NOTES FOR REMARKS BY

IVAN L. HEAD

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Elsewhere in the world, this month is noted for its affinity to brides, to poets, and to rapturous songs by Rogers and Hammerstein. The peculiar and unpredictable Canadian climate associates June with much more serious endeavours, however - meetings of learned societies and bodies such as the Public Health Association. Newfoundland is the province where Canada begins each new day; today, whatever the weather here or on the mainland, we have the privilege of welcoming the arrival of June.

I am grateful to you, Mr. Chairman, and to the Canadian Public Health Association for your invitation to me to join you in your 74th Annual Conference. Please permit me to offer to you my congratulations for three-quarters of a century of service to Canadians, and for the quality of the contributions made by your members.

Among the many Canadians who have left an impressive mark on the world is Dr. Brock Chisholm, the first Director General of the World Health Organization. He was one of an extraordinary group of Canadians who played constructive roles in fashioning the world into a multinational community - at Bretton Woods, at Quebec City (where FAO was founded), at San Francisco,
and elsewhere. Dr. Chisholm used to say that the mark of a mature person was his awareness of the future, and his acceptance of responsibility for that future. An infant, said Dr. Chisholm, has no sense of time but the present. A two-year-old can look forward a few hours, perhaps to a meal. A six-year-old thinks ahead several months. An adolescent is planning his life career, and a mature adult is concerned for the future of his children and his grandchildren, and works to that end.

Planning ahead an entire generation is an incredibly difficult exercise, so rapid is the element of change. Consider the changes witnessed by those persons still alive, born at the turn of this century. The transport age, the nuclear age, the space age have all become commonplace in their lifetimes. Mass communications and mass consumption. Electro-cardiography, cellophane, re-combinant DNA. World wars and regional wars and local wars. The end of colonialism; the beginning of television. Oral contraceptives, political terrorism, environmental degradation, nuclear proliferation. All these made time more intense, more expansive.
As challenging as is the contemplation of this expansiveness of time and its hospitality for innovation and creativity, equally awe-inspiring and seemingly even more difficult to comprehend is the opposite phenomenon which has occurred in spatial terms, where too many people place too much demand on too few resources. Not expansion here but reduction, not creativity but destruction, not freedom but dependence. Another 20th century Canadian, Marshal McLuhan coined the phrase descriptive of this phenomenon. "The Global Village", he called it. Barbara Ward employed a different idiom but with the same sense - "Spaceship Earth".

No previous generation has been required to make such quantum conceptual adjustments or to face simultaneously a temporal explosion and a spatial implosion. Our survival as a human race will depend on our acceptance of both phenomena. Yet all too often the evidence suggests we are failing in each respect. The Yugoslavian leader Djilas summed up that evidence brilliantly when he wrote "We are all living in tomorrow's world today, still using yesterday's ideas".
Whether our ideas are yesterday's, today's or tomorrow's, we in Canada are extraordinarily fortunate. Notwithstanding one of the world's most inhospitable climates, notwithstanding regional resource and market disparities of monumental proportions, notwithstanding the imposition of great distances and vast spaces with the crushing cost burdens that these impose, Canadians have enjoyed for more than a century (give and take a few decades from province to province) a degree of political stability and physical security that is the envy of much of the world. We know from our own experience - though we do not often enough stop to reflect on it - that political stability cannot be expected amid widespread and enduring economic deprivation; that social tranquility cannot endure overwhelming disparities in privilege and opportunity. It is the absence in so many countries of that particular mix that is contributing to alarming discontinuities. Happily there are opposite examples - and we should not overlook them - that security is a product of justice, not of armaments; that democracy thrives once justice prevails.

One of the many remarkable persons who have shaped the structure and the conscience of IDRC through service on the Centre's Board of Governors was the late Barbara Ward. Her lucid
analysis of the condition of mankind and of the planet on which it clings for survival was on one occasion summed up as follows:

"... the only fundamentally unsolved problem in this unsteady interregnum between imperial ages which may be dying and a planetary society which struggles to be born is whether the rich and fortunate are imaginative enough, and the resentful and underprivileged poor patient enough, to begin to establish a true foundation of better sharing, fuller cooperation, and joint planetary work."

Happily, in much the greater part of the developing world, there is still time to come to grips with the essential elements of poverty and to assist the governments and the peoples of those countries themselves to introduce the reforms necessary to increase human dignity - reforms that are in part economic, in part social. That path is long and tortuous, yet it promises success. The other path, responding militarily to perceived threats, is sterile and doomed.
An essential element in a society's ability to introduce justice and to raise itself by its own economic boot-straps is a decent standard of health for all its citizens. As we know well enough in a country as prosperous as our own, it is not a goal easily attainable. Health, as you in your association know so well, is not to be confused with therapy. It has often been pointed out that the standard of health enjoyed in the industrialized world is less the result of advances in technology and a proliferation of facilities than it is of improvements in the realm of public health. The availability of clean water, of sanitary waste disposal, and of adequate housing - not to mention the buying power necessary to feed oneself properly - have had greater impact on the health status of persons in the developed world than has the presence of doctors and hospitals in their midst. An equally important element in the opinion of Dr. Hafdan Mahler, the current Director General of WHO, is education: the knowledge of what makes one sick, of what can be done to deter infection and disease transmission, of what is and is not normal healthy circumstance. All these factors are present and available to most in the industrialized countries; few are common in the developing countries.
The absence of those critical elements in the South makes all the more unfortunate the fact that, until recently, public health measures have formed an insignificant element in the transfer of technology from the developed to the developing world. After the Second World War, curative health services and the pursuit of excellence exerted a greater attraction for health ministers in the developing world than did the adoption of measures aimed at improving the environment and the quality of life. Once in place, sophisticated secondary or tertiary facilities absorbed a disproportionate amount of the total health budget, draining resources away from the preventive services. So, even today, developing country governments may talk of building so many health centres, or training so many auxiliaries, but all too often these items are pre-empted by the rising cost of maintaining and operating complex urban facilities that serve perhaps ten to fifteen percent of the population.

The present worldwide recession has emphasized even more this inequitable division of resources. During times of scarcity, national health budgets anywhere tend to be the first to suffer. In developing countries, as national buying power has dwindled, the health-sector share of the budget has actually
declined in several instances. Cutbacks are apparent throughout the system but their greatest impact is felt at the periphery, always in the rural areas, where services were precarious at the best of times.

As a result, a number of indicators suggest that progress toward improved health status in the developing world is now slowing. During the 1960s, the infant mortality rate in the Third World fell by a steady three or four points per year; it has declined only marginally over the past five years. Average life expectancy, which increased by seven or eight months per year during the 60s and early 70s, is now increasing by only two or three months a year. Overall, in the developing world, infant mortality rates are still ten times higher than in the industrialized world, and life expectancy is fifteen years less. These cruel comparisons are better known in developing countries than they are in our own. We should not be surprised at the sometimes bitterness of Third World leaders when the North is indifferent to their arguments for a more equitable world economic system.

In an impressive report on "The State of the World's Children, 1982-1983", James P. Grant, Executive Director of UNICEF, predicts that according to present trends "the proportion
of the world's children who live without adequate food, water, health care, and education - a proportion which has been declining steadily for more than a generation - will now remain approximately the same at the end of this century as it is today. Meanwhile, the absolute number of children living and growing up in malnutrition and ill health is set to increase."

That same report points out that perhaps as many as half of all cases of severe childhood malnutrition are precipitated not by lack of food but rather by intestinal parasites, fevers, and infection - especially diarrheal infection. Last year alone more than 40,000 children died per day as a result of the synergism of malnutrition and infection. The report observes that "to allow 40,000 children to die like this every day is unconscionable in a world that has mastered the means of preventing it".

This is a heart-rending account, and a discouraging scenario. It is against such a background that the governments of the world and the international organizations committed themselves in 1978 to the concept of "health for all by the year 2000". In the service of this goal, health planners and policy makers have distilled the experiences of years and have
marshalled a number of scientific accomplishments in order to extract the maximum in terms of health benefits from every dollar spent. Health for all by the year 2000 is more than a goal - it is a strategy for extending a simplified form of basic health services to the population most in need. Four key elements - considered the spearhead of primary health care - constitute the basis of the strategy as it applies to developing countries.

The first of these is the use of oral rehydration therapy to combat dehydration resulting from diarrhea. This phenomenon now kills an estimated five million children per year and constitutes the single most important cause of mortality among children. Oral rehydration therapy was developed during the 1960s at the Cholera Research Laboratory in Bangladesh, where scientists studying the physiological and chemical processes resulting in body dehydration discovered that the addition of a certain amount of glucose to salt and water can increase tremendously the body's rate of absorption of fluids and thereby prevent dehydration. Up until that time, the standard method of rehydration consisted of feeding the patient intravenously - an expensive procedure carried out by health professionals in a hospital setting. The most promising technique consists of pre-packaged oral rehydration powders distributed through local...
networks, much in the manner of patent medicines. Its most important advantage is that it can be simplified to the point that technology becomes accessible to auxiliary health workers, to mothers, and even to older siblings of diarrhea victims.

Admittedly, prevention of diarrhea would be preferable to a cure for dehydration but the logistic problems and expense involved in the building of clean water and waste disposal systems, at least in the near future, makes their provision unlikely. In the meantime, oral rehydration is within the power of the non-medical person, offers tangible and immediate results, and may give individuals a greater sense of control over their own lives and the lives of their children.

The quest for universal immunization against six childhood diseases - diptheria, tetanus, whooping cough, poliomyelitis, tuberculosis, and measles - constitutes the second element of the strategy of health for all by the year 2000. Together, these diseases kill an estimated five million children every year. Measles, now considered trivial in the industrialized countries, exacts a particularly heavy toll in the
developing countries where it is frequently lethal to children already weakened by malnutrition, parasitic infestation, and concurrent infections.

Ensuring the viability of vaccines under field conditions is essential to the achievement of universal vaccination. Certain technological improvements have greatly enhanced this possibility. Some vaccines, for example, have been made more resistant to changes in temperature. Where this has not been possible, another approach has been taken. Because live vaccines such as measles or liquid oral polio quickly deteriorate when exposed to high temperatures or to light, with no visible signs of degradation, a simple time-temperature indicator to warn the health worker that the contents of a vial are no longer potent is now being developed and tested under field conditions. By helping to ensure the viability of vaccines being administered, this technology should help reduce occurrences of disease in vaccinated children and should as well enhance the credibility of vaccination programs in the eyes of the people.

The third element in the strategy is the promotion of breast-feeding. The advantages - in terms of nutrition, protection from infection, child spacing, and economy - can
scarcely be exaggerated, nor can the dangers of bottle-feeding under less than ideal sanitary conditions. Evidence from all parts of the world is mounting to indicate that bottle-fed infants of poor parents are many times more at risk from malnutrition, infection and death than are their breast-fed counterparts. The greatest challenge takes the form of convincing mothers that they are capable of breast-feeding their infants notwithstanding the campaigns encouraging bottle-feeding mounted by baby food manufacturers and, in some case, even by medical personnel. The promotional efforts of the infant formula manufacturers led Senator Edward Kennedy to ask:

"Can a product which requires clean water, good sanitation, adequate family income, and a literate parent to follow printed instructions be properly and safely used in areas where water is contaminated, sewage runs in the streets, poverty is severe, and illiteracy is high?"

Senator Kennedy's plea was not successful, as you know, in persuading the United States Government to support the 1981 World Health Assembly's "International Code on the Marketing of
Breast-Milk Substitutes. The United States cast the sole negative vote. Notwithstanding, a number of countries have now adopted measures based on that code and many manufacturers have begun to alter their marketing practices along the lines suggested in the code. While it is too early to determine whether a reversal of the trend is likely, positive results from legislation governing the marketing and advertisement of artificial infant formulae have been observed in some countries.

As an aside, I might mention that Dr. Stephen Joseph, the senior health official in the U.S. Agency for International Development, resigned on principle to register his opposition to his government's stand. Shortly thereafter he accepted an IDRC senior fellowship to engage in research and to write about undesirable commercial practices in the health field. He was desirous as well in returning to the field, and has spent several months with the Grenfell Mission in Labrador.

The fourth key intervention in the implementation of the strategy for health for all by the year 2000 is the use of parent-retained growth charts to monitor the weight gain of children. Contrary to popular belief, the image of the emaciated...
starving child is rarely encountered under normal conditions in the developing countries. Rather, malnutrition manifests itself in periodic or chronic failure to gain weight.

Normal child weight gain, when charted at monthly intervals, assumes the shape of a curve. When weight gain is arrested, following an episode of diarrhea, for example, a depression or flattening of the curve appears. When weight gain is regularly interrupted, the curve is replaced by a jagged pattern. Many years' experience with growth charts in under-fives clinics has shown that once mothers are alerted to the significance of a deviant growth pattern on a child's chart, their tendency is to feed the child, whether he appears malnourished or not.

Growth monitoring does not of course identify the underlying causes of malnutrition. But, like oral rehydration, it is a potentially life-saving intervention that is accessible to the people, that can give them a greater sense of control of their own destinies, and that, perhaps, can inspire them to seek more effective control over their lives in other areas as well.
"Health for all" is a heroic goal; achieving it even by the year 2000 will require monumental efforts. We must not assume, however, that it is unattainable. We have evidence, after all, of a previous major accomplishment in the health sector once the international community combined its resources and its will.

In 1948, the World Health Organization singled out smallpox as an important disease that all countries should endeavour to control. In 1958 the World Health Assembly issued an explicit call for eradication.

For ten years thereafter, according to Dr. Mahler, technicians within WHO claimed that eradication was impossible on technical grounds. The World Health Assembly persisted, however, and in 1966 announced a stepped-up intensive smallpox eradication campaign with substantial support from WHO's regular budget. In the meantime, according to Mahler, the technicians reversed their earlier stand and directed their energies toward discovering how their technological and managerial capabilities could be mobilized to serve the political commitment of member governments.
The result was brilliant, and effective. All countries subscribed to a common strategy consisting of some form of extensive vaccination program and a surveillance-containment activity to detect cases and contain outbreaks. Each national program, however, was adapted in both organization and practice to the existing health services structure and to the national political, epidemiological, and social realities. Thus, no two programs were exactly alike. By 1979, this disease which had been the scourge of mankind since ancient times was eradicated worldwide.

It is not unusual during these days of economic hardship in the industrialized countries to hear arguments to the effect that resources cannot now be spared to alleviate the plight of those in the South. It is an appealing argument, yet it is mounted on a false premise. The question that should be posed is not the cost of acting, but the cost of not acting. We have mastered the techniques in our own communities to determine and quantify the costs should a bridge not be built, should seat-belt legislation not be introduced, should maintenance standards on aircraft not be enforced. It takes little imagination, and simple methodology, to calculate the cost if Central America
burst into a major inferno as a result of social inequity and economic hardship; the loss to the Canadian economy if our valuable Third World markets disappeared because of their lack of purchasing power; the damage to the biosphere if the developing countries continue to destroy their forests because of unsound resource management and the continuing quest for firewood. There is no shortage of evidence establishing beyond challenge that the world is a seamless, interdependent web. We can no more deny our interest in it than we can depart for another planet.

IDRC plays a modest but effective role in these respects. It is a unique institution, funded in its entirety by the Parliament of Canada, directed in its policies by an independent Board of Governors drawn from eleven different countries, dedicated in its belief that human well-being is the significant element in international security, and that indigenous scientific and technological competence is an essential key to the attainment of that well-being and dignity. Since its inception, the Centre has attempted to respond to the requests of scientific institutions in the developing countries, providing funds and counsel to research projects that are designed, conducted and managed by local researchers in their own countries according to their own priorities.
The Centre's Board has been insistent that the ultimate beneficiaries of IDRC support be the poorest of the inhabitants of the developing countries - those living in the rural areas - and that to that end the research undertaken be of a practical, applied nature. The majority of the projects supported are in fields of most importance to ordinary people: increased agricultural productivity and improved nutrition, more effective health care, better education systems, a deeper understanding of housing, sanitation and information problems, and of their solutions. The Centre attempts to be dedicated, yet realistic.

Jean Monnet is a shining, recent example of the effectiveness of a dedicated, realistic person. In an interview shortly before his death he stated: "I am not an optimist. I am simply persistent. If action is necessary, how can one say that it is impossible, so long as one has not tried it?"

Today there is no question about the necessity of action. We know from our television screens that this is so. We were told so by the Williamsburg Summit earlier this week. We know in our hearts that this is the case. It is up to all of us to prove that success is possible.
Monnet again: "We cannot stop, when the whole world around us is on the move."

In your important endeavours here this week, Mr. Chairman, I offer you and your colleagues every good wish. Thank you.