted to annual cropping. India alone would have needed at least 50

million hectares of additional land to produce the wheat and rice it now produces, if average yields had remained at pre-Green Revolution levels. It is, therefore, important that the concept of higher productivity per unit of land, water, time, energy, labour and capital be extended to all farming systems and all regions. Most developing countries will have no option but to produce more food and agricultural commodities from less land and water in the twenty-first century. The challenge lies in accomplishing this in an environmentally and socially sustainable manner. The FAO should launch a co-ordinated international effort to extend the principles and strategies of the Green Revolution to eradicate global food shortages within a decade. The Green Revolution was originally applied to improving productivity of wheat and rice in high potential areas. After the first rounds of phenomenal success, the effort to extend it to other agricultural regions and other crops lost momentum, because the urgent necessity had been eliminated. Recognizing the importance of agricultural surplus to rural employment, industrialization and exports, renewed efforts are called for to apply the comprehensive, integrated approach of the Green Revolution to high potential commercial crops and to all regions. With the knowledge gained over the past 30 years, greater emphasis can be placed on ensuring that the productivity improvements are not only economically viable but also ecologically sustainable. Region-specific strategies should be adopted for mountain areas, high rainfall tropics, uplands and irrigated plains. The crops covered should include foodgrains and oil seeds, cotton and jute, sugar cane, fruit, vegetables, dairy, meat, medicinal plants, spices, and agro-forestry for fodder, fuel and industrial raw materials.

3. *UN Development Force for Food Deficit Regions:* The complex task of planning, managing and executing nationwide programs to eradicate food shortages may be beyond the political, administrative and management capacities of some governments, due to absence of training and experience, political instability or social strife. The slowest member country retards the progress of the whole world. The interests of global peace, political stability and basic human rights justify and may necessitate external assistance to help

countries establish viable food security systems. In countries that are unable either to produce sufficient food or to initiate coordinated programs to overcome present deficits, the International Development Force proposed earlier in this report, can act in a trusteeship role to assist in designing and implementing integrated programmes to upgrade food production and distribution. UNDP can undertake the role of coordinating the activities of all UN agencies in this effort. Emphasis should be placed on sustainable production and distribution--not just relief operations--by the introduction of effective systems for planning, administration, education, demonstration and implementation.

4. *Model Districts:* The potential benefits of applying a resource-based, location-specific approach to agriculture can best be demonstrated by establishment of model programs in different agro-climatic regions. The models should be large enough geographically to serve as a viable index of national-level potentials and of economic and ecological sustainability. Although the concept may vary from place to place, the central approach is to examine in detail the current usage of both land and water resources and then formulate a district level plan for utilizing available physical, technological, human, managerial and financial resources in a sustainable manner to optimize, over time, production, productivity, farm incomes and employment, non-farm occupations, self-employment opportunities, agro-industrial development, exports and expansion of the service sector. This analysis is likely to identify a wide gap between present and potential achievements, which can form the basis for creating an alternative district development plan. Government can seek the assistance of farmers' organizations, private enterprise, educational and research institutes, and voluntary agencies for gathering information, analysis and plan formulation. Implementation of the plan should be primarily through activities that facilitate more efficient operation of market forces, such as assisting farmers to identify and transfer improved technology, establishing commercial organizations of small farmers and linkages between farms and industry, disseminating information on markets and technology, demonstration, education, training and incentives to stimulate

rapid multiplication. The UN Development Force can undertake to assist countries in the design and implementation of model district programs in food deficit countries and transfer the expertise needed for replication in other parts of each country.

5. *World Food Model:* The actual structure and dynamics of the development of global agriculture and its relationship to industrialization, employment and trade needs to be fully understood in order to plan for, and achieve, a world free of hunger. Although national and international institutions maintain a variety of data bases and models to track the impact of production, trade and prices in agriculture, these models are too limited in scope and detail to construct a working global model of the agricultural sector, which could serve as a valuable tool in projecting the medium and long term interactions of changes in food production, consumption, employment, trade, productivity, technology and environmental factors. A world food model, which forms the essential basis for evolving a global strategic plan, can help eliminate both food deficits and surpluses.

6. *On-Farm Training:* The massive demonstration programs conducted in the farmers' own fields by countries such as India to propagate the Green Revolution technology, proved that even uneducated, traditional peasant farmers in developing countries will rush to adopt new technology when its application and benefits are clearly demonstrated. The slow dissemination of new technologies that still hampers agriculture in these countries is largely due to the ineffectiveness of more traditional types of extension and farmer education conducted on a relatively limited scale by agricultural colleges, technical institutes and research stations. This gap in the agricultural education system can be closed by expanding the agricultural training network to the village level. The establishment of farm schools in villages, on land temporarily leased from local farmers, can combine the advantages of both formal training and demonstration on farmers' fields, with emphasis on economic viability and ecological sustainability. This is a low cost strategy that requires prior training of a large number of village level

instructors, but little investment in infrastructure. The schools can demonstrate the economic benefits of new and improved crops and cultivation practices, engaging local farmers as both students and staff, and covering most of the cost of training in the form of sale proceeds from the farm schools' production.

7. *Water Conservation:* The inefficient and negligent use of water in agriculture is one of the most serious barriers to a sustainable expansion of agricultural production. Public policy regarding the cost of water supplied by major irrigation projects and low cost or free distribution of power for pumping underground water aggravate the problem. Technologically, the solutions to water depletion are largely in hand. What is needed is a massive effort of public education and demonstration, coupled with incentives to encourage their adoption. In monsoon regions it has been demonstrated that recharging underground aquifers by reverse pumping during rain-surplus seasons can restore ten years of water depletion in one rainy season. Proven methods are available and have been commercially applied with great success as the achievements of Israel so dramatically demonstrate--radically to reduce water consumption by as much as five- to ten-fold, while at the same time significantly increasing crop yields. The most productive of these methods involving construction of green houses, is too capital-intensive for immediate widespread adoption in developing countries. Drip and sprinkler irrigation are far more moderate in cost and still result in enormous savings of water. The cost of adopting these methods can be further reduced by more widely popularizing them, so as to achieve increasing economies of scale in their manufacture.

8. *Low Input Sustainable Agriculture:* While we have argued against pressure on food-deficit developing countries to reduce their comparatively low-level usage of mineral fertilizers and chemical pesticides, empirical studies sponsored by the National Academy of Sciences and the Department of Agriculture in the USA found strong evidence, long resisted by scientists and commercial farmers in the West, that chemical-free farming can be as productive and cost-effective as

chemical-based methods. Industrial countries that offer subsidies to encourage chemical usage should modify their policies to provide active incentives for the use of chemical-free methods instead. During the last ten years, Indonesia has succeeded in bringing down the consumption of chemical pesticides without adversely affecting grain production through the nationwide adoption of integrated pest management systems for food crop protection. India has launched a massive national training programme to popularize biological methods of pest control, which can reduce the consumption and cost of chemical pesticides by 50 to 75 per cent. Public education programmes of this type are needed at the national and international level to disseminate information about chemical-free methods to producers and to educate consumers in developed and developing countries about both the health and environmental benefits of organically grown produce.

9. *Inland Aquaculture:* Depletion of deep sea fishery resources has resulted in a significant decline in world harvests from the sea. Proven technology is available for substantially replacing sea-grown fish with fresh or salt water pond-grown varieties. The new intensive and semi-intensive methods of cultivation can generate yields 10 to 100 times higher than traditional extensive methods. Due to the warmer climate and lower labor costs of the developing world, inland aquaculture can become a major stimulus to rural employment, incomes, processing industries and exports.
10. *Micro-level Indicators of Food Security:* Development initiatives have been severely limited by the absence of accurate and sensitive measures to assess the impact of national level policies and programs on community and household level food security. New indices, such as the Sustainable Livelihood Security Index now under development in India, need to be evolved and applied that combine measures of income and employment; food and nutritional status, including availability of safe drinking water and sanitation facilities; ownership of productive assets; and education and productive skills.

TRANSITION TOWARDS WHAT?

STRATEGIES FOR RAPID SOCIAL TRANSFORMATION

The pace of human development continues to accelerate. The world has changed more during the present century than in the previous nineteen centuries combined--economically, socially, politically, scientifically and technologically. In recent decades humankind has been buffeted by a bewildering array and intensity of transforming powers--democratization, decolonization, demilitarization, globalization, universal education, scientific advances, information, successive technological revolutions brought about by the automobile, telephone, radio, television, jet aircraft, computers, satellite communications and genetic engineering. Coping with such rapid change has not been easy. It has brought in its wake a broad array of problems--a widening gap between the most advanced and least developed sections both within and between nations, a disequilibrium between growth of population and economic growth, rising unemployment, alienated youth, increasing violence and crime, depletion of natural resources, degradation of the environment, overcrowded cities, mass migrations of talent from South to North, displacement of millions of political and economic refugees, the breakdown of the family and the erosion of traditional social institutions.

Although much has been learned about the various stages of social and economic development, much less is known about the actual *process* itself by which societies transit from one stage or level or form to another. As a result, our efforts to speed the transition are often haphazard, stumbling and fraught with difficulty. Today former colonial nations such as Vietnam and Zimbabwe strive to catch up with countries that have never been subject to foreign rule. The tribal nations of central Africa struggle at great cost to transform themselves into modern states. Even within the prosperous West, the speed and extent of progress is uneven, leading to the emergence of 'developing countries' within developed nations, of poverty-stricken families

in inner cities with rates of chronic unemployment as high as 50 percent or more.

Nothing is of greater value to humanity's quest for progress than an understanding of the development process and the means for consciously directing it more effectively. The tremendous economic achievements of Japan during the post-war period, which was followed during the last two decades by other East Asian economic powers and most recently by China, suggest that the time required for transition can be substantially abridged and the fruits of development be achieved much sooner than has been accomplished by nations in the past. The rising expectations of people around the globe and the potential risks of failing to heed their call have added a greater sense of urgency to the quest for this knowledge.

Eastern Europe

The challenges posed by extremely rapid transition are nowhere more graphically depicted than in the current transition of the countries of Eastern Europe after the collapse of the Berlin Wall, the end of the Cold War and the breakup of the USSR. Although this transition is often described in political and economic terms, it is far broader and deeper in its implications. These nations are in the midst of a simultaneous multidimensional transformation--politically, from authoritarian to democratic forms of government; economically, from a centrally-planned, command system to free market economies; industrially, from defense-oriented to consumer-oriented production; administratively, from highly centralized to decentralized systems; structurally, from state ownership of property to multiple forms of ownership in all spheres; socially, from closed and isolated to open and internationally integrated societies; culturally, from almost exclusive emphasis on values of equity and collective security to strong emphasis on the values of freedom and individual responsibility.

The transformation of Eastern Europe and the former USSR is of vital concern to all of us. Never before in human history has such massive change been carried out as an essentially peaceful revolution. The end of Apartheid in South Africa and recent progress in the Middle East show that this process continues to have beneficial repercussions around the world. At the same time, this incredible advance has been accompanied by events that have de-stabilized the political and economic systems of the entire region, led to the breakup of the USSR, war in Bosnia, the collapse of the Warsaw Pact and the COMECON trade system, a massive brain drain and the threat

of huge waves of economic refugees. These changes, too, have had implications for all nations within the region and beyond--severely affecting trade around the world, from the tea estates of Sri Lanka and India to the wheat fields of America, Australian and Argentina.

So too, the further course of this transition will have a profound impact on all nations, both developed and developing. The future of world peace, the world political system and the world economy hang in the balance. A successful rapid transition will open up new markets to stimulate a new round of growth for the sluggish economies of the West, much as the Marshall Plan stimulated American prosperity in the 1950s. It will equally present economic opportunities for developing countries unable as yet to meet the quality requirements of highly competitive Western markets. Failure of the transition holds the danger of economic collapse and political instability within Eastern Europe, which could even lead to renewed political tensions and another economically devastating arms race. Already on-going wars are being fought in the Balkans, the Caucus and several other regions of the former Soviet Union. Crime is on the rise. Ominous signs have appeared that the authoritarian past is not yet fully buried and could once again arise, if the forward momentum of the transition process does not quickly improve the lives of people within the region. The whole world has an immense stake in the successful outcome of the transition in Eastern Europe.

Initial Results of Reform

The pre-existent conditions, the starting point of the transition, the timing, speed and extent of the reforms introduced during the past five years varied considerably among the 25 nations of Eastern Europe and Central Asia. But, with few exceptions, they were founded on the same general principles and on the policy recommendations of Western proponents of rapid transformation to total free-market liberal capitalism, based on a simultaneous shock strategy encompassing macro-economic stabilization, prices and property rights. Western governments and the international financial institutions, led by the International Monetary Fund, strongly advocated this approach and linked financial assistance to its adoption. The strategy called for rapid deregulation of prices, privatization of farms and industry, introduction of a convertible currency, and balancing the budget to reduce the high fiscal deficits, primarily by reducing military expenditure and subsidies to producers and consumers. The assumption was that a

program with these elements would result in a significant increase in production, efficiency and the availability of consumer goods within a short time.

The actual results were quite contrary to the expectations of these countries' Western economic advisers, as well as to the governments and people of the region. The initial phase of reforms had disastrous impact on the economies, on the people and in some countries on peace and political stability. From 1990 to 1993 production in all 25 nations declined drastically, from a minimum of 10 percent in Poland, 20 percent in Hungary and 22 percent in the Czech Republic to a maximum of 45 percent in Russia, 57 percent in Latvia and 75 percent in Armenia. Investment fell by an average rate of 13-14 percent per year from 1990 to 1992, and by a three year total of more than 50 percent in Russia. The fall in real incomes followed that of output, and the impact was made even more severe, especially for pensioners, by the simultaneous dismantling of the vast social support system and dramatic increase in the cost of essential consumer goods. The drastic decline in living standards for the vast majority has been accompanied by the emergence of a new class of instantaneous millionaires, some on the basis of their ability in combining factors of production in new circumstances and others due to hoarding of goods under inflation, loopholes in newly enacted legislation on privatization, and personal influence with those in power.

Inflation in most of these countries gained tremendous momentum as the reforms proceeded. In 1993 alone, consumer prices rose by more than 100 percent in 15 countries, out of which 11 former republics of the USSR reported increases of more than 300 percent. This was accompanied by a sharp rise in unemployment from extremely low historical levels prior to 1989 up to an average of 17 percent in 1994.

The tremendous physical and psychological stress experienced by people in the region as a result of the economic collapse is reflected in the sharp fall in birth rates and steep rise in death rates. Since 1989, the birth rate has fallen by more than 20 percent in Poland, 25 percent in Bulgaria, 30 percent in Estonia and Romania, 35 percent in Russia and more than 60 percent in Eastern Germany. Such abrupt changes have been observed previously in industrial societies only during times of war. Infant mortality is rising in many of the countries. Not surprisingly, there have been increasing indications of public discontent and voter dissatisfaction with the course of the reforms in the vast majority of countries.

Simultaneous Shocks

The collapse of the East European and Central Asian economies from 1990 to 1994 resulted from their exposure to a series of simultaneous shocks.

1. *Stabilization and Adjustments*: The majority of countries, having suffered from inflation and balance of payments problems in the 1980s, applied sharp stabilization and adjustment programs in the early 1990s aimed to stop inflation, balance budgets, and close balance of payments gaps, while at the same time liberalizing prices in order to correct major price distortions. These deflationary policies led, in most cases, to sharp declines in output.
2. *Resource Allocation*: Sudden dismantling of the central planning machinery was another shock. The central planning machinery responsible for the allocation of materials for current production and allocation of funds and materials for investment in these countries was suddenly dismantled. It proved impossible in the majority of countries to create and organize overnight commodity and financial markets of sufficient depth and flexibility to substitute effectively for the planning machinery.
3. *Import Liberalization*: Drastic import liberalization led to the inflow of better quality, lower priced foreign goods that depressed demand for domestically produced goods. The shock impact of imports was aggravated by the fact that farmers in the region were forced to compete in some cases with subsidized agricultural products from the West.
4. *Privatization*: Although the actual progress of privatization has been relatively slow in most instances, the uncertainty regarding the future status and ownership of enterprises and property has inhibited investment, slowed up current production, and led to widespread plunder of state property.
5. *Trade*: As the socialist structure of these countries began to change and the political influence of the Soviet Union diminished, there was a huge drop in the trade between countries of the region, and following the breakup of the USSR, between the republics of the Soviet Union as well.

Not all countries in the region experienced all five shocks. Those that were spared proved better able to sustain output and real incomes. Czechoslovakia had not suffered from inflation and was largely free of

external debt. Hungary, which had decentralized its economy and had introduced significant elements of the market in production and investment before 1989, was not subject to the sudden shocks due to import liberalization and termination of planning.

Lessons from the Reform

The failure of the transition strategy to produce the anticipated results has given rise to extreme hardship, growing anxiety, frustration and anger within these countries. Internationally, it has generated intense debate about the reasons for the failure, the efficacy of 'shock therapy', and the appropriateness and adequacy of Western assistance. These questions reflect an inadequate understanding, both within and outside the region, of the stages and process and essential conditions for an effective transition under the circumstances prevalent in Eastern Europe at the time. Understanding of this failure holds the key not only to the rapid revitalization of the former Soviet and other East European republics, but also to meeting the challenges of present and future transitions in Africa, Asia and the West. This understanding can be summarized in the form of several lessons that can be derived from the general experience of countries in the region.

1. *Multidimensional transitions cannot be brought about by uni-dimensional strategies:* The economic dimension of transition cannot be viewed and acted upon in isolation from its political and social dimensions. The reform program was developed and guided by domestic and foreign economists who viewed the transition much like a change of clothing--the casting off of one set of economic principles and the adoption of another--ignoring the critical importance of social and political factors. This view could be summed up in the often expressed attitude, 'Good economics makes good politics!'

Transition is the process by which society moves from one form or level of activities to another. While social scientists conveniently divide social activity into several categories--political, economic, social, educational, religious, cultural--in practice these distinctions are at best only partially true. Economic activities in any society take place on the foundation of the political system, social values and customs, and the psychological aspirations and attitudes of the people. During normal periods of slow and gradual change, the impact or role of other dimensions operates below the surface and appears minimal. Economists studying the results of economic

variables tend to overlook the influence of factors from other fields on the assumption that non-economic factors are constant. Under relatively stable and static conditions, these economics principles can be employed to predict changes in economic variables to a considerable extent. But under circumstances in which underlying economic, social and political conditions are undergoing radical change, the relevance and predictive capacity of purely economic concepts is quite limited. This was the situation confronting the States of the region at the beginning of the transition period and the reason why the actual results of the reform differed so drastically from what had been anticipated.

The situation in Eastern and Central Europe was further complicated by the disproportionately large size and importance of the defence sector in the economy. This necessitates, not only a change from one economic system to another, but also a restructuring of the entire economy from a defence orientation to a consumer orientation. This change in structure could not be brought about by reliance on macro-economic policy.

2. *Political and social consensus is essential for rapid social change:*
In a democratic society, the market cannot be instituted by decrees or authoritarian methods which belong to the old system. In the new political climate, reforms will be successful only in the measure they are understood and accepted by the population. The vitality of the market depends on releasing the initiative of people to act in their own perceived best interests by producing and distributing goods and services for consumption by others. This initiative cannot be ordered, it can only be encouraged. Economic policy recommendations failed adequately to anticipate either the impact of the program on the people or their reaction to it. In the early stages of reform, the public exhibited an incredible degree of patience, tolerance and endurance under conditions of growing hardship. Gradually public resentment and personal suffering (especially for the aged, children and new entrants to the work force) became so severe in some countries that no government could have sustained the program without facing political upheaval or violent revolution.

There is some truth in the argument that 'shock therapy' did not fail in Russia and other countries, because it was never actually implemented. At each crucial juncture either the central bank or the government pulled back from enforcing the necessary fiscal discipline. But it is equally true that

‘shock therapy’ never could have been implemented by a democratic government, when it imposed such enormous hardship on the people and generated a polarization and fragmentation of political forces within the country. Where similar strategies have succeeded in other parts of the world, it has usually been under authoritarian governments, such as in Chile.

Where force is not possible, the only viable alternative is to build social consensus in support for the reform strategy. Ultimately, the success of the reform measures will be determined by one factor--the extent to which the people understand, accept and are motivated to act under the new system. Before introducing any new measure, maximum effort should be made to communicate its purpose and nature to the people and win their understanding and approval. *Public education is the most powerful policy instrument.* With public opinion widely divided over the best course of action, it is necessary to win back the understanding, support and endorsement of the population for an alternative program which the major parties and social groups can back. This requires educating the public to understand both the costs and benefits involved in any reform strategy, the trade-offs between immediate advantages and immediate sacrifices required to establish a new and stable equilibrium.

3. *Economic strategy must be balanced:* A market economy can be introduced gradually or step-wise, but it cannot be introduced in a fragmentary or piecemeal manner. Deregulation of prices was the most prominent feature of the strategy in most countries, because it was the easiest to implement. But under conditions of shortages in economies dominated by huge monopolistic enterprises, price deregulation led to skyrocketing prices and spiraling inflation. A market flourishes only when several essential conditions are met--freedom of pricing, freedom of entry and exit from industry, free flow of information, unrestricted movement of goods and services, competition between enterprises, control of monopolies, and private ownership of property. The entire package of free market practices must be implemented hand in hand, otherwise it does not work. Freeing pricing without first regulating or dismantling monopolies, promoting privatization of land and enterprises, ensuring free flow of goods, and establishing wholesale markets and multiple distribution outlets leads to speculation, soaring prices, hoarding and falling production. Historically, the free market evolved over centuries in conditions of surplus production

and stable currency--neither of which exist in Eastern Europe today. Efforts to accelerate the development of the market will have first of all to meet the political, legal, social and economic conditions historically required for its creation. And these conditions must be met simultaneously.

4. *Macro-economic stability is a precondition for increasing production:* It is extremely difficult to increase production in a context of general macro-economic instability and hyper-inflation. The rapidly falling value of local currencies minimized their utility as a medium of exchange. Agricultural as well as industrial enterprises seeking a stable medium in which to hold their wealth increasingly resorted to hoarding marketable, non-perishable commodities such as foodgrains or converting local currency into foreign money wherever possible. This was particularly devastating for agriculture, where higher production was desperately needed to meet consumer demand and reduce dependence on food imports. The breakdown of the local currency as an effective medium of exchange was accompanied by an unfavorable shift in the terms of trade between agriculture and industry, resulting from the near monopolistic position both of the suppliers of farm inputs, especially fertilizers and farm machinery, and the processing units that purchased farm produce, such as dairies and meat processing plants. Together these factors precipitated a rapid fall in farm production and food availability. There can be no solution to the food problem without first establishing a stable medium of exchange.

5. *Macro-level policy must be complemented by micro level change:* Putting in place the right macro-level policies may be necessary, but it is far from sufficient to create a functioning market. The governments of the region have been so preoccupied with "re-engineering" their economic and political systems and with meeting the conditions to attract foreign aid and investment that they have tended to overlook the many essential and practical steps needed to implement the reforms on the ground. Even if governments had been able to get all the laws and economic policies 'right' the first time, there is no assurance that the actual impact on the people would have been less harsh than it has been.

The so-called 'shock therapy' strategy pursued by these countries has been widely criticized for its severity and seeming indifference to social costs. But debates regarding the appropriate speed and social cost of reforms divert attention from a more fundamental problem with this approach. The essence of shock therapy is a reliance on macro-economic factors to bring

about a radical restructuring of the economy and a radical change in the behavior of individuals and enterprises. While monetary policy may prove useful for dealing with short term adjustment problems within a relatively stable environment, there is no evidence to support its use as the principle instrument for social transition. Monetary variables are indicators of the functioning of an economy, but the essential factors which determine the strength and health of an economy are the productivity of its enterprises and its workforce and the material resources of the country. Tight monetary policy can generate intense short term pressure for change in behavior, but this pressure is applied indiscriminately and often with unexpected and unanticipated results. The primary result of premature liberalization of prices was to encourage trade and speculation while discouraging production and investment. It distracted attention from fundamental changes in institutions and social attitudes needed for the transition to be successful.

Macro-level policy measures have to be complemented and supported by parallel efforts at the micro level to educate the population about the new economic system, to generate a free flow of information--not just freedom for information, but the actual exchange, which is still severely limited in these countries--to develop new distribution systems, to impart appropriate business and managerial skills, to provide access to credit, to build up new social institutions and to encourage and promote new enterprises. In most cities of the former Soviet Union, for instance, there is not a single wholesale market for food. There are no systems for consumer credit, no agencies in charge of promoting small business development. In the absence of these and countless other essential micro level conditions, even the right macro strategy will not evoke the anticipated response.

6. *Government regulation is essential for a free market:* A free market does not mean an unregulated one. Quite understandably, decades of totalitarian government had generated such powerful resentment against strong government that by way of reaction the society sought for solutions which did not require government to take a highly visible, leading role. The reform program was based on the implicit assumption that the market is a self-regulating mechanism which can substitute for regulation by government. This notion is contradicted by the experience and practice of every major market economy in the world. Government plays a critically important role in defining and protecting property rights, ensuring competitive

conditions, controlling monopolies, regulating foreign trade, establishing and enforcing quality standards, safeguarding the rights of investors and consumers, preserving the environment from over-exploitation and pollution, encouraging investment, and upholding the rights of employees to minimum wages, safe working conditions and social security in the case of layoffs. The policies that have made possible the most successful recent development initiatives of nations around the world, especially in Japan and the newly industrialized nations of the Pacific Rim, do not support the argument for unregulated free market forces. These countries combined freedom for entrepreneurial initiative, private property and market prices with carefully crafted industrial policies and tightly controlled foreign trade and investment practices to nurture and protect nascent industries and restrict foreign investment. At the same time, they organize massive import of foreign technology. They utilized import tariffs, export incentives, tax relief and other mechanisms to guide development of their domestic economies.

The reform program involved the dismantling of most of the administrative mechanisms by which an economy can be monitored and controlled by government. In place of free market conditions, organized crime and corruption became rampant. In seeking to reject thoroughly the authoritarian form of government that suppressed the rights of the people, many of these countries allowed the power and authority of their central governments to decline to the point where they could no longer enforce conditions needed for operation of either a command or free market economic system. The power of government in the West may be veiled by the fact that its laws are usually obeyed without the need for exercise of force, but the threat of enforcement is as real for tax evaders in North America as it was for free marketers under the communist regime in USSR. Regardless of the system, strong government is a prerequisite for a strong economy.

The experience of the past few years has clearly demonstrated that the State must play a very active role in order to bring about a smooth and rapid transition and this role cannot be limited purely to regulation of the market. Intervention will also be necessary in the form of central planning and industrial policy, at least during the transition period. The radical restructuring of entire industries--defense, agriculture, aluminum, steel--is too complex and massive an undertaking to be made the responsibility of market forces and individual firms.

7. *Agriculture has to be given a special status:* For reasons discussed in the previous chapter, the State has an especially important role in the regulation of agriculture. After the collapse of communism in Eastern Europe, the rise of free market and free trade polemics generated considerable confusion regarding the necessity and legitimacy of state regulation and intervention in protecting and preserving agriculture, which is the beneficiary of innumerable subsidies and supports in virtually every industrialized nation. It is ironic that advice coming from overseas almost invariably recommended eliminating supports to this critical sector of the economy. In the midst of radical economic revolution, the economy, especially the agricultural economy, is in no position to adapt simultaneously to the dual stresses of internal reorganization and external competition.

8. *New institutions and systems are needed to create a market economy:* The establishment of a free market system is retarded by the absence of many basic commercial institutions and systems. The market economy has given birth to a vast array of institutions by which, and through which, it operates—stock and commodity exchanges, systems for mass production, just-in-time inventory management, commercial insurance, franchises, mail order catalogs, courier services, feeder airlines, producers and consumers cooperatives, marketing boards, export promotion agencies, leasing, venture capital and mutual funds, credit and collection agencies, commodity brokers, real estate agents, trade unions, industrial associations, industrial estates, exclusive export processing zones and countless others. Our knowledge of transitions will be complete and our capacity to abridge the time and costs of change will be full only when we have come to understand the role of these institutions and have found ways rapidly to develop them.

The need for new institutions in Eastern Europe is apparent in all fields of commercial activity. It is particularly acute in agriculture. Hoarding, speculation by traders, regional shortages and price variations have been aggravated by the absence of alternative systems for distribution to replace the old centralized food procurement system. Privately operated commodity exchanges have sprung up to handle wholesale transactions. But, unfamiliarity with such institutions, and the lack of a firm legal basis for enforcement of contracts and a system for grading and inspection to guarantee the quality of produce traded, have kept most buyers and seller away. A mechanism is needed to insure distribution of food to deficit areas,

to guarantee farmers an indexed floor price for foodgrains under conditions of unstable, soaring prices, and to establishment and maintain a national buffer stock against emergency. The Indian Food Corporation and Indian National Dairy Development Board, the autonomous marketing boards in the UK, and the Commodity Credit Corporation are model institutions from which the East Europeans need to borrow, adapt and innovate to suit the conditions of a vast food-deficit nation.

Simple commercial systems need to be created to support commerce and industry as well--even such basic systems as telephone listings of sources of products and services that are found in every telephone directory in the West. If trade is to develop between private enterprises, credit checking agencies and collection agencies need to be established. For enterprises which do not qualify or cannot compete for limited bank resources, financial institutions offering hire purchase or leasing of industrial and consumer goods are necessary. The market reforms were expected to lead to a rapid proliferation of new small enterprises, but most of those created so far are engaged only in trading and retail sales. Small business development centers, business incubators, industrial estates, and venture capital funds are needed to encourage entrepreneurship. Some large industrial enterprises have begun leasing portions of their space and equipment to groups of employees who form small businesses for production of equipment and components. This practice should be encouraged and popularized as a natural step toward privatization.

9. *Information is a stimulant and fuel for transition:* The shortage of reliable information and of institutions to disseminate are major constraints to the development of the market. In a command economy, a few people at the top receive most of the information and take most of the decisions, while the rest of the population carries them out. In contrast, the market is based on millions of decisions taken every day by millions of individuals in fields, factories and retail stores around the country. All these decision-makers require timely access to reliable sources of information. Information is needed to make sound business decisions, such as the production or demand for different commodities or variations in price by region or over time. Easy access, maximum dissemination, full disclosure, precise accuracy and credibility are imperative. Creating these conditions will require establishment of new institutions and substantial investment in infrastructure.

The press has freed itself from being solely an instrument of government, but television is still largely under state control. In the entire former USSR today there is no adequate agricultural extension service to transmit research findings from the laboratory to the field, especially to small private farmers. Poor communications systems are incapable of handling the large volume of telephone, fax, telex and computerized messages needed for commercial linkages with other countries.

10. *Catalytic initiatives can release social dynamism:* Social change is facilitated and accelerated by initiatives to introduce or demonstrate new patterns of activity and behavior appropriate to the goals of the transition. One of the most successful initiatives of the Russian Government in recent years has been the distribution of millions of small private agricultural plots to urban and rural households. Since food shortages in the urban areas was the most pressing problem and greatest source of anxiety for the population, the government took steps to distribute more than 16 million small private plots to urban and rural families, so that highly vulnerable households could produce at least a portion of their own food requirements. These plots now account for more than 50 percent of vegetable production and 80 percent of potato and fruit production in Russia. Transitions require changes in behavior and the private plots became an activity in which millions of people could participate in order to augment their own living standards and alleviate national food shortages. Similar catalytic efforts are needed in other fields to engage the population actively in new and improved activities.

11. *Reduce reliance on foreign aid:* The prospect or lure of foreign aid has itself become an impediment to successful transition. In order to qualify for foreign assistance, these countries have overlooked the vast underutilized resources available domestically, rejected the knowledge and advice of their own most experienced people in favor of foreign advice, sacrificed their most cherished social values, discarded even successful institutions and systems, and taken steps which it was painfully obvious to many within these countries could not possibly lead to the intended results under the prevalent conditions. In the 1950s, the Soviet Union managed to recover from the horrendous destruction it suffered during World War II and to embark on a period of rapid industrial growth without any external assistance. But today, without having passed through the ravages of war, the republics desperately seek foreign support and feel helpless without it. It is right that the world

right that the world community generously support successful completion of the reform process in this region that is so vital for world peace. But it is also right for these countries to recognize the enormous untapped potentials which they possess--human, natural and productive--rather than be distracted by the prospect of a large influx of foreign capital.

Alternative Strategy in Yugoslavia

The extreme damage wrought by the economic reform program in these countries over the past half decade necessitates an urgent search for more viable alternatives, a search that has been retarded until now by the widely held view that none exists. Very recent events in Yugoslavia suggest that even in the limited area of economic stabilization and adjustments, an alternative strategy can be more successful. Although the long term impact of the Yugoslav experiment is as yet unknown, its remarkably positive initial results merit serious consideration.

The economic disorder that accompanied recent political developments in Yugoslavia resulted in an explosive increase in prices of more than 100 percent per month in 1992. Despite efforts to control monetary expansion, hyperinflation exceeded three million percent in 1993--far higher than the inflation rate reached in Germany following World War I and, quite probably, the highest rate in recorded history. The price spiral was accompanied by a steep fall in real purchasing power by as much as 75 percent. The budget deficit increased rapidly as the value of Government tax revenues fell further and further behind the rising cost in current terms of its expenditures, due to the time lag between tax declaration, collection and expenditure in a period of very rapid price increases.

In January 1994, the Government embarked on a comprehensive monetary reconstruction program to achieve price and exchange rate stability; to remove administrative controls over production, investment, prices, salaries, and interest rates; to re-establish the role of the central bank in monetary stability; to reorganize public finances through an efficient tax system, including more efficient tax collection and better coverage of the large "gray" economy; to reduce government administrative and defense expenditure to the maximum possible extent; to maintain price supports for important agricultural commodities as an incentive for production; to stimulate economic activities of private, cooperative and public sector enterprises through equal access to credit and government facilities; and to encourage the take-over of sick firms by stronger, more efficient companies.

At the same time, the program was intended to mitigate the harsher effects of shock therapy programs on the working class and fixed incomes pensioners by providing free scope for collective bargaining, enforcement of a minimum wage policy and a social safety net for the unemployed.

It was recognized from the outset that stability of the currency was an absolute precondition for the success of the reform program, which depended in turn on the firmness and consistency with which the program was implemented. The central element of the program was the introduction of a new currency, the 'superdinar', in parallel to the existing currency, but without demonetizing or confiscating it. Inspired by an experiment in the Soviet Union during the 1920s, the value of the new currency was tied to that of the Deutsche Mark and made fully convertible without restriction. Based on the country's very limited foreign currency reserves, new issues of the currency were to be utilized primarily to inject real purchasing power into the economy, revive demand and stimulate production, while covering the government's budget deficit during an initial six month period needed for sufficient recovery. In this way the foreign currency and gold reserves were used as a buffer to moderate contraction of the money supply and avoid the shock usually accompanying such efforts. Issuing of old dinars was stopped, but it remained in circulation as legal tender. An interest rate of six percent was established for the superdinar--the first real, positive interest rate in years--to make holding the new currency an attractive alternative to hoarding goods or foreign exchange. It had been widely anticipated by foreign experts that this strategy would result in an immediate run on the country's foreign reserves and thereby a collapse of the new currency's foundation.

Contrary to expectations, the initial months of the program have yielded spectacular results. Inflation fell to zero percent in the first week after issuance of the new currency and remained below one percent during the first five months. Instead of a massive outflow of foreign currency through conversion of superdinars, people have rushed to cash in their foreign currency, resulting in a 60 percent increase in the nation's reserves during the first three months. One of the most significant features of the program has been its fair distribution of benefits and low social cost to the population. In contrast with the widespread outrage felt by Russian citizens over repeated episodes of demonetization and confiscation of household savings, the Yugoslav people have enthusiastically accepted the new currency as representative of a new deal for the poor and the working class. In addition, instead of the severe contraction of output experienced elsewhere, production rose by more than 100 percent during the first five months, stimulating an increase in employment and demand for new investment. Real tax revenues have increased significantly.

The astonishing initial success of the program can be attributed to its balance and comprehensiveness and to the following specific features: the Government's recognition that stabilization was absolutely essential to economic recovery; the widespread public support for the program, which was in large part due to the efforts to protect weaker sections from its harshest effects; the simultaneous relaxation of controls on industry; support for a natural rather than a forced process of privatization, based on the specific circumstances of each firm rather than on ideology; continued price supports for agriculture and a minimum wage for labor, which are crucial for maintaining food supplies and social stability; and rejection of import liberalization in order to protect domestic manufacturing against a major shock during the initial period of recovery. *Possibly the greatest strength of the Yugoslav program is that it was of necessity conceived by people within the country rather than by foreign experts, and depended entirely on domestic resources and capabilities for its accomplishment, rather than on pleas for foreign assistance. Self-reliance released the creativity, generated the determination and mobilized all available resources to make the transition successful.*

It is too early to predict the eventual outcome in Yugoslavia, subject as it is to extraordinary external constraints on public policy. However, the initial evidence is sufficient to demonstrate that alternative approaches can and must be fashioned which are more comprehensive in scope, more balanced in implementation, more pragmatic in conception and less influenced by extreme ideological viewpoints. It is likely that further study of the Yugoslav model will reveal important applications not only for countries suffering from hyperinflation or the effects of radical transition, but for those carrying out more modest programs of economic reform.

Recommendations for Accelerating Transition in the East

Conditions within the 25 nations of Eastern Europe and Central Asia vary significantly enough to limit the scope for broad generalizations on strategy beyond the statement of principles presented in this chapter. However, there are a number of specific recommendations applicable to all or most of these countries that can be applied to accelerate the pace and ease the pain of transition.

1. *Generate consensus for the transition program:* The transition should be an expression of the will of the society for change and it should help generate greater unity and harmony within the society. Further attempts to put through any macro economic reform package will meet with strong political and social resistance unless a national consensus on the strategy is arrived at beforehand. Any program involves a set of choices regarding which are the most acceptable costs and important benefits. We propose that before launching new initiatives, governments conduct public inquiries and debate over alternative packages of policies and practices. The inquiry should realistically assess the expected costs and benefits of each package. After educating the public about the need for choice and the necessary costs involved, the final selection of the most acceptable package should be made by the people themselves through a national referendum.
2. *Establish macro-economic stability:* The errors in earlier efforts at adjustment and stabilization have led some to argue for a series of compromise programs that do not seriously address the imminent dangers of hyper-inflation and economic collapse. No transition strategy can be successful without first creating stable conditions for economic growth. No effort to improve agricultural production or the availability of food will be successful so long as the currency is not accepted as a stable means of exchange. This is the ultimate justification for the insistence of the international lending community on harsh measures to stabilize the economy. If the previous stabilization programs have not proved politically viable, socially acceptable or economically effective, alternative programs similar to the Yugoslav strategy must be attempted without further delay, backed by the full commitment of government. In some cases, it may be necessary to temporarily reintroduce controls on wages and prices as an interim measure to stop the free fall of the currency. But whatever the method, it is essential that this effort be combined with simultaneous implementation of other essential policies.
3. *Eliminate crop losses:* In Russia and the other republics of the former USSR, highest priority in agriculture must be given to efforts that will increase the availability of food and reduce the

huge crop losses and massive food imports. These losses vary by crop and region but average between 25 to 50 percent of total field production for major crops. A reduction in crop losses could completely eliminate millions of tons of grain imports. The reasons for such enormous losses include poor quality of seeds and planting material, the lack of sufficient local storage capacity, inefficient and inappropriate equipment for planting, harvesting, storage and processing, poorly motivated farm workers and shortage of labor at harvest time. Demonstration projects have proved that potato losses can be reduced from 35 percent to under 5 percent in one year. A viable solution requires concerted and coordinated activity by government, industry and agriculture at a time when each is operating in isolation from the others. The main elements of a viable plan to reduce losses for foodgrains, vegetables and potatoes have been proposed by a Dutch cooperative agribusiness firm. The aim of the plan is to reduce food imports to zero and eliminate food shortages within 3 to 5 years. The plan requires acquisition of foreign production and storage technology, but depends only marginally on import of equipment, most of which can be manufactured in domestic defense facilities. The hard currency requirement is minimal. But the plan does require a leading role by government and financial assistance to farms. In order to be effective, it needs to be supported by a massive public education campaign on use of new technology to eradicate crop losses combined with demonstration plots on both large scale and small private farms throughout the country. The Commission recommends immediate implementation of the plan with the objective of improving the agricultural economy, increasing the food supply and completely eliminating dependence on food imports .

4. *Study benefits of economic union:* Of the estimated 50 percent fall in GDP among the republics of the former Soviet Union, approximately half can be attributed to the breakup of the economic union. Restoration of a common economic space--which is being criticized internationally as a surrender of sovereignty to Russia at a time when both Western Europe and North America are striving for closer economic union--could

immediately restore most of that lost output. The advantages of cooperation between republics needs to be carefully examined. A study should be conducted by a credible institution to estimate the economic losses incurred by the breakup of the common economic space between the former Soviet republics and to assess the benefits of restoring an economic union in some form. It should estimate overall economic growth and living standards for each republic over the next five years operating within and outside the economic union. This study can serve as a powerful argument for closer cooperation among the republics. The study can be undertaken at very low cost by a consortium of researchers from different research institutes within the Commonwealth of Independent States.

5. *Privatize and develop road transport:* Transportation is a major bottleneck to development of a market economy in much of the region. Under the centrally planned system, most freight was hauled by trains over main routes to large cities for distribution in bulk by huge government procurement agencies. Under a market system, millions of small producers and consumers must be free to buy or sell wherever the price is most attractive. This requires a vast proliferation of small goods transporters in the private sector, which are rare in the country today. The large freight transport monopolies have to be replaced by entrepreneurial companies with small fleets competing for freight business. Immediate steps are needed to expand capacity and introduce competition in this vital sector by promoting the development of private road transport companies at the national, regional and local level. Special loan and leasing programs should be established to enable small firms and individuals to purchase vehicles and pay for them out of the revenues generated from use.
6. *Regional models and pilot programs:* Pioneering initiatives need to be encouraged to act as demonstrations and catalysts for new types of activities in the country. In a region as vast and diverse as this and in countries such as Russia, which extends over eleven time zones, no single model or pattern will be widely applicable. Therefore, several areas in each country representing different economic and social conditions should

be selected for establishment of model transition programs. In each area, a study should be conducted of resources and economic potentials, existing institutions and infrastructure, current levels of skill and social attitudes regarding the market system. Detailed strategies should be devised to educate the public about untapped opportunities, strengthen the institutional infrastructure, impart needed skills, establish catalytic demonstrations and encourage multiplication of successful new activities. A plan should be adopted at the forthcoming UN Social Summit for establishing model district programmes in East and Central European countries. *Plans for transition should cover all of the factors listed above, providing trained personnel to assist in the establishment and initial operation of new institutions and systems.*

7. *Plan for institutional development:* An assessment of the type and functioning of existing institutions and economic systems should be compiled to identify missing links that need to be provided to support the transition. Based on this study, a master plan should be drawn up for establishing the necessary institutions and systems in each country. In order to prepare a cadre of managers for private sector industry and institutions, specialized institutes of management should be set up in each country.

8. *Launch a massive program to impart new skills and attitudes to the population:* In countries where private enterprise was extinguished for decades, entrepreneurial, financial and marketing skills can be extremely limited. An analysis should be undertaken of the types and levels of skills needed for transition to a market system, covering areas such as entrepreneurship, management, national and international marketing, strategic business planning, finance, quality control, product development, production technology, design, and human resource development. Experience in former colonial nations where entrepreneurship was also stifled for a long period indicates that a profound change in attitude is necessary before people will risk leaving or forego seeking salaried and pensioned jobs in favor of self-employment, even when the salaried jobs are scarce or unavailable. Such a basic change of

attitude, which normally requires a change of generation can be accelerated by a massive program of public information, education and demonstration spanning several years.

9. *Study the benefits of economic recovery on world trade:* Recessionary trends are effecting most of the world today. The prognosis in the West, especially in the European Union, is for slow growth during the 1990s. The progress of developing countries is impeded by slow growth in the industrialized nations and the collapse of Eastern Europe. What would be the impact on the world economy of a rapid recovery and economic expansion in the countries of the region? What would be the result elsewhere of further decline in Eastern Europe? These questions are of vital relevance to the entire world. A detailed study should be undertaken under the auspices of the United Nations, OECD or the European Commission to quantify the potential gains or losses to the global economy of rapid or slow progress of the transition in Eastern Europe and Central Asia.

10. *Scientific resources:* Science has been one of the greatest casualties of the reform program. Severe fiscal constraints have forced governments to reduce drastically budgetary allocations to research institutions, leaving most of these institutions with little or no source of revenues to support their activities. High priority must be given to developing a detailed plan for preservation of the scientific research infrastructure during the difficult transition period and for restructuring it so that it can be effectively integrated into the emerging market system. The drain of talents must be stopped by a concerted national effort to exploit each country's competitive advantage in science by marketing these capabilities internationally and particularly by linking up with other countries in the region and with developing countries that can most benefit from the region's scientific and technological capabilities.

Search for a new model

Ironically, despite all the international debate about transition, thus far the actual goal of the transition process has never been clearly spelled out. It is widely presumed to be to some form of capitalist system, but which variety--the Swedish? the Japanese? the American? Although the ostensible goal of transition has been to economies based on private ownership, three years after the initiation of transition programs, very little privatization has actually taken place in most countries of the region--ranging from around 15 percent in Russia and Bulgaria to a high of 50 percent in Poland. It is widely believed that acceleration of this process will lead to rising unemployment and a widening gap between the rich and the poor, leading to creation of a huge underclass that had been virtually eradicated in previous decades. Is this result really the best these countries can hope for in the foreseeable future?

The events in Eastern Europe have been widely hailed as a victory for democratic capitalism over authoritarian communism. The obvious failure of the latter has been used to support the claim of the former to be the sole political and economic heir to the next millennium. This view has been applied to justify the imposition of radical shock therapy on the unsuspecting and unprepared populations of Eastern Europe and stringent structural adjustment programs on many developing countries. But the claim itself is based on a limited and superficial interpretation of history.

The fall of the Berlin Wall marks the end of a confrontation between two divergent systems that have been struggling toward reconciliation throughout the present century--one based on the human right to freedom and the determinism of the free market, the other based on the right to basic economic security and the determinism of the State. The one has made people subservient to the needs of the State, the other has left them subject to the whims of the market. True communism has never existed. What lived and has finally died in Eastern Europe is not communism, but Statism, the domination of the State and use of State authority to govern the life of the nation, in practice reducing people to forced labor. True capitalism, which regards people as a factor of production, passed away more than half a century ago, when the challenge of communism prompted Western societies to incorporate socialist principles and measures to mitigate the blind justice of the free market. There are no true capitalist societies in the world. There are no free markets. The free market system is highly regulated and controlled by the very State over which it claims victory. But although in reality both systems are dead, the ideology of the capitalist system lives on

and casts an illusory impression of supremacy.

Rather than searching for a victor and vanquished, the urgent need is to find a successor that combines and synthesizes the enlightened values of both systems--freedom and equality, liberty and security. It has been amply proven that the authoritarian State is incapable of exerting a benevolent authority over the people without imposing severe restrictions on freedom, stifling human energy and creativity, leading sooner or later to rising discontent and a loss of social vitality. It is also abundantly clear that the institution of money through the free pricing mechanism of the market system--although it does succeed in generating high levels of energy, creativity and productivity--regards people as a purchasable commodity or a potential market, but is otherwise indifferent to human values and welfare. Neither the determinism of the State nor the determinism of the market can be adequate in themselves to achieve the goals of peace and prosperity that we strive after.

It has been generally assumed that transition now taking place in Eastern Europe will sooner or later lead these countries to adopt forms of government and economy identical to those prevalent in the West. But for those raised in a society that offered a great measure of social security, the poverty and insecurity of the Western system are gross inadequacies. While it is clear that these new democracies have rejected the authoritarian statist system, it is not yet clear what finally they will accept, discover or invent as a more acceptable alternative. The creativity and inventiveness they have exhibited in seeking an alternative in the past may quite possibly lead them to discover that better mousetrap which both East and West are in need of.

Viewed from an evolutionary perspective, we may surmise the general direction and likely destination of that quest. The requirements of the State and the Market must eventually give way to the needs of People. The values of authority and money must be supplanted by acceptance of the fundamental value of the human being. Human welfare and well-being must become the central determinants of social policy, in place of the compulsions of the centrally-controlled State bureaucracy and the decentralized market pricing mechanism. *The first essential step in that direction is a commitment by market economies to guarantee the right of every citizen to employment.* Neither the mechanism of State planning and control nor the mechanism of market prices can accomplish this on their own. A blending of their values and methods--freed from the blinkers of dogma and the determinism of limited imagination--can lead us to the answer.

Wider perspective on Transitions

The outcome of all great social transformations--of which the present instance ranks in magnitude and importance with that of the French Revolution and the movement which freed India and so many other former colonies from imperialism, economic exploitation and cultural domination--depends on the degree to which individuals and institutions within the society have been prepared to understand, accept and respond to the new environment ushered in by the transition. Two hundred years ago the people of France were ready to overthrow the old order but ill-prepared to create anything new, with the result that the old soon re-established itself and lived on for another century. It took India's leaders more than four decades to prepare their people for freedom and it has taken another four to overcome the vestiges of colonial rule that prevented the country from releasing its energies for prosperity. Long after the foreign conquerors had left, colonialism lived on in the institutions of government and in the attitudes of the population. Decades of freedom and education were needed for the country to outgrow a sense of inferiority, a seeking for security, a feeling of submissiveness and complacency and to acquire a sense of pride, ambition, high aspirations and expectations, a seeking for achievement, and a spirit of adventure and enterprise--and still the task is not complete.

Development is like a chemical reaction that is determined by the variety and quantity of elements present and the conditions under which they are put together. If one essential element or condition is missing, a social transition like a chemical reaction may not take place at all. The absence of peace in war-torn Africa or democratic freedoms in former colonial nations, the absence of social stability or an entrepreneurial class, the absence of a functioning banking or education system, the absence of the minimum necessary infrastructure for transportation and communication--any one of these may be enough to prevent transition until the deficit is made up. If even an inessential element or condition is missing, the process of transition may require many times longer than would otherwise be necessary. Lack of information, lack of education, lack of necessary skills, lack of supportive laws or incentives or protection against losses--insufficiency in any of these areas may be enough to slow or delay the process of change by years or even decades.

The world needs a coherent intellectual framework for understanding and dealing with radical transitions. High priority should be given to developing

a fresh conceptual approach that is not encumbered by allegiance to existing theories and systems. Transitions should be regarded as social transformations which depend on and result in corresponding changes in social, political, economic, and cultural spheres. Efforts to guide a multi-dimensional social transition through uni-dimensional strategies, particularly those limited to manipulation of macro-economic policy, are unlikely to yield the anticipated results. Even those transitions which are apparently confined to economic activities within a stable political context necessarily depend on changes in social attitudes and in social institutions which can be dealt with most effectively by assuming a wider perspective of the process. Clear visualization of the before and after states of transitions, the existing system, the goals to be sought after, and a detailed picture of the changes that need to occur in behavior, attitudes and institutions are necessary for deriving the most effective transition strategies.

With the knowledge the world possesses today, with the example of many successful nations over the last four decades, and with its highly educated and motivated people, surely the nations of Eastern Europe and Central Asia can abridge the time required and the hardship of lessons learned by trial and error to a few years. But this cannot be accomplished by sweeping remedies or hastened by over-eagerness or impatience. It will require application of a profound understanding of the process of development and transition. *We believe that a properly conceived effort to draw on the best available knowledge and experience of other countries can generate a transition strategy that avoids the dangers and pitfalls of the initial approach to reform and put in place the essential foundations for the new system to function effectively and generate benefits for the people before the dawn of the new century.*

DEVELOPING HUMAN RESOURCEFULNESS

In the preceding chapters we have tried to draw attention to the uncommon opportunities that the world presents at the dawn of a new millennium for the abolition of war and the eradication of poverty. None will question the desirability of achieving peace, democratic freedoms and prosperity for all. But many may doubt the practical feasibility of accomplishing these necessary goals. Every great endeavor requires a proportionate investment of energy and resources for its accomplishment. The realization of peace and prosperity is no exception. What, then, are the resources required for this achievement and where are we to find them?

The history of civilization is the process of humankind discovering greater and greater resources and learning how to utilize them to acquire higher and higher levels of physical security, productive power and comfort. In the earliest phase, these resources were almost exclusively material. The next phase brought the discovery of tools and instruments that made the material resources far more productive and valuable than before. Gradually, society discovered rudimentary organizational resources--the capacity to organize productive activities in a more effective manner. The organization of farming utilized the tree to make a plow with which to cultivate repeatedly the same land, giving birth to sedentary societies. The organization of crafts, commerce, armies, governments--constructed from a fabric of customs, rules, systems and laws--each made use of the material resources for greater productivity, power and achievement. At each stage of this evolution, society discovered the power of knowledge to increase further the productivity of the material, technological and organizational resources at its disposal. A knowledge of weather patterns boosted productivity in agriculture. A knowledge of astronomy enabled sea-worthy vessels to travel across the oceans to distant lands. This led to the invention of systematic education as a method to pass on acquired knowledge and skills to the next generation and thereby continuously increase them.

The Ultimate Resource

These rich and varied discoveries came as the result of a careful observation and analysis of the external world around us, an infinite exploration and experimentation with things, an endless trial and error blending of minerals and plants to forge metals and produce medicines. *As a result, for millennia we have tended to overlook or, at best, grossly underestimate the greatest of all resources and the true source of all the discoveries, inventions, creativity and productive power found in nature--the resource that has made minerals into ships that sail the skies, fashioned grains of sand into tiny electronic brains, released the energy of the sun from the atom, modified the genetic code of plants to increase their vigor and productivity--the ultimate resource, the human being.* World Food Prize recipient and father of India's milk revolution, Dr. V. Kurien, has decried the tendency to credit external factors for the accomplishment of people. "It is the farmer that has produced this miracle, not the cow." And so it can be said of the Industrial Revolution and the Green Revolution.

Looked at from a different perspective, the entire evolution of civilization is a progressive act of humanity's self-discovery. At each stage of external observation and exploration, people have discovered more of their own inner capacity for resourcefulness. The material, technological, political, economic and social development of the world over countless centuries is an external expression of the growing discovery by humanity of the unlimited creative power of mental ideas, emotional aspirations, physical skills and higher values. The real process of creation and development is from the immaterial to the material, from the inner to the outer, from idea to invention, from aspiration to achievement, from the lofty value of freedom and the ideal of self-determination to the founding of democratic nations, from the soaring emotions of an emperor's love to the beauty and grandeur of the Taj Mahal, from the urge for adventure to the discovery of a new continent, from the potter's joy in expressing perfect skill to the perfect symmetry of a vase. All begin as an inner urge that expresses externally in life.

Leadership in Thought

In times of crisis, great leaders rise to remind us that the true resource is ourselves. Thus, Winston Churchill inspired the tiny British nation with the courage to stand and fight fascism when all the rest of Europe had

surrendered; thus, Franklin Roosevelt halted the collapse of the US banking system during the 1930s by convincing the people that fear was their greatest enemy and that the basic economic strength of the nation was intact; thus, Gandhi inspired whole generations to fight against colonialism, apartheid and other forms of oppression in a non-violent manner; thus, Independent India's leaders declared the goal of complete food self-sufficiency at a time of near total dependence on grain imports to avert widespread famine; thus, Gorbachev broke down the psychological barriers to peace and human understanding that had divided the world into two opposing armed camps for four decades; and thus, Deng Xiaoping committed the Chinese nation to provide food and clothing for all its citizens, launching a period of phenomenal economic progress for one-fifth of the world's inhabitants. These great acts of leadership were fundamentally acts of leadership in thought, of leaders who knew the power of human creativity and determination to achieve what few believed possible.

It has been our objective to show that now is a time of unprecedented opportunity, provided that we shed the artificial fetters that limit our ideas, attitudes and actions. *When we rely on external resources, we achieve the minimum because our achievement is based on what we see before us. When we rely on the inner resources, we achieve the maximum because we are constantly led to discover more of our own unlimited capacities.* Why should we wait before acting until we are compelled by the irresistible force of the rising expectations of the world's masses, by the explosion of violence in our cities, or by the complete breakdown of our economic systems because of spiraling unemployment? Why should we not act now to prevent these outcomes and reverse the trends that threaten to make them a reality? All the resources necessary are within our reach, within ourselves. We need the courage to think and say that it is time to abolish weapons of mass destruction and call a halt to the use of war for settlement of disputes, that it is time to insist that all people enjoy the most basic democratic freedoms, that there can and must be enough food produced to feed everyone, and that every person must be guaranteed the right to gainful employment.

The barriers to these achievements are not material or technological. It takes money, materials and technology to make war, not to stop it. That requires a determination and insistence, an intolerance of violence, which must start with a commitment of the world's leaders and the total empowerment of the UN to enforce peace. It takes material resources and technology to suppress people, not to make them free. That requires an acceptance of basic human rights as a non-negotiable minimum requirement for each nation to participate in the international community, which must start by a voluntary abdication by the great powers of the principle of rule by might that governs

the present structure of the UN. Renunciation of the veto power, expansion of the Security Council and democratization of UN decision-making processes will forge an institution capable of meeting the challenges of the future, rather than living in the shadow of the past. Why should we wait for these things to happen inevitably after a lapse of decades or centuries when we are amply capable of bringing those beneficial results now to the great advantage of everyone?

Many will argue that when it comes to food and jobs, the external resources are the real constraints. We disagree. It has been amply demonstrated that the main cause of famines is not inadequate production or supply of food. In the modern day, famine is primarily an economic problem of entitlement, not a physical problem of shortage. The world possesses enough technology to double or triple the food supply in a decade, if only the world's poorest two billion people have the purchasing power to consume it.

So too, the problem of employment. Humankind has employed itself ever since the dawn of civilization. So long as people have wants and are willing to work to fulfill them, there need not be a shortage of jobs for all who seek them. The problem today is not a shortage of money or technology. The problem is that we have constructed a hermetically-sealed economic system that does not permit all people to express that willingness. Even if we reached the advanced stage of technological development that enabled one tenth of the world's population to produce all the goods and services that the entire humanity could ever possibly aspire for, what would prevent us from distributing that work in such a manner as to provide everyone the opportunity to acquire the purchasing power to consume their share of that over abundance? The main limit on the production of sufficient goods to create prosperity for all is not material, financial, or technological. It is the inefficiency and arbitrariness of the present economic system that fails to take advantage of the vast latent market potential of nearly half the human race. Give these people the chance to work and they will create the markets to provide jobs and higher incomes for everyone. The single act of moving artificial subsidies and import barriers for agricultural products in industrial nations that protect the jobs of so few in the West and eliminate jobs for so many in developing countries can help realign global labor markets, creating vast scope for employment generation in the South that will act as an engine for industrial exports and full employment in the North.

Ultimately, the achievement of peace and prosperity for all does require an enormous investment of resources, but the resources demanded are human resources that dwell within ourselves, waiting to be tapped. These resources

can never be exhausted because the more they are drawn upon, the more they grow. *The real challenge of development is developing people--not in the external sense of providing them with food, clothing, good health and fresh water, but in the inner sense of developing their awareness, attitudes, skills and values to make them more enlightened, productive and contented human beings. What we need today is fresh leadership in thought by our leaders to educate themselves and then the world about the opportunities of the Third Millennium and then to take the actions to convert these possibilities into actualities. Developing our human resourcefulness is the single greatest need and opportunity of our time.*

Tapping Unutilized Resources

Economic and social development strategies emphasize the strengthening of social capacity by building up physical infrastructure, production facilities and commercial organizations and by creating a conducive environment for increasing economic activity through appropriate laws, fiscal, monetary and trade policies. Human development strategies focus on improving the welfare and capacities of the individual through better health, education, political choice and economic opportunity. Together they encompass the two basic components of all development--micro and macro, personal and institutional, individual and collective. The challenge is to develop simultaneously both individual and social capacities and utilize their potentials in a complementary manner. For the individual, development involves acquisition of greater knowledge, more progressive attitudes, improved skills and higher values. For the collective, development involves establishment of more useful and productive institutions, systems, organizations and cultural values.

The conventional view that development is essentially a function of scarce economic inputs must give way to the perception that the opportunities and potentials for rapid development far exceed actual achievements in every country. Looking back over the past few decades, we realize that the speed of social progress could certainly have been much greater than it was. The tremendous potential for accelerating development is most easily illustrated by instances in which actual achievements substantially excelled expectations, such as the enormous leap in world agriculture during the 1960s and 1970s and the phenomenal growth of incomes, employment and exports in East Asia during the last ten years. These unforeseen accomplishments reflect the magnitude of potentials that these countries possessed but had not previously utilized.

The untapped resources of the society can be categorized under several headings:

- *Knowledge* of the process of development and the factors that stimulate it.
- *Education* that imparts progressive social values and practically useful perspectives.
- *Information* that creates awareness of opportunities.
- *Values* that foster productivity, organization and social cohesion.
- *Skills* that improve quality or productivity.
- Successful *systems* that can be imitated.
- *Organizations* that promote cooperative, coordination or a wider sphere of activity.
- Environmentally-friendly *technologies* that can be widely adopted.
- Social *attitudes* that foster self-confidence, individual initiative, and positive responses to new opportunities.
- Development oriented *laws, policies and programs* that can be more fully implemented.

A huge surge in development can be achieved if every socially available resource and potential is fully utilized by the people--if every capable youth, male and female, continues education up to the level of their highest aptitude; if every family employs all the health care knowledge and best practices known by the society; if every government self-employment program and training program is fully utilized; if all known technology for improving agriculture is widely publicized and put to practice. The highest priority must be to evolve strategies for utilizing these vast social resources more effectively.

The magnitude of this potential is illustrated by the enormous gap, referred to earlier, between average yields on major food crops achieved by poor developing countries in Asia and Africa and the yields obtained by the world's most productive producers. Proven technology already exists capable of raising low yields well above the world averages. The real limiting factors are inadequate dissemination of information about best practices and success stories, inadequate skills in employing these methods, inadequate organizational arrangements for marketing and processing, as well as out-moded policies and attitudes about food self-sufficiency and the role of agriculture in the national economy. Developing these individual and institutional resources should be our highest priority.

Theory of Development

A greater knowledge of the process of development that we seek to accelerate is the first essential resource needed for achieving the goals set forth in this report. The UN Secretary General has rightly drawn attention to the worldwide crisis in development economics and called the need for new thinking on development "the most important intellectual challenge of the coming years." Until now development has been largely a haphazard subconscious or half-conscious process of trial and error experimentation, an application of partial strategies, a confusing mixture of productive and counter-productive initiatives, an unscientific and often superstitious clinging to half-truths or old-truths that no longer have any relevance.

Development is not merely a set of goals or programmes. It is a social process by which human beings become mentally aware of new opportunities and challenges, conceive of ideas, create inventions, release their energy and enthusiasm for achievement, and acquire the skills and organizational capacities for action. A better understanding of that process will enable us to avoid the errors and tardiness of past efforts and accomplish in the next few decades what might otherwise take centuries.

The world possesses sufficient experience and information to formulate a comprehensive and integrated theory of development as a social process. The theory should explain the process by which human society has developed to where it is today, the forces which propel its growth, and the stages of its past and future progress. It should be based on the perception that the political, economic and social life of humankind is a single, inseparably whole and, therefore, that comprehensive, total strategies must be applied to resolve our problems, because partial strategies lead to partial solutions which disturb the harmony of the whole, generating unwanted side-effects.

This knowledge should be utilized to formulate a model of development that is based on the internal dynamics of the process rather than on its external manifestations or extrapolation of future trends from past data. This model should become so precise that we can anticipate the impact of peace, more education, greater political freedom, rising social expectations, high values such as guaranteed employment on the progress of society. This conceptual knowledge should enable us fully to understand and replicate conditions responsible for the post-war achievements of Japan, China's recent 20 percent growth rate or Yugoslavia's remarkable conquest of hyper-inflation. A comprehensive approach will enable us to anticipate the imbalances and

side-effects generated by partial initiatives and to evolve total strategies to avoid them.

The comprehensive conceptual model needs to be complemented by the development of models for employment, food, education, trade and other fields that go beyond the national or sectoral approach to show the impact of the complex interactions that are key determinants of the development process--for instance, the impact of democracy on agriculture and of increasing agricultural productivity on employment, industrialization and trade, the impact of rising education on democratization, social tolerance for diversity, personal expectations and social stability. Once formulated, these conceptual models need to be applied under a variety of conditions to test their validity and demonstrate the value of a comprehensive approach to development. Therefore, we have proposed that the UN adopt a number of districts in different regions of the world, including crime-ridden inner cities or impoverished rural areas in industrial countries, to evolve and apply strategies for their rapid transition to a higher level of development.

Six Goals in Education

Once formulated, this knowledge needs to be imparted through education. Education is the greatest known civilizing force and single most powerful lever for human development. Training imparts skills, but education increases the capacity of the individual at a more basic level, making the mind more active and alert, converting physical energy into mental energy, trains us to see things from a wider perspective, to question and challenge the status quo, to think and imagine, to innovate and invent, to make decisions for ourselves and to act on our own initiative. *Education is the process by which society passes on the accumulated knowledge and experience of countless centuries to new generations in a systematic, concentrated and abridged form, so that today's youth can start their lives at the high point of knowledge and wisdom attained by preceding generations.* Education replaces the slow subconscious process of trial and error learning with a swift conscious process. This accumulated knowledge is a great power that can be utilized to accelerate human development and abridge the time needed for society to arrive at progressively higher levels of material, social and psychological fulfillment.

Despite the massive efforts of international institutions to create awareness of the vital role of education in peace, democracy, economic development, population control and environmental protection, progress on extending the benefits of education to all humankind is still grossly inadequate.

In 1990, 948 million people or about 20 percent of the entire world population lacked even basic literacy skills. Adult literacy rates in the least developed nations still average less than 50% and are less than half that level in a number of countries. Unless more intensive efforts are made, worldwide the absolute number of the illiterate will decline only marginally by the year 2000. It is likely to increase by nearly 10 percent in South Asia--home to more than 40 percent of the world's illiterate--and by nearly seven percent in Sub-Saharan Africa.

Although universal primary education has been a goal for decades and primary education has been made compulsory in most countries, still 128 million children living in remote rural areas, urban slums and refugee camps--representing 20 percent of the total school-age population--are excluded from primary education. Unless greater measures are introduced, this number may rise to more than 160 million by the turn of the century. Achieving true universality of primary education by the year 2000 will require a massive investment in school buildings, teachers and instructional materials for an additional 230 million school-age children. An additional 4 million teachers will be required, 20 percent more than in 1990. In sub-Saharan Africa, gross primary enrollment will have to double before year 2000 to achieve this goal.

In addition to the quantitative deficiency in educational enrollment and achievements, the quality of teaching facilities, materials and staff are severely deficient in many countries. Most developing countries hire teachers with only a secondary school certificate and a minimum of teachers' training. This contributes to the high rate of primary school drop-outs and grade repetition. Only 71 percent of first-grade entrants complete primary school in developing countries.

Addressing these challenges will require a substantial increase in financial resources devoted to education. In most regions, public expenditure on education has risen in recent years. In 1990, the world average was 13.5 percent of total government expenditure or 4.8 percent of GNP. More than one-third of the countries in the world still spend more on the military than on education. Efforts to improve education must go hand in hand with efforts to promote peace and disarmament and drastically curtail military spending. Mechanisms should be put in place to insure that a significant portion of reduced military spending is invested in education and training.

The very highest social priority should be given to six educational goals in both developing and developed countries. First, there must be a massive effort to achieve UNESCO's goal of *eradicating illiteracy* worldwide by the

year 2000. The problem can only be banished by an all-out commitment of every national government to eliminate the huge backlog of illiteracy while at the same time insuring that every newly born child is taught to read and write. National youth service corps and military personnel can be utilized to help provide the necessary manpower.

Second, every possible step must be taken to provide *education for female children*, an essential requirement for social equity and quality of life improvement. Nearly two-thirds of the world's illiterate are women. In the poorest developing countries, literacy rates among females are 40% below rates for males and the average number of years of schooling for females is 60% lower. But perceptible progress has been made. Between 1980 and 1990, female primary school enrollment rose from 44 percent to 47 percent of total enrollment, although it actually declined in the Arab States and remained virtually unchanged in South Asia. Uneducated females represent a huge reservoir of untapped human potential that must be given every opportunity and full assistance to develop their innate capacities. This will call for accelerated efforts to establish crèche and child-care facilities, abolish child labour, and remove gender bias from text books and educational institutions. The cost of raising female educational levels up to that of males worldwide has been estimated at \$2.5 billion, a small amount for an initiative that could have such wide ranging benefits.

Third, literacy must be complemented by *techniracy*, education that imparts basic technical information and skills to the population through a variety of teaching methods suited to the educational level of the recipients. Detailed recommendations are presented in the next section of this chapter. At the other end of the spectrum, comparable efforts must be made to raise scientific literacy, which is essential for continued growth of technology, productivity and employment in modern society. The pervasive influence of science in society requires that we bridge the gap that presently divides the sciences and humanities and evolve an educational system in which science is no longer regarded as a specialized field of study.

Fourth, radical changes are needed in the content of school curricula at all levels to make education relevant to the real needs of the students and the development of the country. The society whose system of education is integrated with the social aspirations of the country will develop most rapidly. The system of education prevalent in most developing countries is oriented toward the outer form--acquiring a degree or qualifying certificate--rather than the inner content of knowledge.

Educated unemployment is a direct result of a system that fosters obedience and rote learning rather than individual initiative and creative thinking. A new system of *development education* needs to be introduced at all levels that presents the history of development over the centuries, the potentials of the present society and the opportunities for individual advancement. The goal of development education should be to equip the student with an understanding of his society, its achievements and potentials, and the opportunities open to each individual to participate in its future growth. The index of its success will be the extent to which students of this curriculum seek self-employment rather than salaried jobs.

Fifth, *minimum and average educational levels should be raised in all countries*. Two centuries ago education was a luxury of the rich and it was simply inconceivable that every member of the population in any country could receive even a minimum level of education. Few of the industrial nations fully meet their own present minimum standards for every citizen. These minimums are arbitrary, not optimal. Raising the minimum levels of achievement further in all countries may be the most important initiative that governments can render to prepare their citizens for a more productive, prosperous and peaceful future.

Sixth, new educational systems must be evolved to prepare people for life in the 21st Century. Education imparts knowledge of the past and the general ability to deal with the future, but this ability is only in potential. It is not fully developed in the form of practically useful knowledge. An educational system that endows the individual with the capacity for physical accomplishment, psychological fulfillment and original thinking would enable society consciously to abridge the development process and accomplish goals within one or few decades that would otherwise take place over a span of a century or more.

We believe that it is possible to fashion a system that directly prepares students for life in the 21st Century, because the necessary knowledge already exists subconsciously in society and consciously in a few stray individuals or social groups. Materially, the world already possesses the knowledge needed to produce sufficient food and other necessities to eradicate poverty from the earth, but this knowledge is not yet a conscious possession of humanity as a whole that is passed on to every individual, even in the most advanced nations. Socially, every culture possesses the knowledge of the essential qualities necessary for lasting success. This knowledge, if consciously formulated, can be systematically imparted to the entire population through formal education. Psychologically, the right attitudes, values and motives enable the individual to attain a self-existent happiness and inner harmony which nothing can disturb. This knowledge too can be consciously formulated and communicated through the *educational system of the 21st Century*. Mentally, our knowledge is partial, biased and

biased and largely dependent on social status and opinion, rather than purely rational criteria. True mental objectivity can be taught. Human fulfillment in the 21st Century depends on our ability to provide an education that imparts not only material facts, but also the mental perspectives, psychological attitudes, personal values, individual skills and organizational abilities needed for the full blossoming of human resourcefulness and accomplishment.

Developing Skills

Improving the quality and quantity of productive skills is essential to implementing the strategies for peace, democratization, food security, economic growth and full employment set forth in this report. The phenomenal growth of East Asian countries is the direct result of their massive investments in upgrading the skills of the workforce. Rather than generating excess workers, rising productivity has generated greater demand for labor. Labor productivity in South Korea rose 11 percent per year between 1963 and 1979, mostly due to investment in education and skills. This increase has been accompanied by a growing shortage of labor, equivalent to one percent of the workforce in 1991. Investment in education and training helped Thailand raise labor productivity by 63 percent during 1980-85. It, too, is moving from a labor surplus to a labor shortage economy.

An enormous range and depth of physical, technical, organizational, managerial and social skills are needed in order to constructively utilize the freedom which democracy provides, the productive power of new technologies, the efficiency of modern institutions and systems to achieve greater developmental results. These skills admit of constant and continuous improvement without limit in the same way that technology and organization can always be further improved. A comparative survey of the level and quality of skills in any country with those of countries above and below it on scales of economic and human development will reveal the crucial role of skills in development. A scale of progression on key skills can help every country identify its relative position, assess the scope for further progress and evolve strategies to fill the gap. *Raising the skills of society to those of countries higher up on the scale will enable the country to move to that higher level.*

Despite enormous expansion of educational and training institutions, most of these countries suffer from a shortage of quality vocational skills among the huge number of people at lower levels of the society who seek desperately to raise their standard of living. This shortage retards growth in productivity

and quality needed to meet domestic needs and achieve international competitiveness. The technical training infrastructure in these countries should be expanded by the establishment of craft and vocational training institutes at the local level in every community to impart a wide range of basic technical skills. A massive program of basic vocational and skills training should be launched on a parallel with the 100% literacy programs that are now being promoted by many governments to wipe out rural illiteracy. The military in many developing countries possesses the organizational capabilities and experience with intensive training to assist with this task. An institutional gap exists in agricultural training systems.

In most developing countries, agricultural colleges, universities and polytechnics train researchers, government, bank employees and extension officers, but not farmers. Producing more food with less water, less chemicals and less soil erosion requires high levels of skill. The chain of agricultural training needs to be filled out at the lower level by establishing thousands of village level farm schools as proposed in the chapter on food security.

The switch from centrally planned to market oriented economic systems in Eastern Europe cannot be successful until the population has acquired the skills needed to function effectively in the new economic environment. Under the communist system, emphasis was placed on education and training in technical subjects with little attention to marketing, organizational, commercial and interpersonal skills, which are essential requirements for functioning in a market economy. A detailed inventory should be compiled of the types and levels of skills needed for transition to the market, covering areas such as entrepreneurship, management, national and international marketing, strategic business planning, finance, quality control, product development, production technology, design, and human resource development. Intensive training programs need to be introduced to impart these skills on a massive scale.

Even in the most advanced industrial nations there is vast scope for upgrading skills to improve productivity and to keep pace with rapid technological development. Inadequate skills are a major impediment to the assimilation of new technologies. The increasing demands of global competitiveness place pressure on workers in these countries to continuously improve their skills. The mismatch between the skills of the workforce and the evolving needs of industry aggravates unemployment. Studies of the return on investment from training programs document the enormous benefits of continuously upgrading the skills of the work force. Private sector investment in training will prove inadequate unless it is encouraged

encouraged by incentives or complemented by greater public investment in this sector.

Information Superhighways

Information promotes political freedom, economic development and social justice. The transforming power of information under *glasnost* opened up Soviet society to events in the outer world and created widespread awareness of the alternative approaches and achievements of other nations. Information brought down the Berlin Wall, ended the Cold War and ushered the world into a new era. Information about economic opportunities and potentials is an essential ingredient, a catalyst, of the development process. In the past, development strategies have tended to place too little emphasis on the power of public awareness to release people's energies and initiative on a massive scale. The vast accumulation of knowledge and new technology for rapid dissemination of information that the world possesses today can be utilized to increase the speed of change, eliminate many false starts and wrong turns and much unnecessary suffering. *The goals and strategies recommended in this report aim to accelerate the process of political, social and economic development by creating greater public awareness of desirable and achievable objectives and releasing the initiative of individuals and institutions to pursue them more vigorously. Information is the most powerful catalyst for this process.*

The speed and extent of knowledge transfer are far from optimal between and within nations--even within industrially advanced nations--due to lack of information, out-dated attitudes and beliefs, lingering superstitions, and conventional wisdom. Ignorance and skepticism about new opportunities are characteristic of development at each stage and in every field of activity. Information about success stories helps overcome this resistance and spurs people to action. Enormous potentials are waiting to catch the attention of the society and take off at this moment. Proven technology exists in many fields that await application because people do not know or do not believe that it can be employed successfully. Imitation of intensive aquaculture methods commonly employed by farmers in Taiwan and Singapore can raise average fish yields in South Asian, African and Latin American countries 25-fold. Advanced methods for micro nutrient management can double or quadruple fruit and vegetable yields in most developing countries. A complete list of proven but untapped technologies and commercial opportunities should be compiled for each country, each region and local area. Programs should be initiated to publicize information about

commercialization of agriculture, stimulating industrialization, encouraging self-employment and new business start-ups, improving management practices, etc.

Role of the media

A free and well-developed media is vital to democratization and development. But for this very reason, the dissemination of information by the media carries with it a great responsibility that cannot be effectively shouldered where private profit is the sole motive or government control limits freedom of expression. The media can play an invaluable role in disseminating relevant information to the public, but the type and quality of information being carried in most developing countries must be radically improved. The worldwide tendency to focus on the immediate and dramatic at the expense of that which could make a substantial and lasting contribution to development requires greater efforts to creatively present socially useful information in an easily accessible and interesting form.

Information in Developing Countries

In the industrial democracies there are usually multiple sources of independent information available to the public on most issues. The same is not the case in developing countries, where very often the sole source of information is government, which lacks credibility because the quality of information is poor or it is politically motivated, or academic institutions that are insulated from practical, especially commercial, realities. The need is especially great for widely broadcasting value-added information at the local level.

Specialized agencies should be established in developing countries in the form of public foundations or independent research institutions to provide a credible, unbiased source of information by identifying critical gaps in public awareness needed to stimulate development in various fields; conducting studies to document proven practices in agriculture, business, education, health, government, media; disseminating information on new opportunities; commissioning films, novels, short stories and syndicated columns to communicate developmental information; supporting pioneering examples of new or improved activities in different fields; encouraging others to imitate successful pioneers; recognizing and rewarding high achievers. *A modest investment in new institutions to disseminate information can have an impact comparable to that of the information superhighways being heralded in the most industrially advanced nations--accelerating adoption of new activities, magnifying the response to*

government programs, and doubling the total developmental achievements of a country over the next five years.

Information as a Stimulus to Transition

The people of Eastern Europe and the former Soviet Union are highly educated, but long deprived of free access to information. Recent economic reforms have dramatically increased the importance of information in the functioning of the economy. The breakdown of the command system necessitates the establishment of new channels for the dissemination of information about economic principles, commercial opportunities and successful practices within and outside the country. The macro economic reforms introduced to free prices and legalize private property cannot generate the desired results, unless the population is also given easy access and exposure to a very wide range of essential information on new technologies, legal reforms, trade potentials, self-employment opportunities and modern management practices. The plethora of new laws, regulations and deregulations being enacted in these countries has the population baffled and bewildered regarding what is now legal or illegal, acceptable or impermissible. The transition of these nations can be significantly accelerated by systematic dissemination of important information to the population regarding potentials in agriculture, industry, technology, commerce, management and law as well as in politics, public administration, international relations, education, social institutions and health.

Information Needs of Industrial Nations

Even in the information-rich West, where the average citizen is overwhelmed by a continuous barrage of ideas, opinions and so-called 'facts' of varying accuracy and credibility from myriad sources, there is a need for more reliable information. This superabundance conceals gaping holes of ignorance. American foreign policy toward the USSR in the 1980s was certainly influenced by the fact that, as recently as 1988, more than 50% of Americans believed the Soviets fought against the United States in World War II. The irrational alarm which economists sounded in the late 1970s about the impact of inflation on the poor in the US overshadowed compelling evidence published by a leading economic institution that poorer Americans were actually better off and it was primarily the rich who were less advantaged by the price rise. The importance of continuous investment in training is not fully understood by all but the most advanced corporations. There is considerable scope for increasing awareness in areas such as self-

employment opportunities, the linkage between education and career development, management practices, and foreign trade opportunities. Ignorance and superstition concerning drugs, crime, ethnic and race relations, environment, health, education, child care, and the life of the elderly demoralize the population and make effective social action difficult in these areas. These problems can be minimized by educating the public to understand the changes taking place and to adopt appropriate new behaviors.

Raising Awareness Internationally: Public opinion is an even more important determinant at the international level, since the authority of global institutions is still quite limited. Rising ethnic and nationalistic sentiments threaten the integrity of States and impedes progress toward regional cooperation and global governance in many countries, because their populations lack reliable information regarding the enormous costs of political and economic fragmentation. The global debate over the Uruguay Round of GATT has been obscured by lack of clear information regarding its impact on the countries involved. International negotiations on debt, aid and the environment are complicated by lack of awareness about the opportunities that greater economic integration will generate for all nations. International institutions, non-governmental agencies and the international media play an important role in providing information to the world community, but there are still huge gaps to be filled in all fields. A conscious and systematic effort is required at the international level to put in place both the institutions and the technology for information superhighways needed to support peace, democracy and sustainable development in the 21st Century.

Building Social Organization for Development

The achievement of peace, food security and full employment cannot be accomplished without more fully utilizing one of the most creative and productive of all human resources--organization. The march of humanity is marked by the development of larger-scale, more complex and more efficient types of organizations to serve higher and wider social needs. Advances in the technology of organization, as much as advances in the technology of production, have been responsible for global progress during the present century and, especially, during the post-war period.

We have argued earlier that establishment of effective and lasting peace

requires a radical restructuring of the existing institutions for global governance. Unless and until the UN comes to embody in its own functioning the principles of representative democracy, it cannot hope to play a leading role in maintaining peace and freedom in the world. As every government and political leaders know only too well, an organization with responsibility but without authority is doomed to failure. Unless UN member states invest the necessary authority with international institutions and meet their financial commitments to support them, the world will continue to drift and flounder, powerless to oppose petty dictators and ruthless aggression. Unless a cooperative world military force comes into existence, every country will continue to be burdened with the enormous expense and insecurity characteristic of the old system.

Perhaps more than any other institution, the military has understood and demonstrated the enormous power of organization to accomplish a goal. The Gulf War was a dramatic illustration of the importance of reliable information, perfect planning, logistical support systems, effective chains of command and swift responsiveness to changing situations. *If humankind could mobilize and apply the same efficiency to the war on poverty and unemployment that it has exhibited in preparing for and waging wars against each other, very soon there would be no more poverty or unemployment to fight.* During World War II Ford Motors converted from manufacture of cars for the masses to making trucks and airplanes for the military, producing B-24 bombers at the rate of one per hour from a single production plant. If conversion from civilian to military production could be carried out by so many countries within one or two years, it must be possible to convert the military from war-based to peace-based applications and defense industries from military to civilian production within half a decade. That requires human resourcefulness in organizational innovation.

Organization is the means by which people work together cooperatively to achieve common goals and, in the process, to serve society in a wide range of functions. The achievement of food security and full employment depends on the establishment of new types of public and private organizations--commercial, financial, industrial, export, research, educational and training. These institutions are needed to encourage, support, standardize, regulate and control development activities. New institutions lie behind the success of most major development achievements. India's Green Revolution was as much a product of new quasi governmental organizations created for supplying inputs, warehousing and marketing as it was of new farm technology. India's White Revolution was

propelled by the rapid proliferation of producer cooperatives. Thirty years ago government was the only agency capable of investing and managing activities on so massive a scale. Today the society is more developed and mature and many of these functions can now be handled more efficiently in the private sector--but in either case, organization must play a central role.

Wherever countries fail to live up to their natural potentials, some institutional gap will be found that prevents new activities from taking off. In examining the potentials of commercial agriculture and agro-exports in India, ICPF identified critical missing links in the organization of production, transfer of technology, training, storage, processing, marketing and distribution of perishable commodities. Extension of proven systems can significantly accelerate development. The establishment of a new type of institution--the township and village industries--in China and the unique system for linking them with scientific institutions made possible the country's phenomenal achievements in rural enterprise and employment generation. These enterprises now represent 16.5 percent of all businesses in China and employ 22 percent of the total workforce. Institutional innovations of this type are possible in every state and every country. *A comparative study of institutions and systems in more and less developed regions and countries for every major sector will make it possible to construct accurate scales and reliable road maps for more rapid development.*

In the countries of Eastern Europe and the former Soviet Union, the social institutions that served under the centralized command system need to be transformed out of recognition or entirely replaced in order to support a market oriented system. Attempts at economic reform that focus primarily on changing laws and public policy without creating the necessary institutional infrastructure cannot succeed. Thousands of systems that have been fashioned by human resourcefulness are needed to support economic activity in different fields. The system of warehouse receipts enables American grain traders to purchase unseen crops with full confidence in their quality. The absence of this simple system retards trade on the recently established commodity markets in Russia and other CIS countries. A complete listing of essential institutions, small and large, should be compiled based on the experience of other nations and plans drawn up for introducing them.

Thus far, the development of social organizations like the development of technologies has been partial, piecemeal and sectoral, leaving large gaps between parallel and interrelated activities and institutions. This is especially evident at the international level where the organization of the collective social life of humanity is rudimentary and fragmentary though far

more complete than it was a few decades ago. In spite of the phenomenal growth in global communications, transportation, commerce, finance and tourism, it is still more difficult to carry out most activities internationally than it is domestically because the international activities are not as well organized. For instance, transfer of technology within and between nations still involves a largely trial and error process. Firms in developing countries seeking to acquire the best available technology for importation or acquisition have to search at considerable expenditure of time and money to discover what is available within their own country as well as overseas. The process of identifying and commercially transferring technology can be vastly simplified and accelerated by the establishment of international technology transfer corporations, sponsored by UN agencies such as UNESCO and UNIDO, specializing in all major fields of technology. These corporations should be operated on a commercial, for-profit basis, though governments of developing countries could become shareholders in order to promote their formation. Each corporation could undertake a detailed study of available technologies in their field and offer to assist corporate customers in developing countries in selecting the most appropriate technology to meet their needs. The corporations could also acquire the rights to important technologies with large-scale applications and then market them widely.

Velocity of Social Forces

Speed is a powerful engine for development and an important index of organizational efficiency and effectiveness. The higher the level of organization and development, the faster everything moves. The more developed the society, the faster it communicates new ideas and new information, develops new technologies and products, establishes new systems and institutions, adopts new policies and laws, transports goods, delivers services and carries out activities. Money, information, education, technology, public opinion, training, administrative decisions, transport, communication are powerful social forces and resources. Their productivity can be increased by increasing the speed with which they are employed, in the same way that land productivity can be raised by increasing cultivation from one to two cropping seasons per year.

In the most industrially advanced nations, the velocity of money is roughly 2.5 to 3 times higher than in the average developing country. Removing administrative red-tape and inefficiencies in the banking system can multiply the use value and productivity of real money, because the same money can be utilized for more transactions. The same is true for information, tech-

nology, training, transport and other factors. Increasing the speed of dissemination of information and new technology can accelerate the creation of new businesses and new jobs. In many developing countries, inefficient bureaucracies are slow to take decisions, issue licenses, review applications, sanction loans, and amend legislation. This inefficiency directly impacts on the pace of development. Streamlining and expediting decision-making and the movement of other social resources is a highly effective strategy for spurring development. *Comparative scales need to be created to measure the movement of each of these social forces within and between nations. Strategies can be evolved to stimulate more rapid overall development by directly acting to increase velocity of these forces up to ten-fold or even more.*

Progressive Attitudes

The world we live in today is an external expression of our inner attitudes. The world we aspire for can be realized only by acquiring the attitudes corresponding to those achievements. Every political leaders knows the power of attitudes. Great leaders possess the power to change them. Many of those who frankly acknowledge that external limitations such as money and technology are not insurmountable barriers to changing the world erect an alternative myth of inner determinism by insisting that the attitudes of people, and especially their leaders, cannot be changed.

In contrast, we view attitudes as one of the greatest of human resources, one that possesses a remarkable capacity for adaptation. Over the past two decades, we have witnessed and been parties to a radical change in attitudes of people, leaders and nations around the world regarding preservation of the environment. It would have been difficult to conceive in 1970 that in spite of the myriad technological difficulties and powerful economic interests at stake, the entire world would make such a dramatic shift of attitude so quickly. This change was not brought about from above by enlightened leadership, but rather from below in response to a swelling tide of public awareness and concern, growing as a result of the work of countless individuals, voluntary agencies and research institutions projected through the media, confirmed by the findings of the UN World Commission on Environment and Development, embodied in the specific resolutions of the Earth Summit and in the growing body of environmental laws being adopted by every country, and now commonly incorporated in the educational curricula at every level.

The changes called for in this report require changes of attitude of this magnitude. But no longer is it necessary for a great visionary leader to espouse a new attitude. The higher general levels of public education, the worldwide extension of the media and the active initiative of literally thousands of institutions serving the public interest can exert a powerful force for change, which sooner or later political leaders will accept and espouse.

What is the shift in attitudes demanded to achieve global peace and prosperity?

- From a competitive, ego-centric, state-centered attitude toward national security that seeks to enhance security for some nations at the expense of the rest of the world to an attitude of true global cooperation for collective human security.
- From demanding that other nations grant democratic rights to their people to a willingness to extend democratic principles to the governance of international institutions.
- From preoccupation with problems and limitations to an appreciation of the opportunities for more rapid development.
- From wanting to meet people's minimum needs to wanting to help them realize their maximum potentials.
- From the attitude that everything is determined by external constraints--money, other nations, political leaders, the general public--to the attitude that everything is determined by our inner resourcefulness and there are no limits to what it can accomplish.
- From viewing the developing world as a problem or a burden to viewing it as a vast untapped potential for global progress.
- From feeling that those who cannot find jobs must be paid social welfare to the attitude that everyone must be offered opportunities for gainful employment.

Cultural Values and Development

The growing violence, more and more visible disparities between rich and poor, and widespread destruction of the environment cited in this report have raised widespread concern that the present course of development is undermining the cultural as well as the natural environment for human development. A careful analysis of the relationship between culture and development reveals that cultural values are the essential foundation for all lasting social achievement.

The security, stability, productivity, growth and sustainability of society are determined by its values. This report calls upon nations and the international community to make a conscious shift to values that can generate greater domestic and international security, higher rates of sustainable growth, and more equitable distribution of benefits for all. The insistence on immediate abolition of war, eradication of poverty, democratic human rights and full employment express a commitment to the pre-eminent values of human life, social and economic as well as political freedom, and the development of the full potentials of the individual. The achievement of these high human values also requires the achievement of a large number of physical, organizational, social and psychological values, as well--higher productivity, better quality, more efficient utilization of resources, faster speed, more systematic functioning, improved coordination and cooperation, punctuality, cleanliness, open-mindedness, tolerance, harmony and a host of other values essential for high achievement in any field. Therefore, we have stressed repeatedly the importance of the value of integration in the formulation of strategies, of maximum utilization of human and social as well as material and technological resources, of greater speed and organization, and other values.

Values are a powerful instrument to spur development. They are goals or standards that set the direction and mobilize the collective cultural energies of the society for great accomplishment. They prompt us to strive for the maximum that is conceivable, rather than minimum that is achievable. Values form the basis for the tremendous developmental achievements of the past two hundred years, such as the Japanese commitment to teamwork and consensus, the American devotion to enterprise and innovation, the German dedication to quality, and the Dutch commitment to partnership with other people, rather than exploitation. Development is retarded by the slow pace at which new values are acquired, which normally requires a change of generation. But values can also be consciously transmitted through education in order to abridge the time needed for transition. The efforts over the last ten years to implement the value of environmental security illustrate the range of knowledge, information, attitudes, institutions, systems, and skills needed to achieve any high value in life. The recommendations presented in this report are intended to form a basis for identifying and providing the values, attitudes, organizations and skills needed to achieve peace and prosperity at the dawn of the Third Millennium.

It is well known that societies which are able to harness their cultural energies for development tend to progress very rapidly. Yet at the same

time, we know that cultural factors can also be a barrier to rapid progress. Clinging to the external forms and norms of behavior which distinguish one culture from another generates resistance to progress, whereas the inner content of culture is a powerful engine for collective achievement. Customs are the external form of culture, values are the inner content. The customs vary widely, but the values are universal.

The controversy over the relationship between culture and development is complicated by the fact that development both creates and destroys cultural forms and values. Every developmental achievement results in an abandonment of old behaviors and attitudes and acceptance of new ones. Development destroys survival-based, traditional values and creates achievement-oriented, progressive values. Over the last two centuries in countries around the world development has strengthened expansive values that encourage greater freedom, tolerance, individual initiative, self-confidence and self-respect, dynamism, risk-taking, efficiency, punctuality, organization, communication and cooperation, open-mindedness and respect of new ideas, innovation and creativity. At the same time development has weakened values that support respect for tradition and hierarchy, seniority and authority, self-effacement and humility, patience and perseverance, generosity and self-sacrifice. The 19th century tolerated values based on the exploitation of people over people through slavery, colonialism and war, and the domination of man over nature. The guiding values for the coming century are freedom and respect for the individual, social equity, tolerance for human diversity and harmony with the environment.

Development is widely regarded as the cause of moral decline and increasing corruption, crime and violence. These negative consequences are primarily due to the fact that freedom has been extended to vast sections of the population which were confined in the past by rigid social barriers and minimum expectations, so they never had need or occasion to embrace the values they now eschew. The earlier self-restraint has been replaced by a self-assertion that has not yet acquired the productive values needed for achievement. Rising expectations enhances this tendency. While it is true that corruption is more prevalent today than ever before, it is also true that the entire global economy functions on the basis of a faith, honesty, openness and tolerance that would have been inconceivable in the past. We mourn the loss of cloistered values, which were very often accompanied by narrow rigidity and provincialism, while failing to recognize the enormous growth in positive human values that has made possible the incredible progress of the past few decades.

In past centuries cultural values were handed down to future generations through the family. Education, which now focuses on the transfer of information, ideas and mental skills, can also impart development-oriented values such as open-mindedness, initiative and innovation. Integration and tolerance for diversity are crucial values for the further development of the human community. Yet the increasing speed of globalization has accentuated a contrary tendency toward increasing fragmentation. The pull of fragmentation cannot be countered solely at the political level. Education--both formal and public--is the best means for rapidly communicating and imparting the benefits of integration to the largest numbers of people.

In order fully to harness cultural potentials for development, we need to understand better the natural process of value formation in society, to discover the circumstances and conditions under which new values are accepted, and the factors that retard or facilitate this process. In other words, we need to evolve a theory of value formation which will ultimately enable us to consciously identify and instill values that are most conducive and supportive of a peaceful, prosperous life for all humanity. The collective progress of humankind will achieve its maximum velocity when we have discovered how to consciously accelerate the process of values acquisition. The role of the UNESCO Commission on Culture and Development can make a valuable contribution to our understanding of this most important issue.

Strategies for Developing Human Resourcefulness

The following strategies can be carried out by both governmental and non-governmental agencies at the national and international level to achieve the goals set forth in this report:

1. *International Level*

Shift Resources from Defense to Human Resource Development: Worldwide, massive investment is needed to improve the quantity and quality of education and training. A substantial portion of these resources will have to come from reduced military spending. But as recent

experience illustrates, savings in defense spending will not automatically go to this sector. The UN Social Summit should adopt specific goals for reducing military expenditure worldwide and channeling a specific percentage of the savings into education, vocational training, public information and other programmes for development of human resources. Each country should set similar goals. The Commission recommends that a minimum of 10 percent of the reductions in defense expenditure are invested in education.

2. *Comprehensive, Human-Centered Theory of Development:* An important contribution in shifting in thinking has taken place from regarding development primarily in terms of economic growth to greater emphasis on the human welfare and development of people. But development is not only a set of goals or material achievements--it is a social process by which human beings progressively develop their capacities and release their energies for higher levels of material achievement, social and cultural advancement, and psychological fulfillment. New theory is needed that focuses on the dynamic role of information, attitudes, social institutions and cultural values in the development process. An international effort should be initiated at the forth-coming UN Social Summit to evolve a comprehensive, human-centered theory of individual and social development that will lead to the formulation of more effective strategies to accelerate the development process. UNDP's approach to human security and sustainable development is an important contribution to this effort.

3. *Social Organization Index:* It is now widely recognized that a country's social organization or 'social capital' is a key determinant of its development. Measures and indices such as UNDP's Human Development Index that provide a comparative national assessment of progress on key dimensions of development generate greater awareness and stimulate greater political will and social initiative to improve performance. In a similar manner, UNDP should commission a program to construct a Social Organization or Social Capital Index consisting of one or more scales to measure the organizational development of countries covering major sectors such as commerce, industry, agriculture, education, health care, and technical

training. The index should evaluate the level of social organization in terms of its overall support to activities in each of these fields as well as the number and quality of institutions providing this support. Where objective measures are not possible, a rank or relative scale will suffice. These scales can then be utilized by countries to assess their own level of organizational development and to identify key areas where improvement is most needed.

4. *Scale of Productive Skills:* UNESCO should commission studies to construct a series of scales to measure the level of key skills in societies at different stages of development. The scales should assess the quantitative and qualitative development of key physical, technical, vocational and organizational skills, so that countries can more accurately identify high priority areas for training.
5. *Developing Countries: Eradicate Illiteracy:* All developing countries should commit to achieve UNESCO's goal of eradicating illiteracy by year 2000, engaging the participation of educational institutions, non-governmental agencies, military and national service corps personnel.
6. *Educate the Girl Child:* Central and state governments should give the highest possible priority to raising the educational achievements of female children. The benefits of educating girls on health, nutrition, population control, and family welfare should be widely publicized. A comprehensive strategy for achieving this goal should be drawn up and presented at the Fourth World Conference on Women in Beijing in 1995.
7. *Emphasize Techniracy:* While we have argued strongly for the importance of general education, rising numbers of educated unemployed justify a shift in government spending toward greater investment in vocational training. Basic technical and vocational skills are in short supply in most developing countries and this shortage acts as a significant constraint to more rapid growth in incomes and jobs. Efforts must be intensified to deliver these skills in an accessible manner to all sections, especially the rural

workforce, by establishing an extensive system of local craftsmen training institutes at the local level throughout the country, offering a wide range of basic technical and vocational training. Each country should prepare an inventory of key physical, commercial, educational, organizational and technical skills needed to raise the country to the level of nations at the next higher level of development. Place maximum emphasis on investments to raise the quality and quantity of skills to that level.

8. *Development-Oriented Education:* The growing problem of educated unemployment in developing countries reflects the wide disparity between the knowledge taught in the classroom and that required for self-employment and individual achievement in society. Development education should be introduced at all levels of the curricula of schools, colleges and universities in every country to impart a greater knowledge of the process of development the society is passing through and the opportunities which it presents for individual accomplishment, with emphasis on entrepreneurship and self-employment.

9. *Disseminate Information:* Governments in cooperation with public foundations, research institutes, universities and voluntary agencies should identify gaps in public awareness regarding opportunities and achievements in agriculture, industry, trade, management, science, technology, nutrition, health, education, employment, law and social welfare. National, state and local level programmes would be initiated to promote wider dissemination through governmental and non-governmental channels and the media.

10. *Enhancing Social Capital:* Introduce measures to increase the velocity (speed of transmission and utilization) of productive social forces, including money, information, decision-making, application and dissemination of technology, transportation and communication to increase productivity and stimulate development. Identify missing organizational links needed to raise the country's performance to that of more developed nations in agriculture, commerce, industry, exports, invention, marketing, distribution, consumer and commercial credit,

housing, health, education, training and other key activities. Combined teams of researchers and business professionals in each country should identify innovative systems successfully employed by other nations to improve performance in key sectors of the economy and propose steps to introduce as many as possible.

11. *Industrial Nations: Raise Minimum Standards of Education:* Unemployment is highest among those with the least education. Extending the minimum compulsory level of education by two years will improve the educational qualifications of the workforce, slow the entrance of youth into the labour market, generate new jobs in education, and better equip the next generation for coping with the increasing complexity and sophistication of life in the coming century. Intensify efforts to reduce high school dropouts and encourage greater enrollment in higher education.

12. *Management Training:* The ability to manage people, time, technology, money and other resources has become a critically important skill for achievement in modern society. The emergence of free market forces and globalization of business require new and improved management skills in every country. Introduce management training as an essential part of the high school and college level curriculum in order to impart essential planning, organizational and financial skills to all students.

13. *Education for the Future:* Accelerate efforts to evolve new educational systems adapted to the needs and conditions of life in the next century. Emphasis should be placed on developing the capacity for original thinking, acquisition of higher values, and psychological attitudes that lead to achievement and personal fulfillment.

A CALL FOR LEADERSHIP IN THOUGHT THAT LEADS TO ACTION

The vision of opportunity presented in this report is based on neither blind hope nor scientific projection. Mere wishing has no power for accomplishment and science has not evolved far enough for projections with regard to the complex processes that govern global political, economic and social development. And although it is true that very often our hopes have been disappointed, it is equally true that our fears have frequently proved misplaced. Our attempt has been to present what is imminently possible, not what is immediately inevitable--though we believe that much of what we have written will inevitably come to pass in one form or another, because it represents a natural fulfillment of social movements that have been preparing for a long time and continue to gain momentum.

The next two years are a propitious time for creating the leadership in thought that leads to purposeful collective action. Three major events will bring together world leaders from both governmental and non-governmental agencies to develop strategies for meeting the major challenges confronting humankind. At the International Conference on Population and Development and the World Conference on Women, concrete steps must be taken to generate greater educational, training and employment opportunities for the poor, and most especially for females, which are the best known methods for eradicating poverty and bringing down the rate of population growth. In the absence of effective measures, expanding population will pose increasing threats to human security worldwide. Therefore, substantial resources must be transferred now from defensive military preparedness for some possible future conflict to an all out war on poverty today. That is the best investment in the future security for all people.

Fifty years after the founding of the United Nations, world leaders will come together in Copenhagen in March 1995 to examine the impact of the UN on global politics, economics and human security and to develop strategies for converting the unfilled social aspirations of the UN into reality. Issues of

international governance are now pressing and ripe for action. Although they may be too complex and important to be dealt with comprehensively at the Social Summit, the occasion should be utilized for placing the restructuring of the United Nations and the international security system at the top of the international agenda.

Strong measures are needed at the national level to generate sufficient employment opportunities in both industrial and developing countries. But international cooperation and coordination is essential to ensure we are actually creating more jobs and not just intensifying competition for those that already exist. The Social Summit is also the right platform for launching a World Employment Programme to generate one billion new jobs worldwide during the next decade.

Ironically, the passing of the Cold War has heightened the incidence of violence in human affairs, partially because of greater freedom and removal of the external constraints that had earlier prevented people from expressing pent-up frustrations over their unfulfilled expectations. Tolerance for diversity and pluralism is an essential foundation for the exercise of democratic freedoms and achievement of economic prosperity. The greatest achievement of the 20th Century has been the growing recognition of the pre-eminent value of the human being. In recognition of the need for promoting greater tolerance in societies around the world, the UN has declared 1995 as the Year for Tolerance. This can only be achieved by recognizing that the forces which oppose us are not other people, but our common enemies--ignorance, egoism, poverty and greed. As world leaders at the Earth Summit in 1992 supported a Convention on Biological Diversity designed to protect and preserve genetic diversity in the living world, at the upcoming Social Summit a similar Convention on Human Diversity should be adopted to protect and preserve the rich variety of human cultures, which are the finest fruit of civilization and the moving force for our future progress.

Governments alone cannot accomplish these goals. It is the collective responsibility of the entire humankind. The advance guard of those who have already achieved high levels of prosperity in both the industrial and developing countries have a special responsibility to assist the rest of humanity do so as well. Nor is it any longer feasible for a portion of society to benefit to the exclusion of the majority. A world in which 20 percent of the population enjoys 84 percent of the income while another 20 percent struggles for survival on a mere 1.4 percent of the world's income can never provide a secure and sustainable way of life for humankind. Poverty is the greatest source of instability and strife and it will not honor any boundaries. We have all the resources necessary--intellectual, financial, technological,

and organization--to arrive at a system that guarantees the right of each individual to human security in its widest meaning--peace, food, employment and education for all. Those who now possess and enjoy affluence hold it temporarily in trust with a responsibility to use it build a better world for all. An investment by the one billion people already living in affluence in all countries of \$1000 per capita could form a trillion dollar Trust Fund to create a world without poverty.

Looking back over the past decades, centuries and millennia, we certainly cannot say that our progress has been as rapid as it possibly could have been. What we have achieved by the last decade of the 20th Century could have been accomplished decades or perhaps even centuries earlier. There was no compelling necessity that we fight two world wars before recognizing the need for global governance. It was not inevitable that we fabricate more than 50,000 nuclear weapons before realizing that they have robbed us of the very security we sought to achieve by them. We cannot say that the collapse of the East European economies was an essential and unavoidable step in their transition to greater freedom and prosperity.

On the other hand, wherever humanity has set itself with determination to achieve something great, sooner or later it has accomplished. In fact, that inner determination and commitment seem to create external resources and opportunities where earlier there were none. The intense effort of countless dedicated individuals and institutions to grow more food at a time when explosive population growth threatened the world with unprecedented famine leading to creation of the high yielding varieties of wheat and rice is a consummate illustration of this truth. So too, in looking forward, what justification do we have for saying that it need take decades to eliminate war or hunger or poverty from the face of the earth, just because it has not gone more quickly in the past?

It is this latter truth that we would wish to become the guiding principle of the next millennium. Instead of waiting for calamity to compel our progress, we can consciously and collectively develop the inner determination not only to overcome the problems that presently confront us but also to seek out every opportunity to better our present accomplishments and discover more of our as yet unborn human capacities.

The choice is ours and if we choose, what would otherwise take decades or centuries can be accomplished much sooner. Standing on the verge of the Third Millennium, we have the capacity to bring the future toward us by seeking with greater eagerness and determination to discover more of the infinite resources within ourselves.

The report examines the global issues of international security, employment, food and transition in Eastern Europe and identifies a range of "Uncommon Opportunities" that have arisen since the end of the Cold War to evolve lasting solutions to these problems. The report brings out the linkage between peace, democratization, development and the environment; calls for a restructuring of the UN on democratic lines; proposes a shift from a state-centered, competitive approach to national security to a global cooperative security system; calls for acceptance of employment as a fundamental human right; traces the positive contribution of technological development and trade to job creation; sets forth the basic elements of a world employment programme to stimulate job growth in both industrial and developing countries; views the Third World as a driving force for expansion of the world economy; argues that agriculture can be a powerful engine for employment generation and economic growth in the developing world; presents an alternative approach to transition in Eastern Europe; stresses the fundamental role of education, information and organization in development. The report challenges the view that external factors are the main determinants of social progress. It approaches development as a human process by which individuals and societies acquire and express greater awareness, knowledge, skills, values and institutional capabilities to promote their material, social and psychological progress and views diversity and pluralism in human societies as a potential force for integration. The 50th Anniversary of the UN is the time to act on all these opportunities, and to establish a global convention on human diversity and a global trust fund for a world without poverty.

The astonishing events of the past few years beginning with the fall of the Berlin Wall and the lifting of the Iron Curtain make this a time of uncommon opportunities for accelerated progress on issues of concern to all humankind. These events removed the physical barriers to freedom for hundreds of millions of people and the physical threat of nuclear war that

loomed over the whole world. But they have also shattered decade-old ideas, beliefs, attitudes and conceptions, leaving us without a clear vision either of our past or our future. Without an understanding of the forces and processes that have brought us to the present and without an intellectual map to the opportunities and challenges of the future, there is a real danger that the remaining fragments of out-moded ideas, attitudes and structures will lead us backwards rather than forwards or, at the very least, prevent us from seeing, seizing and fully benefiting from this unprecedented occasion.

International commissions set up by government, or international agencies, such as the UN, to study pressing issues of global concern are bound by the views and policies of the governments that constitute them. Thus, Robert McNamara proposed the establishment of the Brandt Commission as an independent initiative nearly twenty years ago to look beyond the horizons fixed by government policy and priorities, which resulted in a new vision and perception of an interdependent world. The International Commission on Peace and Food is such an independent initiative to seek a fresh perspective that extends beyond the present purview of governments. Like the world in general, the Commission has been overtaken by events. Originally conceived to utilize the growing international consensus on the need to abolish hunger as a lever to promote disarmament, recent progress on disarmament has outpaced our highest expectations. Eradication of poverty has emerged as the most essential condition for building a stable peace.

Several factors make this an auspicious time for breaking new ground and seeking higher accomplishments. The peaceful termination of the confrontation between East and West has lowered the mental barriers that divided the world into opposing ideological camps and prevented either side from critically evaluating their own and opposing viewpoints. This provides us with an opportunity to boldly experiment with new ways to reconcile and synthesize the forces of individual freedom and social responsibility. This is evidenced already by the movement of economic liberalism spreading throughout the developing world and the revolution of democratization that began in Latin American during the early 1980s, then exploded into prominence to sweep away authoritarianism in Eastern Europe, and is now washing away three decades of post-colonial authoritarian rule in Africa, where it has already raised 15 new democratic states in four years. South Africa is the most recent and inspiring example of this new freedom movement.

The aftermath of the Cold War period has also given greater impetus to another powerful current that is stirring the world from below--a revolution of rising expectations that gained prominence among the Western middle-

class after World War II, but has now acquired global proportions among the masses on every continent--reaching peak intensity in the great cities of Asia, Latin America and to a lesser extent Eastern Europe and Africa--unleashing an unprecedented burst of human initiative, a clamor and striving for more comforts and better lives, a growing impatience and assertiveness, as reflected in the growing incidence of urban and ethnic violence and mini-wars. No longer are the poor satisfied or resigned to their condition or willing to wait indefinitely for improvement.

These powerful currents, triggered and supported by the onset of the information age, are quietly sweeping through the world at the present time, awakening aspirations and stirring energies to action. They bear with them great potentials and grave challenges. A global community of democratic nations is the greatest safeguard against war, for history confirms that liberal democracies do not wage war against one another. So too, it is the greatest safeguard against famine, for no democratic nation with a free press has suffered from famine in the past five decades. The climate of freedom which democracy generates is highly conducive to development of the market economy and for rapid economic development. Rising expectations is a product of growing political and social freedom and more education translating into higher economic aspirations. It moves people to cast off the shackles of inertia, complacency and resignation, which are the handmaidens of poverty, and rise up to fulfill their own economic destiny. The energy and aspirations these two movements have released, if properly harnessed and directed, are enough to rebuild the world in a brighter image; if left blocked from constructive expression and frustrated in their seeking, enough to destroy the fragile peace and limited prosperity we now enjoy. Both the potentials and the challenges unleashed by these two great forces urge us, indeed compel us, to a more far-sighted vision and to bolder enterprises.

The new international political climate has also created the possibility of a massive redirection of resources from defense to development. Already military spending has declined by one-third from a peak of \$1200 billion in 1987. The hoped-for windfall peace dividend has not met expectations, primarily because a large portion of the cuts were absorbed by the decline in economic activity in the USSR and Eastern Europe and by efforts to control the US budget deficit. However, an additional \$400 billion a year in savings is practicable and could generate substantial cash resources for deployment to address pressing problems. Combined with a conscious and creative effort to utilize for development purposes other resources possessed by the

military, such as personnel, R & D capacities, training facilities and teaching staff, organization and management, logistics, transport and communication, engineering and technical, we have the material capacity to generate prosperity and a safe environment for all in the coming decade.

The perspective the world seeks must be based on a greater understanding of the inextricable linkages between peace, democratization, development, equity and the environment. None of these great goals can be achieved without corresponding progress on the others. Today, the greatest security threats are social in origin and cannot be mitigated or controlled by greater defense preparedness. Partial solutions will lead, at best, to temporary achievements fraught with unwanted side-effects that perpetuate the problems we seek to solve or generate new problems in their wake, such as the environmental pollution generated by application of industrial technologies, the population explosion resulting from improved public health, and the economic collapse generated by a uni-dimensional approach to a complex politic, social and economic transition in Eastern Europe. Viewing famine in narrow terms as shortage of food ignores the important role of democratic institutions, a free press and employment opportunities in eliminating famine. Comprehensive, integrated solutions alone can unravel the knots that make it impossible to establish peace when more than a billion people remain hungry and impoverished, while at the same time making peace an essential precondition for the eradication of hunger and poverty. ICPF has approached major problems by viewing them as parts of an integrated whole that can only be addressed by concerted action on multiple fronts. The report emphasizes that human attitudes, values, awareness, energy and skill are prime movers of the development process.

What are the foundations of this new intellectual perspective and what type of strategies, actions and results will it lead to? It requires a change in the way we look at and think of familiar things like war, weaponry, security, the role of the military, developing countries, democracy, agriculture, industrialization. First, we have to awaken from the millennia-old nightmare that war is a natural and inevitable part of human existence, which can perhaps be mitigated or kept far from our shores, but never really mastered or eliminated. In a world now free from major opposing military blocs fighting proxy wars in the developing world to maintain their perceived security interests, *there is no insurmountable material or technical or political obstacle to the complete abolition of war as an instrument of national policy and of the incidence of war in international affairs.* It requires a determined will and the fashioning of effective institutional

arrangements for enforcement. *The complete abolition of the production, possession or use of nuclear weapons is a first essential step toward this most desirable goal.*

Second, in the interests of human rights, global peace and prosperity, the movement of democratization must be carried to its logical conclusion. The sovereignty of nations, derived as it is from the sovereignty of their people, has to be based on a form of government that grants self-determination to those people. Whatever its inadequacies, representative democracy is the only proven system for extending these rights to all citizens. *A representative, democratic form of government should become the norm and standard in international relations and the minimum requirement for participation in the institutions of the UN system.* Furthermore, this principle that is so essential to achieving peace and prosperity at the national level is also vitally important to the creation of truly viable and effective institutions for global governance. Rule of law, democracy and universal human rights are incompatible with a system that is still governed by the principle of rule by might. The world fast approaching is a multi-polar world with many centers of economic growth and political influence. An expansion of the Security Council and abolition of the veto power are necessary but not sufficient steps in this direction. But if our aspiration is for establishment of a settled and secure peace and prosperity for all people and not merely a precariously unstable and temporary absence of war, then *nothing short of a complete restructuring of the UN system along democratic lines will suffice.*

Third, there must be a shift from the ego-centric, state-centered competitive security system that has governed relations between nations over the past century. This system is founded on the premise that each nation should strive to arm itself militarily against possible sources of aggression, which in turn creates a greater sense of insecurity in other countries, thus leading them similarly to arm themselves. This inherently de-stabilizing approach to international security was a natural outgrowth of the security arrangements put in place after the two world wars, resulting in the arms race and the confrontation between East and West. *It must give way to a new cooperative security paradigm based on the principle that the security of each nation can be enhanced by measures that provide greater security for all nations through lower, rather than higher, levels of defense expenditure and armaments, and by the establishment of a permanent standing military force, a world army, that guarantees the security of all member nations against external aggression.*

A fourth new perspective is a change in the way the industrial and

developing nations perceive their mutual interests. The old view of a Third World of politically and economically weak, aid-dependent countries is a vestige of the past that blinds us to immense opportunity. While growth is slow or stagnating in much of the West, it is gaining momentum in one developing country after another. The phenomenal progress of the East Asian 'Tigers' is now being outdone in speed and sheer magnitude by China. India and other nations are destined to follow these examples within the decade. *In the coming years, the so-called Third World will be the major engine driving the growth of the world economy and, as a result, the greatest potential source of economic growth and job creation for the industrial nations.* The measures presented in this report to accelerate development and employment generation in developing countries can be a highly effective strategy for ensuring growth and prosperity for all in the next century.

Fifth, nowhere are we in greater need of fresh thinking than when it comes to the issue of employment. So much have we come to accept the inviolability of the economic rules and systems fashioned haphazardly, and often unthinkingly, for our convenience that we now feel helpless to improve or alter the structures we have created. The very notion of an economic system that provides security and wealth for some while denying it to others--regardless of whether that denial is on the basis of heredity claim or first discovery or superior capacity--is an idea unworthy of a world that speaks of reason and justice--in the same way that slavery and colonialism are now considered unacceptable. Furthermore, it is unsustainable in an increasingly democratic world, where political leaders cannot resort to force to suppress the outrage of a rapidly growing minority of the economically disenfranchised unemployed. In a world where people are responsible for their own livelihood and economic well-being, employment is not a privilege, it is an absolute necessity. The system that fails to offer job opportunities to all is a failed system. Nor can we cast blame on some inevitable flaw in the market system. Like all others, it has been fashioned from our ideas and values. If we change the priorities, we can make it work differently. *The change that is needed is first of all a recognition that employment is a fundamental human right that must be guaranteed to all.*

Full employment would seem more appealing if it were not so widely believed to be impossible. The Western world has come to accept the myth that technology is inevitably eliminating jobs. Again it is intellectual limitations that stand in the way of progress more than material constraints. Although it is certainly true that technology eliminates jobs, at the same time it creates them, and on balance it creates many more than it destroys.

Otherwise, how can we account for the 400 percent increase in employment in the technology-intensive in the United States during this century, or the projected 21 percent expected over the next 15 years? While the total percentage of the workforce employed is near to historical peak levels, unemployment has risen in the West due to historically high labor force participation rates coupled with a number of temporary factors that will subside during the decade. The notion that the amount of work available in society is fixed has to give way to the realization that society can create real demand for more employment. *This report presents a series of practical strategies to stimulate greater demand for labor in industrial and developing nations and provide a viable basis for full employment economies.*

Out-dated thinking about food and agriculture conceals a vast hidden potential. For too long, food has been considered primarily in terms of hunger and meeting people's minimum needs, leading the governments and people of many developing countries to overlook its greater role in the process of economic development. Historically, it was rising agricultural productivity and surpluses that gave birth to the Industrial Revolution in Europe. In this century a strategy based on increasing productivity in agriculture has been a driving force for industrialization, job creation, and rising incomes in the fastest growing nations of East Asia. *Accelerating agricultural development with emphasis on value-added commercial crops is a highly effective strategy for employment generation and industrial growth in developing countries today. Coupled with the elimination of subsidies and protectionist policies for agriculture by industrial countries, ICPF's country-level research indicates that this strategy may be sufficient to stimulate the creation of the billion jobs needed to abolish poverty and unemployment throughout the developing world.* Whatever loss that this may entail to the four percent of the work force engaged in agriculture in industrial nations will be compensated many times over by the surging demand for import of industrial goods and services in developing countries. A structural adjustment is needed in industrial as well as developing countries to abandon anachronistic policies that benefit a few, but curtail the progress of the entire world community, including the nations that employ them.

The need for fresh perspectives and comprehensive strategies is graphically illustrated by the economic decline and social upheaval that has rocked the transition states of Eastern and Central Europe. The courageous initiative of these people to abandon dead rhetoric, reverse narrow attitudes, cast off decrepit structures to embrace new ideas, accept new attitudes and adopt new systems marks the greatest peaceful revolution in history. Yet our common inability to look beyond the mental dichotomy of two out-moded

systems--a statist communism that stifled the vitality of its people and a rampant free market capitalism that lives on in Western thought long after it has been abandoned in practice in favor of a more humane system--has led to untold human suffering and a wasteful squandering of the economic potentials of these countries. The temporary supremacy of economic doctrine in human affairs has blinded us to the need of solutions that are at once politically, economically and socially viable. Efforts to guide a multi-dimension social, political and economic transition through reliance on uni-dimensional strategies, particularly those focused on manipulation of macro-economic policy, are bound to fail. *An alternative approach is needed for the transition in Eastern Europe that builds political and social consensus for rapid change, introduces all the essential elements of a market economy in a balanced manner, gives priority to developing the essential micro-level institutions and skills, recognizes the essential role of government regulation and the special status of agriculture, and reduces reliance on external assistance.*

The most difficult mental shift of all involves our conception and attitudes about ourselves. Humanity has become so creative and prolific in its external accomplishments that we have lost sight of the greatest of all resources--the human being. It is from within ourselves that have sprung all the ideas, technologies, innovations, organizations and activities we regard with such admiration and anxiety. *Most of all, the new perspective the world seeks should be based on a recognition that humankind is the master of its own destiny, that the external limits are not binding on us if we tap the unlimited creative potential of our own inner human resourcefulness.* Discovering more of these inner resources and rapidly developing them in all people is the single greatest challenge and opportunity before us. Educating every human being to see the opportunities beyond the present limits and discover the potentials within themselves is our most important task, for *true education is leadership in thought.* This education should help us shift from our present preoccupation with problems to a grasping of opportunities and an insistence on actions to exploit them; from an emphasis on meeting minimum needs to a commitment to achieve the maximum which our inner resources and outer potentials make possible.

This leadership in thought necessitates that we first come to understand fully the process by which humankind has evolved to the present level of development, the forces that have propelled or compelled that growth, and the stages and levels of that ascension. Our achievements have been the result of the initiatives and contributions of countless individuals and communities, an unconscious, or at best semi-conscious, process of haphazard trial and error experimentation. In order to proceed more surely and rapidly than in the past, this unconscious process of growth has to be

converted into a conscious process of human self-development. We must become conscious of our past achievements so as to hasten and multiply our future accomplishments. *The cumulative experience of many countries over the past five decades needs to be freshly examined to evolve a comprehensive theory and model of development which will clarify the process of human self-discovery and development and serve as an instrument for evolving more effective development strategies to meet the challenges that still confront us.*

These perspectives have been applied in the report to generate specific strategies for accelerating progress on peace, food security, poverty eradication, full employment, social transition and human development. Although the number and range of recommendations is too great to be briefly summarized, the following fifteen strategies represent the central thrust of the Commission's proposals.

Summary of Key Recommendations

1. *Restructuring the UN:* The opportunity provided by the 50th Anniversary of the UN should be utilized to examine the restructuring of the UN to make it a more representative and democratically functioning system of international governance, by increasing the number of permanent members of the Security Council, abolition of the veto power, a redefinition of the respective roles and powers of the Security Council and the General Assembly, enhancing the status and powers of the UN Secretary General, and establishment of democratic guidelines for membership and participation of States in the UN system.
2. *Global Cooperative Security System:* The present state-centered competitive security framework must be replaced by a cooperative security system that unconditionally guarantees the security of member nations against acts of external aggression by means of a standing WORLD ARMY, similar in constitution to NATO but open to all countries that practice democratic principles of national governance, contribute financial and defense resources to a common armed force, accept ceilings on national defense expenditure and eschew possession of nuclear weapons.

3. *Peace Dividend:* A detailed plan should be drawn up by the Security Council for a further 50 percent reduction in global defense spending before the end of the decade to a maximum of \$400 billion. In addition, all States should conduct studies of the opportunities to re-deploy manpower, educational and training, scientific and technological, production and organization resources controlled by the military to combat rural and urban poverty as well as national and global environmental degradation.
4. *Nuclear Weapons:* The use of nuclear weapons should be declared by the UN a crime against humanity. Based on the precedent of the Chemical Weapons Treaty, the proposal for a universal ban on the possession of nuclear weapons by any nation should be placed before the Security Council for a vote. The five permanent members should agree to the suspension of their veto power on this most crucial issue to the future of humanity.
5. *Full Employment In Industrial And Developing Nations:* Partial or incremental measures will not solve the growing problem of unemployment in industrial nations. A radical change in values, priorities and policies--a structural adjustment--is required, based on the recognition that employment is a fundamental right of every human being.

Comprehensive strategies coordinated among OECD countries should be implemented to increase public investment to spur economic growth, remove tax disincentives for job creation and the bias for development of capital intensive technologies, promote small firms, raise minimum educational and training standards, reorient social security programs, increase labor market flexibility, and make income distribution more equitable.
6. *One Billion Jobs in Developing Countries:* A comprehensive strategy based on promotion of commercial agriculture, agro-industries and agro-exports, improved marketing, expansion of rural enterprises and the service sector, dissemination of commercial information, extending basic education and upgrading skills can form the basis for creation of one billion jobs in developing countries over the next decade. Achievement of this

goal requires that the industrial countries adopt agricultural trade policies designed to enhance export opportunities of developing nations.

7. *Global Employment Programme:* Neither the industrial nor the developing countries can resolve the problem of unemployment in isolation. The industrial nations require a significant increase in demand, which only the faster growing developing countries can provide. The latter require greater investment and access to markets, especially for agricultural products and textiles. A global employment program should be adopted at the 1995 UN Summit setting forth a plan to dramatically expand job creation worldwide during the rest of the decade. The plan should focus on elimination of protectionist trade policies, debt rescheduling for the poorest debtor nations, accelerated transfer and dissemination of technology, and international cooperation to encourage labour-friendly tax policies.

8. *International Sustainable Development Force for Food Deficit Regions:* An international development force should be constituted under the UN, consisting of demobilized military personnel and young professional, trained and equipped to promote people-centered, sustainable development initiatives. The technical and organizational capabilities of this force should be employed to design and implement integrated programs to upgrade food production and distribution in famine-prone nations by introduction of effective systems and institutions for planning, administration, education, demonstration and marketing.

9. *Model Districts:* At the forthcoming UN Social Summit, a plan should be adopted for establishing model district programmes in many countries. The central approach is to improve the usage of available natural, technological, human, managerial, institutional and financial resources in a sustainable manner to optimize production, productivity, farm incomes and employment, non-farm occupations, self-employment opportunities, agro-industrial development, exports and expansion of the service sector. The programmes should also cover depressed urban and rural areas in the industrial nations.

10. *Eliminate crop losses in the CIS:* In Russia and the other republics of the former USSR, highest priority in agriculture must be given to implementing a comprehensive program to reduce crop losses, which average between 25 to 50 percent of total field production for major crops. A viable plan is now available to reduce losses for foodgrains, vegetables and potatoes, eliminating food imports and food shortages within 3 to 5 years. The plan requires acquisition of foreign production and storage technology, but depends only marginally on import of equipment, most of which can be manufactured in domestic defense facilities. In order to be effective, it needs to be supported by a massive public education campaign on use of new technology to eradicate crop losses combined with demonstration plots on both large scale and small private farms throughout the country.

11. *Institutional Development for Economic Transitions:* Macro-economic policy reforms must be complemented by parallel efforts at the micro-level to build up new social institutions to support education and training in entrepreneurial and management skills, a free flow of commercial and technical information, access to credit and marketing assistance for small enterprises, business incubators, industrial estates, quality standards, leasing, franchising, and a wide range of other basic commercial systems.

12. *Global Education Program:* A worldwide program should be launched to improve the quantity and quality of education in both developing and industrial nations. The program should focus on achievement of six objectives: eradication of illiteracy by 2000; raising the educational standards of female children to that of males; expanding techniracy by improving basic technical information and productive skills through a network of basic technical institutions using methods of instruction appropriate to the recipients; changes in the school curricula at all levels to make education relevant to the real needs of students and the development of the country; raising the minimum levels of education in industrial nations by two years; and evolving education systems now to prepare youth for life in the 21st Century.

13. *Master Plan for Debt Alleviation:* An international agreement should be negotiated to provide debt alleviation for the 60 poorest, most indebted countries. Debt reductions can be based on the current market value of country debt, directly linked to investment by these countries in programs to expand education, upgrade vocational skills and other investments that attack the root causes of poverty.

14. *Comprehensive, Human-Centered Theory of Development:* An important contribution in shifting in thinking has taken place from regarding development primarily in terms of economic growth to greater emphasis on the human welfare and development of people. But development is not only a set of goals or material achievements--it is a social process by which human beings progressively develop their capacities and release their energies for higher levels of material achievement, social and cultural advancement, and psychological fulfillment. New theory is needed that focuses on the dynamic role of information, attitudes, social institutions and cultural values in the development process. An international effort should be initiated at the forth-coming UN Social Summit to evolve a comprehensive, human-centered theory of individual and social development that will lead to the formulation of more effective strategies to accelerate the development process.

15. *Tolerance, Diversity and Small Arms Proliferation:* The dramatic increase in the availability and use of small arms has become a highly destabilizing factor, both in industrial and developing countries. Often these weapons are utilized against other ethnic, religious and linguistic groups. Highest priority must be given to controlling and reversing the proliferation of small arms on a parallel with the determined international measures employed to curb hijacking. These weapons should be classified and a UN register created to monitor their manufacture and sale; agreements should be negotiated between major arms suppliers to severely restrict production and sales; and strong sanctions must be instituted to discourage states from abetting small arms proliferation. The year 1995, declared as the International Year for Tolerance, will be an appropriate time to establish a global convention on human diversity and a global trust fund for a world without poverty.

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