

OTTAWA PUBLIC HEARINGS

MORNING SESSION

May 26, 1986

Tapes 1 to 8

PUBLIC HEARINGS

Ottawa, Canada

26 May 1986

Morning Session

TAPE 1 - SIDE 1

DR KHALID

The World Commission on Environment and Development. In the centre of the table is our Chairman, Mrs Gro Harlem Brundtland, The Prime Minister of Norway. Our four Commissioners are seated here, they are giving us their backs, they are facing you and they come from all corners of the world and are distinguished leaders in many walks of life ranging from politics, science, industry, finance, law, and their biographical details are available to you. We are sorry that few of our Commissioners are not with us because they have been held in other important engagements but we do expect some of them to join us in the course of our meetings here. At the far end is Mr Jim MacNeill, the Secretary General of the Commission, who is a Canadian, and I am sure many of you know Jim. Now it is my pleasure to call on a man, who, as a former Minister of Tourism needs perhaps little introduction, a political scientist whose work in the House of Commons has included committee service in fisheries, forestry, communications and last but not least, acid rain. May I call on the Minister of Environment, Tom MacMillan.

TOM MacMILLAN

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TAPE 2 - SIDE 1

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(Note: part of Tape 1 - Side 1 repeated)

Cont. of MacMillan's speech

(see enclosed copy of speech)

DR KHALID

Thank you very much Hon. MacMillan for your forceful, forthright and constructive address to us. It certainly reflects Canada's holistic approach to the problem of the environment but also Canada's globalistic vocation. Thank you once again.

Now it is my pleasure also to call on the Minister of External Relations, Mrs Vezina. The Honourable Monique Vezina who comes to her responsibilities of state from a long career of public life, public service in her vacation and social and economic affairs. We know that the Honourable Minister is preparing to go tonight to the United Nations and I am sure that the whole African continent - because this is a special session of the General Assembly on Africa is looking for Canada's leadership in that meeting. The Honourable Monique Vezina

Monique Vézina

(see enclosed copy of speech)

DR KHALID

Ladies and gentleman I now call on our Chairman. She is described in virtually all your printed material as the former Prime Minister of Norway and leader of the opposition. Needless to say she was that three weeks ago, but since then, she became the Prime Minister of Norway, and that reflects of course how up-to-date our documentation is.

I would like publicly to congratulate you on my behalf and certainly on behalf of all the Commissioners and I am sure that everybody wish you well, Gro in your new functions. I must add that one of the fairest decisions you have taken when you assumed office was to devalue the Norwegian kroner for good reasons. We are sure that you are not going to devalue your commitment and engagement in the work of the Commission and for good reason too.

MRS GRO HARLEM BRUNDTLAND

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TAPE 3 - SIDE 1

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Cont. of Mrs. Brundtland's speech

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TAPE 4 - SIDE 1

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(continuation of Mrs Brundtland's speech. See enclosed copy of speech.)

Dr Khalid

Mrs. Brundtland, thank you very much for a very inspiring and a very inspired statement. I am sure this is the type of forthright and direct talk we are accustomed to hear from you. But I am sure that this is also the type of direct talk which everybody in the audience would like to hear because people are tired of receiving yet another report and recommendation which is written in the backward language of diplomatic conferences.

Mrs. Brundtland you have been holding the biosphere, so should I ask you again to hold the biosphere.

Mrs. Brundtland

Mr. Minister, the Commission has been given a great task to tackle. We are humble with regard to it but we will do what we can.

Now this is a very small globe and inside it is water, minerals, air, animals and plants. It is a closed ecosystem and it will function for years and years if left with light to keep the ecosystem functioning. But as the globe, you know, it's fragile and it has to be taken care of in a sensible way to be retained for the future.

So, we wish in the Commission that this be placed in the Office of the Minister of Environment in Canada for all his visitors to be reminded of the important work that the Minister is doing on behalf of his government, and all of you in the non-governmental organizations and everyone engaged in public participation to promote the only one earth thought which is the only way for our own future. So, here, Mr. MacMillan for you and as thanks from the Commission.

MacMillan

Madame Prime Minister, in accepting this on behalf of the people of Canada with great gratitude, I express the hope that you will return to Canada well before this little seedling becomes a great tree.

Khalid

Thank you very much. Our Public Hearings will start at 10:30 but in the meantime we are all (laughter). You know my time is quarter to five in the afternoon. I still keep Geneva time. You are all welcome to coffee and the members of the media are welcome to meet with our distinguished ministers.

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TAPE 4 - SIDE 2

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TAPE 5 -SIDE 1

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Mrs Brundtland

Ladies and gentlemen, I welcome you all on behalf of the Commission to this Public Hearings. We are sorry that we have run a little late. Speakers this morning had lots on their minds and you will be able to see and to listen to what has been said and follow up as with regard to your own constituencies, what has been said this morning.

That is a good suggestion to all of you: that what has been said is probably important also in Canada. But we now enter into the public hearings in the same way that we have done in our other Commission meetings that have been taking place in different parts of the world. Starting with Indonesia, Jakarta where we had two days of public hearings. That is what we will have here in Canada. We were in Oslo last June, in Brazil last fall, October, and now here in Canada.

It is an important part of the whole process of fact-finding but also of moving public participation and involvement and public engagement in the whole agenda on environment and development. And I thank you all for having come here today and for all the work and enthusiasm that we know has been put into the preparation to this meeting.

Thousands of people have been engaging in preparing for the submissions that the Commission has received and we are deeply

appreciative of all the effort and engagement put into it and indeed it gives us an important input into our own thinking process and agenda.

There are here in this audience representatives from all sectors of the Canadian environment and development constituency and we are looking forward to your views and participation during these two days of public hearings.

Before we start I should like to introduce to you the Commissioners who are in front of you: the Vice-Chairman, Mansour Khalid, you met in the opening ceremony, from Sudan; Emil Salim, Indonesia, to my left; Stanovnik from Yugoslavia, front left from my side; Sokolov from the Soviet Union; Shaib from Nigeria; Ambassador Sahnoun from Algeria; Saburo Okita from Japan; Judge Singh of the International Court of Justice and from India; Margarita de Botero from Colombia; Ma Shijun from China and Lang from Hungary to the right and we have on my right side Paulo Nogueira Neto from Brazil. On my right side the Secretary General, Jim MacNeill, and to my left the one who is going to lead this public hearings trying to arrange the speakers and has been preparing in a very tedious, I think, manner and very importantly so, to prepare for the effective use of our time this morning and tomorrow, Chip Lindner the Secretary to the Commission and I give the floor.

W.H.Lindner

Thank you very much, Madame Chairman, most of you I know, I have met many of you in the course of the co-ordinating meetings around Canada last month. And so I think with the correspondence we have exchanged over the past few weeks and the meetings that we had in Canada, that you are all fairly familiar with the procedure that we establish jointly together in those co-ordinating meetings. As to how we will structure the public hearings so as to accord the greatest possibility and opportunity for as many as possible to express their views and have the opportunity to dialogue among yourselves and with the

Commission and to be available for comments and questions and enquiries from the Commission.

So we have broken as you know the public hearings into five thematic sessions: there will be two sessions today and three sessions tomorrow. Each of the sessions will begin as we have all agreed, with four or five sessions. Five oral presentations and summarizations over the written submissions we have received relevant to the theme today which is environmental management and economic development.

I know that all of the presentors we have spoken to know that we do indeed have to maintain a rigid time schedule which is unfortunate but essential in the circumstances so that each of the presentors will be speaking for ten minutes. The podium has been timed and it will be set at the end of the eight minute period a yellow light will go on indicating that you have two minutes to conclude. At the end of the two minutes you'll hear a very loud beep.

And it will be helpful if you could at the yellow signal try to move your comments so as to complete in the ten minutes. After the presentations, the oral presentations, have taken place we will open it up for general discussion and debate, questions from the Commission and comments from the floor.

We would like if at all possible, we are running very far behind today, and we will have to go on longer than we originally intended and cut down the lunch period in order to finish. But we will like to ask, those people who do make presentations from the floor, in front of microphones which are scattered around the hall, if you could try to restrict your remarks to approximately no more than three minutes.

And please remember that every minute you go beyond that is a minute you deprive from your neighbour and your colleague who has travelled a long way to have the opportunity to express their views as well. We will ask each submitter, each

presenter, who will be introduced and asked to come to podium. Those people will be recognized from the floor when you raise your hands.

We will have to do some random selection and we hope to get to hear you all, but if we don't we do have the opportunity at lunch where you can mingle and chat with the Commissioners on a personal individual basis.

We do appreciate your understanding for the constraints and I think what we should do now is start the public hearings.

Mrs Brundtland

On the first session which is called Environmental Management and Economic Development the first presenter is Prof. Stanley Rowe, Saskatchewan, Environmental Society, Sustainable Futures

Prof. Stanley Rowe

Madame and Prime Minister Brundtland, Members of the Commission, ladies and gentlemen,

Today initiates Ottawa's two weeks of intense cogitation, I think that is the right word, on environment and economic problems of international concern. For after these WCED hearings comes a conference assessing progress with World Conservation Strategy, followed closely by a session on the Fate of the Earth. And all three take as their center of interest that most important question: can humanity creatively integrate economic development with environmental conservation and preservation?

Now giving first place on the fortnight's programme to the World Commission on Environment and Development is very appropriate. The Commission as you know reports to the General Assembly of the United Nations in 1987 and the Mandate for Change reminds us

that it represents one of the few opportunities in the remainder of this century to generate new and necessary environment development initiatives in the world community.

Now I assume that the intention of the programme planners in designing Session One is to allow examination of some of the general issues of environment and development before sharpening the focus and getting down to particulars in later sessions. My presentation is therefore oriented to some general key conceptual issues and it is given on behalf of the Saskatchewan Environmental Society, copies of the paper, if any remain, on the table in the hall.

How can world of nature and the community of peoples with their national economies be harmonized? Posing the question this way, suggests that the two are separate. But not so. Humanity, the human species, exist and is supported within, inside the world of nature and I mean that not figuratively but literally. We are deep air animals living inside an ecological system.

The analogy that we should keep in mind is that of mother and unborn child, the child existing within the mother wholly dependent on her and on her health. Just so, people are wholly dependent on the health of the ecosphere. I use ecosphere rather than biosphere because ecos, you remember means home, and that is a good concept the homesphere in which we live. We are dependent then on the health of the ecosphere, this spherical, transparent home at the surface of the planet.

The reality of human ecology, of humans within the ecosphere and their relationship to it, is that everything that we do, our economies and so on, exist within that space, that lay space. And we draw boundaries, of course, on its ecosphere for a national and regional purposes but it is all of one piece.

The peoples of the world in other words are supported by placental technologies that draw resources from the surrounding ecosphere, just as the fetus draws its sustenance from the body

of the mother. Knowledge of human ecology therefore sets a clear priority. The world of nature, the ecosphere, is more important than the human species, that is but one part of it. By a fallacy of misplaced importance buoyed up since the age of enlightenment by much hubris we have pronounced ourselves, the human species, to be more important than the enveloping ecosphere.

The part we say is more important than the whole, that somehow brought it into being. The malign results of that misjudgement lie all around us. Evident in the kind of science, technology and industry that we support and practice and triggering conferences and commissions such as this one today.

When, therefore, we optimistically declare that economic development and environmental maintenance can go along hand in hand, this qualifier must immediately be added. Only if maintenance of the ecosphere is made the first priority, economic development must be secondary guided by strict ecological standards. But in other way economies must be redesigned to support the ecosphere, not vice-versa.

These fundamental ideas apart from being universally accepted, mostly nations continue to view the environment vaguely not as the enveloping supportive system that is both the source of life and the source of resources to sustain life but rather as a vague add on to the economy. Something to be tinkered with to wave productivity. Something whose continued pollution at acceptable levels may even provide clean up jobs. In almost all media reports the economy comes first and people will attend to environment with a bit of financial support in goods times and grudgingly if at all when times are bad.

Recently, in an economic bulletin in Canada environmentalists were challenged to forget their prudery and get into bed with economists, so as to be more persuasive with decision-makers who presumably for years had slept only with economists. This seductive invitation might be even more enticing if it could be

decided in advance who has to be wife number one, who has to get the lead status and who has to be the concubine.

Accumulating evidence suggests that the political decision-maker will not survive long without the environmentalists as primary partner, as first mate. Though he might want to retain the neo-classical economist for amusement. If it be granted that economies are derivative, that the existing prosper are the forbearance of the ecosphere, then the standards that guide economic development should be those that guarantee the health of the ecosphere and its sectoral three dimensional ecosystems and anticipate and prevent strategy will set ecologic guidelines for economic development.

It is not enough, however, to exhort people to protect genetic resources, ecosystems and their processes. The sad fact is that people pursuing a hard kind of science, that assumes no environmental responsibility have devised the worldwide technologic economic system that is actively destroying the ecosphere. Patching up which is the present tactic is ineffective. The system itself must be changed.

Most destructive and therefore requiring first change, is use of those unnatural resources that are not normally found in perceptible quantities in the ecosphere's lay space until brought out of the crust of the Earth through pipes and mine shafts. The so called non-renewable fossil fuels, radio nuclei, heavy metals, other toxic inorganic and all the derivatives systemic poisons that these non-renewables have yielded and are continuing to yield. Surely we can develop a softer science, a sophisticated technology that makes what we need from safer energy resources, from ceramic materials more closely allied to the bodies constituency, from the organic rather than from the inorganic.

A primary aim of economic development must be new industrial directions that cease to assault the planetary home. But even turning away from non-renewable resources, for safer more benign

renewable and replenishable parts of the ecosphere will not solve the environment development dilemma without control of populations.

Over-utilization of landscapes and soils, of plants and animals, water and air may not release poisons as the non-renewable resources do, but may nonetheless starve and cripple humanity while destroying the quality of the natural world. Let me then finish by suggesting a third agenda that stands behind the alternative agenda, a little more general:

The first point, we must educate to increase understanding of the earth-people relationship, conceived as a nurturing ecosphere as home wherein humanity has evolved and is now supported;

second, we must encourage the safe and sustainable use of renewable resources and replenishable components of ecosystems. Humans as organic renewables must also be looked at, as far as their own safe and sustainable numbers are concerned;

thirdly, discourage globally the use of non-renewable resources and of non-replenishable resources, that is of geoenergy and of those unnatural chemicals not normally found within natural ecosystem lifespaces, weapons of war must certainly be included here;

four, contains such non-renewable and non-replenishables and their toxic derivatives as entered into current industrial processes and protect the ecosphere environment from them until such time as more benign technologies can be introduced;

and fifth, with these four policies in place and heeded and of course, with attention to a more just redistribution of the necessities of life, a give economic development free reign.

If those guidelines are in hand, I don't think we have to worry too much about economic development. Thank you.

Mrs. Brundtland

Thank you Prof. Rowe. Now the second is Harvey Mead and Luc Gagnon, Union Quebecoise pour la conservation de la nature, interrogations sur la science économique.

Mr. Luc Gagnon

We would first like to thank the members of the Commission for allowing us to participate in this important process. Je vais faire ma présentation en anglais, mais évidemment si des gens veulent communiquer avec nous ou nous poser des questions en français, vous êtes les bienvenus.

We fully support the efforts of the Commission and we agree on the following priorities outline in your document Mandate for Change. As you said action must focus on prevention and not on the repair of damages. We must continue to emphasize that it is less expensive to prevent pollution than to suffer its consequences. We must also continue to emphasize that a development that respects the environment will create more jobs than the current model of development. And most important political representation must be shifted toward economic decision-makers.

We are concerned however, about the fact that environmentalists presently do not have sufficient credibility to convince decision-makers, specifically those responsible of economic matters. These people base their decisions on economic conventions that tend to devalue or neglect environmental issues. In other words, it will be impossible to demonstrate the benefits of conservation so long as methods of assessing progress remain unchanged.

In brief, we think that a complete redesign of economic accounting must be proposed to take into account the assets of the society such as its natural resources and the liabilities of the society such as pollution.

It is important to focus on economic theory because this is the language that decision-makers will listen to. Recent debates in economics focus primarily on the confrontation between the Keynesian and monetarist approaches. However, if we examine the fundamental of both approaches, we notice that natural resources are absent from both models.

This is strange because natural resources are very important in the production process. Both approaches assume that strong economic growth could be achieved under conditions of extreme resource shortages. This is completely unrealistic. In accounting terminology, we can summarize this short-coming by stating that macro-economics only deals with revenues and expenses and remains totally oblivious to assets and liabilities.

For example, it is obvious that the natural resources of a country constitute a long term asset. In economics the reduction of the stock of natural resources is not considered a lost. This a very serious mistake because it creates the illusion of balancing in common expenditures while in reality assets are depleted.

This leads us to an important question. How to assess this depletion value of natural resources. Up to now the depletion value has been completely neglected by economic indicators. Economists justify the state of affairs by claiming it is impossible to attribute a value to such resources. They restrict their analysis to the steps of extracting resources, transforming them, consuming and then discarding these goods.

However, sustainable development clearly requires that waste must be recycled. By accepting this new logic, it becomes very simple to determine the depletion value of most resources. It must be equal to their recycling costs. This can be demonstrated by answering a question. For example, if a user extracts a ton of copper, how much would does he have to pay the government to prevent the depletion of that resource? The answer is simply the amount the government would need to recycle

the same quantity of that resource from scrap-metal. After this recycling, the assets, in this case copper, will not be reduced. Obviously, there are many other considerations to this principle. For example how to deal with resources like oil which cannot be recycled. The document we have submitted deals with these cases and we urge people to consult it.

Why do we put so much importance on economic indicators? Because they have become indicators of political performance. Economists and politicians constantly refer to the gross national product to assess the performance of a country. This indicator therefore place an important role in the decision-making process. Unfortunately, it is systematically biased against the protection of health and the environment. One reason is that the calculation method adds up any type of production. For example, when companies discharge toxic chemicals into the environment they are responsible for the sickness of many citizens. We then spend large amount of public money to care for these people and then we add up all this expenditures to the GNP. This gives us the impression that we are richer because we are sick. Not only should such expenditures not be added to GNP, they should subtracted.

A second serious inconsistency in the GNP concerns assets. As an example, let us assume that a country at the start of the year has an oil well. During the year, several thousand barrels of oil are extracted and the well runs dry. All this oil is refined producing a good deal of pollution and then consumed, according to the present calculation method. All this activity would have significantly increased the GNP during the year. At the end of the year citizens would have the impression, thanks to this consumption of oil, of being wealthier. In fact, they would not be wealthier but on the contrary minus one oil well.

This type of absurdity is involved in the analysis of most assets. According to present calculations methods, when dollars are spent to build, maintain or even demolish a house, all these expenditures are added indiscriminately to the GNP. This

fundamental mistake in economic accounting, may be summarized as follows: economic indicators make no distinction between an expenditure that affects our assets and an expenditure that does not affect them.

A new indicator is needed. A new indicator that would make this distinction between the use of non-renewable and renewable resources. It would give us some information whether our development is sustainable or not. For those who still doubt that economic indicators are a major factor in the political decision process we will remind them about the current obsession of politicians about public deficits.

The amount of a public deficit is also an economic indicator and an indicator that at present has exactly the same flaws as the GNP, namely that it does not consider assets and liabilities. Is it better as an individual to have a fifty thousand dollar debt on a house that it is worth fifty thousand dollar? Or a five thousand dollar debt because of a trip made the previous year?

The amount of the debt does not mean anything if one does not look at assets at the same time. We are not saying that deficits are not important, we are saying that we do not really know the extent of our real deficit. The current monetary deficit is meaningless. There could be a much bigger hidden deficit related to assets and liabilities.

For example the destruction of our forests without ensuring their regeneration, may constitute a large deficit. Exposing people to dangerous toxic chemicals also creates a deficit because it will decrease our long term productivity. Pollution respects the basic principle of borrowing, namely to pay later what we refuse to pay now. It is a deficit. The recent political desire to reduce monetary deficits may actually increase the real deficits.

What are the first programmes to be cut by governments. Programmes in environment, public health, education and also regulation to control exploitation of resources are removed. These political choices will actually increase the real public deficit.

To conclude we recognize that the development of a new economic indicator is not an easy task. However, it must be stated again that current economic indicators are not just inaccurate, they are harmful because they constantly give us the illusion of progress and an incentive toward a development that is not sustainable. Thank you very much.

Mrs. Brundtland

Thank you very much, Luc Gagnon. Number three this morning is Joe Keeper, Northern Flood Committee, Cree Indian Northern Development, the Cree and the Environment.

Mr. Joe Keeper

Thank you, Madame Prime Minister, Commissioners, ladies and gentlemen. First of all I would like to thank the Commission for being able to make this presentation here this morning. I am here to represent the Northern Flood Committee and to present to the Commission our experience of hydrodevelopment in Northern Manitoba. What it has meant for our people, our land and what it may mean for our future.

First, let me give you some of the background. The Northern Flood Committee consists of five Cree bands (he names them) with a total population of some 9,200 Cree Indians. On any measure our bands are among the most seriously disadvantaged peoples in Canada. The life expectancy of the Indians in Manitoba is some twenty years below the national average, the infant mortality rate is nearly twice the provincial average. Housing standards are poor, unemployment pervasive and per capita income only one fifth of the national average.

Historically our bands had a nomadic life style, sustained by the adequacy in the local environment and the resources necessary for fishing, hunting and trapping. The development of the fur trade which occur with the colonization of Canada led to the eventual depletion of these renewable resources as a consequence of over-harvesting. This resulted in the impoverishment of our people.

In the 1960s and 1970s the government of Canada gave increasing attention to the development of hydroelectricity in the Provinces North. Originally, little thought was given to the consequences that would have for the North aboriginal inhabitants. The Northern Flood Committee was formed in 1974 to represent the interests of the Cree people who would be affected by the proposed hydro-project and the diversion of the Churchill and Nelson Rivers and the devastation of much Cree land.

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TAPE 1 - SIDE 2

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TAPE 6 - SIDE 1

Ottawa, Canada

May 26, 1986

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Continuation of Joe Keeper's statement

As a result of pressure from the Northern Flood Committee supported by Canada, the Northern Flood Agreement was signed in 1977. An indication of the impact of the hydro-project on the Cree and traditional Cree lands is the fact that some 19 per cent of reserved land was impacted. In addition, the surrounding land traditionally used by indian people for hunting and trapping was also radically affected. The altering of the water routes and short lines affected access to some 25 million acres. Some three hundred and twenty eight thousand acres traditionally used for hunting and trapping were flooded. For the Cree the water and land is our life. Water is used not only for drinking but for domestic and commercial fishing, recreation and general transportation. The hydro-project then has had and continues to have a devastating effect on our people.

Let me say something more about our people and the hydro-project. The relationship of my people, the Cree toward land and water made development on the scale of the hydro-project virtually incomprehensible. Nevertheless our bands responded to the wish of the Province of Manitoba to engage in such a venture by coming to an agreement with them about the appropriate compensation which will be required to offset Cree losses.

The Northern Flood Agreement comprehensible defined entitlements for the bands in the areas of land, navigation and transportation, resource management and development, community development and environmental management. It committed the other the parties to the agreement, Canada, the Provinces of Manitoba and Manitoba - Hydro to work towards the eradication of mass poverty and mass unemployment in our bands. The implementation of the agreement, a legally enforceable contract which establish arbitration procedures has been beset by delays, difficulties and government and hydro procrastination. However, we are now cautiously optimistic with the backing of Canada that we can move towards the realization of our entitlements and this open new paths for our peoples future development.

The hydro-project has had a profound impact in our traditional way of life: on hunting, trapping and fishing, on the quality of the environment in which we live and our relationship to our land and to our waters. This represents, represented an additional and sudden stress on our already seriously impacted way of life. Hoaxed as in the past by unavoidable forces from the dominant culture, impacting on our traditional culture. The hydro-project has preempted other developments which we might have chosen to follow. It must therefore provide the means by which new paths can become open to us.

Let me share with the Commission our vision for the future. The treaty signed by our forefathers with the British Crown, preserved for all time our rights to our land and our water. This land and water constitutes a valuable and essential element in the development of a vast hydroelectric capacity in Northern Manitoba.

The Crees rightful share in the benefits of this development offers us an opportunity to create for our communities the social and economic development that has so far been denied to us. Compensation for the losses we have sustained and a rightful share in the revenues which the hydro-project will generate will provide the financial basis for a new social and economic development initiatives consistent with Cree aspirations.

Economic investment combined with new technological developments and the availability of cheap hydropower can be important tools of development. The possibility of diversifying our economy by the imaginative use of aquaculture and the development of Northern agriculture including greenhouse vegetable production based on the availability of cheap energy supplies offers but two examples. Most importantly the pre-entitlements under the Northern Flood Agreement will give us the financial resources to manage, control and lead our own development process. We have depended on others for too long and with too little effect. The cost will be considerable. Indeed, the Canadian government itself has estimated that this may be an excess of half a billion dollars. Though this remains only a fraction of the total cost of the hydro-project.

Let us now turn toward the realization of this vision. For eight years we have waited in growing frustration for the Province of Manitoba and for Manitoba-Hydro to implement in good faith the Northern Flood Agreement. Whether because a bureaucratic inertia, controversies over the interpretation of the agreement, or the lack of political will, such implementation has not taken place.

We now have a new understanding with Canada, the trustee for Indians peoples to go forward into negotiations with a clear intention of establishing a timetable for implementation which

will ensure that our promised benefits from Northern hydro development will be realized. If this take place the environmental changes which have occurred in Northern Manitoba would have been an important step which will allow us, the Cree people, to rebuild our economies and our communities.

The financial benefits, which we will regularly receive, will provide us with the independent means to build our own economic infrastructure and to identify and pursue our own performed economic initiatives. The dependency which resulted from the destruction of our traditional way of life will be removed for the first time in more than a hundred years we will resume the rightful command of our own destinies.

In conclusion, let me say the Northern Flood Committee has played a historical role in ensuring that hydro development has been forced to take account of Cree interests and entitlements. We have it made it clear that the Cree people must be significant beneficiaries from hydro developments which involve the use of Cree lands and Cree waters. We have called on Canada with whom we have a special treaty and with whom we have a special treaty and constitutional relationship to stand together with us in ensuring that the benefits promised by the Northern Flood Agreement are delivered.

We look toward the future confident that with the support of Canada and the good will and commitment of all parties we face a turning point for our people. The paths we may take are many but with wisdom, skills and foresight they will go to creation of a new basis for the realization of the aspirations of the Cree of Northern Manitoba.

Once again we thank the Commission for the opportunity to make this presentation. We hope that our perspectives and the relationship between the environment and development in our permanent tribal lands will be useful in your deliberations, we

look forward to your 1987 Report to the General Assembly and particularly hope that your recommendations give due consideration to the average of view points on these issues which are so critical to our common world. Thank you.

Mrs. Brundtland

Thank you very much, Joe Keeper. And then I pass on the floor to Julian Dumanski of the Agricultural Institute of Canada, Land Use and Soil Degradation.

Julian Dumanski

Thank you, Madame Chairman, Madame Prime Minister, honorary Commissioners, ladies and gentlemen.

First of all, thank you for the opportunity to present the views of the Agricultural Institute of Canada on these important issues having to deal with environment and development. Our Institute which is the voice of professional agriculturalists in Canada consists of about 5,400 individual members. We have nine provincial institutes and eight scientific societies. We cover the scope of activities which are undertaken in agriculture. We have made information available to this Commission on various issues having to deal with agriculture such as for example pesticides, water issues, habitat, preservation and so forth, but today I will speak only on the issues of land use and soil degradation.

Now, to introduce the question of land use and soil degradation consider first of all that all life on this planet, that is all life except that which exists in aquatic environments, all life is dependent on a thin mantle of soil that envelopes the earth. I'd just like to divert you for a minute and indicate

that in the biosphere that was made available to you this morning, Madame Prime Minister, I noticed that it lacks soil and I wonder where in fact that soil perhaps had gone.

In most parts of the Earth this mantle of soil is one meter or less in thickness, that is all, one meter or less in thickness, in Northern latitudes such as we have here in Canada, this mantle is half a meter or less and within this half a meter of soil it is only the top twenty centimeters that gives us all of her food. Consider also the fact that a soil that took perhaps tens of thousands of years to form can be completely destroyed in one or two years of misuse. Now land is the basis of food production in Canada and in the world and it will always be the case.

However, the supply of good quality land for agriculture is limited, in Canada we are a country which is the second largest land mass in the world, only five per cent of the actual land area has soils and climates that are dependable for agriculture. We farm more than five per cent but only five per cent is dependable for agriculture and all of this land is plenty now in use.

There are essentially no reserves of agriculture land in Canada. There are considerable concerns on what is happening with these lands considering that we are here dealing with a resource which isn't fix supply. The major concerns center on the allocation of agriculture lands to other uses. Here primarily urbanization but more importantly we are concerned about soil degradation. In Canada about a hundred thousand hectares of rural land were converted to urbanization between 1976 and 1981 and about half of this was prime land and every hectare which is converted reduces the production potential of the nation's agriculture.

However, of even greater concern is the fact that soil degradation is increasing everywhere, severe water erosion, for example, affects 5.8 million hectares which is about 13 per cent of our improved land area, when the erosion affects about 6.4 million hectares 14 per cent of our improved land area, compaction affects about one million hectares, salinization about 2.2 million hectares. Organic matter losses are 40 to 50 per cent of what they were in our prairie soils and 30 to 40 per cent in the eastern soils.

Now the estimated impact of degradation, annual impact, is about one billion dollars in reduced hills and additional cost to the farmers. The evidence also, although we are somewhat weak in this area, but the evidence is that all farm impact in terms of reduced water quality and other impacts is also very considerable. Now farmers alone cannot be blamed for soil degradation, farmers are under intense economic pressure and they must strive to maximize production year by year in order to survive year by year.

Thus far they have had to bear almost all of the costs of soil conservation by themselves and they cannot afford to do this. Economic production and other policies that are sensitive to conservation objectives are necessary and we will highly recommend that this be developed.

Now, another related effect, the effect of climate change: our studies indicate that the so called greenhouse effect will be to increase production pressures on our best lands. Only on our best lands. Although temperatures will be warmer it is estimated that total Canadian crop production will decrease. And this is because Northern soils are generally not suited for expanded production and because potential evapo-transpiration will be considerable higher than the added precipitation, as a consequence total production probably will decrease. The

impact of that one of the major impacts of that, will be that there will be highly greater pressures on water supply because the arid lands in the South will increase in area.

Finally then, I'd just like to make one or two points. No society in history has been able to survive the loss of its food production capacity. While all the evidence is clear that we are far from a crisis along these lines in Canada each year our potential is decreasing as land is alienated for other uses or becomes degraded.

Progressively bit by bit, we compromise our developmental and environmental opportunities, we believe that agricultural development and environmental management can coexist, it will however, take some enlightenment long-term planning and it will also require some definite actions to ensure that it in fact does exist.

That is the essence, Madame Chairman, of my statement, I would just like to take this opportunity as an indication of the degree to which we and the Institute are concerned of these issues, we had a book commissioned, about a year ago, it is called "Wealth About the End", it deals with agriculture in Canada and it is future possibilities or losses of/for opportunities or whatever and we sincerely hope that you'll accept this as part of the total documentation that you will be receiving. Thank you.

Mrs. Brundtland

Thank you very much, I now give the floor to the honourable Jim Bradley, the Minister of the Environment for Ontario, Common Shares in the Environment.

Jim Bradley

Thank you very much, Madame Chairman and Madame Prime Minister at the same time, members of the Commission and distinguished guests.

It is a pleasure to come before you today to discuss our mutual environmental concerns, I would like to table report prepared by several of our resource ministries on behalf of the Government of Ontario entitled "Common Shares in the Environment", and I believe the members of the Commission have a copy of the report at this time.

The environmental problems we face can probably be categorized in two ways: those which are localized affecting only the area in which the problem arises and those which are international having a transboundary effect on other countries. Most recent example of this is the radioactive fall out from the Chernobyl accident.

Let me address the transboundary issue first. The problems of Ontario's two most important environmental problems arise from activities outside of its borders and thus outside of our effective control. Acid rain from US power plants and industries is falling on our lakes and our forests. Toxic chemicals leaking and being discharged into the Niagara river from the New York side is threatening drinking water and fisheries.

Ontario then is handicapped by its lack of jurisdiction over these polluters. Without the co-operation of our neighbours little can be done to protect our side of the border. It is not a situation which should long continue between two nations which enjoy such a long friendship. I know the reducing transboundary pollution is a matter of Dr. Tolba and the United Nations Environmental Programme has been working on.

I would like to offer some thoughts on our own personal experience as a Province. First, before we can ask another jurisdiction to take corrective measures we must attend to our own backyard. Otherwise we have little credibility on requesting another government to take what can often be difficult and expensive measures.

Ontario did this with this countdown acid rain programme launched in December of last year. We targeted the Provinces four main emitters of sulphur dioxide for a 67 per cent reduction by 1994. One of them the Inconico Smelter in Sudbury is a largest single acid gas emitter in all of North America.

The programme will cost hundred of millions of dollars, expensive for a province with a population less than one twentieth of the size of the United States. With our programme in place, we have initiated meetings with representatives of US States, those polluting and those being polluted, to form alliances and cajole the offenders into the making commitments for reduction.

We have also gone in the US courts joining others to try to force American air polluters to obey their own laws. In addition to our governmental work the citizens of this Province have been involved. One of our citizens groups, Pollution Pro sent an acid rain caravan to the US, to help raise our American friends awareness of the effects of US generated acid rain on Canada. In fact 50% of the deposition and damage in Ontario originates South of the border.

Regarding toxics in our Great Lakes waters, and those of the Commission who were on the boat ride yesterday on Ontario will be aware of this, the clean up of the chemical complex on the US side of the Niagara River including the infamous Hooker chemical dumps, now owned by the Occidental Chemical

Corporation has become a major issue for our government. Without effective remedial action, the drinking water for four million Ontarions is threaten. The Occidental dumps include Love Canal and Hyde Park. The latter containing North America's largest non concentration of dioxines over two thousand pounds.

We have been pressing vigorously for corrective action, our latest effort includes an attempt to negotiate a four party Niagara River Action Plan, committing both federal governments, New York and Ontario to a clean up programme. We have taken a tough stand to protect the health of our citizens and the integrity of the river and of lake Ontario.

We have been involved in a number of co-operative efforts to study and measure the problems in order to come up with the best clean up plan, a unique report was prepared by the joint Niagara River Toxic Committee in 1984. Again we have used the US court system with some effect, I might add that Ontario based citizens groups have joined the legal battle as well, joined on the expertise of Ontario scientists. Unfortunately, there appears to be no effective international law or court which can be used to redress the problems, the absence of these treaties and agreements provide some help in bringing about joint remedial actions.

The two that affect the Niagara the most are the 1909 Boundary Waters Treaty and the 1972 Great Lakes Water Quality Agreement. Both are administered by the International Joint Commission. Looking at it on a more localized basis then, past management of our forests has led to a rapid decline in our harvestable trees and degradation of the Northern environment.

Our new government, elected partly on a strong environmental platform, has taken a number of measures that we hope correct the problem. We initiated an audit of the remaining wood stands to get more accurate data. For setting realistic levels of harvesting based on sustained yield, we have undertaken a major class environmental assessment, a force management activities that will involve public participation and the setting of new standards for proper stewardship of the resource base of Ontario's largest industry.

We have awarded the use of environmentally sound biological sprays to control forest insects, in many respects I find that as the Minister of the Environment, I am really the Minister of the long-term economic health of the Province.

On another front we are strengthening the laws and regulations governing the discharges of toxics into our air and water. With the new laws in place, we will not hesitate to ask the court to jail flagrant and repeated offenders and just recently, you'll be aware, the city of Toronto was able to gain a one year jail term for a persistent polluter.

Ontario is exploring a number of initiatives to increase sustainable development activities within our native communities and Northern Ontario. Our recently released report to the World Commission on the Northern environment makes a number of recommendations that would increase native peoples participation in development.

Regarding Ontario's relations with developing countries I can say that this problem has both the tools and the human skills that can be shared with the Third World. We have pollution abatement equipment, micro-hydro-electricity generators and other hardware that conserves the needs of developing countries. We have service and management skills that we can

share. Right now our crown utility Ontario-Hydro through a Canadian international development agency programme is helping the country of Kenya improve its power management programme.

I would like to end, Madame Chairman and members of the Commission, by saying that I am convinced that strong environmental protection is good long-term economic policy. Any government that ignores the environment does so obviously at its own risk. For in the long-run human health will suffer, quality of life will be reduced and future prosperity forfeited. Thank you.

Mrs. Brundtland

Thank you very much, Minister Bradley. And let me also again on behalf of the Commission thank you for the excellent tour at the Toronto harbour and for the presentations you made on the Great Lakes. Thank you.

We shall open general discussions after these five presentations. However, we have, in agreement with some of the people who have been presenting papers that have been distributed to the Commissioners, wanted to call upon certain of you for brief statements. The first one here on my list to start on the debate is Simon Miles, President of the Ontario Conservation Council.

Mr. Simon Miles

Thank you, Madame Chairman, I should like to relate to the work of your Commission some thoughts based upon our recent experience at the Council of putting together an assessment of conservation and development practices in Ontario in this report which is being submitted to your Commission. In our

submission to your Commission, the Council has directed its attention to the question of follow up after your report is being discussed by the General Assembly.

In short already we are beginning to anticipate what could happen to your report and trying to prevent it being put aside, to use the language of the Commission. Most of the real follow up action will be done by national and sub-national governments and eventually by individual citizens. We all know that is going to take long time.

Now to make sure that they do follow up we have to start thinking now about the packaging and the promotion of the recommendations. For example, one of the Council's key recommendations to your Commission is that these governments will pick up on your suggestions when it comes to integrating economic development and the management of the ecosystem if you encourage and assist these governments to start by conducting such assessments of their own performance.

This is rather like the one that Tom MacMillan spoke of this morning and we were very grateful to the government of Ontario for being so open to subject itself to an assessment by a non-governmental body. We believe that we have to start with assessments because it's very difficult to go to politicians and I am sure I don't have to tell you this, to civil servants and to assume that nothing has been done. Obviously they don't like the implications of such suggestions. Quite rightly, I would not if I were a politician.

Now assessments are also learning processes. They force one to start thinking what one is actually doing or has been doing. But how does the Commission gets such assessments launched? We suggest that with regard to the packaging and promotion that thought be given to presentation, may be as attachments to your report of sort of

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continuation of S. Miles's statement

and we were very grateful to the Government of Ontario for being so open to subject its self to an assessment by a non-governmental body. We believe that we have to start with assessments because its very difficult to go to partisians and I am sure I don't have to tell you this, also civil servants and to assume that nothing has been done. Obviously they don't like the implication of such suggestions. Quite rightly. I wouldn't if I were a politician.

Now assessments are also learning processes. They force one to start thinking what money is actually doing or has been doing. But how does the Commission get such assessments launched? We suggest that with regard to the packaging and promotion that thought be given to presentation, maybe as attachments to your report, of sort of how to do it kits, with useful examples of how others have gone about their successful work.

Now we have offered our recent work as one example of what we hope will be many that you will receive, as an example of one way, in this case how to do it with regard to assessment. Now in addition to these kits on assessment on could have many other for example: as regard to the theme of this morning's talking on Environmental Management and Economic Development, you could perhaps have a kit on how to identify true costs of new developments that are meant to contribute to our Economic and I would like to add our Social Development.

This is the sort of thing that looks Luc Gagnon as spoken to so well this morning. But it must not be a chapter in your book or a few paragraphs, it has got to be very clear as to how you

do it. Many are being to talk about identifying true costs. Mayors and Ministers and their staffs need to know how to do it and who to involve. And that would be very very helpful because you will have that material made available to you, if you could package it in that way.

Finally, I would urge that if we are to learn from our experience of our global initiatives, such as the Brandt Commission and the World Conservation Strategy, then its essential that once you have reported to the General Assembly that there be a group that continues to promote the recommendations of the Commission. Because, the Brandt Commission and the World Conservation Strategy did not have that money allocated and I think that that is one of the problems that they face. Its one of the reasons why at this late date we are now having a Conference in Ottawa, as you know, to follow-up on the World Conservation Strategy to look at how we can put accountably into the process.

Now ideally the funding should come for this follow-up from a large number of International Agencies including the obvious like UNEP, the World Bank and others so that they become more identified with your objectives. Again you know that once you start paying for something you become more interested in the outcome. Now it generally takes seven years or so for seminar ideas to be incorporated into conventional policy making.

I think that Jim MacNeill who worked so hard on Stockholm can testify to this very well. It took time for Governments to pick up on the ideas of Stockholm. So this means that we need at least five years of good solid funding to back-up your recommendations. And the follow-up team could organise seminars, demonstration projects etc. on the use of the kits mentioned.

Again the sort of thing that Tom MacMillan offered to host in Canada by way of a seminar on forecasting I hope that we can hold him to that and many other things, I welcome that. The

team should involve as many as possible the key agencies, donor agencies from industrialised countries, the international agencies and the development planning agencies of both the industrialised and the developing countries, so that they too identify with the process.

And I would like to end by using this platform to urge our add agency, SIDA, to add to the already very generous support of your good work and make an advance commitment in principle at least to help finance this follow-up. And both SIDA and Environment Canada should also start thinking now about how they are going to follow-up on your report.

Thank you very much Commissioners for giving so much of your precious time to this very important undertaking for the World, Thank you.

Mrs Brundtland

Thank you very much and indeed we would hope that what you said would come true. We will now open the floor to a general discussion and in between I will call on some of those that we have named before hand but I open it for general remarks.

Wayne Easter

Thank you Madame Chair, I am the president of the National Farmers Union and I am also a dairy farmer from Prince Edward Island.

First of all I would like to say we do welcome the Commission, wish you well. Yours, there is no question, is a task of enormous importance to this in future generations. I want to take a very few moments to elate agriculture and the farming abuses of land. I am pleased that the Chair of the Commission recognise the agricultural problem extensively in her remarks

this morning. With reference to those remarks, Madame Chair, although I personally as a farmer had been educated to use intensive artificial inputs in my farming operations, I often think how farmers would be probably better off if we just used the natural abilities of the land to produce, in terms of the mass of surpluses that we have now. But yet too we also have a problem of hunger in the world and even hunger in North America which is mainly a problem of allocation.

But I will briefly relate the farm problem and its interrelationship and why the abuse of land. The problem in agriculture is not faceless. I as a farmer am a potential victim of the system that we now operate under. Why are approximately in this country 25% of Canadian farmers facing the immediate prospects of farm bankruptcy? It is directly related to the general concept of a cheap food policy that is constituted the corner stone of federal agricultural policy since the beginning of settlement. Low domestic and competitive export prices.

While import costs have been steadily rising in an increasing volume and variety of polluting imports have been encouraged to maximise production, the general result has to be lower prices and to reduce the margins of returns to farmers in each unit of production. In the name of efficiency the process we are caught in leads to a contradiction that leads to underdevelopment of farms. This policy has contributed toward poor husbandry practices and abuse of our soil resources. It has increasingly forced many farmers to seek other forms of employment to supplement their incomes and indirectly to subsidize the cost of food production. It has contributed towards rural population and growing abuse of our agricultural resources.

High interest rates have deprived the new generation of young farmers from pursuing a chosen profession in farming. We regard the current cheap food policy in agriculture as a form of economic violence which is contributing towards soil

exploitation and the growing impersonal relationship between farmers and the soil for economic survival. It is a policy of industrialisation that can lead only towards disaster economically for us as farmers and environmentally for us all as Canadians and as world citizens.

Unless public attitudes and government policies change direction, Canadian agriculture faces a bleak future and our report card in agriculture shall reflect the failure of these policies.

I might mention, in conclusion, that internally, within our own organization, as we debate, as members between ourselves, in term of organic farming and chemical farming the short term economic abuse of land versus the long term costs of immediate survival, we look forward to your report to adding to that debate the internal discussion in our organization and the external discussion around the world in terms of improving our environment and hopefully improving the lives of farmers and their lives in the world. Thank you very much.

Franciso Bohero Barnes

Madame Chairman, members of the Commission, I am from Canadian Organic Growers. Our presentation has to do on Food Security and Seed Patenting. We are a citizens organisation of growers and consumers interested in health conservation and the natural environment and are greatly concerned about plant genetic resources and seed saving.

We are most concerned about seed patenting which exists in some countries and about its effects on future food supplies for an expanding population. We feel that any monopoly created by seed patenting allows the integration of plant varieties and agricultural chemicals ensuring a continuing dependence on the latter. This may lead to loss of diversity and to an ever decreasing gene pool.

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Seed patenting may result in the loss of many non hybrid varieties because these are not so profitable to seed companies and because growers using hybrid seeds may not save their own seed. Most crop seeds came from one of nine so called centres of genetic diversity which are all located in the Third world. There many generations of farmers had developed a great range of plant viability. Such diversity is necessary to protect crops against disease, pest, and adverse matter like weather and soils, and to provide for new varieties. These plants may become a highly and profitable commodity which can cause prices to rise and open scientific exchange to decline. Third World farmers may thereby be exploited.

We firmly believe that diversity and availability of seeds may be better maintained as a public resource without seed patenting. Therefore we feel that the practice of exclusive patenting should be publicised and discouraged. In Canada, the National Farmers Union and other non governmental bodies have protested plant breeders rights legislation.

Canadian organic growth heritage seed programme encourages the preservation and exchange of seeds. We're being offered certified seeds from other countries for free distribution to seed growers. We do not know is proposed Canadian legislation will restrict our exchange of seeds or only its sale. Some of our correspondents in countries that have passed plant breeders rights legislation say that chemical companies are greatly interested in breeding strains that are resistant to their own herbicides and require their own fertilizers.

Excessive use of pesticides may well be questioned in view of chemical accidents such as that in Bhopal two years ago and chemicals leaking from our great lakes systems. May we suggest that you seriously consider this very important social matter in dealing with world environment and development.

I would just very briefly like to suggest that this freedom in the genetic exchanges which is the information of nature also becomes the freedom of the information floors of all languages and cultures and we have a proposal to submit together with this a magazine called Regional Priorities that I will put forward to the Commission.

Kenneth Amberly

I am from the Crossroad Resource Group in Winnipeg. We so heartily welcome your Commission. I took part in the hearings before the first Stockholm Conference. I have three brief comments. First there are so eloquent addresses this morning that so addressed the issues.. I can ask and can I ask: have you considered the importance of this to the nation and to the people of Ottawa, that one of the public access television stations of our country was asked and allowed and assisted to televise the whole of the proceedings so that it can be broadcast live and broadcast again?

This is an absolutely unique service that cannot be provided by the regular television networks but the public access television networks stations do it.

Most of the public Commissions even the one we had to come through to Winnipeg on Starwars and free trade, they forbid television cameras inside the public hearings for fear the people would find out what was going on. But I know you people are not like that, thank Heavens.

And my other thing would be to ask our distinguished Honourable Tom MacMillan if he would indicate how serious his environmental department is concerned with the environment by making a hundred copies of every one of these beautiful briefs that are available on the tables and making them available nationwide to all the environmental organizations in Canada want them. I hope he is listening or one of his trusted agents.

And my third brief point is that isn't it interesting how many people are talking about agriculture and the farm lands and the forest lands? As one person said, I ain't never heard of no country that was prosperous for a long time that could not raise their own food and house their people. And our agriculture system is self-destructive and government and business has combine together to make a very self destructive forest programme. Besides from that things are pretty good.

What we are recommending, and I have recommended in my brief to you, Madame Chairman, was that your Commission and Canada consider another national park system. Not to destroy the one we have now. It preserves 1% of the land in virgin purity while we destroy the other 99%.

What I want to consider is that we work towards creating another national park system where we have 1% of all the farmland being set up as a genetic reserve to preserve genetic diversity with in our own country and call them organic farmers or ecological farmers. And make a national park system where 1% eventually of all the farmland in the country and 1% of the money from the government and universities goes to promote an alternative technology.

You see we have a military dictatorship industrially that promotes only one kind of technology. The industrial technology and they will not allow the other technology. What I would like to do is introduce competition into the free enterprise system.

Now if we get 1% of the farmland ecologically and organically farmed within 10 years and then gradually increase it to 10% and see whether it turns out good or bad. And beside the farmlands, lets get 1% of the forestlands harvested in a sound manner where only 80% of the mature trees are harvested by selective cutting, with horses or elephants. And then the land is preserved by using no chemicals and only hand thinning and hand seeding or benign and gentle mechanical seeding.

But there would be enough natural re-seeding if you use selective cutting and sure side by side with the restructive forestry technique and government and business the fact that there are people and there is a method that you can harvest the forest without self destructing it. Thank you Madame Chairman you whole Commission is a bright light in a world of wilderness.

Rhoda Inuksuk

First of all I would like to thank you, thank the Commission and Madame Chairman on behalf of the Inuit ... of Canada, which is the national organization that we have here.

You mentioned the need this morning to consider the environment when making trade agreements. Inuits in Canada and in Northern Quebec and central and high Artic are becoming very worried because our government is negotiating free trade with the governments of the United States and are putting water diversion on the table as part of those negotiations. One project calls for the daming of James Bay, this would affect the whales, migratory birds and many other species as well as the Inuit who depends on them.

This could change the environment of the artic on a broad scale. We hope that your Commission will bring the voice of reason to all international trade discussions including those between Canada and the United States. Further we are most concerned to see the international trade treaties, in particular the Convention on the International Trade In Endangered Species, used to transform the relationship between the Inuit and the animals which they depend on into a relationship where the animals depend on man who destroys their habitat. But man no longer values and depends on them.

Environment threats are relatively new to the Artic which is the home land of the Inuit. But we see more and more of them from shipping, minor exploration and industrial activity and

military activity. The Inuit people who are also threatened by the industrial activity which occurs far from there and leads to the accumulation of industrial pollutions in a thick yellow bag called the arctic haze.

The most cruel environmental threat comes from the other sectors of the environmental movement itself as we see the animal rights law systematically destroys our way of life and violates our right as aboriginal peoples to our tradition and values. Yet our people including the Arctic people need development. The challenge is to find strategies for development which meet the needs of the people and the environment.

For Inuit to be able to maintain more relationship to the environment, the land and the sea and the sea ice requires international cooperation with respect to the uses of the arctic by others. Recognition of the priority of the Inuit values with respect to the environmental. And revision of the current approach to the development and the environmental protection that allows pollution of the arctic to continue now that after it has been identified as occurring.

And on the other hand for this threatens the relationship between the man and other species through destruction of ancient interdependences. We hope that in a city like this the World Commission on environment will be effective and successful. Those who truly know the arctic environment are really asked how it should be used.

Inuits believe as that their ancestors helped the strangers who came to the arctic to survive there and that we have something to contribute to the continuing survival of man and animals in the arctic if others could only listen. Thank you for listening today and we look forward to initiative of this industrialized world and in particular our neighbours in the circumpolar north. Thank you.

Mrs Brundtland

I thank Rhoda Inuksuk, President of the Inuit Tabirsat of Canada who was just speaking to us.

Speaker on the floor

I would just like, Madame Chairman to draw your attention and that of the Commission and interested members of the audience here to a rather insidious tough pollution about which most might not be aware. This is through the use of phosphate rock fertilizer used both as fertilizers for our crops and also very widely used as road slag. Both here in and imported abroad. Many are of the phosphate rock fertilizers are contaminated with uranium, that is the calcium originally present was displaced by uranium and in many of these phosphorous rocks the uranium content was high. Because of uranium of the whole forium series is very long lived and that they accumulate in the vegetation which of course may be grazed upon by the herbivores and eventually end to the human chain and also eventually be leached to ground waters and accumulate in the aquatic organisms which again are the food resource for many of our fish.

I think we have a concern here which is not widely voiced. That is we are alerted to the Chernobyl's and the Three Mile Island Point source hazards, but we have through this industry and its perhaps constitute something like over 1.4 billion dollars to the Saskatchewan economy, so it is a very important industry, the use of these phosphate rocks. We have a very insidious way of disseminating the uranium which is the content of this both in our own food stocks and by exporting it abroad and also exporting a potential hazard. I think this is one thing I would very much like the Commission to consider. Thank you .

Mrs Brundtland

Thank you. Is Douglas Brucher, Manager Environment and social Economic Development or Canadian Petroleum Association here? No, O.K. Floor is open for anyone to speak and of course to any of the Commissioners to make comments or to ask questions to any of the presentations that we have heard this morning.

Lorry Grilly

I'm between organizations and employment at this time. I guess what I am hearing here is - I am not sure absolutely if I am hearing this - but I am hearing a lot of top-down type of ideas being projected and a lot of concerns that need massive support or funding from government, other organisations. I am concerned at the individuals being left out and not being given enough direction. I liked what Simon Miles had to say about how to do kits and I have been working a little bit along the same lines, a type of urban conservation strategy approach which is simply a local application of global needs.

So if the direction is given for the individual to contribute as best they can, given whatever resources they can drum up. I think there is a need for more voluntary time given by the individual and I do not see that coming right now from any of the measures that are being directed. I have a feeling that the environment is an elitists club, which comes to me because none of my relatives will talk to me in a sustainable conversation about the environment.

So what I would like to suggest is that measures be looked at which would encourage individuals to work, to give some of their time in environment and development and perhaps orient it around the year 2000 since that is a historical point, milestone. And perhaps gives the opportunity for people to see where their places in history. Appeal to their alteristic sense and at the same time give them positive reinforcement,

giving a measure of their time for their community first. And that applies - people will not be alteristic and do things for no return - I think they need to see some kind of return - and if they are working in their community there is the opportunity for them to make friendship, change their attitudes and the values of that community so that they are both working to help themselves and they are working to help the world.

I think that the attitude and value changes is the only way that really things are going to change permanently otherwise with this top-down centralized approach we simply going to perpetuate the same system that has got us into the problem. Thanks.

Chris Ludmore .

I am a senior environmental science student at North ... Collegiate. I have noticed that what a lot of what we are saying is dealing with specifics here but I think we should go to a more international level and just like to find out that in Ontario we have introduced a law, known as Spill's Bill which forces polluters to clean up after themselves and pay for the cost of cleaning up. I would just like to suggest that we apply pressure in other countries to introduce such laws and we all know that a law is only as good as the enforcement behind it.

I think we should also apply pressure to the country to enforce these laws because it has happened before in the past that laws have been passed and due to economic problems - like people corporate blackmail - people saying that they will lay off work so that control orders will not be met. We have to enforce these laws and the other thing we have to do is particularly with Third World countries, people are *lowering their standards to encourage foreign investment. We have to apply pressure on these countries to maintain their standards at a world level so

that the foreign investment will not be attractive there
because it is cheaper for them and they do not have to pay to
clean after themselves.

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TAPE 7 - SIDE 2

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TAPE 8 - SIDE 1

Morning Session

Sally Rutherford

I would like to respond to Emberley's comments and some of the other comments that have been made, particularly that conservation being elitist, I think that it is quite true if you look around at yourselves, most of the people here have some direct interest in conservation of the soil, of the water, of the air and I think it is quite true that the general population does not have any real understanding of what the problems are and what the situation actually is.

I have had the opportunity of working with the senate committee that produce the report so that the rest can have the opportunity to go across the country and speak to people in Canada on the issue of conservation. And it came home again and again that most of the people that have some information are directly involved and it is not the general population particularly the urban population that has any real information.

I would like to suggest to the Commission and particularly, I suppose, to the Minister of the Environment that they encourage the educational institutions particularly grade schools and high schools to increase the information that presented to students, particularly young students on the issues. Because I really believe that unless we can try to educate people from the ground up, conservation is going to remain a relatively elitist occupation for a relatively small number of people.

Although they mean well, the conferences I have attended tend to be all the same people, they speak to each other on a fairly continuous basis and it is very difficult to get the message

distributed more widely. And I think that perhaps entering it into the education system on a broader basis and perhaps as Mr Emberly suggested doing some sort of public relations work through public broadcasting is a really valuable and important way to go. Thank you.

Mrs Brundtland

We have among all the submissions that the Commission has received, there is one from class of a group of 14 year old students who made a very excellent paper to us. So although we may be pessimistic about the level of education or the amount of spreading of knowledge and interest I just want to mention that as an optimistic part because we should not be ashamed, those of us who are working with environmental issues because we have been trying to learn about them and to concentrate on them and try to influence other people.

Now because either it is elitist or it is grassroot, because if it is not both it will not function. We have, I think now before rounding up this mornings session, I would give the floor to you at Microphone 5

Bernard Duval

Madame la Présidente et membres de la Commission, je représente de l'Union des Producteurs agricoles du Québec. Je pense que ce matin il s'est dit beaucoup de bonnes choses dans ce secteur économique et de la production agricole. Je pense que, au nom de mes confrères agriculteurs du Québec, on a depuis le vingtième siècle répondu à l'attente du gouvernement de produire, produire et produire plus. A chaque fois fois qu'on voulait répondre aux attentes de la population du Canada et du Québec, on avait éventuellement la bonne recette, on avait la

bonne semence, le bon grain, l'engrais chimique qui se résumait à des tonnes d'engrais chimiques utilisés en agriculture, en fonction des problèmes qu'on vivait on a essayé la bonne utilisation des pesticides.

Aujourd'hui, on veut réglementer à peu près tout ce qui dans le passé nous a été montré comme bon. Le seul point que je voudrais soulever, c'est que si on a été incités, si on a été informés pour produire plus avec des outils ou une technologies qui répondaient aux attentes de l'alimentation, peut-être qu'aujourd'hui il faudrait regarder de quelle manière on aborde la réglementation, puis peut-être le message que je voudrais laisser c'est que si c'était bon de nous inciter à produire, entre l'incitation à produire et la réglementation environnementale qui va créer des problèmes à produire plus, peut-être que la tempérance aura sûrement un meilleur goût. Merci.

Mrs Brundtland

I had one of the Commissioners raise his hand just before I announced that number 5 was now the last speaker. But I would like to call upon Ambassador Sahnoun. And after that I suggest that we close for the lunch break.

M. Sahnoun

Madame Chairman, just a number of points which might need some clarification and if we do not have to have this clarification now we can have them later in writing or if necessary through some of our discussion. Mr Gagnon has very ably introduced or underlined the fact that economic theories are rather oblivious to introducing or incorporating assets and liabilities in whether they are coping with the GNP or with public deficit. Certainly these are concepts which probably will take some time to introduce in academic thinking and then in political thinking. I was just wondering whether Mr. Gagnon and his

group have given some thought to some comprehensive thought to the idea of introducing environmental costs in practice and then from the bottom up build in this thinking into the academic minds as well as the public minds.

My second interrogation of thinking is in connection with the introduction by Mr Joe Keeper, we are very sensitive in the Commission to the problems of the native people and I think we are certainly very much open to hear a lot during our stay in Canada knowing the experience in Canada in this field. We have heard one argument which I would very much like to have your contribution to it and that is that the Indian people want to build an economic basis in the areas in which they are living and that actually they will, therefore, in a way develop these areas. And we will see coming from the window corporation which we might have asked to leave from the door which will then exploit these areas with maybe a better share of revenues with the native people.

This is an argument. As I have said we have heard and we would very much like to hear whether the native people would be in fact certainly much more aware as far as I can see it, perceive it myself, of the necessity of protecting the environment. Exploiting, of course, and having economic basis for them but with a better knowledge of the relationship between the people and the environment and relationship between the people and the land.

My third point is - an indication I just want to have statistics whether I am correct - but there have been something like one hundred thousand hectares of cultivated land which were converted to urban settlement in a space of, was it five years something like - 76, 81? Well at this rate, or has this rate been kept on or whether it is somehow reduced now?

I think the final report is a very important point which I would also like some elaboration if possible - that is the role of the international court. I think it is Minister Bradly

who mentioned it, the role of international court something which we have started to give some thought actually very serious thought - we have the contribution of one of the Commissioners who is the president of the International Court of Justice. But if we could have the basis of your experience with the United States some elements for our own thinking, we would certainly be grateful. Thank you Madame Chairman.

Harvey Mead

I am from the Union Québécoise pour la Conservation de la Nature, the group which Luc Gagnon is representing. In response to your first question the Quebec Government has last fall conducted a poll on citizens sensitivity to environmental issues. I was going to make a comment on this earlier but we had our say at the podium and I was letting others speak. The poll was very positive in that something like 80% of the population sees environmental issues as high priority and also feels that development and environment can be compatible. It certainly our concern that this perception on the part of the population does not seem to go a long with the notion of costing.

I think that one of the highest priorities for our group and I think for a great many groups for getting down to the grassroots and that was when my comments was going to come in deals with making those perceptions relevant to - fitting them into a sense of cost. It is a big job.

LUNCH BREAK

End of Morning Session

END OF TAPE 7 - SIDE 1

TAPE 8 - SIDE 2

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