



Habitat

United Nations Conference
on Human Settlements
Vancouver 1976

Strong views aired at symposia and public meetings

As the Bulletin went to press, one third of the 30 public meetings and symposia being held across Canada as part of the public participation process for Habitat had already taken place.

Twenty more meetings still lay ahead until the end of November before the Canadian National Committee and the Canadian Participation Secretariat will assess these encounters with Canadians.

The first four sessions were held within four days, three of them in Northwestern Canada, requiring three separate teams from the Canadian Participation Secretariat to wend their way North, equipped for snow but encountering only balmy weather.

The weather matched the turn-outs. At Inuvik, 120 miles inside the Arctic Circle and the first and most northerly of the human settlements to be visited, native people were in predominance.

The members of the Canadian National Committee had an interesting dialogue with representatives of the native people who spoke of the difficulty of maintaining their unique lifestyles in the face of modern civilization. They claimed that Inuvik, a community of 4,000 situated some 1,200 miles northwest of Edmonton, was not planned with native people in mind despite claims to the contrary by the federal government. The government came in for some more knocks at the public meeting when it was accused of giving money for aid to developing countries but not doing enough for its native people.

At the Winnipeg symposium, the first of the 14 to be held, Calgary Mayor Rod Sykes made the front pages of papers across the Prairies when he said that party politics were responsible for the scuttling of urban reform. The theme of the



J. Ken McQuinnon, Minister of Local Government for the Yukon, and Max Bacon, Toronto planner and keynote speaker, talk with participants during the Whitehorse symposium.

two-day symposium was "Factors affecting rural-urban migration" and Mayor Sykes said the various political parties were unwilling to

get together to present a common, workable program. The symposium's main conclusion was the

see page 2

J.W. MacNeill appointed Commissioner-General of Habitat for Canada

Jim MacNeill, Secretary of the Ministry of State for Urban Affairs, has been appointed Canadian Commissioner-General of Habitat with the rank of Ambassador Extraordinary and Plenipotentiary. He will head a new Canadian Habitat Secretariat which is to include the present Canadian Participation Secretariat from MSUA and Host Secretariat from External Affairs.

In announcing the appointment, the Prime Minister stated: "The appointment of Jim MacNeill as Commissioner-General is intended to provide the leadership required to ensure that, as Host Country and

as an active participant in the Conference, Canada's role will be fully effective."

The Ministry of State for Urban Affairs has had the lead responsibility for Canada's participation in the Conference. The Department of External Affairs has responsibility for Host Country arrangements. Both departments will continue to provide full support to the new Commissioner-General.

Mr. MacNeill will be responsible for providing overall direction of Canadian planning for the Conference. He will report to the Honourable Barney Danson, Minister of

State for Urban Affairs. He will divide his time between offices in Vancouver and Ottawa and he is expected to undertake extensive travelling abroad in the coming months.

"The appointment of a Commissioner-General is a clear demonstration of the government's determination to do what it can and must do to ensure the success of the Conference and pull it off in a manner that will be a credit to Canada, both internationally and domestically," said the new Commissioner-General.

Interviewed on his first day as

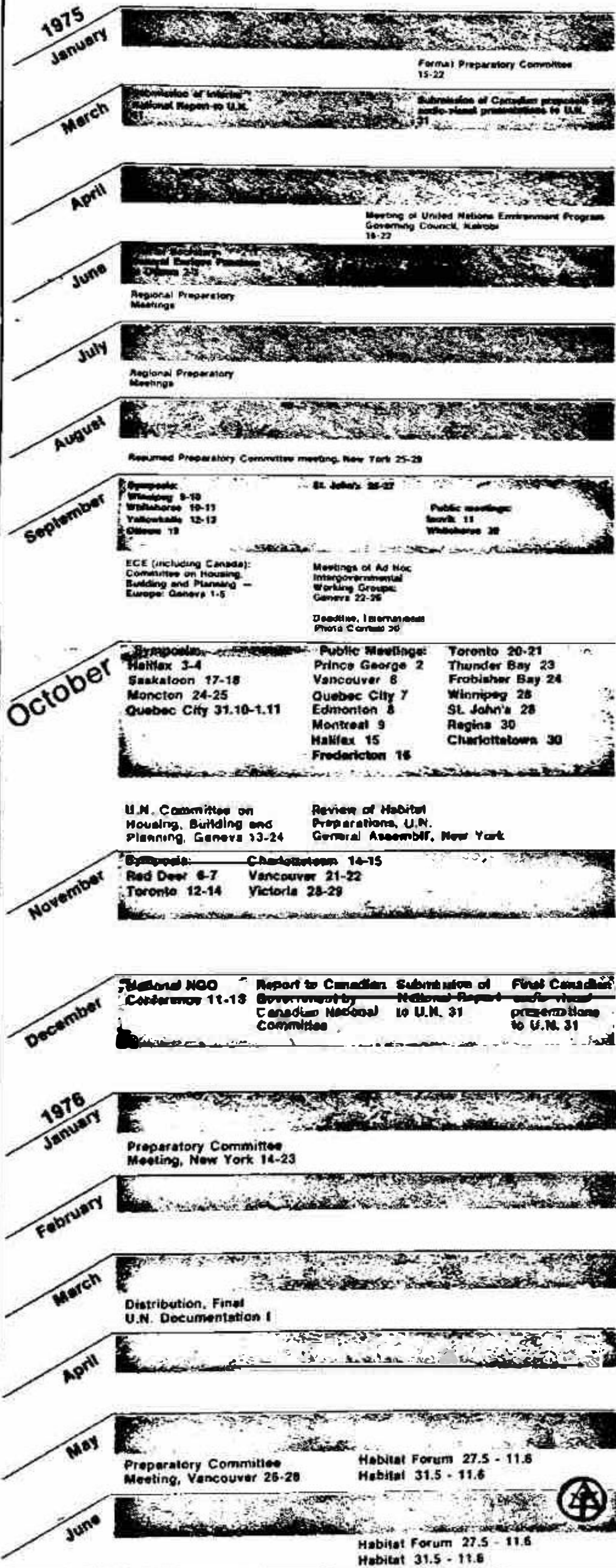
Commissioner-General, Mr. MacNeill said that he looks forward to the next nine months with optimism and enthusiasm. "Habitat will be one of the most significant United Nations Conferences of recent times," he said. "The activities started over the past two years in the United Nations, in over one hundred countries and here in Canada are now beginning to converge. As we enter the home stretch towards Habitat, we have the ingredients of a good build-up to the Conference, an exciting and productive two weeks in Vancouver, and a wide range of important post-Habitat activities."



Habitat

timetable for UN and national preparation

■ National
□ International



HABITAT BULLETIN is produced by the Canadian Participation Secretariat in conjunction with the Canadian Host Secretariat of the Department of External Affairs. It is intended to convey information on Canadian and U.N. preparations for Habitat, and to encourage the involvement of non-governmental organizations and individual Canadians in these preparations.

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ADDRESS all enquiries to Canadian Participation Secretariat for Habitat, Ministry of State for Urban Affairs, Ottawa, K1A 0P6.

Ottawa, October, 1975
Bulletin No. 6

Six issues of a supplement HABILAT WORLD, will be published by the United Nations Habitat Secretariat in New York prior to the Conference.

Strong views aired

from page 1

absolute necessity of maintaining the viability of rural areas with the help of federal, provincial, and municipal governments.

In Whitehorse, capital of the Yukon Territory where the theme of the two-day symposium was "Planning for small communities", the academics, federal, territorial and municipal officials, town planners, and concerned citizens concluded that the unique characteristics of small communities must be increasingly taken into account in planning decisions.

Max Bacon, a planning consultant with wide experience in small communities across Canada, said that to date, planning ideas were being forced upon people. James Lotz, a consultant with extensive experience in the Yukon emphasized the need for active participation in decision-making by citizens and by all levels of government. Leonard Mine, a Toronto planner, later expanded on this theme in relation to development decisions. He said the decision itself is not as important as how that decision is made.

The theme of "Resource-based one industry towns and the natural environment" occupied two days of give and take discussions in Yellowknife, the capital of the Northwest Territories, a town of 12,000 built on the output of its gold mines.

The audience in Yellowknife heard from all sides on the problems facing communities such as this one. They heard from union officials, senior federal government officials, university professors, and from a Member of Parliament.

Iona Campagnolo, Parliamentary Secretary to the Minister of Indian and Northern Affairs, said people should not wait for a political messiah who would have the answers to current problems. She said it was up to people to know what they wanted then up to politicians to see that this was carried out.

The biggest turnout to date was for a symposium in Ottawa on the theme of "International cooperation in human settlements". Some 200 persons came to the Ottawa hearing. Numerous foreign diplomats stayed throughout the day-long meeting to hear varying views on what Canada was doing and should do to help less developed nations.

Jacques Jobin, Executive Director of OXFAM, said Canada should not impose solutions to problems on other nations. Professor L. Green, of the Department of

Political Science of the University of Alberta echoed the same theme when he said Canada should not tell developing nations what to do.

"We've got to get to the situation where people are given the advantage of developing their own potential and where we help them to get this realized", he said.

John A. MacDonald, President of the Export Development Corporation, spoke about the role of business and industrial investments as one of the private approaches to human settlement solutions.

The Canadian Participation Secretariat returned to Whitehorse, this time for a public meeting, where the audience heard their Mayor say he was "dead set" against an oil pipeline passing through the area.

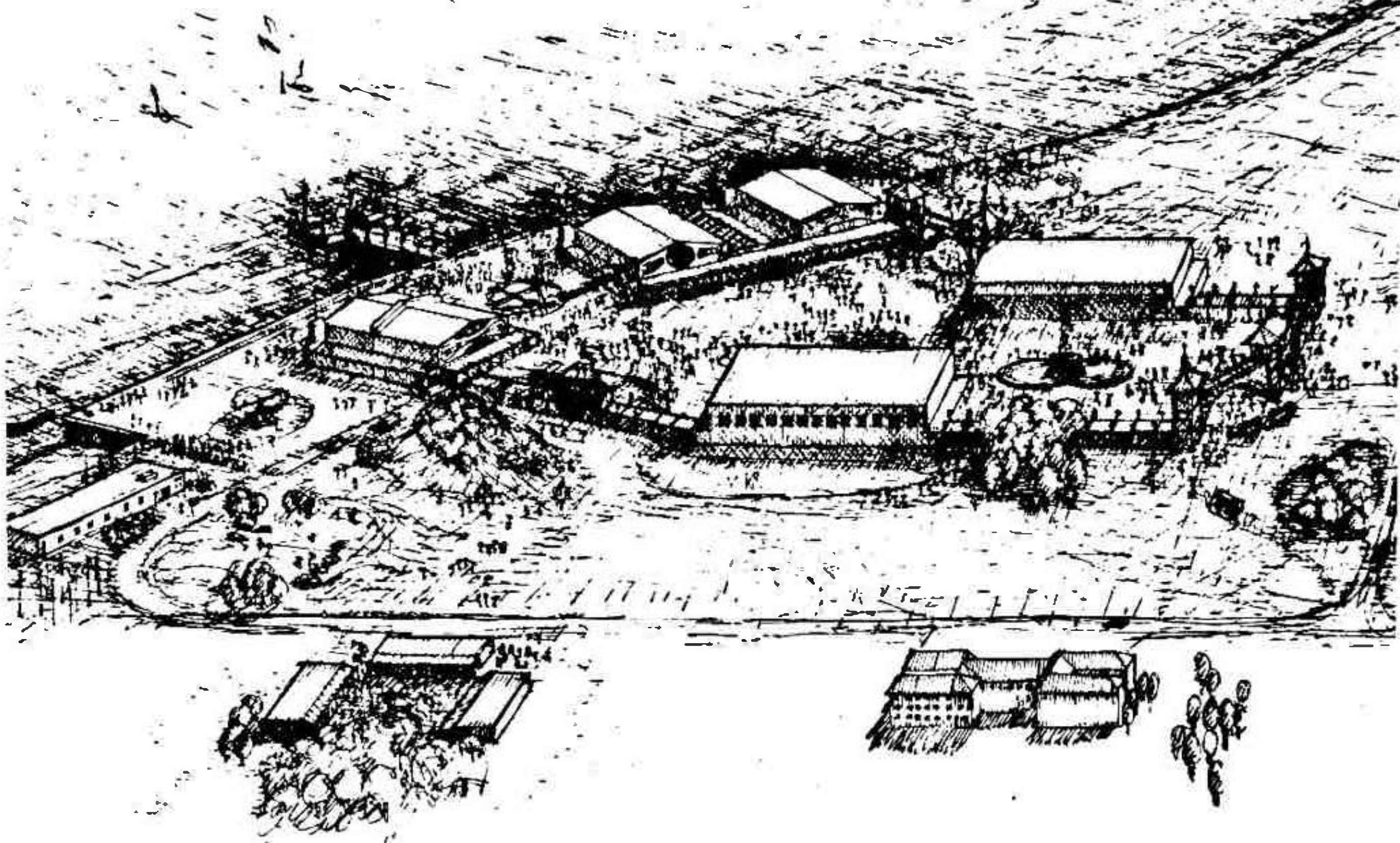
Mayor Paul Lussier said a pipeline would bring a situation similar to that in Alaska which would "destroy Whitehorse". He said such a project would pour in money and manpower into Whitehorse which would impose a strain beyond the capabilities of this community of 13 thousand.

Two days later in Prince George. In northern British Columbia, the audience heard a call for a new federal transportation policy for northerners which would eliminate freight rate disparities. The regional administrator of the Fraser-Fort George District said food, clothing and other items cost more in Prince George than in Vancouver four hundred miles to the south-west.

Vancouver, Canada's largest city on the west coast and the site of the Habitat conference eight months away, had its first involvement with Habitat at a public meeting on October 6 which attracted the biggest and liveliest crowds to date and a record of 36 briefs.

More than 200 people heard from a wide spectrum of speakers who covered a broad and diversified range of issues, including immigration and the needs of children in human settlements.

Jericho Beach: a colourful site for Habitat Forum



Through this fall and winter a crew of Vancouverites will be working on Jericho Beach, site of the *Habitat Forum* — the non-governmental activities for Habitat. Most will be young people, welfare recipients or disabled workers. They will be paid under a specially created Joint Federal/Provincial scheme, which has been described by one Manpower official as "the most imaginative program I have ever seen." The site, originally a meeting place for Indian tribes, is considered the most creative approach to an NGO gathering ever developed.

The 17-acre former Canadian Armed Forces seaplane base has been made available to the organizers of Habitat Forum by the British Columbia Government and the City of Vancouver, whose Parks and Recreation Board will develop Jericho Beach as a public park after the Conference.

A series of large aircraft hangars on the site will be converted into conference rooms (the largest seating several thousand people), display areas, experimental workshops, theatres, restaurants and social areas.

There will also be outdoor exhibition areas where experimental structures, innovative housing, alternative energy generators, urban food producing units and other full-scale "demonstration projects" will be erected before and during the conference.

The whole site will have a traditional British Columbia theme with all the colour and atmosphere of a country fair, complete with beer garden, salmon barbecue, bars and coffee houses. The emphasis will be on people rather than exotic technology or machines. The buildings will be enlivened with such things as enormous wall panel paintings in traditional west coast Indian designs and colourful fabric hangings.

Vancouver talents featured

The latter will be both decorative and utilitarian — serving as acoustic treatment for the cavernous interiors of some of the hangars. All these will be designed and produced by local craftsmen.

The new construction will be largely handcrafted, out of local materials. For example, covered walks to link the buildings in case of rain, seating and stages will all be built in much the same manner as old-time railway trestles. These structures will be built from logs salvaged from local beaches. A sawmill will be set up on the site to process some of the logs to make the covered alleys and convert some into roofing shakes.

Unmarketable lengths of sawn lumber donated by a local sawmill will also be used in the form of wood chips covering the entire grounds.

This is the first time at any UN conference that such a broad range of facilities will be provided for non-governmental organizations and individuals. It means that virtually any kind of activity which relates to human settlements can be accommodated.

Transportation

The site will be linked to downtown Vancouver, where the UN sessions will take place, by shuttle bus service (riding time about 15 minutes).

A similar service will link Jericho Beach to the University of British Columbia (10 minutes ride), where other meeting facilities and living accommodation will be provided. Also contemplated is a link by sea transport.

While the international NGO Committee for Habitat has overall responsibility for developing a core non-governmental program and for co-ordinating all activities for Habitat Forum, anyone — individual or organization — may participate. More than fifty groups and individuals have indicated their intention to do so.

However, because of the wide interest that has been shown in Habitat Forum from many quarters, those wishing to participate in program activities (rather than just coming as observers) are urged to contact Habitat Forum's Vancouver office, PO Box 48360, Bentall Centre, as early as possible. This office can also put you in touch with others who may be planning similar activities and with whom you may want to co-operate.

All the organization required to achieve this imaginative plan is provided by a group of representatives of non-governmental organizations, professionals and interested citizens in Vancouver, who formed a special body with the rather cumbersome name of the Association in Canada Serving Organizations for Human Settlements (ACSOH).

ACSOH was established as a response to the need of many NGO's around the world wishing to participate in Habitat to have a central co-ordinating office. Its responsibility is primarily a host function, very similar to that provided for the United Nations official conference by the Canadian Host Secretariat. In providing for program activities, ACSOH maintains liaison with the International NGO Committee for Habitat.

Heritage conservation is economically sound

The *Habitat Bulletin* provides a forum for articles by people with stimulating views on human settlements issues. This time our contributor is George Galt, a freelance writer and senior research officer with Heritage Canada, a national foundation promoting the conservation of heritage buildings and the natural landscape.

Older buildings imbue their neighbourhoods with a sense of history. Many are aesthetically appealing. They create textured streetscapes and offer unusual configurations of interior space. They represent the spectrum of solutions to the basic problem of shelter and the more sophisticated problems of design. For these reasons, runs the longstanding conservationist argument, we should preserve our more worthy heritage structures for present and future enjoyment.

Less current is the complementary argument that the recycling of heritage buildings can be profitable, not only to the individual entrepreneur but to the community at large.

That renovation and restoration are viable alternatives to demolition and new construction has been proven time and again by individual developers. A national spot survey undertaken by Heritage Canada in 1974 documented the economic success of several heritage recycling projects. Return on equity in these developments, for example, ranged from 14% to 35% rendering them strongly competitive with investment in new construction.

Equally important is the viability of recycling from the standpoint of the municipal treasury. It has often been argued by the proponents of new development that new high-rise construction solidifies the city's tax base; a prosperous growing municipality, they say, cannot afford to let its real estate languish in antique forms.

But several studies in recent years have proven these voices wrong, if not everywhere, at least in a handful of significant cases. An exhaustive report compiled by the San Francisco Bay Guardian in 1971 showed that while the city's central high-rise district contributed \$62.9 million in tax revenues, it drew on the treasury for \$67.7 million worth of services, a loss to the municipality of nearly \$5 million. Another 1971 study, the Price Waterhouse cost-benefit report on land use in the Borough of York, Ontario found that high-rise construction provided no significant tax advantage over low rise. And in Halifax last year, conservationist Elizabeth Pacey completed a cost-benefit analysis of the city's 1973 new development which showed that new assessment had burdened the average ratepayer with an extra seven dollars in property taxes, more an economic bane than a boon.

These studies destroy the cliché that demolition and new construction provide a gold rimmed formula for subsidization of the residential ratepayer. While it is still true that some decrepit buildings represent an irretrievable tax loss, it can no longer be assumed that, for the sake of the municipal balance sheet, all aging real estate should be retired.

This is further demonstrated by tax revenues from conservation areas such as Vancouver's Gastown and Philadelphia's Society Hill neighbourhood. Revenues from the most extensively renovated sector in Gastown rose 81% in the six years during which the work was completed. In Society Hill, the increase has surpassed 100%.

More difficult to pinpoint, but no less real are the benefits accruing to the tourist industry from conservation. Studies consistently show that sightseeing is one of the two major purposes for travel. Add to this the fact that any historic site or building is a sightseer's magnet, and the impact of conservation is obvious.

The most recent Canadian Travel Survey conducted in 1971 found that 29% of Canadian tourist spending is attributable to tourists whose main activity is visiting historical and cultural sites. No other category in the study comes close to this figure. Even fishing, the next most popular activity, accounted for only 15.2% of tourist dollars.

Statistics abound pointing to the enrichment of tourism in areas where conservation has been emphasized. The most salient example is New Orleans, where the historic quarter generates over \$200 million in tourist revenues annually. In Savannah, the income from tourism quadrupled in just six years of restoration work.

All this is not to say that antique structures are just another economic resource which ought to be mined. We value them for much more than their economic potential. But if we are to preserve the full splendour of the Canadian heritage, we must look beyond our museums, excellent though they may be, to the dynamics of the marketplace. It is here that most of our heritage assets will stand or fall. We must, as many heritage developers have done, find new uses for old buildings, and those uses must be economically sound.

That heritage conservation can pay for itself has been shown many times over. What remains is to convey this information to our mayors and councils, to our travel industry and to our real estate development industry. Persuading local governments and the business community of the economic strengths of recycling is essential if our heritage is to be preserved.



The Canadian lecture tour of Barbara Ward, originally scheduled for November, will take place from March 29 to April 28, 1976, beginning in Ottawa, then Quebec City, Toronto, Winnipeg, Calgary, Victoria, Montreal and Halifax. Details will appear in future issues of the Bulletin.

An atlas-in-a-glance map of the Georgia Strait Urban Region (Vancouver and Victoria) is now available. It provides a wealth of information on population density, land use patterns, transportation, and other relevant topics. A similar map has been published for the Windsor-Quebec Axis and both have been produced jointly by the federal Department of the Environment and the Ministry of State for Urban Affairs. These maps may be obtained in English or French versions through the Canada Map Office, Department of Energy, Mines and Resources, 615 Booth Street, Ottawa K1A 0E9. Refer to Map ELD-4 for the Georgia Strait region and Map ELD-3 for the Windsor-Quebec Axis. Each map costs \$3.00.

The Vancouver Billboard Program is going ahead with a good response from the Vancouver business community. 300 billboards will be reserved for a one-month period prior to and during Habitat. The boards will display the winning entries to a series of contests on human settlements themes, open to students, amateur and commercial artists. Details will follow.

300 NGO representatives to meet in December

Over three hundred representatives of non-governmental organizations will gather in Ottawa for a unique conference on human settlements December 11 - 13. It will be an opportunity for dialogue among NGOs as well as between them and those in the government who are preparing for the Habitat conference in Vancouver next June. In addition it will contribute to the development of a Canadian National Policy on urban growth and land use. Co-hosts for the conference will be the Canadian National Committee (C.N.C.) and the Canadian NGO Participation Group.

The opening session on Thursday evening is designed to hold those organizations now actively preparing for Habitat accountable for their progress. People such as Senator Sidney L. Buckwold, Chairman of the C.N.C., Dr. C.I. Jackson of the Canadian Participation Secretariat, Mr. Terry Tanner of the Association in Canada Serving Organizations for Human Settlements (ACSOH), and Mr. Geoffrey Grenville-Wood of the Canadian NGO Participation Group will be on the platform.

Land use will most likely be one of the key issues that will occupy the conference workshop sessions Friday. Public housing programs for the handicapped, energy-saving design, participation-oriented community organization, and an emphasis on human values are Canadian NGO concerns. International initiatives for solving human settlements problems are also important interests.

A three-man task force is now working to canvass NGOs and pinpoint the key questions facing the conference. Its members are Dr. Michel Chevalier of the University of Montreal, Mr. James Gander of the Economic Council of Canada, and Dr. Clair Woodbury, Coordinator of the Canadian NGO

Participation Group. Dr. Chevalier said in an interview, "It is vital for the conference to get at the jugular issues, and we need to look at real situations, the land bank in Saskatoon and Ontario's land taxation program, for example".

The recommendations of the conference will be published to assist the Canadian government in making its presentation to the Habitat Conference, and to serve as a reference for Canadian NGOs who will have their eye on the government's performance at Vancouver.

Steering our course through the greatest convulsions in history

THE HOME OF MAN

A Book by Barbara Ward
to be published in February
1976.

The Home of Man by Barbara Ward (Lady Jackson) will be published early in 1976. The well-known environmentalist and author elaborated some of the major human settlements issues in many of her previous publications. *The Bulletin* is now pleased to present the prologue to her forthcoming book.

There are two reasons why it is exceedingly difficult to get a coherent grip on the issue of the human habitat - the settlement where all the world's peoples, save for dwindling groups of nomads, are born, live out their lives and go to their death.

The first reason is that this habitat includes everything. A Roman philosopher once said: "nothing human is alien to me". How much more true is this of the inescapable context within which the whole of existence is carried out. What can we leave out when we are talking of the complete life cycle of mankind? Yet to try to grasp everything is to risk grasping nothing. The entirety of the human condition certainly escapes the statistician. It probably escapes the poet. So whatever is written about our habitat must submit to being incomplete. Perhaps, as a result, it will leave out vital clues to coherence and understanding.

The second reason is even more daunting. At no time in human history has the man-made environment of life been in such a state of convulsed and complete crisis. This is not to suggest that great upheavals have not repeatedly overtaken humanity. Great civilizations have perished. Empires have fallen like skittles in a bowling alley. On the very threshold of the so-called Age of Progress, in the seventeenth century, a perturbed observer like Sir Thomas Browne could observe: "The world's great mutations are ended". Throughout history, in the dark aftermath of plague or war, folk songs and ballads are full of the loss and collapse of human hopes. Compare this Elizabethan verse:

*"Brightress falls from the air
Queens have died young
and fair"*



with the lament made for the destruction of man's earliest city, Ur, about the year 2000 B.C.:

*Verily all my birds and winged
creatures have flown away -
'Alas! for my city' I will say.*

*My daughters and my sons have
been carried off*

*'Alas! for my men' I will say,
O my city which exists no longer,
my city attacked without cause,
O my city attacked and destroyed!*

Few lives, indeed, have escaped all echo of the mourning cry in Ecclesiastes: "Man is born to trouble as the spark flyeth upward".

But if the intensity of crisis is not new, sheer scale undoubtedly is. The figures are becoming so well known that it is hard to remind ourselves how phenomenal they are. Yet they must be repeated. On any recognizable definition of what is a human being, it took at least half a million years for the first 100 million people to appear on the face of the Earth - at about the year 1000 B.C. In the wake of improvements in agriculture and increase in food supplies brought about first by Neolithic man and then by the great valley civilizations - in Egypt and Mesopotamia, in North India and China. Farming, handicrafts and commerce continued to develop irregularly but expansively for the next 2,500 years. By about 1500 A.D., there were perhaps 500 million human beings on Earth.

Then the great accelerations began - in knowledge, in power, in resources and technology, in mobility, in conquest. The first thousand million mark for humanity was passed about 1830. The next thousand million took only 6 hundred years, the next only thirty. Today, with just over four thousand million beings on the planet the added thousand million has taken only fifteen years. This rate of growth means that in the first decade of the next century, a whole new world, equivalent in numbers to this one, will be piled on top of the present level of population.

Further ahead, the predictions become even more fantastic. In fact, unchecked, they could be adding well over 250 million people a year by 2034, the bicentenary of the death of Thomas Malthus - the first man to postulate the theorem that population would always grow to exhaust the available food supplies. But such predictions belong to the world of dream - or rather of nightmare. Before such increases could take place, the old destroyers, hunger, war, plague, "death on a pale horse", would have wiped out the surplus. What we are concerned with today is the imminent doubling of our planetary numbers in less than forty years.

Scale is not the end of the cataclysmic nature of modern change. Once again, the figures are known and repetition can state their impact. Yet we have to make the effort of imagination needed to realize that after some fifteen thousand years of organized human existence in recognizable settlements, the whole character of this habitat is being radically transformed in less than a hundred years. If we take "urban" as the adjective to qualify settlements of more than 20,000 inhabitants, throughout most of human history at least ninety per cent of the people have lived not in cities but in hamlets, villages or at most in small towns. At the time of the American Revolution, for instance, this was the percentage of Americans living in centres of no more than 2,500.

Now compare with this the sudden explosive acceleration of change in the twentieth century. After a hundred years or so of industrialization, the number of people in urban areas at the end of the nineteenth century was about 250 million in a world population of 1,650 million - the urban population accounting for fifteen per cent of the world total, a little higher than the earlier urban figure of ten per cent but still leaving the world's rural peoples in overwhelming predominance. And now in just a century, this millennial relationship is being overthrown with almost inconceivable speed. By 1960, urban populations had grown to a thousand million in a world of three thousand million - only a two to one rural ratio. Today, urban peoples are racing towards the 1,500 million mark out of a total world population of four thousand million. Ten years from now, they will pass the two thousand million level. By the year 2000, there will actually be more urban dwellers than rural people in a world population which will have risen to between six and seven thousand million.

We also have to realize what an astonishingly new phenomenon is the city of a million people. Probably neither Rome nor Byzantium reached that peak even at their greatest extent. True, if Marco Polo's impressions can be trusted, Kinsai in China - on the site of today's Hankow - may have had 3 million inhabitants in the 13th Century and Edo - as Tokyo was first called - seems to have reached a million by the 18th Century. But the concept of a "big city" did not go much beyond 100,000 until the beginnings of the 19th Century - it is almost comical to recall that at the time of the American Revolution, only two cities, Boston and Philadelphia, had even reached 50,000.

a dimly perceived but passionately longed for vision

Then, with the spread of industrialization and of world wide trade, the city of a million begins to race ahead. London reached the mark in the 1820s. By 1900 there were eleven "million-cities", six of them in Europe, still the imperial and commercial dominant of the world. But the jump from two to eleven in the 19th Century has been followed by an infinitely more formidable acceleration in our own time. By 1950, there were 75 "million-cities", 51 of them in developed regions, 24 in the developing world. Today, the developing nations have pulled ahead. They contain 101 such cities, out of a world total of 191. By 1985, the million-city will have jumped from 11 to 273 in less than a century - and 147 of them will be in the less developed lands.

And even this vast multiplication does not fully measure the contemporary upheaval in human settlements. The million-city begins to explode into the ten-million city. There were two of them in 1950 - New York and London. By 1970 there were four. But by 1985, there will be at least 17 of these gigantic agglomerations, ten of them in developing areas - with Mexico City, at nearly 18 million, only a step behind New York. And at the head of the list Edo's successor, Tokyo, will recover its earlier primacy with the dubious distinction of bringing 25 million people together in a single conurbation.

We may, of course, question whether some of the more surrealist predictions - for instance, a Calcutta of over 30 millions - will ever be reached. Various degrees of urban collapse may well have intervened. But the projections are valuable as indicators of the sheer avalanche-like scale with which the world's peoples are increasing, heaving themselves out of the millennial framework of village and small town and descending in deluges of mixed hope and despair on the world's larger settlements.

To seek analogies for change on this scale, one has the obscure feeling that only the distant billenia of geological time can provide any adequate concept of the scale of upheaval. The Indian subcontinent detaching itself from Antarctica and sweeping across the

Indian Ocean to its violent collision with Asia's land mass along the Himalayas, the sea pouring in to change the Caribbean or the South China Seas into a chain of islands, the grinding of continental plates against each other, heaving up the Andes and leaving volcanic chains where Asia and Europe collide - these are surely the images that are appropriate to the scale of the 20th Century's urban deluge. We are in the full tide of this great sweep. Its final consequences lie ahead. But already the ground shakes. We should hear if we were listening, the mutter of the approaching storm. And the upheaval is not simply a physical upheaval - the largest increase and "wandering of the peoples" in human history. It is taking place within two wider but equally unstable contexts, one social, the other ecological. They, too, are unique in the experience of mankind.

The social context is the deepening conquest of the human imagination by a dimly perceived but passionately longed for vision of equality and dignity for every human being. This dream has, no doubt, many roots - archetypal memories of the unself-conscious equality of tribal society, the millennial Neolithic experience of shared tasks and modest returns in early agriculture, passionate revulsion against arrogance and greed in the wake of man's first experiments in "high" civilization - in Babylon or Mohenjo-Daro, in Ch'Ang An or Rome. But for modern society, the Biblical strain is unmistakable. The great Hebrew prophets - from Isaiah to Karl Marx - have called on man "to undo the thongs of the yoke, to let the enslaved go free . . . sharing your bread with the hungry and bringing the homeless into your house".* The rights of the down-trodden, the duties of the fortunate, the value and dignity of the poor, the harsh condemnation of irresponsible wealth, these are judgements and energies inherited from Western man's Biblical tradition - inherited even when betrayed - and in our own day, this tradition either colours the imagination, troubles the conscience or at least perturbs the complacency of all mankind. And, as our world prepares to add another world equal in numbers to itself in no more than four decades, the cry for greater justice and dignity for all these thousands of millions will not be stilled. On the contrary, it will be raised all the more insistently as numbers and pressures increase.

* Isaiah Chapter 58 revised 6.7

But it is one thing to underline the fact that people's growing sense of their dignity and equality - both individually and collectively - is a near-universal phenomenon, an "inner limit" to the development of planetary society which can be transgressed only at the risk of the severest social disorder and breakdown. It is quite another to achieve even minimum agreement upon the content of this new perception of the human condition.

As a rough first definition we can start by recognizing that any valid concept of dignity and equality includes a number of non-material "goods" - responsibility, security and participation, the free exchange of thought and experience, a degree of human respect that is independent of monetary rewards or bureaucratic hierarchies, and a realization that this respect is lacking where rewards and hierarchies are too restrictive or too skewed. All these goods of culture, of men's mind and spirit, need not be costly in terms of material resources. Indeed, they belong to the sphere of life where growth is truly exponential - in knowledge, in beauty, in neighbourliness and human concern.

But they require physical underpinning. And here the pressures bring us to a further context of great uncertainty and risk. When we try to establish even the minimum physical conditions of a worthy human existence, we confront the widest possible spectrum of uncertainty. For one thing, there are inescapable differences of climate and culture - Arctic housing tells us nothing about Tropical standards, or Mediterranean radiance about the midnight sun. Diet, uses of energy, patterns of worship, work and play partly and rightly reflect a vast and precious variety of cultures and social purposes. But we can perhaps accept an irreducible minimum - another "inner limit", this time the limit of physical wellbeing, which human society transgresses at its peril and which must include food, energy, shelter and the training and work required to secure them.

It is all too easy to see that even on this exceedingly modest standard, the task of achieving minimum conditions of human dignity for between six and seven thousand million people by the year 2000 constitutes a tremendous physical task, raises wholly new questions about the use, abuse and exhaustion of resources and begins, for the first time in human history, to hint at risks to the integrity of the entire life support systems of the planet's biosphere. These, if you like, are the "outer limits" beyond which the human race cannot march - or stray - without risking its own survival.

To take these high abstractions down to a more homely level, we can note that in the crucial area of food, the average North American eats some 1900 pounds of grain a year, all but 150 pounds of it in high protein food such as the products of cattle and poultry. It is perfectly possible that, for a largely sedentary people, this diet is as dangerously over-generous as the 400 pounds of grain eaten by the South Asian is manifestly too little. A biological norm may lie somewhere between the two - an intake of 1000 to 1200 pounds of grain and grain equivalents, the level general in North America in the 1950s and in parts of Europe today, neither region at either time betraying, it must be admitted, any severe signs of general under-nourishment. But to bring up to this level two thousand million or so people in developing lands who are now below a decent norm and to ensure that the next two thousand million born there achieve it requires little short of a new agricultural revolution with vast increases in supply - for fertilizer, for improved seed, for farm machinery - and equally vast impacts on the world's reserves of soil and water, both in using and possibly in polluting them.

Nor will the fertilizer and machinery be produced or used without a corresponding leap forward in the demand for energy. Once again, an energy "norm" per person is a difficult concept. In spite of some of the follies of prestigious air conditioning, temperate climates do seem, of their nature, to require less lavish energy-use for man's domestic purposes. Only a really determined rejection of the ideals of thrift can explain why a citizen of the United States uses more than twice as much energy as an equally prosperous - and chilly - citizen of Sweden. But again there must be some half way house between extravagance and the direct need. Between 1900 and 1970 - another

of equality and dignity for every human being



Tokyo, one of the world's largest cities, will have 25 million people by 1985, more than Canada's total population today.

of those giant accelerations — world energy consumption rose from about 650 million metric tons of coal equivalent to 6600 million metric tons — more than a ten-fold increase and the bulk of it, from 2560 up to 6600 million, occurred in the halcyon Fifties and Sixties with oil coming out of the sands at a dollar a barrel. Rising costs may, perhaps, check the rate of acceleration, but estimates as high as 21,800 million tons of consumption for the year 2000 have been made in United Nations' surveys.

We should notice that these extrapolations have been based on present use. Yet today the two-thirds of the world's peoples who live in developing countries consume fifteen times less energy, on the average, than do the citizens of developed societies. Given the vast attractiveness of substituting mechanical and muscular energy — the man on the tractor for the man with the hoe, not to speak of the driver alone in the four seater car — future energy use may be grossly under-estimated unless it assumes at least a doubling and trebling of demand among the present poor. Add that to existing extrapolations and the limit of safe exploitation may be fixed not by the availability, cost or risk of new energy sources but by the "outer limits" of thermal pollution on a planetary scale.

Nor should we forget the part played by energy in a further dimension of basic physical need

— the need for shelter. In constructing houses, in using them, in creating in them the warmth for cold winters, the coolness for torrid summers and all the services of the household, from cooking to piped water to sewage, which turn a mere building into a treasured home, energy, usually in its cleanest and apparently most trouble-free form — electricity — has come to dominate the houses of the developed world. In fact, the 4,740 thousand sub-standard houses of the United States are largely defined by the absence of services — water closets, baths, heating appliances — all of which require energy to provide them. The enormous gap between energy use in developed and developing countries is in part explained by the degree to which such services are simply unavailable to the poorest groups. Nearly half the municipalities of Latin America have neither sewage systems nor piped water. The proportion in the Indian sub-continent and parts of Africa is higher still. The open drain down the main street, the contaminated well at the corner crossing — these can be ugly symbols of man's habitat in energy-poor societies.

Of course, they are not the only symbols. The degradations continue downwards in degrees of squalor — from a family to each room (the figure for 80 percent of the people in Calcutta), to four families to a room, to tar paper shacks, to shift-sleeping in literally makeshift beds, to no rooms or roofs at all and thousands sleeping on the pavement. Various U.N. surveys put the number of houses that need to be built to keep up with growing numbers and repair the worst evils of the past at over 47 million units every year. The figure can only be an estimate and tells us not too much about the resources required. Rural housing in reasonable climates makes far less claim on materials or energy than the dense tenements of great urban conglomerations. But if the figures are not absolutely precise, they are precise enough to suggest that perhaps a quarter of mankind has barely attained the dignity of a roof and there are 70 million more humans to accommodate every year.

Add to this trend of inadequate food, energy and shelter the basic needs of training in a world where illiteracy is actually increasing and of work in areas where half the labour force may be under-employed or completely without employment for part of every year and we can see how near the human race is coming to the point at which the "inner limit" of human dignity is finally transgressed and the most rapidly eroding of all resources — the patience of the poor — will compound the vast material strains entailed in acting in time, on an adequate scale and without irreversible environmental disruption, to meet humanity's basic needs. Mankind is in fact engaged in a kind of race for survival between the inner and outer boundaries of social pressure and physical constraint while the doubling of the world's peoples and emergence of a half-urban world takes place in only four decades.

These overlapping contexts of violent demographic, social and environmental change all meet, one could say, collide in human settlements. These places must carry the vast weight of the migrations — overcrowding at the terminus, decay and blight in the deserted areas. They are also the meeting place of all the aspirations and demands of mankind's enlarged sense of its human dignity. In village or town, in suburb or alium, men and women experience in their daily environment the fulfillment or frustration of all the drives

and demands of aspiring modernity. Above all, it is in settlements that the physical consequences of the vast upheavals will reach their climax. Millions upon millions crowded in the exploding cities, all too often without the minimal provisions for urban cleanliness, offer man's most concentrated insult to the support systems of air, water and soil upon whose integrity the survival of life itself depends. If it seems difficult, almost by definition, to grasp the full scale and implications of the problems raised by the human habitat, it seems virtually impossible to do so if they are caught in these changing contexts, this whirling kaleidoscope of interlocking and contradictory forces, needs, aspirations and risks.

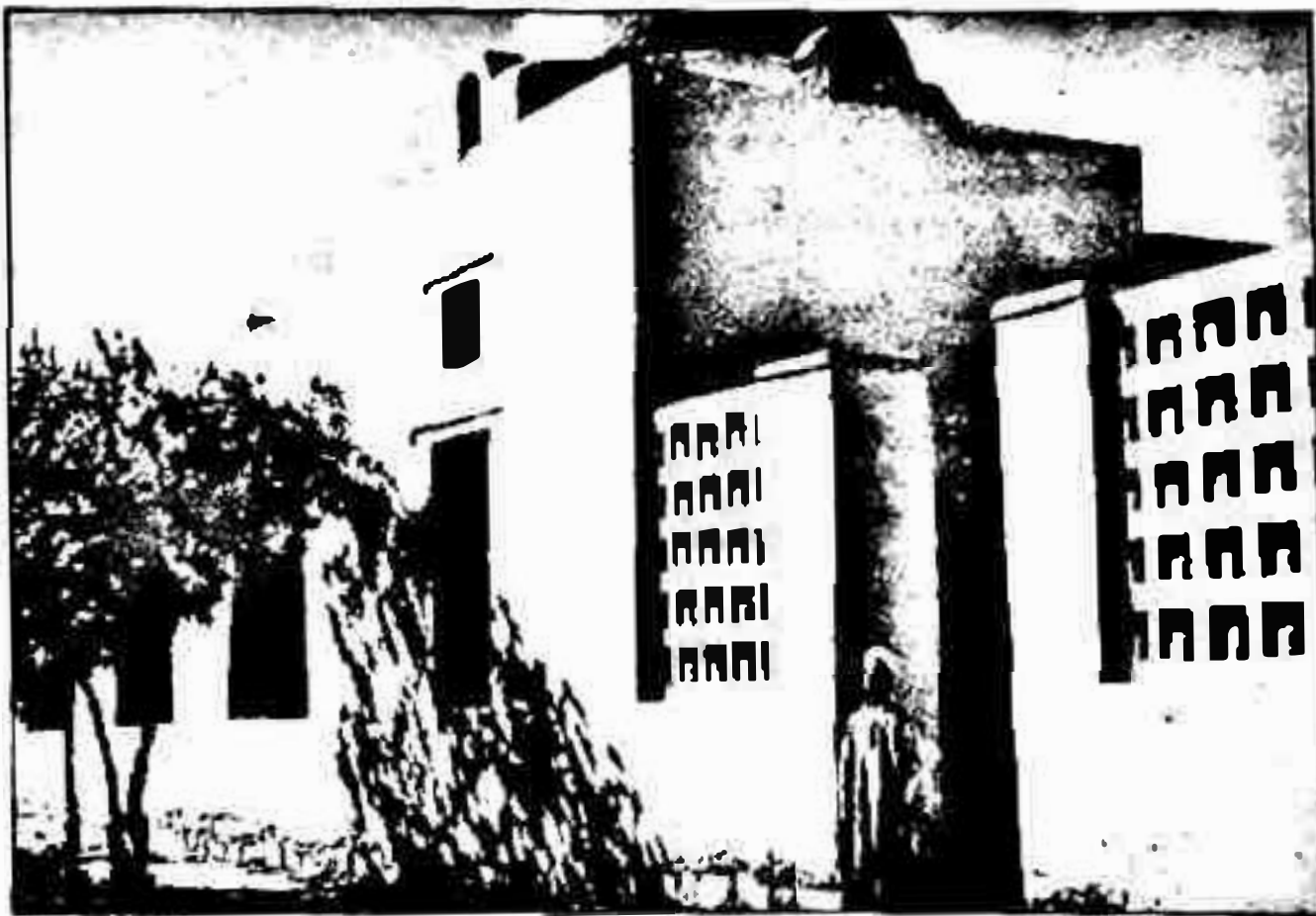
But, remarkably enough, the vast and uncertain contexts of explosive growth, explosive aspirations and potential biophysical limits do not

compound the problem of devising some sense of meaning and strategy in our approach to human settlements. On the contrary, the three contexts, rightly placed and judged, can provide clues for analysis and priorities for action. The demographic flood is potentially so damaging precisely because it is a flood — in other words, an unmanaged, unintended, disorganized rush, pell mell, into the new urban order. But what this suggests is not further confusion but the opposite intention — a fully human one — to grasp the meaning of the phenomenon and produce urban settlements not by chance but by some measure of design. The first pointer is thus away from building the city by chance and over to the city built for human purposes.

Then the other two contexts fall better into place. For the first purpose of any settlement must be to end inhuman deprivation. There are a great many other needs, no doubt. And some of the aspirations of more fortunate citizens may, consciously or unconsciously, con-

tribute to degradation elsewhere. But this does not change the priority. Before the problem of, say, the highly rewarded but often culturally deprived life-styles of wealthy single-class suburbs is dealt with, families in settlements must be able to satisfy the minimum needs — food, energy, secure shelter and work. Often there are no contradictions. Nothing, for instance, so reduced the death rate of the 19th Century poor as the sewage systems built at the instance of the 19th Century rich. But cities must be built not for economics alone — to build up the property market — not for politics alone — to glorify the Prince (in whatever form of government). They must be built for people and for the poorest first.

And in this new intended order, the limits on material resources and on the environment must, for the first time, be recognized as fundamental challenges and constraints. The settlement by design, the settlement for people, the conserving and enhancing settlement — these are the priorities suggested by the convoluted and interdependent revolutions of our time. With these three priorities as strategic guidelines, the tactics of the business — land use, shelter, utilities, traffic, work, recreation, convenience, beauty — can be rationally considered and some decisions for policy arrived at. We do not need to repeat the pessimism of Clemenceau in 1919. As he said, we do indeed have chaos. But, unlike him, we can realize that we have enough "to make a world".



"I would like any architect or engineer despising mud to tell me what other material I can replace it with": Hassan Fathy.

'Man Alive' highlights Egyptian architect Hassan Fathy

The CBC series 'Man Alive' on November 10th at 10:30 p.m. presents a program devoted to the controversial views of Egyptian Architect and Engineer, Hassan Fathy. 'Man Alive' responds to one of the most important issues to be considered at Habitat — the problem of housing the poor in developing countries. Hassan Fathy rejects the conditioned reflex of turning to modern technology for solutions and takes us back to the practical ways and native ingenuity of his people to provide answers

now ignored by technocrats. For Hassan Fathy building with bricks of sun-baked mud, strong, made on the spot, the material free, is still the most practical solution for housing the millions living in the hot belt around the middle of the earth.

Hassan Fathy's radical vision became a practical reality almost 30 years ago with the construction of the new village of Ghourna near Luxor. His book entitled *Architecture for the Poor* carefully documents every aspect of the building. But in a tragedy of misunderstanding and red tape the village remained empty.

Fathy's vision however is not only for the poor, not only for the Third World — it is a vision of villages, towns and cities that are real communities for man.