Forum: Second General Assembly

Issue: Developing strategies to sustainably manage natural resources for economic growth in mountainous regions of LEDCs.

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Introduction

Despite an ever-evolving globalization, mountainous regions in LEDCs face staggering development due to physical constraints. The main countries of discussion include Nepal, Kyrgyzstan, Albania, and Pakistan. Natural resource management is at the forefront of ensuring sustainable economic development for many LEDCs. With rich resources including coal, minerals for agriculture, and precious metals, mountainous regions represent opportunities for economic flourishing. According to the World Economic Forum, more than half of the world's population relies on resources from mountainous regions. However, over-mining these resources has been a critical issue in mountainous regions. Climate change has disproportionately targeted regions, with Nepal in particular. As the world's demand for resources is increasing, once remote mountainous regions have become centers of national attention. Mountainous regions have fragile ecosystems which are increasingly vulnerable to the accelerated pace of climate change. Many mountain ranges in LEDCs including the [arraracha etc] host ranges of unique plants and animal life. Mountains also host more than 28% of the world's remaining forests, making them key players in many industries ("SDG 15"). Balancing private sectors with the rights to control natural resources in LEDCs is an increasingly important challenge.

Furthermore, considering the cultural and social value of mountainous communities is crucial in developing sustainable communities. Many mountains around the world are holy sites affiliated with religious values (Food and Agriculture Organization of the United Nations). Thus, respecting cultural values during negotiations remains a key component to consider. With collaborations with nomadic or Indigenous cultures, the committee is encouraged to propose economic and diplomatic solutions for mountainous LEDCs to flourish. For this agenda, navigating international trade agreements and assistance programs balancing environmental accountability with economic development is crucial. With environmental Social Governance (ESG) principles in mind, delegates are encouraged to cultivate means for sustainable mountainous development through active collaboration.

Definition of Key Terms

Sustainable Resource Management

The principle of responsibly balancing the use of natural resources to meet current needs while preserving them for future generations (British Assessment Bureau). In this agenda, fossil fuel resources including coal, critical minerals such as granite, resources like lumber, and biodiversity are focused as major resources.

Less developed countries (LEDCs)

The LDC category was established by the UN General Assembly in 1971 as an acknowledgment by the international community that special support measures were needed to assist the least developed among the developing countries ("LDC Category").

Environmental Degradation

According to the General Multilingual Environmental Thesaurus, Environmental Degradation refers to the compromisation of natural resources in any way. Deterioration of the natural environment due to human activity, often results in reduced biodiversity, soil erosion, water pollution, and ecosystem collapse. In mountainous LEDCs, environmental degradation can threaten local economies that rely on natural resources.

Ecotourism Industry

The practice of using nature or the surrounding environment as a tourist attraction, allows individuals from worldwide to experience a country's nature (Rariel). This industry is currency at 216.9 billion dollars and is one of the leading emerging economic sectors in many mountainous countries including Kyrgyzstan and Nepal.

Nature Capital

Natural capital can be defined as the world's stocks of natural assets which include geology, soil, air, water, and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible ("What if Nature Capital").

Value Change

A value chain is a series of consecutive steps that go into the creation of a finished product, from its initial design to its arrival at a customer's door. The chain identifies each step in the process at which value is added, including the sourcing, manufacturing, and marketing stages of its production. A company conducts a value chain analysis by evaluating the detailed procedures involved in each step of its business. The purpose of a value chain analysis is to increase production efficiency so that a company can deliver maximum value for the least possible cost (Tardi).

Allocation of rights

According to the Natural Resource Governance Glossary, allocation of rights refers to the process and approach through which companies are granted the right to extract. Openness and competition in the allocation of rights can have a positive impact on the quality of the outcome.

Counter-cyclical fiscal policy

A policy that increases budget spending when resource revenues are low and imposes limitations on spending when revenues are booming. Resource-rich countries can use this approach to mitigate the volatile impact of commodity boom and bust cycles on their budgets (European Union).

Exploitation

In economics, exploitation is the act of using resources or labor unjustly for one's own advantage. For mountainous regions, it's notable to note that exploitation involves human labor and natural resources. Continuous exploitation occurs predominantly across LEDC and MEDC partnerships, and this is a critical issue to consider in scope of this agenda (Vaia).

Background

Historic overview of the agenda

Pre-industrial

Mountainous regions have historically been barred from development due to the natural barriers resulting from geographic inaccessibility. In a digital era, high altitudes in mountainous areas have prevented many countries from connecting with the internet, resulting in a lower pace of economic growth (Lampe). Spiking transportation costs further exacerbated separation for mountainous regions. Risks for natural disasters like avalanches, storms, and rockfalls have increased exponentially throughout historical industrialization.

Globalization

An increasing globalization has turned many industries to utilize economic resources from mountainous regions for many industries. Mountainous regions are regions rich with critical resources in a world dwindling of natural resources. However, the exploitation of such resources is a key issue highlighted by numerous governments, India in particular (Nair) Across the loss of biodiversity, cultural heritage, and more nations have become aware of the destruction of these resources. In these most vulnerable areas, droughts, floods, mudflows, and landslides have infringed on the livelihoods of locals in mountainous zones (Ding and Peng).

Major points to focus

Navigating issues throughout mountainous development is dependent on ESG principles. Below are more elaborations on this issue. Mountainous development must strike a balance between economic development and sociocultural preservation.

Environmental Implications

Degradation of the environment is a critical issue in mountainous regions (Sustainable Management of Natural Resources in Mountain Areas). Environmental implications remain at the forefront of many humanitarian crises in these areas, notably as an effect of mining practices and agricultural development (Fao). These factors infringe on local species and traditions.

Economic Policies

As nations are transitioning into a low-carbon economy, transitional material extraction relies on mining projects in mountainous regions. Taking advantage of raw materials such as minerals, metals, and energy resources is expected to enhance the global economy. However, proper management of these resources is an indispensable aspect of helping LEDCs elevate their Gross Domestic Product (GDP). In the 1992 United Nations Conference on Environment and Development (UNCED), in particular, guidelines for economic policies. The core issue in discussing economic policies is rooted in the valuation of resources in mountainous communities. Resources such as timber, hydropower, and minerals, have a measurable economic value. However, many LEDCs lacking comprehensive markets or economists are often taken advantage of during the creation of global economic deals (Preston and Pratt).

Major groups have provided financial assistance for mountainous preservation, religious groups and

Capital resources from mountainous regions do not cycle back toward the welfare of local communities. Instead, major companies continue taking advantage of these regions. Mountainous regions have individual

In 1996, the Food and Agriculture Organization of the United Nations (FAO) proposed innovative methods to ensure the downflow of economic resources. This Mountain Forum conference was held online to optimize attendance for representatives of remote regions.

Social Impacts

According to a 1995 report by Mountain Forum, to UNCED, “For more than one billion people, mountains are sacred places. Mountains are also becoming recreational refuges from crowded cities for the tourist elite.”

Many philosophers, hermits, and theologians receive inspiration from spending time in the mountains, making the area a distinct place of spirituality and holiness. Mountainous regions have been one of the last regions to undergo development because of their tight-knit societal and cultural values. As natural resource extraction occurs, many countries have become insensitive to these holistic value systems. Mountain tourism accounts for 9% to 16% of all tourism, which has resulted in severe disturbances of mountainous cultures (Johnson).

Land resource extraction is especially a critical issue for groups centered in mountainous communities. Many indigenous communities place deep traditional values in the land itself; extracting these resources often severe connections from their homes and way of life, resulting in a loss of identity. Furthermore, displacement of individuals in mountainous communities has become a rising issue since the industrial revolution. With an increasing number of industries focusing on mountainous resources, these individuals have become unable to continue their way of life and have been displaced to more urban areas (Matanzima and Loginova).

Major Parties Involved

The Mountain Partnership

Founded in 2002, the Mountain Partnership focuses on the sustainable development of mountainous regions. With an emphasis on biodiversity, gender equality, policy and law, research, sustainable livelihoods, sustainable agriculture, and rural development ("International Partnership for Sustainable Development in Mountainous Regions"). Andes, Central Asia, Europe, the Hindu Kush Himalaya, and other regions are major focuses of this initiative. This is an NGO in collaboration with the United Nations' sustainable development goals (SDGs).

Nepal

Many private sectors in Nepal have focused on developing solutions to balance economic gains with the protection of their natural environment (Schreier and Shah). Dynamic management of watersheds has been prevalent in Nepal, leading to an overall stance supporting public and private business initiatives including sustainability measures.

Kyrgyzstan

With mountains accounting for 94% of its land, Kyrgyzstan is one of the main nations concerned with this issue. Kyrgyzstan's upstream position has resulted in its name as the "water tower" of Central Asia. Kyrgyzstan is a member of the WTO (World Trade Organization), leading to an export-based approach to its international role in mountainous resource management (Martsynkavych). With many issues of resource management rooted in the Soviet occupation, the Kyrgyz government is still in its infancy of sustainable development.

United States

The United States actively contributes to the North American economic management of mountainous resources. With a majority of freshwater supplies in its mountain ranges, the United States' policy focuses on sustainable development. Watershed management remains at the forefront of the United States' mountainous development. Considering the implications of dams and other water-related systems remains a key part of the United States' mountainous policies (Abdrisaev et al.).

Uzbekistan

Uzbekitan's mountains run from 2000 m to 3000 m. The United States has conducted numerous mountainous resource management and surveys in this area especially due to its high uranium content, which is a key component for nuclear weapon development. Uzbekistan's mountainous resource development remains an ongoing task; the nation has welcomed foreign assistance and navigation in covering this issue. Uzbekistan's mountainous terrain is rich with natural resources including coal, natural gas, and biodiversity, making it a key component of their heritage and economic development. Like many countries in Central Asia, the success of Uzbekistan's development relies heavily on the strategic use of mountainous resources ("Sustainable natural resource and forest").

Previous Attempts to Resolve the Issue

The issue of sustainable development in mountainous regions spans cultural, economic, and environmental facets. Across the last decades, economic exploitation of such resources has run rampant. It was only in the early 2000s that active measures to promote sustainable development were initiated in many nations worldwide. Collaboration between LEDCs and MEDCs has been a core pillar for effective development in these regions. With national experts traversing borders, the world is still working towards mountainous sustainable development—essentially chances to boost LEDC economies and risks for cultural and environmental destruction.

Combining the issue of water management and energy production in mountainous regions, Pakistan is one notable case of sustainable energy generation. Small-scale hydropower has been established in remote mountainous areas in the Hindu Kush Himalayan region. Successes have been monumental in transforming not only the effective management of water resources in the region but also the livelihoods of local communities. Increased local energy production elevated the quality of life for hundreds of local Pakistanis. These smaller-scale projects have less negative environmental impacts on the mountain itself. By capitalizing on the natural gravitational force of the region, energy production in the nation has been transformative throughout 2017 and 2018 ("Small hydropower transforms lives in Pakistan's mountains").

The Mountain Partnership has also initiated numerous funding projects for less developed mountainous regions including Kyrgyzstan and Uzbekistan. They have provided innovative approaches for the environmental and economic use of these mountainous regions. Furthermore, experience in assisting numerous nations around the world provides repertories for the Mountain Partnership to apply more effective solutions for future endeavors. Combining regional circumstances, world-renowned technical expertise, and economic assistance, this global body has initiated numerous changes across natural resources management, local governance, social mobilization and inclusion, and agricultural economics ("Rural Development Fund"). National-level funds including the Untied State's rural development funds have also aimed toward the extraction and sustainable management of mountainous resources. However, the transparency of such assistance has been questionable across decades ("Rural Development Programme for Mountainous and Highland Areas").

In mountainous regions of Southwest China, concentrated sustainable infrastructure funding has worked to promote water management and resource extraction efficiency. Mountainous regions—especially at extreme altitudes—require resilient infrastructure which often damages ecosystems. Combining regional expertise for such construction measures has been executed. While these required substantial governmental subsidies, successes

included drastic reductions in pollution and energy loss. However, overwhelming accessibility to once remote mountainous regions resulted in the loss of biodiversity in this area. In consideration of the failures of sustainable townships, stricter governmental constraints have been erected across other areas (Shen, et.al).

The United Nations has been actively involved in sustainable development in mountainous regions, with dozens of comprehensive resolutions passed across the General Assemblies and ECOSOC (Economic and Social Council). Notably, 2022 was deemed as the "International Year of Sustainable Mountain Development". 94 nations sponsored the General Assembly decision to facilitate the sustainable development of mountainous LEDCs. This year has been prepared since 2001. The 2005 resolution titled "Rendering assistance to poor mountain countries to overcome obstacles in socio-economic and ecological areas" was centered around agricultural development and food security in these areas. While these resolutions have ideated solutions to the struggles of these geographical and economic challenges, significant achievements have yet to be denoted ("Mountain Partnership: United Nations").

Possible Solutions

Investments in mountainous areas or related industries could be another way to approach this issue.

- You could consider corporate responsibility and encouragement of sustainable development for actively involved private sectors
- For a more government-oriented approach, you could propose the proliferation of impact investments, encouraging shifts in tax rates for sustainable development, or perhaps more radically, call for sustainable governmental (or NGO) participation for dealing with sensitive mountainous development
    - Here, it will be critical to review the United Nations's policies on maintaining sovereignty.
    - Additionally, pursuing sanctions or other economic repercussions could be a common way to approach accountability. However, it is key to consider the long-term implications of cutting off trade with LEDCs, which could endanger their delicate economic rebounding. Solutions involving punitive measures should proceed cautiously.

Cultural sensitivity should be one major aspect to consider in sustainable development:

- You could conduct further research into policies or customs surrounding common LEDC mountainous regions, especially within sensitive religious regions
- Creating strict guidelines for collaborating with or working near such areas with spiritual or cultural value could be a great way to approach this component
- Combining aspects with UNESCO (The United Nations Educational, Scientific and Cultural Organization) World Heritage sites could be a measure to integrate international support for navigating this issue.

Water resource management is another major part of tackling this issue:

- Ideating accountable watershed management systems through community engagement can help holistically and safely manage this aspect of the issue
    - Especially for Indigenous areas, water holds high holistic values that may need to be negotiated

    - Creating democratic management bodies with economic and environmental experts can be helpful here.
- Establishing equitability in resource distribution is another major point in the water management issue, especially for areas with high percentages of frozen water sources
    - Creating arctic climate solutions can be a measure to increase the longevity of your proposed solution.

Scientific solutions for agricultural optimization can also be considered.

- As seen by Armenia's mountainous irrigation system, drip irrigation or incorporation of solar panels can help nations maximize biodiversity in mountainous areas
    - However, solutions with difficult economic feasibility should generally include international support or UN assistance to be successful
- Silvopastoral (planting trees on pastureland) can be another type of plan for LEDCs to easily execute.
    - When considering solutions, try to maximize the given resources in these geographical areas. For instance, you could research Central Asia's common animals or plant life to navigate solutions
- These solutions could involve collaboration or funding for environmental sciences or agricultural departments across the world to join in research or solution development
    - Such collaborations could be useful and integrate educational aspects into the solution as well
    - Establishing multilateral partnerships between LEDCs and MEDCs with similar mountainous resource issues can be a way to initiate your solution.

Support for market entrance or emerging business opportunities for mountainous LEDCs can mark a major milestone for sustainable development in these regions

- Promotion of sustainable mountain businesses worldwide could help drive economic growth in LEDCs
    - Concentrating on local employment opportunities could further increase the standard of living and GDPs
    - Collaborative business development within the nation could be another way to reduce exploitation
- Proposing collaborations with fair trade organizations could be one measure to safeguard such exchanges is another way to promote sustainable development
    - These could be ensured by establishing mountainous trade unions, reviewing policies, or international bodies to facilitate mountainous economic growth
- Mandating sustainable business plans could be another approach to ensure the environmental sustainability of mountainous businesses
    - Encouraging the employment of environmental or economic experts can help drive logical and safe business plans for LEDCs.

Bibliography

Abdrisaev, et al. "Sustainable Mountain Development in North America From Rio 1992 to Rio 2012 and Beyond." *Mountain Partnership*, 2012, openknowledge.fao.org/server/api/core/bitstreams/d163a72d-2a07-484b-915f-46cd833f1c78/content.

British Assessment Bureau. "What Is Sustainable Resource Management and How Do You Achieve It?" *British Assessment Bureau*, 8 June 2022, www.british-assessment.co.uk/what-is-sustainable-resource-management-and-how-do-you-achieve-it/#:~:text=Sustainable%20resource%20management%20can%20be,it%20will%20impact%20future%20generations.

Ding, Yu, and Jian Peng. "Impacts of Urbanization of Mountainous Areas on Resources and Environment: Based on Ecological Footprint Model." *MDPI*, Multidisciplinary Digital Publishing Institute, 11 Mar. 2018, www.mdpi.com/2071-1050/10/3/765.

Ebrahim, Zofeen. "Small Hydropower Transforms Lives in Pakistan's Mountains." *Dialogue Earth*, 4 Jan. 2021, dialogue.earth/en/energy/small-hydropower-transforms-lives-in-pakistans-mountains/.

European Union. "Glossary: Counter-Cyclical Fiscal Measures." *Glossary:Counter-Cyclical Fiscal Measures - Statistics Explained*, ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary%3ACounter-cyclical_fiscal_measures#:~:text=Counter%2Dcyclical%20fiscal%20measures%20are,to%20help%20stimulate%20economic%20recovery. Accessed 17 Nov. 2024.

Fao. "Summary Report on Land Degradation Assessment Training in Kyrgyzstan - January 2024." *Knowledge Repository*, FAO ;, 1 Jan. 1970, openknowledge.fao.org/items/020d0542-44c9-44ba-8515-9d7cd8eaeaa6.

Food and Agriculture Organization of the United Nations. "Mountain Cultures - FAO Knowledge Repository." *Food and Agriculture Organization of the United Nations*, openknowledge.fao.org/server/api/core/bitstreams/3183ea2e-521d-4cde-bb59-5336904c70c0/content. Accessed 17 Nov. 2024.

General Multilingual Environmental Thesaurus. "Environmental Degradation." *Environmental Degradation*, General Multilingual Environmental Thesaurus, www.eionet.europa.eu/gemet/en/concept/15154. Accessed 17 Nov. 2024.

"International Partnership for Sustainable Development in Mountain Regions (Mountain Partnership) | Department of Economic and Social Affairs." *United Nations*, United Nations, sdgs.un.org/partnerships/international-partnership-sustainable-development-mountain-regions-mountain. Accessed 17 Nov. 2024.

Johnson, Harry. "Economic, Social and Environmental Impacts of Mountain Tourism." *eTurboNews*, 27 Apr. 2023, eturbonews.com/economic-social-and-environmental-impacts-of-mountain-tourism/.

Lampe, Klaus J. "Mountainous Area." *Mountainous Area - an Overview | ScienceDirect Topics*, www.sciencedirect.com/topics/earth-and-planetary-sciences/mountainous-area. Accessed 17 Nov. 2024.

"LDC Category | Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States." *United Nations*, United Nations, www.un.org/ohrlls/content/ldc-category. Accessed 17 Nov. 2024.

Martsynkavych, Vladlena. "Kyrgyzstan and the Conflict over Natural Resources." *CEE Bankwatch Network*, June 2013, bankwatch.org/wp-content/uploads/2014/04/Kutmor-Kygryzstan-Jul2013.pdf.

Matanzima , Joshua, and Julia Loginova. "Sociocultural Risks of Resource Extraction for the Low-Carbon Energy Transition: Evidence from the Global South." ***The Extractive Industries and Society*****, Elsevier, 17 May 2024, www.sciencedirect.com/science/article/pii/S2214790X24000765.**

"Mountain Partnership: United Nations General Assembly Resolution." *Mountain Partnership*, www.fao.org/mountain-partnership/publications/un-documents/united-nations-general-assembly-resolutions/en/. Accessed 17 Nov. 2024.

Nair, Yogesh. "Mountainous Regions - Spiral of Threats and Human Security Challenges." *United Service Institution of India*, www.usiofindia.org/publication-journal/mountainous-regions-spiral-of-threats-and-human-security-challenges.html. Accessed 17 Nov. 2024.

Natural Resource Governance Glossary. *Natural Resource Governance Glossary*, resourcegovernance.org/sites/default/files/documents/natural-resource-governance-glossary.pdf. Accessed 17 Nov. 2024.

Pratt, D.J., and L. Preston. "The Economics of Mountain Resource Flows." *The Economics of Mountain Resource Flows*, www.fao.org/4/w9300e/w9300e07.htm. Accessed 17 Nov. 2024.

Rariel. "The Difference between Ecotourism and Sustainable Tourism." *GSTC*, 10 Oct. 2024, www.gstcouncil.org/ecotourism/.

"Rural Development Fund." ***Mountain Partnership: Members Detail*****, www.fao.org/mountain-partnership/members/members-detail/ar/c/43178/. Accessed 17 Nov. 2024.**

"Rural Development Programme for Mountainous and Highland Areas: Azerbaajan." *IFAD*, www.ifad.org/en/approach. Accessed 17 Nov. 2024.

Schreier, H., and P. B. Shah. "Challenges in Mountain Resource Management in Nepal : Processes, Trends, and Dynamics in Middle Mountain Watersheds : Proceedings of a Workshop Held in Kathmandu, Nepal, 10-12 April, 1995." *The Library of Congress*, www.loc.gov/item/2013332930/. Accessed 17 Nov. 2024.

"SDG 15 - Indicators of Sustainable Forests and Mountains." *Mountain Partnership: Forests*, Mountain Parternship, www.fao.org/mountain-partnership/our-

work/focusareas/forests/en/?page=5&ipp=6&tx_dynalist_pi1%5Bpar%5D=YToxOntzOjE6IkwiO3M6MToiMCI7fQ. Accessed 17 Nov. 2024.

Shen, Yujan, et al. "Constraints to Achieve Infrastructure Sustainability for Mountainous Townships in China." *Habitat International*, Pergamon, 7 Feb. 2018, www.sciencedirect.com/science/article/abs/pii/S0197397517304514.

"Sustainable Management of Natural Resources in Mountain Areas." ***Alianza Para Las Montañas: Sustainable Management of Natural Resources in Mountain Areas*****, www.fao.org/mountain-partnership/our-work/regionalcooperation/sustainable-management-of-natural-resources-in-mountain-areas/es/. Accessed 17 Nov. 2024.**

"Sustainable Natural Resource and Forest Management in Mountainous Areas." ***UNDP*****, www.undp.org/uzbekistan/projects/completed-sustainable-natural-resource-and-forest-management-mountainous-areas. Accessed 17 Nov. 2024.**

Tardi, Carla. "Value Chain: Definition, Model, Analysis, and Example." *Investopedia*, Investopedia, www.investopedia.com/terms/v/valuechain.asp. Accessed 17 Nov. 2024.

"This Is Why Mountains Matter More than You May Think." *World Economic Forum*, 11 Apr. 2019, www.weforum.org/stories/2019/04/why-mountains-matter-more-than-you-think/.

Vaia. "Macroeconomics." *Vaia*, www.vaia.com/en-us/explanations/macroeconomics/international-economics/exploitation/#:~:text=In%20economics%2C%20exploitation%20is%20the,unjustly%20for%20one's%20own%20advantage. Accessed 17 Nov. 2024.

"What Is Natural Capital?" *World Forum on Natural Capital*, naturalcapitalforum.com/about/. Accessed 17 Nov. 2024.

Appendix or Appendices

I. https://www.fao.org/mountain-partnership/publications/un-documents/united-nations-general-assembly-resolutions/en/ (Mountain Partnership: United Nations General Assembly Resolutions)

This website is a collection of all United Nations General Assembly Resolutions passed on the agenda at hand. Downloading respective documents and reviewing their solutions can be beneficial for ideating your own solutions. Please note that copying or simply creating a collage of existing solutions is not the purpose of the debate. Please use these resources as inspirations to find improved approaches to the issue.

II. https://www.fao.org/family-farming/detail/en/c/1149481/ (Rural Development Programme in the Mountain Zones | FAO)

This website is an example of socio-economic development from a more localized approach. Referring to the document and solutions linked here can help you find more ways to create domestic development and engagement for sustainable mountainous resource management.