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**MILLENNIUM PROJECT HUNGER TASK FORCE: LAUNCH OF THE 21ST
CENTURY UNIQUELY AFRICAN GREEN REVOLUTION**

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Thank you very much, Bob Havener. Ladies and gentlemen, since the time is short, I shall be brief. I am going to give an outline of the report of the Hunger Task Force under the umbrella of the U.N. Millennium Development Goals. Dr. Jeffrey Sachs of Columbia University is the world coordinator of all the task forces. And, unfortunately, Pedro Sanchez who was to have made this presentation this morning is not well, and he asked me as a co-chair to present it. I'm happy that what I'm going to be saying will be supplemented by Florence Wambugu and Kevin Cleaver.

I think the task has become light because of the outstanding, of course, presentation by Dr. Norman Borlaug, who dealt with the problems of Africa, why certain things which happened in Asia could not be reproduced, and also the last presentation by Dr. Joachim von Braun, who again has dealt with some aspects of the African situation.

Let me tell you, the Hunger Task Force deals with the whole global hunger, not merely African, although today, for today's presentation we are concentrating on the situation in Africa. In purely absolute numbers, the largest number of women, children and men who will go to bed hungry tonight are in South Asia in total number. Sub-Saharan/Africa comes next, but the situation there is somewhat different, largely related to the question of purchasing power, and of employment, not just for the availability in the market, but the fact remains that a very large number of people do not have adequate money to buy, to have access to balanced diet and safe drinking water. We call nutrition security as one, having access to both balanced diet, as Dr. Joachim von Braun said, in terms of micronutrients, macronutrients, and also safe drinking water, because clean drinking water today is becoming an important constraint in terms of human nutrition apart from problems of irrigation.

The situation with reference to tropical agricultural productivity – unfortunately, today Africa is at the bottom. This question was also gone into by another panel in great detail, set up by the Inter-Academy Council. I had the privilege of also co-chairing. That report was presented to the Secretary General of the United Nations in June. Those of you who would like to get an overall idea for the African situation, both in terms of science and technology and in improving productivity of African agriculture, because the other panel's mandate was – how to harness

science and technology for improving productivity. The Hunger Task Force is a broader term. We've not gone into poverty issues in the Hunger Task Force, but it is clear that hunger is the extreme manifestation of poverty, because for any poor person, food is the first among the hierarchical needs of a human being. If you're a very poor person, 70-80% of whatever money you have goes to food. This is why elimination of hunger is absolutely vital to the larger spectrum of polity, because of food productivity, human productivity and so on. The African situation in terms of productivity is low, and I think the IFPRI study has clearly shown the importance of agricultural productivity. It is one of the best means of reducing poverty, and it is the best safety net against hunger and poverty.

Why Africa? The reason is quite clear. The old question of the progress has been dealt with in great detail. The climate and soils are the same as many parts of Asia. The large, increasing problems of HIV/AIDS and diseases and the linkage between nutrition and health is a very important linkage, which is not normally discussed. A drug-based approach alone will not be enough. It is important to attend to the nutrition of the affected person. There are no major river basins, and also, unlike the Green Revolution of Asia, which as Dr. Borlaug talked about, wheat and rice and maybe corn, there is no single crop of that kind in Africa. That is why in the other report, the Inter-Academy Panel Report, we call it the Rainbow Revolution, not one single; as it may be in some other place. We don't have across the continent a large rice, wheat rotation or wheat and rice or so on. So the African Green Revolution has to be somewhat different in terms of what needs to be done.

Why has Africa not benefited very much from the Green Revolution? You can see the yield increase is somewhat low. Sub-Saharan Africa hardly 28% between 1960 and 1998, in contrast to almost 88% in Asia. There are many reasons for this. One of the first is, of course, the soil, the soil fertility depletion, because most soils, both in a country like my own, India, as well as Sub-Saharan Africa, are both hungry and thirsty. The soils are hungry. They've been cultivated, eroded; many of them, micronutrient depletion is high apart from macronutrients. There is also water scarcity. Therefore, the soil fertility approach in the whole panel has been to identify a few strategic interventions, a few catalytic interventions which could then stimulate a considerable amount of change. I think it is very important to have this catalytic intervention. Just as seeds became the trigger of the Green Revolution in wheat and rice and corn and so on, we feel that in the case of the African sub-continent, the first important catalytic intervention is soil health care, soil health improvement. And there are a number of such suggestions which have been made, arising from work of Dr. Pedro Sanchez.

What does management gain on those large projects? People who have been leaders in particular, talk about large projects such as: the small micro-irrigation facility harvesting the water from falls in small ponds; in community ponds; equity in sharing the water; utilizing that water for low water acquiring but high-value crops. Many of these need to be done.

Now, the underweight children have been used by us, underweight children as to locate hunger hotspots, because after all, starting with the children, when the children are undernourished means the mother is also undernourished. The fetal and maternal undernutrition, leads to low birth weight child. And one of the great tragic forms of human iniquity is malnutrition of the child at birth, not an opportunity for the full expression of the child's innate mental, potential for mental and physical development. The low birth weight child and the

consequence of under nutrition is why we have used the hunger hotspot calculation from the point of more than 20 persons and about 100,000 children who are undernourished.

What is the approach then of the panel, which is also available on the website for any of you to read and to comment on. One of them is the policy reform. It is only with technology and public policy that we can create conditions for rapid progress. Technology alone will not be able to do it unless the public policy support is also there. So we require increase in productivity, fundamental to overcoming poverty and malnutrition. We require improved nutrition with the proper safety nets. Our safety net is based on a lifecycle approach, starting with a pregnant woman, nursing, but young children from 0 to 2, then all the children, then coming to school, noon meal program for the school, going up to old and infirmed persons. You look at the lifecycle as a whole, and that is how our recommendations on nutritional safety nets are based.

Restoration of degraded ecosystems, the soil health has to be improved, water has to be conserved, and biodiversity also utilized in a sustainable way. Africa is very rich in biodiversity, wildlife as shown by Dr. Borlaug. Whole medicinal plant wealth is also very rich. But then how do you make all this biodiversity in a sustainable way into wealth meaningful to the people? These are some of the challenges ahead.

Our recommendation is – invest in soil healthcare, soil healthcare by an integrated nutrient supply, not only fertilizer. Fertilizer is needed. At the same time, nitrogen fixing shrubs and trees. In fact, one of the most effective nitrogen fixing methods, which fixes nitrogen also on the stem as is identified by French scientists in Senegal. Very efficient nitrogen-fixing material is there and the biofertilizers. Small-scale micro-irrigation – this has done a great good in India, for example. You just catch the rainfall where it falls and try to conserve it as well as you can and share it. Improved seeds are available in many cases; banana will be mentioned shortly. And later investment in research and development.

How do you get the nutrition atrazine plant nutrients at the lowest possible cost? This is done by what has been called the fertilizer trees or nitrogen-fixing trees. I use the word “integrated nutrient supply” appropriately, what is possible under a particular condition. This is a very important strategic intervention; in the African context, it is very important.

We have then improved nutrition and the various forms of safety net. I mention, apart from nutrition, literacy and nutrition education. There is a need for a food for work program or other methods of intervention, and for the children, the young children 0 to 5 and also pregnant women and nursing mothers. These are to be exceedingly important in terms of priority.

Feeding vulnerable groups and homegrown gardens should not be underestimated, nor the potential which homegrown foods occupy. One can have small homesteads; one can have a number of crops, which is already done in many parts of Africa. You can see a very large number of crops being grown, but this can be done more systematically.

Wherever necessary the biofortification and fortification work can be done. Market access has become a key limiting factor. Again, Dr. von Braun mentioned it. I was there when the World Food Summit Plus Five meeting was held in Rome, and almost all African leaders, Mr. Mussovini of Nigeria was one of the most articulate leaders who said, unless markets are

available to us, if I produce more, what will I do? The prices will crash. I can't do everything. The market will have to be doubled up by overcoming poverty, increased consumption at home, but also foreign markets will have to be opened up. This is an exceedingly important area. I think though trade today is becoming free but not fair. How do you combine free and fair trade in order to ensure? Because we must remember that, unlike some countries, which hardly have 2-3% of the people are engaged in agriculture. In most countries, not only mine but also in Africa, 70-80% are in agriculture. So it is the backbone of the livelihood security system of the country. It is not only the backbone of the food security and ecological security, but the livelihood of the security system which is exceedingly important.

This is why missing markets – I'm not going to go into great detail – is well known. We are hoping that the negotiations which are taking place – the United Kingdom, for example, is taking a lead. They've said, and along with the European Union, the new common agriculture policy. Otherwise, more production, more subsidy, the rain mountains, the butter mountains, and the wine rivers as they used to be called, are all products of extraordinary amount of subsidy. Now, the European Union has agreed to some extent to dealing production from subsidy. It will be a very important step which we'll take.

So the market, including the roads and communication, which Dr. Borlaug and IFPRI have been emphasizing, communication, then the policy reforms one must really mobilize for particular action – without it, nothing else will happen – the budget priority, which is important. Transport costs are exceedingly high in relation to Europe, all the other countries. We'll mobilize particular action, what hungry countries should do. It's a sort of compact, as we call it, between rich countries and poor ones. It has to be a mutually symbiotic compact in which, broad-based agricultural growth in poor countries, and also access to markets is improved and so on.

So the paradigm shift has to be done in the area of reducing hunger by 2015 is the U.N. Millennium Development Goal number one. Is this possible? It is certainly possible. It's only half of 850 million people, it is possible. Where there's a will, there's a way, if it can be done, Dr. Borlaug summarized how within three to four years fear of gloom and doom, of total despair was transformed into great hope and joy. It can happen if you really want it to happen. The modern technologies have spread like anything now. The cell phone, for example, has gone everywhere. Everybody is now waiting for it.

But what are the steps needed? We have summarized them into seven major steps of our report, summarized seven major accommodations.

First, move from commitment of will as expressed in speeches to particular action, in other words, what they call, "Walk the talk." Because too many speeches are that. If you read all these big meetings, everybody says agriculture is the highest priority, but it is not reflected. Borlaug showed how the expenditure is increasing and agricultural investment is decreasing correspondingly. Therefore, we must walk our talk if we really mean that we want to end hunger and poverty.

Prepare a national level action plan, packages of technology, services and public policies, all of them together – what kind of public policies it requires, what kind of investment decisions, what kind of services, including extension and knowledge of systems. And a technological

package which is environmentally sound, and also less risk-prone, because even if farmers get credit, we must have a low-risk technology.

The third is: increase agricultural productivity. The Green Revolution, and without associated ecological harm, no environmental damage. Productivity enhancement must be without risk to the environment.

The fourth is build a sustainable community center nutrition security system, which the community involvement, the decentralization which Dr. Joachim von Braun mentioned is very exceedingly important. If you decentralize it, much more people are involved. They have a sense of involvement in management, and it is important to build these community center nutrition security systems. In parts of India where there are hunger hotspots, what we have done is to promote community center gene bank, seed bank, water bank and green bank. They got the prize at Johannesburg for the most innovative methods of sustainable food security. It is possible to build balanced diet and clean drinking water.

Then safety nets based on the whole lifecycle approach and marketing which holds the key really to progress. Many people don't realize in India it was not merely technology, but the government had a minimum support price, and there was full cooperation of India, which was asked to buy whatever the farmers bring. At one stage, the food cooperation had 70 million tons in their store, largely because the government honored its commitment to the farmers that whatever you produce we'll buy. But it is not always feasible, marketing finally will determine whether the farmers will make the investment that is needed.

Finally, conserve, not only conserve but enhance the ecological foundations essential for sustainable agricultural advance. But we should not only conserve what we have got but also enhance it in term of land, in terms of water, in terms of biodiversity, in terms of forest and all the atmosphere. Today everyone is talking about global warming not being a distant phenomenon but already occurring. Some of the computer simulation models show that global warming and temperature rise will do great harm in parts of India, parts of Pakistan, and parts of Sub-Saharan Africa. In other words, in addition to the problems we already have, they will get further compounded if the climate change problem is not addressed.

So, ladies and gentlemen, I once again want to say that we miss Pedro Sanchez. He has done a great job with reference to providing leadership to the work of this task force. But some of my other colleagues on the task force are going to supplement my talk and bring in their own ideas. But before I conclude, may I once again express my own admiration and gratitude to Dr. Borlaug, the Ruan family, Ambassador Kenneth Quinn, Judith Pim, Bob Havener, and others for really having made Des Moines the world's most stimulating, committed, interesting food capital of the world. Thank you very much.