

### **Socio-Economic Research and Applications (SERAP)**

COP 26: What do we know so far? What next?

The dust has settled on COP26. Now the hard work begins. This newsletter aims to highlight the takeaways from the recent COP26 forum. It provides insight into the discussions between different parties. SERAP has been engaged in the climate change agenda, and we have highlighted some relevant publications.

Climate change is considered one of the most severe threats to development, society, and health globally. Populations across the globe have witnessed the significant damaging impact of climate change. Over the recent years, its impact on natural life has grown more substantial and more devastating. Climate change has caused extraordinary wildfires, dangerous sea level rise, steady temperature increase (a rise of just 1.1C), etc. There is, therefore, a deep concern around the threat of climate change.

As part of the forum to discuss and tackle climate change, the COP26 was recently organized, and was referred to as the "biggest and most important climate-related conference on the planet", by the UN. The forum constitutes 197 countries that are bound by a treaty that aims to "stabilize greenhouse gas concentrations in the atmosphere". This year the summit included the 25th annual summit. Extensions to the UNFCCC treaty were discussed and negotiated to establish binding limits to Greenhouse Gas (GHG) and enforcement mechanisms for individual countries. More than 100 leaders of the world and thousands of diplomats have agreed to end and reverse deforestation by 2030 and set new targets for cutting burning coal, oil, and gas. A pledge of \$14 billion from public and private funds has been committed to stop and reverse deforestation. Part of the funds will also help developing countries restore damaged land, and building resilience.

Moreover, £1.1bn of the fund will be allocated to protect the Congo Basin's forest. As part of the conference, the role of indigenous communities in protecting forests has been formally acknowledged as a a crucial component in the fight against deforestation. Furthermore, participants agreed on "common timeframes for the frequency of revision and monitoring of their climate commitments". However, expectations from COP26 were low, given that previous deals had not materialized Furthermore, disputes between members -such as, Norway and Brazil- have been taking place pertaining to the Amazon Fund. Key countries like Brazil and Russia had also refused to sign the 2014 agreement on deforestation had prevented strict action. Recent concerns have been directed at the allocation of funds and whether they are being used for the protection of forests or are being diverted.

In Glasgow, a reality check came from the latest UNFCCC report on its latest updates of the national commitments thus far to reduce carbon emissions. Although some advances had been made since Paris Climate Summit, they are still not enough. "A sizable increase, of about 13.7 per cent, in global greenhouse emissions in 2030 compared to 2010 is anticipated" the report said. The UK and India launched a fund to help small island states to prepare themselves against climate change disasters and highlighted the need for adaptation to climate change globally.

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## **Keys Points and Recommendations**

Five different recommendations can be derived from COP26:

#### • Secure global net zero by mid-century and keep 1.5 degrees within reach

Countries have agreed that curbing deforestation and switching to a greener economy is necessary. There has also been a call for more involvement in a robust carbon market mechanism that keeps emissions in check. If emissions are not controlled, the climate gains that communities have strived towards will be futile.

#### • Adapt to protect communities and natural habitats

Building resilience through infrastructures and restoring the ecosystem has been discussed in the forum. Participants believe that supporting local communities and including them in different aspects of policy-making is crucial. Without local communities' support and specialized expertise, efforts towards climate mitigation will not be as effective, given that policy-makers are unaware of exact communal contexts.

#### • Mobilize finance

Finance has been a crucial factor in the fight against climate change. Emerging countries are disproportionately affected by climate changes and climate disasters, yet they lack the funds that could help them build greater resilience. Given their nominal carbon footprint, it has been considered justifiable for wealthy countries to play their role by compensating poor countries for the damage they suffer. However, past experiences have shown that pledges are seldom met. It was belieat COP 15, that channeling \$100 billion a year to less-wealthy nations by 2020 would help them improve the, would However, since the last pledge, the effect of climate change on developing countries has been increasingly devastating. Therefore, this year's forum intended to secure the necessary funds and define new targets that would keep poor countries in mind.

#### • Work together to deliver

During this conference, participants have agreed to greater levels of collaboration and have defined new initiatives and coalitions for climate actions. Geographical boundaries do not sustain in the face of climate disasters; therefore, countries cannot partake in isolationist policies that are inward-oriented. To make a genuine difference in the fight against climate change, there is no other option except for all countries to stand together and work consistently towards climate mitigation policies, as well as their enforcement, to ensure that all countries are playing their part.

#### • Develop frameworks that encourage multilateral collaboration

The time for selective action is long past. Countries and communities must now come together across as a whole, bypassing internal differences to commit completely to the mitigation of climate change. This collaboration will also require the involvement of communities that have long been at the margins of society, particularly indigenous groups and rural communities who have been living off the same land for centuries. Their methods of nature preservation could provide breakthroughs in our approach towards climate resilience.

#### **COP26 – Background Articles**



The climate pledge of \$100 bn annual aid to developing nations has slipped to 2023. The UK COP26 Presidency has said

that the \$100 bn goals is likely to fall short in 2021 and 2022, but is confident that it will be met in 2023. Mohamed Nasheed, the former president of the Maldives, has said "the financing announcement is extremely disappointing in that it asks us as developing countries to wait even longer for the delivery of a promise that was first made more than a decade ago. I know the UK presidency has worked very hard for this, and I appreciate their efforts, but this is not sufficient to lay the groundwork for a successful outcome at COP26". Read More...



U.N. climate envoy Mark Carney, who assembled the Glasgow Financial Alliance for Net Zero (GFANZ),

put the figure at \$100 trillion over the next three decades and said the finance industry must find ways to raise private money to make the effort far beyond what states alone can do. Carney's comments reflect a problem often cited by investors who need to be sure that they are being accounted for in a transparent and preferably standardized way globally in the face of a myriad of climate-related risks. Read More...

## **Top-Down and Bottom-up Approaches to Climate Change Adaptation in Bulgaria**

Bulgaria is likely to face serious impediments to economic growth till 2050; demographic slowdown and barriers to economic diversification are the most important among them. Climate change will add to these challenges. The analysis considers two climate change scenarios. contrasting a climate-sensitive scenario and a carbonintensive scenario. Regarding the agriculture sector, based on this study's findings, the effect of temperature rise on crop yields in Bulgaria can be considered harmful. NPVs are high, clearly indicating that the benefits are far more significant than incurred costs. The NPV calculation shows that investments in adaptation measures are economically efficient. The annual cash flow expressed in present value will reach its maximum between 2027 and 2030, meaning that improved irrigation and soil quality, shift in cropping seasons, climate-resistant crops) will have a positive impact on the sector. Read more

# HOW TO GO GREEN? A general equilibrium investigation of environmental policies for sustained growth with an application to Turkey's economy

Green growth is a relatively new concept aimed at focusing attention achieving sustainable on development through the efficient use of environmental assets without slowing economic growth. This paper presents a real-world application of the concept, and identifies viable policy options for achieving a complementary ecological regulatory framework that minimizes output and employment losses. The analysis utilizes macro-level data from the Turkish economy and develops an applied general equilibrium model to assess the impact of a selected number of green policy instruments and public policy intervention mechanisms, including market-based incentives designed accelerate technology adoption and achieve higher employment and sustainable growth patterns. Read more



Sri Lanka -Managing Coastal Natural Wealth

Sustainable coastal development is fundamental to Sri Lanka's sustained economic growth and competitiveness, especially since it gained upper-middle-income country status, and pressures on coastalresources increase. Yet, the value of Sri Lanka's coastal assets could diminish if adequate policy and institutional mechanisms to foresee, assess and manage long-term risks are not put in place. The issues related to the three most important areas discussed in this the report, namely fisheries, coastal tourism, and coastal zone management, call for differentiated interventions across geographic regions. Read more



The Glasgow Climate Pact is the first U.N. climate deal to explicitly mention the need to move away from coal power and subsidies for

fossil fuels. However, in the face of- what has been called 'lobbying' from top fossil-fuel producing countries- the language was watered down throughout negotiations. The preliminary draft of the deal called on nations to "accelerate the phasing-out of coal and subsidies for fossil fuels". Instead, a second draft urged countries to move away from "unabated coal" and "inefficient subsidies for fossil fuels". Later, China and India successfully pushed for another last-minute change to the crucial phase, saying they would only agree to "phase-down unabated coal" rather than "phase out". Read More...

# **Economic and Land Use Impacts of Improving Water Use Efficiency in Irrigation in South Asia:**

This paper modifies and uses an advanced computable general equilibrium model coupled with biophysical data on land and water resources by Agro-Ecological Zone (AEZ) at the river basin level to examine the economy-wide consequences of improvements in water use efficiency (WUE) in irrigation in South Asia. This is the first time the benefits of such modifications have been evaluated in an economy-wide context. In Pakistan and the rest of South Asia, and improvement in WUE of up to 30% appears to be economically profitable. Read more



#### How realistic is Bangladesh's climate prosperity plan?

Bangladesh currently emits 0.3 tons of carbon dioxide per person per year, compared to about

20 tons per person in developed nations. Yet, Bangladesh is the seventh-most-affected country regarding extreme weather events in the past two decades. Bangladesh currently spends about \$2 billion annually on climate change-related adaptation measures, with 75% of the money from domestic sources. The country would need almost three times that adaptation by 2050 to achieve its climate goals. Read more

#### Five big takeaways from COP26

Young people had a prominent presence at COP26. More than 100,000 young people marched in the streets of Glasgow last weekend to demand climate action. Their presence was palpable inside the conference venue, where even former president Barack Obama urged the youth to 'stay angry' about inaction on global warming.

"We are the first people experiencing climate change," said Jorge Quilaqueo, a Mapuche traditional healer from Chile, who was carrying a drum and a tight bundle of feathers and was wearing a poncho embroidered with geometric designs. "The medicinal plants of the sacred places and the springs are disappearing." Read more

#### How to spend £95 trillion?

In the wake of the COP26 summit, the Innovation District in Glasgow has featured plans to replace gas heating with warmth drawn from rivers in the area. Just as air and ground have heat that can be captured and used for buildings, Clydebank uses Clyde's water that way, and much of Glasgow's East End could benefit from the same technology.

The project, which starts around £210m, is one of many projects requiring a lot of money and is being given a colossal boost by shifting investment funds to making the great energy transition work. Read more

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