

Is India's Climate Change Response Typical of the Global South Situation?

By Masakazu Toyoda

Last year, India became the world's most populous country surpassing China. In terms of GDP, India is already the fifth largest economy and is expected to overtake Japan and Germany to become the world's third largest economy by the late 2020s. Furthermore, in terms of international politics, India successfully held the G20 presidency in 2023 and demonstrated its presence as a "leading country of the Global South".

Is India leading and representative of the Global South in terms of climate change? India is already the world's third largest emitter of carbon dioxide, after China and the United States. At COP26 (the 26th session of the Conference of the Parties held in Glasgow, England, in 2021), India's commitment to achieving net zero emissions by 2070, was well received by some while heavily criticized by others as being too late. At COP28, Prime Minister Modi and notable other leaders in India expressed interesting statements/comments as the voice of the Global South. I would like to review the rationale of some of those statements to see if India's situation could be considered typical of the Global South.

First, at COP28, in 2023, Prime Minister Modi criticized developed countries, saying that developing countries are suffering from the greenhouse gases emitted by developed countries. The carbon budget is the upper "cumulative" limit of greenhouse gases that can be emitted since 1850 when trying to limit the temperature increase to a certain level. The carbon budget for limiting emissions to 1.5°C is estimated at 2.85 trillion tons (excluding deforestation and other land use). The OECD countries have already spent 46%, non-OECD countries (excluding China) 22%, and China 11% of the total budget. This means that almost half of the total carbon budget has already been spent by developed countries. This frustration is understandable, especially when one considers that the total population of the OECD countries is only one-sixth that of non-OECD countries. Incidentally, looking at the carbon budget per capita, the cumulative per capita emissions of OECD countries exceeded the 1.5°C budget in 1892, about 130 years ago, while those of non-OECD countries are not expected to reach the budget even by 2050 (Note 1). This kind of analysis makes some people uncomfortable, but it is very descriptive of the thinking in developing countries and so far India seems to speak as if on behalf of the Global South, whether or not they are committed to carbon neutrality in 2050.

Second, Prime Minister Modi called for "Climate Finance and Technology (by developed countries) to be critical for the Global South, without the support of the developed countries, the world could very well plunge into darkness." Climate Finance is an international fund provided by the developed economies and international organization to support activities to control and reduce greenhouse gas emissions (mitigation) and minimize the effects of climate change (adaptation). Starting in 2010, Climate Finance was supposed to provide \$100 billion annually, but it has long remained unachieved. It is said to have finally reached the goal in 2022. The "Climate Finance" will expire in 2025, and COP28 unfortunately concluded with ambiguity about how it will

be handled after that. Adaptation is a matter of life and death for developing countries struggling to cope with climate change. Incidentally, according to the United Nations Environment Program (UNEP), the annual funding shortfall for adaptation is estimated to be up to \$366 billion. Again, India says out loud what the Global South thinks.

Third, at COP26 the initial proposal for "phase-out" of coal-fired power generation was finally weakened to "phase-down" of unabated coal power due to opposition from India. At COP28, the scope was expanded from "coal-fired power" to "fossil fuels" with the phrase "phase-out of fossil fuels," but was ultimately toned down to "transition away of fossil fuels," which was agreed upon. Fossil fuels are always the target of criticism at COP, but fossil fuels can be decarbonized through CCS (Carbon Capture and Storage) to produce zero-carbon hydrogen and ammonia for use in thermal power plants or as decarbonized industrial fuels. The issues are more related to cost than the availability of storage for carbon sequestration.

The cost depends on the region and, for the time being, hydrogen and ammonia production derived from fossil fuels is said to be cheaper than if produced from the electrolysis of water using renewable energy. As for the availability of CO₂ storage, the Global CCS Institute estimates global storage capacity at 4 trillion tons. Even if 10 billion tons (a little less than one-third of the 2022 global emissions) were to be captured and stored, this would mean that there is enough capacity for 400 years (Note 2). The Global South can depend on coal power during its transition to net-zero, thanks for the change from phase-out to phase-down due to the opposition from India.

Fourth, there is, however, a warning from Indian climate change experts that the geopolitical risks of massively introducing solar power could increase for India and other economies (such as those in the Global South). According to the International Energy Agency (IEA), China's manufacturing share of key components of solar panels exceeded 80% by 2021 and will reach 95% for polysilicon and wafers in the next few years. From the perspective of energy security, the deep dependence on Middle East oil, (which eventually lead to climate change) was once a concern. It may soon be replaced by a heavier dependence on China for solar power generation equipment and critical materials.

I leave it to the reader to judge the reasonableness of India's arguments. One thing I would like to emphasize is that the issue of climate change needs to be discussed scientifically and based on statistics and figures, not speculation and emotion.

(Note 1) Institute of Energy Economics, Japan "Energy Today," Takahiko Tagami, p. 42, 43.

(Note 2) Ibid. and Yoshikazu Kobayashi, p. 69.