

Climate change and the unfeasibility of United Nations Sustainable Development Goals

With recent upward trends in global temperatures and sea levels, many countries are experiencing higher rates of evapotranspiration, groundwater depletion, water salinity, and loss of habitats. Moreover, increases in living standards entail higher consumption of animal products that require greater natural resources. While the United Nations has recognized some of these issues in the 17 Sustainable Development Goals, the recommendations seem somewhat simplistic since they fail to recognize the inter-connections between the goals and the pressures exerted by population growth. Rapid population growth in many developing countries is hampering the attainment of sub-goals such as “ending hunger and food insecurity”, “improving education quality”, “providing adequate sanitation”, and “achieving productive employment”. This article emphasizes the importance of setting realistic policy goals and outlines the steps through which the goals relating to agricultural decisions, and population health and migration patterns might be achieved in the wake of climate change.

First, the implications of rapid population growth for food production were underscored by Malthus in 1798. However, cultivation of new lands and improvements in agricultural technologies have afforded adequate supplies of dietary energy for most populations. However, environmental pressures such as depletion of groundwater and land degradation are gradual and their assessment requires a longer time frame. For example, population increases of over 33 million during 1980-2010 in six Indian states (Bihar, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal) were significantly associated with greater groundwater depletion.

Second, constraints imposed by rapid population growth in developing countries for achievement of Sustainable Development Goals are discussed and evidence is presented on “unwanted” fertility from India. Third, comparisons are made for India during 2002-2016 for average well depths in 495 districts and terrestrial water storage anomalies assessed via GRACE satellites for 274 1x1 degree grids using estimated parameters from dynamic random effects models. Lastly, migration patterns especially of the highly educated from 39 sending countries to OECD countries during 2000-2010 are analyzed and total fertility rates were significantly associated with higher migration rates for the highly educated indicating “brain drain”.

In summary, it would be helpful to emphasize the benefits of healthcare and family planning services for enabling couples to achieve their desired family size by reducing unwanted fertility. Moreover, education of girls and greater employment opportunities for women can lower the desired family size. The United Nations Sustainable Development Goals are unlikely to be met by 2030 because the ambitious objectives cannot be tackled using the existing natural and human resources. For example, it is important to recognize that attainment of the Sustainable Development Goal 4 emphasizing “equitable quality education and promote lifelong learning opportunities” critically depends on adequate resources for education that are in turn facilitated by small family size; it is essential to outline how the goals might be operationalized. Further, it is

counter-productive for developed countries to provide agricultural subsidies that create market distortions and may be exacerbating the obesity and chronic disease epidemics via low food prices. In fact, it would be efficacious to provide subsidies for generating renewal energy rather than subsidizing large agribusiness that promote consumption of unhealthy and processed foods. Finally, in view of differential fertility rates in developing and developed countries, it is important to harmonize international migration patterns for low, medium, and high skilled labor for enhancing global sustainability and well-being.

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