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Population, Environment and Development: Culture Matters

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Mr. Chairman, Distinguished Delegates, Ladies and Gentlemen: Thank you very much for the privilege of serving as your special discussant.

The Population Division's excellent report gives a scholarly and objective review of the extraordinary changes in population, the environment and development during the 20th century. The report reviews carefully many case studies, theories and points of view, and reaches this modest conclusion: "Although it is widely acknowledged that important relations exist between population, development and the environment, there is little agreement about the nature and magnitude of links. There is widespread recognition that population growth is one of the many factors that impact the environmental resource base. ..." [page 121]

I suggest that the links among population, development and the environment are difficult to understand in part because a fourth topic is missing from the list, namely, culture. Culture includes technology, institutions, law, politics, and values. Without an understanding of these aspects of culture, we have little chance of understanding how population, development and the environment interact. If I had to summarize my remarks in just two words, I would say: culture matters.

My suggestion that culture matters is not a criticism of the report. The report mentions the roles of technology, markets, and cultural and social institutions. The assignment to the Population Division did not give culture a title role with status equal to population, development and the environment.

I cannot now review all the ways that technology, institutions, law, politics and values interact with population, development and the environment. I would like to give some examples.

During the 20th century, technological changes included the invention and worldwide diffusion of stainless steel, the tractor, nitrogenous fertilizers, pesticides, new varieties of agricultural plants and animals, modern contraceptives, radio, television, films, computers, the Internet, antibiotics, vaccines, the chainsaw, the airplane, and physical, chemical and biological weapons of unprecedented destructive power. Obviously technology, one component of culture, has implications for population, development and the environment.

Other components of culture, such as politics, laws, institutions and values, also profoundly affect the interactions of population, development and the environment. In this great political institution, the United Nations, I want to focus on politics because you, as a political representative of your government, can greatly influence how population, development and environment will interact in the future.

Some of the great political changes of the 20th century include: the end of colonialism; the end of legally sanctioned racial segregation; the establishment of political, social and economic rights for women; the rise and fall of Communism; the spread of democracy; and the establishment of economic growth as a kind of “state religion” in authoritarian and democratic nations alike.

In North America, politics affected population, development and the environment before the existence of the United States. The tall trees of New England were felled by colonists sent for that purpose in part to provide masts for the ships of the British Navy. Politics continues to influence deforestation today, for example, through government subsidies to logging, land clearing, and road building in forests. Politics also governs the recovery of forests through subsidies for carbon sequestration and conservation.

The military draft of men to fight in the American Civil War in the 1860s caused a labor shortage, which accelerated the spread of horse-drawn threshers and reapers. These machines prepared the way for the American conversion to the tractor and other mechanized agriculture between 1920 and 1955.

Wherever mechanization was powered by fossil fuels, fewer people and fewer draft animals were required to work the fields and bigger farm fields became economical. Mechanization released a vast agricultural labor force to go to the cities.

In the former Soviet Union, an ideological commitment to big enterprises as demonstrations of the power of the state led to state farms that averaged, by 1977, 40,000 hectares, three times the size of Washington D.C. Often these vast treeless fields suffered intense soil erosion from wind.

In the Po Valley in northern Italy, in the Tennessee Valley Authority and the Colorado River in the United States, along the Volga River in the Soviet Union, in India and China and Egypt and elsewhere, dams to extend irrigation, control floods and generate electricity always also served larger political purposes. They demonstrated to the people the power of the state to control nature for the social good. This demonstration was helpful to whoever was in power at the time, be it Roosevelt, Stalin, Nehru, Nasser, Nkrumah or many other leaders. In the 1960s, more than one large dam at least 15 meters high was completed every day on average. By 1990, two-thirds of all the world's streamflow passed over or through dams. The diversions of water from natural courses reduced the Aral Sea from the world's fourth largest lake to its eighth largest lake. The full environmental consequences of damming the rivers that drain into the Mediterranean Sea have yet to be felt.

Politics governed societies' responses to air pollution in Mexico City, Athens, London, Pittsburgh, Peru, Ontario, the Ruhr of Germany, and the industrial complex between Dresden, Prague and Krakow. From the beginning of Japan's Meiji restoration in 1868, the central government's intense commitment to industrialization, militarization and imperialism sacrificed local livelihoods and overran local resistance. After World War II, economic power replaced military power as the state religion. In 1961, the Yawata steelworks dumped 27 tons of soot and dust from its smokestacks every day. A fisherman whose fishing was destroyed by the Yawata steelworks lamented: "With the development of the Japanese nation, and the development of this region, it is us fisherman who have become the victims." Until about 1965, Japanese polluters were protected in the national

interest. Remarkably, between 1965 and 1985, Japan completely reversed its pollution policies and practices. By 1985, its citizens had nearly the cleanest air of any industrialized country.

The political, economic and social status of women changed in most countries around the world during the 20th century. The Constitution of the United States was amended to guarantee women the right to vote only in 1920, 42 years after the amendment was first introduced into Congress. Between 1970 and 1990, the worldwide labor force participation of women relative to men nearly doubled. The number of economically active women rose from 37 to 62 for every 100 men engaged in the cash economy. This dramatic change in the cultural and economic roles of women coincided with the equally dramatic fall in global fertility since about 1970. The direction of causation, if the link is causal, is not obvious, but the importance of culture in the change of fertility is clear. Political and economic changes in the status of women affect and are affected by changes in the number of children they have. Changes in the number, size and composition of households have environmental consequences, for example, through the number of refrigerators, housing units, and fuel consumption per person.

These few examples suggest that culture matters in complex ways that need to be much better understood. Culture moves people's behavior through the constraints and possibilities of population, the environment and development. Culture includes politics, technology, law, institutions and values. Politics matters. Culture matters. What you value and what you choose to do, as an influential member of national and global culture, will affect population, the environment and development and the links among them.

Thank you for your attention. I look forward to your comments.

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