TIMUN SOCIETY

Study Guide - Week 9

UNDP-Supporting Green Energy in Developing Countries

1) TDLR:

Green energy transition has been a hot topic of conversation for decades. In 1992 during the Rio Summit countries first introduced the notion of "Sustainable Development" and since then have pushed forward to advance it in their policies. Over the years however, the divide between developed and developing countries proved to be a major setback in the transition of the world to renewable energy sources.

Barriers such as lack of technology, insufficient resources or simply lack of experts, cause many countries to struggle with dependency on fossil fuels and uneven access to electricity. The United Nations Development programme and its Green Climate Fund can help struggling nations in their efforts. This goal requires member states to agree on the best approach through the framework of the UNDP.

2) Background Information:

During the 1992 Rio Summit, the concept of "Sustainable Development" was brought forward and became a topic in the international agenda. Since then a number of conferences and summits have been dedicated to notions of climate change, renewable energy sources and climate responsibility. The global awareness of human impact on the climate has led to a number of initiatives meant to combat rhe causes of climate change, one of which is energy production. Attention of the international community turned to wind farms, solar panels, geothermal power plants and nuclear power plants.

Many developed states started turning towards energy utilizing "green" sources due to their lower/none-existent carbon footprint, efficiency and lack of reliance on fossil fuels. For a number of the developing states however, such transformation would have proven too costly. A number of nations in the regions of Africa, Asia and South America are heavily dependent on fossil fuels for their energy requirements, often leading to their reliance on foreign powers holding the resources and technology. Development of independent clean energy technologies would allow for not only wider access to electricity, which in many regions on average is still below 40% but also strengthen the sovereignty of many nations by cutting their reliance on others for basic resources like energy.

Some of the developing countries have dedicated significant time and resources to build up renewable energy sectors and saw great benefit from their efforts. India invested heavily in the solar power sector

with their power plants providing around 47% of renewable energy in the country and the industry being the 3rd largest in the world. Kenya has utilized its resources and invested in geothermal energy, satisfying almost 50% of the country's energy demand with goals to boost it to 100%. Brazil advanced their hydroelectric sector which by now results in around 60% of the country's power output through those technologies.

3) Key Issues:

3.1) Financial barriers: One of the major setbacks on the path of many countries to transforming from reliance on fossil fuels and towards renewable energy are resources. Developing technologies, finding suitable locations for thermal or solar power plants and building the infrastructure requires a big investment upfront that will only start paying itself off in a perspective of years and decades. Some countries cannot afford it on their own that is why the question of aiding is of particular importance. Should the developing nations receive funding from the UN [Green Climate Fund]? Should we turn towards a model of bilateral treaties between states for sharing technology and resources? Should the matter be delegated to regional organisations such as the EU or ASEAN?

3.2) Reliability of Green Energy: Some of the concerns raised by the sceptics on renewable energy sources are the potential unreliability of such power plants. Wind farms' effectiveness varies from month to month and sometimes countries can jump from exporting the surplus of power to requiring transfers from others to meet their demand. Additionally many countries, even developed ones, have old power grids that can't support transfers of excessive amounts of power leading to outages if the output is larger than expected. Should countries retain fossil fuel energy production as backups in case of emergencies? Should renewable energy production remain a minority share in demand due to unreliability risk? Should the UN aid nations in developing more stable infrastructures?

3.3) Local Communities Involvement: In many cases even with the best efforts of the state in trying to build the green energy infrastructure the resistance comes from local communities. A popular emotion among citizens is resistance to having a nuclear powerplant close to their homes or a windfarm in their backyard. States who want to respect the opinions of their citizens often have to spend months if not years trying to find locations that will not cause massive protests for their investments. How can we prevent delays in energy transformation caused by civil resistance? Should states focus on educating people on the need for green energy? Should protest from local communities rule out the possibility of creating new power plants in the region?

4) What can the UNHRC actually do?

The United Nations Development Programme serves as an advisory body to member states helping them achieve the UN Sustainable Goals. It's a forum for debate and cooperation but its decisions are not binding on the member states. Some of its main functions are:

- Supporting member states through providing access to experts and offering policy advice
- Providing grants and loans through Green Climate Fund;
- Executing and publishing reports on clean energy transition in member states
- Educating people and promoting knowledge in the areas of sustainable development clean energy and energy access

5) Major Stakeholder's:

1) China: China is the world's largest producer of green energy infrastructure [Solar panels, wind turbines, etc.] is a significant player in the context of access to technology and resources. It places itself as an advocate of the local south and defender of developing countries. In the debate it would prefer to keep the possible aid within the bounds of its Belt and Road Initiatives focusing on individual treaties between China and states receiving their aid.

2) India: India is a role model of utilizing renewable energy sources for developing countries. It has seen great success with its investment in solar energy plants and advances their goals in the rural electrification project. In the debate India would likely offer their knowledge and expertise in the field of renewable energy and bringing electricity to rural areas with other developing nations through UN initiatives.

3) Germany: As a representative of the European Union who, through its member states, is the largest contributor to the Green Climate Fund Germany stands for global cooperation in the area of green energy development. Germany is one of the strongest actors in Europe when it comes to developing and implementing renewable energy infrastructure. In the debate it would likely advocate for cooperation through UN agencies and funds as well as for climate accountability for states.

4) Kenya: As one of prime examples of success in African clean energy infrastructure initiatives Kenya serves as a blueprint for what could be transferred to other developing nations. They advocate for adequate use of local resources to best suit individual countries' needs. In the debate they would demand larger resources to be allocated to clean energy transformation in developing countries and offer their experiences as an example to other nations.

5) Brazil: Being a green energy powerhouse among Latin American nations Brazil puts a strong emphasis on regional cooperation. They concentrate not only on the advancement of renewable energy infrastructure but also on environmental protection. In the debate they would likely concentrate on technology sharing between the states to even out the chances and argue in favor of funds being allocated to developing nations.

6) Sources and further reading:

https://www.un.org/en/conferences/energy2021

https://www.iea.org/reports/world-energy-outlook-2024

https://www.irena.org

https://www.unescap.org/events/2025/financing-energy-transitions-long-term-green-economic-prosperity-asia-and-pacific

https://www.politico.eu/article/world-leaders-call-multibillion-dollar-green-energy-boost-for-developing-world

https://isa.int/about_uss

https://www.theafricareport.com/379415/powering-africas-future-through-innovation-investment-and-connectivity/

https://www.seforall.org/our-work/initiatives-projects/energy-transition-plans/kenya

https://www.climatepolicyinitiative.org/press-release/brazil-surpasses-global-growth-in-climate-finance-but-international-resources-for-forests-still-fall-short-of-potential