In the last weeks, diplomats from all over the world were negotiating more than twenty draft resolutions at the UN Environment Assembly (UNEA). The Assembly is a biennial intergovernmental meeting which sets the global environmental agenda. It also sets the strategy for the UN Environment Programme (UNEP), and outlines policy responses to address emerging environmental challenges. In amongst proposals regarding plastic pollution, air quality, pesticides and circular economies, to mention but a few, the most controversial was a Swiss-led proposal to establish an expert group on solar radiation modification (SRM).

Back in 2019, at the last face-to-face Assembly, the Swiss proposed a resolution to assess the science and possible governance of 'climate altering techniques' aka geoengineering. That came to naught in the face of persistent opposition from the US and Saudi Arabia. The opponents argued for assessment in the IPCC, not UNEP; and for separate treatment of carbon removal techniques and SRM. The US also objected to efforts from Bolivia and the EU to stress a precautionary approach, and to respect diverse forms of knowledge, not merely scientific analysis.

So what happened this time? We were back in Nairobi again observing the negotiations for a second time. Here in part 1 of our report, we explain the process and describe the positions adopted by different states. In part 2 – coming tomorrow – we try to interpret the

debates and outcomes.

Fast forward

This time the Swiss resolution focused on SRM only, again calling for a UNEP led assessment process through an appointed expert group with a mandate to consider and advise on the state of knowledge. The experts were to marshal what the world collectively knows about science, development, application, deployment, control, ethics and potential impacts of SRM, including risks, benefits and uncertainties.

The US again argued (again supported by Saudi Arabia and Japan) that assessment should happen elsewhere than UNEP: in this case through the recently announced scientific 'lighthouse' process of the World Climate Research Programme of the World Meteorological Organisation. US negotiators also resisted efforts to include assessment of governance options, and of social, legal, geopolitical and security risks, arguing that anything other than a strictly scientific process would be premature. Successive re-drafts of the resolution reflected many of these demands, despite attempts by the EU and others to broaden the scope of the assessment and membership of the expert group.

Wider involvement

The most striking development compared to 2019 was that this time around many more countries got involved. And most – especially those from Africa and the rest of the Americas – sought very different outcomes that the US. Senegal, Kenya, Cameroon, Djibouti and South Africa all intervened, as did Brazil, Mexico, Columbia, Barbados, Argentina and Ecuador.

The African states appointed a formal regional representative, putting forward their agenda. They wanted the resolution to recognise calls for a moratorium on solar geoengineering, as reflected in the African Ministerial Conference on the Environment (AMCEN) decision in August 2023 to call for a 'global governance mechanism for non-use of SRM'. But they also wanted the resolution to support better and broader access to information, and mandate compilation of member state positions and existing expert knowledge through a broad-based inclusive process. Some of the states most vulnerable to climate change – including Fiji, Vanuatu and Pakistan – broadly supported the African position, and emphasized deep concerns about SRM. So did those concerned about unauthorised experimentation, notably Mexico – who saw the 'Make Sunsets' balloon launches as a 'violation of sovereignty'.

What's the procedure?

How might such disagreements be resolved within UNEA – which aspires to consensus? Any country can submit a draft resolution in advance of the meeting. Each resolution consists of some preambular material, typically referencing previous agreements or highlighting relevant concerns; and some 'operational paragraphs' mandating some action – typically convening a consultative, working or expert group, preparing a report, or urging member states or other international institutions to take relevant action.

To achieve adoption by the summit, the draft resolution is discussed through a series of informal and formal meetings open to all delegates. First come informal negotiations under the auspices of the Committee of Permanent Representatives (in the days before the Assembly convenes). Uncontroversial resolutions can be agreed in this process and adopted by the opening Plenary of UNEA. This is rare. On most resolutions negotiations continue under a body called the 'Committee of the Whole', which allocates them to smaller 'contact groups' with chairs appointed from amongst Nairobi based delegates by the UNEA presidency and secretariat. To facilitate wide participation, contact group agendas are further subdivided into smaller clusters, but states with small delegations are still often unable to follow all the resolutions that concern them.

Negotiating norms

The normal process of negotiation of each text begins with a reading through of the draft, and compilation of suggested amendments followed by more detailed discussion of concerns. The aim is to achieve consensus by eliminating or compromising over disputed issues. Drafts typically become covered with proposals for additions and deletions, many in square brackets, indicating disagreement. The proponents, or the co-chairs, might issue a revised draft, typically simplifying, or 'streamlining' language in the hope of minimizing further dispute.

Texts agreed under the process go forward for formal endorsement by the UNEA closing plenary. Those with limited remaining disagreements might be further discussed in the high-level segment of the meeting (following closure of the Committee of the Whole), while those still strongly disputed tend to be withdrawn. So any country, especially a globally powerful one, can hold the process hostage, and shoot down the whole resolution if it doesn't get its way. And compromise resolutions can end up converging on the 'lowest common denominator' of agreement.

A familiar playbook

In 2019 the Swiss were forced to withdraw in the face of US and Saudi intransigence, even after suggesting a revised and streamlined draft conceding to many of their demands. This time, over a series of drafts and negotiated texts the operative text was again repeatedly pared back, eventually constituting merely a proposal that the UNEP executive should prepare a paper. This paper was only to set out options for the establishment of a repository for voluntary submissions of relevant information on SRM. But even this proved divisive, with contestation over the modalities of such a repository continuing amid persistent simmering disagreement over how the proposal should be framed. Once again, the Swiss eventually withdrew the battered remnants of their text.

During discussions, the US, with support from Saudi Arabia and Japan, consistently pushed for language unpopular with most in the negotiating room – in this case regarding the preeminence of science and a leading role for the WMO, and maintained reservations over much of the remaining Swiss proposal. Africa, whilst wanting to improve access to information on SRM, also had concerns about the Swiss proposals. They wanted to ensure that establishing an assessment process, or even a repository, did not legitimate unfettered research, experimentation and development of the technologies. Instead, any mandated action should merely share existing information, focused on understanding the risks involved. Other delegates broadly aligned with the African position and pushed for broader language about the sort of information that should be gathered, including ethical, human rights and security dimensions.

Deep divisions

But it was not only the operational text that proved divisive. There was protracted debate on how the climate challenge should be described in the preambular paragraphs, and whether reference to emissions reductions or temperature goals was more appropriate. The extent of reference to prior decisions at the Convention on Biological Diversity, and the London Protocol also generated controversy. More intense struggles took place over language about ‘potential risks and benefits’, with many preferring reference only to ‘negative impacts’ or ‘risks and concerns’. Indeed, at one point one developing country delegate insisted that the risks of solar geoengineering should not be described anywhere as ‘potential’, but always as ‘unacceptable’.

A whimper, not a bang

The negotiations finally collapsed when delegates were presented with a simplified compromise draft prepared by the meeting co-chairs, which would have mandated UNEP to prepare a paper on options for establishing (in collaboration with WMO) a repository of existing scientific information, research advancements, and activities on SRM. The repository would have included member state and stakeholder submissions. The draft punted any further possible steps to the future.

Many states had previously supported establishing some form of repository to improve access to information on SRM, and somehow producing a synthesis of existing knowledge. But the co-chairs' proposal still proved divisive. Arguments continued over who might establish a repository, and on what terms. The Africans couldn't accept WMO involvement, nor the apparent legitimation of unspecified new SRM 'activities'. The Americans opposed gathering member state and stakeholder materials before the vaunted 'neutral scientific information' was in hand. And the proposed preambular text acknowledging precaution and concerns remained too strong for the US, and too weak for Africa and others including Pakistan, Mexico, and Pacific islanders. With negotiating time running out, the talks were over.

A missed opportunity?

Most states participating in UNEA still indicated that they don't know enough about SRM – especially about the risks. As in 2019, many emphasised not only gaps in knowledge, but also the dominance of Northern ways of knowing. Following the 2019 failure, UNEP commissioned an expert report on SRM anyway, albeit without the broader legitimacy that would have been conferred by the resolution. In advance of UNEA-6 the UN establishment also highlighted SRM amongst topics for advance consultation with its Major Groups and Stakeholders.

In their presentations at UNEA-6 several Major Groups raised deep concerns about consideration of SRM: the Science and Technology Major Group described SRM as a "speculative and unproven technology with associated long-term risks." All the Major Groups that adopted positions on SRM supported either a moratorium or non-use stance. The Youth Group also advocated assessment taking an intergenerational perspective and involving developing countries.

An opportunity to acknowledge the broad concerns of most states and stakeholders and to

ensure that existing information is shared more broadly has therefore been missed. No steps have been taken towards stronger governance of experiments and development of SRM. But neither have such steps been endorsed or legitimated by a UNEA resolution.

Where does this leave us?

In the second part of this blog – we will discuss lessons we might take from these negotiations and the implications for future action. To summarise: many states see deployment of SRM as illegitimate, and even research as meriting governance. Major powers do not seem to want to deploy, or even develop SRM, but acted in ways that would allow them freedom on action on the technology now and in the future. And the window within which effective governance could be established is closing. Any claim that SRM is demanded by vulnerable countries, and that research is primarily for their sake, feels disingenuous – or at least premature.

While climate scientists focus on refining model simulations, very few countries appear to see geoengineering as primarily a question of narrowly scientific or even purely climatic feasibility. Most want to start from a precautionary stance and include governance conversations. Finally, while almost everyone wanted to learn more, and see more equitable access to knowledge, reasonable suspicions are harboured by developing nations about what SRM's function will be, while deep divides remain about what sorts of knowledge are valid, and whether, how and by whom new knowledge might be generated.

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