Governance at a Glance, Issue 6: May 2021

ENVIRONMENTAL ISSUES

An Exploration of the Complexities and Challenges Faced in Health, Education, and Migration Governance in Nepal

Governance Monitoring Centre Nepal

Centre for Social Change

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What is the current status of Health, Education, and Migration governance? How are governance systems organized, what progress have we made, and what changes can be expected in the coming future?

Our 'Governance at a Glance' series explores these questions from a lens of key thematic areas that have or have the potential to characterize Nepal's overall development and affect governance systems. The pages enclosed in this report represent a summary of the key issues, systems, and political tools used by the ministries and concerned departments in processes related to the environment surrounding Health, Education, and Migration governance.

About GMC Nepal

Governance Monitoring Centre Nepal is a research initiative by Kathmandu-based NGO Centre for Social Change. Using a variety of investigative methods and the latest in qualitative & quantitative research tools, GMC Nepal is dedicated to strengthen Nepali democracy and empower its citizens through accurate & up-to-date information.

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Glossary of Abbreviations

Certain commonly used shorthand abbreviations are used through the pages enclosed in this document to represent names of specific organizations, projects, studies, statistical composites, and/or governmental & non-governmental bodies for brevity.

They are listed below in their order of appearance in this report:

GoN	Government of Nepal
CBS	Central Bureau of Statistics
COVID-19	Novel Corona Virus Disease, Discovered in 2019
MoEST	Ministry of Education, Science, and technology
GL	Glacial Lakes
GLOF	Glacial Lake Outburst Floods
AQI	Air Quality Index Measuring Scale
UNDP	United Nations Development Programme
MoHP	Ministry of Health and Population
FHD	Family Health Division (MoHP)
WFP	World Food Program
ADB	Asian Development Bank
NGO	Non-Governmental Organization
INGO	International Non-Governmental Organization
CDC	Centers for Disease Control and Prevention
NDC	Nationally Determined Contribution (based on the Paris Climate Agreement)
NDRF	National Disaster Response Framework
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
NAPA	National Adaptation Programme of Action to Climate Change
USAID	United States Agency for International Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
SDG	Sustainable Development Goals
ACE	Action for Climate Empowerment
MoEST	Ministry of Education, Science, and Technology
DRR	Disaster Risk Reduction
UNICEF	United Nations Children's Emergency Fund
SSRP	School Sector Reform Plan 2016-2023 (endorsed by MoEST)
IOM	International Organization for Migration

Environmental Issues in Nepal

Country Profile at a Glance

Nepal is world-renowned for its rich and diverse geography. It stretches from the tall mountains of the South Asian Himalayan range spanning across its northern border, which includes many of the world's highest points, to the fertile plains of Terai along the Southern border adjacent to the India states of Uttar Pradesh, Bihar, and West Bengal. Two other Indian states border the country, namely Uttarakhand and Sikkim, where the areas are known for their own misty, hill-dominated topography marked by the valleys formed under the Himalayan river pathways. As is often the case around the world, with this diversity of geography comes diversity of communities, languages, customs, and social histories.

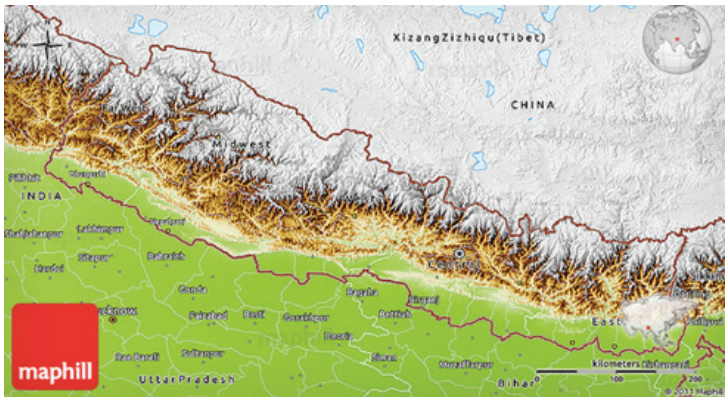

Figure 1: Topographic Map of Nepal
Image Source: MapHill.com

The topographic map attached alongside this text shows the geographical diversity within the political territory of Nepal. One of the unique features of the national map's slim and quasi rectangular shape is that geographical differences become highly pronounced as one travels northwards or southwards. While there are also significant natural differences across the length of the map, most notably in valley formations and wind patterns, the variation is most striking when viewed by the narrow width of the map.

Along with the geographical and cultural diversity, there are also several grave vulnerabilities and social inequities lurking behind Nepal's globally celebrated beauty. There are several different dimensions of social organization that position certain communities as more advantaged than others. These include divisions of gender, caste, ethnicity, indigenous status, disability, sexual orientation, income, wealth, etc. Individuals and communities who are at the intersection of more than one of these social inequities are thus even more relatively disadvantaged than the privileged classes.

The remainder of this publication will explore specific elements within the spheres of Health, Education, and Migration governance with respect to environmental concerns, based on physical, natural, scientifically established realities. Still, it is important to acknowledge the various forms of social injustices that can become enforced, reenforced, and exacerbated by environmental issues. Activities such as plastic pollution, anthropogenic climate change, and poor waste management practices have direct negative impacts in environmental, economic, health, and social aspects of citizens' lives. It must be acknowledged that the impacts of such effects are not equitably distributed. Marginalized communities, that are often least responsible for environmental damage, are generally most vulnerable to its effects. Development practices, poverty reduction projects, and community resilience enhancement programs endorsed by the government must thus address such underlying social inequities for effective enforcement in the long run.

Unique Nepali Vulnerabilities

As a result of its unique topographical makeup and diverse geography, Nepal has certain environmental vulnerabilities that are considered largely unique in the South Asian region and in the world at large. Since the scope of this publication is defined to extend up to the analysis of governance practices within the three key areas of inquiry, a full breakdown of Nepal's unique naturally existing vulnerabilities is not presented. The following sentences list an assortment of key must-know national vulnerabilities that have largely informed policies and programs endorsed by the Nepali government as well as the international donor community in the past and present.

Himalayan Seasonal Melts

Over 1.6 billion people live directly in or downstream from the Himalayan range. Marginalized communities in Nepal, many of whom do not have direct representation in the country's government, are most vulnerable to melting pattern disruptions. Agricultural organization, power systems, economic activity, and cultural norms are thus inextricably linked with the conservation of the Himalaya.

Glacial Lakes

Nepal has 20 of the 200 most dangerous glacial lakes in the world, most notably including the Tso Rolpa, Imja, and Thulagi lakes. Each of these are reported to be in critical condition and requiring of immediate attention to reduce risk of sudden outburst that can trigger large-scale floods and landslides.

Wildfires and Air Pollution

Certain geographical orientations, particularly in the upper-hilly regions, along with late-winter atmospheric conditions that tend to trap smoke within valleys cause wildfires and the subsequent air pollution, which have become a major seasonal environmental hazard especially in urban areas such as Kathmandu and Pokhara. The first half of 2021 marked record wildfires and lowest air-quality measures recorded in recent history.

Vulnerability to Natural Disasters

Nepal is globally ranked eleventh and thirtieth among vulnerability rankings to earthquakes and floods respectively. More than 27,000 deaths are estimated to have occurred between 1971-2007 by a United Nations Development Programme (UNDP) longitudinal study, which averages to over two deaths per day. Disaster resilience is especially urgent as around 80% of the population lives in rural areas that heavily rely on agriculture and are thus very sensitive to even slight climatic changes.

Climate Change

UNDP reports that Nepal ranked fourth in vulnerability to climate change across the world. Given its unique geography, the rate of global warming observed in Nepal due to anthropogenic activity is projected to be higher than the global average. It is estimated that the country will warm by 1.2°C–4.2°C by the decade of the 2080s, given the current carbon emission rates. A warming of this dramatic significance has the potential to permanently affect many areas of Nepali life, including the habitability of certain areas thus triggering large-scale forced migrations. Unprecedented pressure is expected to rise on human health, livelihoods, and ecosystems over the coming decades due to accelerating climate change. Natural hazards associated with warming temperatures such as droughts, heatwaves, river pathbreaking are all projected to intensify unless immediate action is taken to reduce global emissions within the next decade.

Health Governance

Environment and Health

The inextricable links between the environment and human health is rather intuitive. Over the last few decades, concerns surrounding environmental degradation have taken up more and more space in public consciousness. Particularly, the rise of climate change following the rapid burning of fossil fuels releasing significant quantities of greenhouse gases trapping heat under the atmosphere has accelerated global discourse on environment-related health interventions.

Strictly from a human health perspective, experts have deduced that global warming could bring some localized benefits over closely defined time periods. In areas that receive snowfall making the land infertile and unusable for agriculture, global warming could lead to increased food production. Similarly, areas that have historically faced extreme winters could benefit from warming, as fewer winter-deaths and illnesses could be caused by the changing temperature patterns. However, besides these few and rare instances, there is overwhelming consensus that climate change negatively affects many key indicators connected with human health, including clean air, safe drinking water, sufficient food, predictable weather patterns, secure shelter, political stability, etc.

Nutrition

The government of Nepal has made impressive strides in reducing the prevalence of various nutrition measures over the last few decades. This progress is most clearly observed by analyzing the prevalence of stunting, caused primarily by chronic undernutrition, as an indicator of overall nutrition levels. Stunting prevalence has dramatically fallen from 57% in 2001 to 36% in 2016 according to the Ministry of Health and Population's (MoHP) 2017 report titled 'Family Health Division.' Chronic undernutrition rates tend to vary by maternal education and wealth levels – 23% of children whose mothers have secondary education are stunted, whereas 46% prevalence is expected among children of mothers with no formal education. Thus, not only are major strides being made in the field of nutrition, but pathways that can potentially mechanize even better nutritional outcomes in future generations, such as education, are being uncovered through recordkeeping and research efforts. However, with growing uncertainty in weather patterns and a rapidly changing climate, such efforts are in danger of being reversed by environmental factors.

The World Food Program (WFP) estimates that without clearly defined climate change adaptation efforts, the risk of hunger and child malnutrition on a global scale could increase by over 20% by the year 2050. A 2021 country climate profile published by the Asian Development Bank (ADB) quotes studies identifying two key risk factors that are expected to be the primary drivers: a lack of fruit and vegetables in diets, and health complications caused by increasing prevalence of underweight citizens. The study suggests there could be approximately 61.9 climate-related deaths per million of the population linked directly to food availability in Nepal. Given the country's chronic issues of poverty, political instability, food insecurity, and the looming risks exacerbating all these factors in the form of climate change, the government's future malnutrition alleviation plans must take localized climate risks into account for effective long-run enforcement.

Heat-Related Illnesses, Air Pollution, and Other Diseases

The United States Centers for Disease Control and Prevention (CDC) classifies heat stress related illnesses as an independent class of diseases. Given the currently observed trajectory of rapid global warming, experienced at an accelerated rate within Nepal, heat stresses such as strokes, extreme exhaustion, complications triggered by prolonged heat-exertion, syncope, and various skin diseases are poised to become larger concerns in the country's public health realm in the near future.

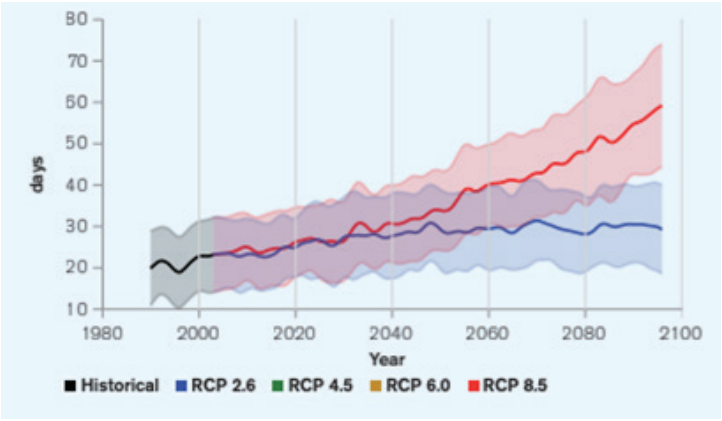

Figure 2: Historic & Projected Days Above 35°C
Image Source: Asian Development Bank

Research has placed a cap of 35°C as the acceptable threshold of the human body's ability to regulate its own temperature. Beyond this temperature, even very short periods of heat exposure can present risks of serious illnesses and deaths. Even temperatures under the 35°C can contribute to indirect health crises, such as through increases in populations of malaria and dengue carrying mosquitos. Climate change is pushing global temperatures closer to this dangerous threshold. Thus, heat stress is considered a topic within public health that experts believe is currently being undermined in the discourse.

The figure attached above shows that Nepal faces a significant increase in the annual number of days exceeding 35°C in the coming future. Early preliminary studies, as reported by ADB in 2021, show that potential reduction in heart-related deaths achievable by pursuing lower carbon emission pathways can be significant.

The first quarter of 2021 saw record wildfires and unprecedented levels of low air quality observed in Kathmandu and several other urban areas. Although the harmful effects of the air are temporary, prolonged seasonal exposure every year has the potential to permanently affect lung health and breathing capabilities. Many other vector-borne disease are also prevalent in Nepal, such as malaria, dengue, Japanese encephalitis, visceral leishmaniasis, lymphatic filariasis, which are disproportionately faced by rural communities located in lowland Terai and Hills. These diseases are sizable threats to about 80% of the population by geographical dispersion. Under increased global warming, this at-risk population is expected to increase, further exacerbating existing public health concerns besides extreme weather events and other such strictly environmental disasters along the way.

Inadequate Health Focus on Plans and Policies

Currently submitted and enacted major national policies, listed below, that directly respond to the climate crisis have been criticized for their lack of focus on human health related concerns outside of potential injuries and deaths in extreme weather events. Moving forward, these concerns must be brought to center stage for climate action plans to be holistically successful in the long run.

Policy/Plan	Year	Status
Nationally Determined Contribution (NDC) to Paris Climate Agreement	2016	Submitted
National Target Communications to the UNFCCC	2014	Submitted
National Disaster Response Framework (NDRF)	2013	Enacted
National Adaptation Programme of Action (NAPA) to Climate Change	2010	Enacted

Education Governance

Environment and Education

Issues surrounding the environment, both in terms of the naturally existing physical study of the land as well as the elements of resilience building and disaster risk reduction processes are deeply linked with various parts of the education sector.

Environmental degradation and effects of anthropogenic climate change is recognized as a threat to the progress of development worldwide – widening global inequalities, escalating food, water and health insecurities, and influencing a number of different forms of direct and indirect resource conflicts, as reported by USAID. Countries around the world are experiencing both moderate and amplified effects of the global climate crisis. However, the nations that are facing its worst effects are developing countries with high rates of poverty. A common thread that connects this narrative is education, as poor countries (and marginalized communities within such countries) are generally characterized with low education and illiteracy. Studies suggest that nations who lack resources, both tangible as well as abstract such as knowledge bank, human capital, etc., are most vulnerable and yet least prepared to cope with the long-run effects of environmental damage and climate change.

It is thus critical to analyze and evaluate the two sides of the coin – how the education sector teaches and prepares communities for environmental issues, and how environmental conditions affect education sector processes. The remaining of this chapter will explore these two mechanisms in the Nepali context.

Integration of Environmental Studies in Global Curricula

International communities active in environmental and climate change advocacy have long recognized education as a crucial element of the global response to adaptation and mitigation measures, as well as overall resource conservation efforts and sustainable development, as highlighted by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Goal 13 of the Sustainable Development Goals (SDG) endorsed by the United Nations also emphasizes the need take urgent action to combat climate change and its impacts.

Organizations and collaborations such as the UN Framework Convention on Climate Change (UNFCC), the Paris Climate Accord, the Action for Climate Empowerment (ACE) framework, etc. have emphasized to governments across the world to educate and empower younger generations, policy makers, and all relevant stakeholders with the necessary knowledge, skills, and values to affect change. Climate activist Greta Thunberg's global climate strike, joined by hundreds of students from various districts of Nepal, is a sign of the youth taking charge of bringing change to the education system.

However, interventions such as the ones mentioned above have not seen much noteworthy success in Nepal. Even though the country contributes a negligible amount to the global carbon emissions causing climate change, Nepal is deeply vulnerable and disproportionately affected by its effects.

Environmental Studies in Nepal

The current school curriculum developed by the Ministry of Education, Science, and Technology (MoEST) for basic (Grades 1-8) and secondary (Grades 9-10) education include topics of present environmental challenges such as pollution control, prevention from natural disasters, conservation of ecosystem and natural resources, etc. MoEST endorsed school curricula have also made centrally directed efforts to include some surface level information on topics such as global warming, sustainable development, and climate change in the past decade.

However, many of these topics are generally listed under mainstream subjects such as Science, Social Studies, and Population Studies with inadequate provision of knowledge or skills necessary to empower students to act individually or as a group to resolve environmental issues. A thorough revisit and replanning of environment education is the need of hour in Nepal, especially in the public education sphere managed by MoEST. In contrast, the higher education curriculum offers much more specific undergraduate and graduate level courses and programs for interested students, especially within streams related to development studies. Subjects such as environmental protection, conservation, natural resources management, and sustainable development are administered at the college level.

Effects of Environmental Degradation on the Education Sector

As described in the first chapter, Nepal is one of the most vulnerable countries in the world to the adverse effects of climate change. Longstanding environmental and geographic difficulties, along with chronic poverty and a vast network of various social injustices combine to make Nepal deeply at risk. Longitudinal studies show increasing variations in weather patterns, unpredictable temperature fluctuations, and rising occurrences of extreme weather events in the past decade. Unsurprisingly, impacts of such environmental concerns have both directly and indirectly impacted the value and continuity of education throughout the country. Students in Nepal are currently experiencing the effects of environmental damage and climate change firsthand, as evidenced by the follow examples:

- During the 2017 monsoon floods, around 380 schools were used as shelters to accommodate close to 4,60,000 affected citizens in southern Nepal. As the flood subsided over time, many schools were left beyond salvation with irreparable infrastructure and equipment damage.
- The 7.9 magnitude April 2015 earthquake that destroyed close to 35,000 classrooms are estimated to have directly affected close to two million school children in 2015. As many students did not have any school premises to return to owing to the damage caused by the quake, temporary learning spaces were constructed to engage the students. Now, over five years later, many schools have still not been fully restored.
- The most recent example of such educational disruptions caused by environmental issues relates to the March 2021 record wildfires and air pollution experienced in Kathmandu Valley as well as several other urban centres of the country. The government enforced school closures were announced to shield students from Kathmandu's rapidly deteriorating air after it reached hazardous levels for several days without improvement. Along with the wildfires, smoke and gas emissions from vehicles and factories were also cited as the causes of the record pollution measures, exacerbated by spring-time atmospheric conditions trapping the smoke in the valley. Amidst the smoke, haze, rising health alerts, and the still ongoing surge of the Covid-19 pandemic, schools were ordered to close following almost a year of closures caused by the first nation-wide lockdowns in 2020.

Incidents such as the ones recounted above serve as both examples as well as ominous warnings for what education management issues might look like in a warming world. Further educational and economic disruptions are expected to increase with the steady rise in global greenhouse gas emissions causing anthropogenic climate change. Moreover, students in remote areas with poor infrastructure, low resources, and unequal representation are poised to become even more vulnerable to such threats in the future.

In the Nepali context, gender is a key determinant of climate impacts. As the world continues to warm, scientists are predicting higher occurrences of droughts and dry spells, coupled with low rainfalls even during monsoon seasons. In many rural areas, women and girls in the family are expected to collect water. Thus, under conditions of dry spells, not only are women forced to travel longer, sometimes unsafe distances, but this additional time is also likely to replace time spent in schools or studying at home. In this way, pre-existing social inequities are worsened by environmental issues. Similarly, heat waves and extreme weather events are closely linked with mental health effects as well as diseases such as malaria, diarrhea and flu, which also reduce the likelihood of active educational participation among students around the country.

Notable Recent Interventions

Experts and analysts consider the 2015 earthquake as a historic wakeup call for the Nepal government to build resilience against and mitigate the impact of large-scale natural disasters. Realizing the unique vulnerabilities of students during times of environmental chaos, MoEST, in collaboration with UNICEF and various other partners, has taken some steps towards the protection of schools from disasters by creating a long-term flexible plan of learning spaces creation, drinking water availability, sanitation and hygiene necessities, and other such concerns being addressed in the Disaster Risk Reduction (DRR) guidelines mandated for schools.

The DRR objectives of the School Sector Reform Plan (2016-2023) solidify the aims by including concrete targets related to the creation, maintenance, and flexibility of learning environments, school safety protocols, and DRR strategies to be mainstreamed in the Nepali education sector.

The Master Plan for Comprehensive School Safety (2017) developed by MoEST in the soon-after 2015 earthquakes context also presents an early version of the targeted policy currently being proposed. The document is a roadmap that guides Nepal's school administration, teaching staff, and students to build resilience and adaptive measures to combat extreme weather events and situations of conflict. The three main objectives outlined by the master plan are:

1. Building resilient and safe schools with respect to location and construction.
2. Engaging school management committees, teachers, administrative staff, and parents to work collaboratively through school disaster mapping protocols and hazard simulations.
3. Educating resilience strategies to children to allow then to become prepared to respond to events such as floods, earthquakes, violence, etc. both in school and at home.

Migration Governance

Environment and Migration

The International Organization for Migration (IOM) defines internally displaced persons as "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internally recognized state border." This phenomenon of migration is commonly called internal displacement. When we view issues surrounding the environment with respect to migration governance, a large part of the discussion revolves around this very topic – related to forced migrations caused by extreme weather events or uninhabitable changes in the climate.

As per the latest IOM data, more than 10 million people were newly displaced around the world in 2019 due to natural disasters. Among these, an average of 6.5 million disaster displacements were recorded in South Asia over the past decade. Given the overwhelming consensus generating science that links environmental degradation, anthropogenic climate change, and extreme weather events or natural disasters, it is thus predicted that migration governance will become increasingly centered on this issue in the coming decades.

Nepal is a hub of biodiversity and natural resources, consisting of 118 unique ecosystems, 75 different categories of vegetation, 35 types of forests, and snow-capped mountains higher than anywhere else on the planet. However, as mentioned in the previous chapters, this diversity has also led to high vulnerability to climate change, geophysical erosion (such as landslides) and extreme weather events. The continued trajectory of increasing carbon emission rates is expected to cause further climate change effects in the coming decades. Thus, conflict and disaster related displacement is also expected to increase in Nepal. The IOM reports that internally displaced persons in Nepal accounted to 29,000 in 2019 due to a variety of unpredictable natural disasters. This migration has largely been funneled as rural to urban migration, with some anecdotal evidence suggesting that disaster-related displacement is unlikely to affect long-term flows as much of this migration has been temporary for now. Nevertheless, internal displacement possesses numerous challenges for migration governance in the future.

Affirmative Policies and Laws

Natural disasters can occur anywhere at any time. Thus, the government of Nepal has adopted the following affirmative policies to build resilience on disaster, natural resources management, and monitoring/controlling migration in Nepal within the context of disaster triggers.

1. National Calamity Relief Act 1982
2. National Adaptation Program of Action to Climate Change 2010
3. The Climate Change Policy 2011
4. National Framework on Local Adaptation Plans for Action 2011
5. Guidelines for the Resettlement of Disaster-Affected 2014
6. Land Use Policy 2015
7. The Disaster Risk Reduction and Management Act 2017

8. National Policy and Strategic Action Plan for Disaster Risk Reduction and Management 2018–2030.
9. The National Land Policy 2018

Key Environmental Migration Triggers

The causal relationship between migration and climate change has been studied by academics and practitioners for decades. A few key triggers can be isolated in order to bring light to determining the underlying pathways that eventually lead to the decision (or forced practice) of migrating. Generally, rural migration is triggered when the catastrophic risk of climate change is supplemented to other socioeconomic factors that increase socioeconomic vulnerabilities. Similarly, poorly managed migration in the receiving community can lead to overuse, and thus eventual shortage of natural resources, deforestations, and further environmental degradation. Thus, the proper management of these pathways is extremely important for effective governance.

An assortment of key factors that trigger migration caused by environmental factors are listed below.

1. Desertification

Throughout the first quarter of 2021, unpredictably high number and intensity of wildfires were recorded, estimated to be 15 times more than those occurring in 2020, burning in 22 of Nepal's 77 districts. Incidents like this can result in dangerous desertification caused by geophysical disasters that can permanently affect the fertility and habitability of land, ultimately causing forced migration.

2. Stress on the Ecosystem

Illegal poaching and the endangerment/extinction of flora and fauna, rise in temperature, loss of biodiversity, and other such causes has led to the increased risk of glacier and ice sheets melting. This has the dangerous potential to irreversibly change the delicate balance of ecosystems. The World Economic Forum predicts that ecosystem-stress based extreme weather events such as floods can cause casualties to increase by three times previous predictions in Nepal.

3. Haphazard Development

Despite Nepal being one of the least urbanized countries in the world, it is estimated that about 20.15% of its population lives in city areas. With such a rapidly growing trend in unplanned urbanization, the lack of effective infrastructure design and foundation building could lead to various disasters as well as environmental degradation, triggering forced migrations.

4. Poverty and Food Insecurity

Economic fragility, lack of livelihood opportunities, and low agricultural productivity in rural areas enhances poverty and food insecurity. Other issues mentioned above, such as rapid desertification and ecosystem stress can also cause low or non-existent agricultural harvest. Ultimately, lack of food and resources can cause high volumes of displacement. Currently, Covid-19 has increased the socioeconomic fallout of resource scarcity in a similar way, as more of the globe's poor are being pushed further into poverty and food insecurity.

5. Conflict

Logically flowing from the food and resource scarcity scenario, there are many cases around the world where extreme weather events' aftermath has seen resource hoarding by certain groups. This has the potential to trigger conflict, which can also lead to even further displacement of people wishing to remove themselves from war-torn areas.

6. Infectious Diseases

As mentioned in the Health Governance chapter above, environmental degradation can directly cause the spread of diseases. Nepal is especially vulnerable to such conditions given its weak health care system, as exposed by the ongoing Covid-19 pandemic, which can trigger migration.

Challenges for Migration Governance

Despite a number of often reinforcing pathways influencing migration patterns, the act of moving is most often considered a coping strategy to deal with the adverse effects of climatic shocks while studying the relationship between migration and the environment. Provision of new economic opportunities, better healthcare options, and more resources for affected people in the aftermath of natural disasters are the leading causes for environmental displacement. Additionally, remittance sent by emigrants to families and communities affected by such environmental shocks also helps to mitigate the vulnerabilities, offset income losses, and build resilience in the long run.

The impact of environmental degradation and climate change leads to an increase in internally displaced persons in the following ways, causing their own challenges for migration governance.

1. Displacement increases migration-specific vulnerabilities among citizens, including human trafficking, missing migrants, and disappearances due to lack of adequate data collection and maintenance processes, especially with regards to age, gender, and origin.
2. Displacement increases the likelihood of climate action failure with respect to aid and assistance due to its low adaptation in out-migration prone rural areas. This phenomenon also has the capacity to undermine the development of weatherproof infrastructure in Nepal, as investments and development efforts becoming centralized to urban areas.
3. Expansion of stakeholder capitalism metrics relating to the development of the country needs to be handled with careful inclusivity, which haphazard migration tends to undermine.
4. Weak institutional and governance mechanisms are further funneled to rural areas to monitor and regular climate change-induced disruptions (including migration).
5. Poor implementation of the localization of national laws and policies is a major challenge. Concurrently, weak institutional arrangement also implies poor data collections and health indicator framework development of migrants and rural-area citizens.
6. Difficulty to achieve consensus on exact nature of relation between climate change and migration among the policy makers and expertise remains a major challenge as underlying mechanisms remain underexplored, receiving relatively less attention from academia as well as the development community.

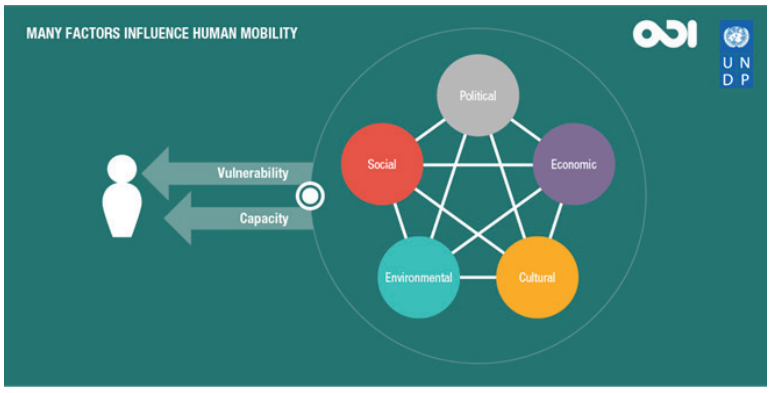

Figure 3: Factors that Influence Human Mobility
Image Source: UNDP

References

Governance Monitoring Centre Nepal works with and/or relies on a number of partner organizations, open data sources, government and quasi-government institution reports, policy-briefs, multi-lateral organization reports, and mainstream/independent media houses – including digital, print, and audio/video content producing publications for information.

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1. Constitution of Nepal
2. International Labour Organization
3. National Planning Commission
4. National Law Commission

Environmental Issues in Nepal:

5. United Nations Framework Convention on Climate Change
6. Asian Development Bank
7. Ministry of Forests and Environment
8. United Nations Development Programme

Health Governance:

9. Ministry of Health and Population
10. World Food Program
11. The Partnership for Maternal, Newborn, and Child Health
12. World Bank
13. Centers for Disease Control and Prevention
14. World Health Organization

Education Governance:

15. Ministry of Education, Science, and Technology
16. Ministry of Finance
17. United Nations Educational, Scientific and Cultural Organization (UNESCO)
18. USAID Emergency Education Response – Phase I & II
19. The Brookings Institution

Migration Governance:

20. Ministry of Labour, Employment, and Social Security
21. Department of Foreign Employment
22. World Economic Forum
23. Nepal Center for Disaster Management
24. International Organization of Migration
25. United Nations Department of Economic and Social Affairs (UN-DESA)
26. Al Jazeera
27. My Republica
28. Food and Agricultural Organizations of the United Nations

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Authors

Shuvam Rizal
Research Lead | Shuvam.Rizal@SocialChange.org.np

Shradha Khadka
Research | Shradha.Khadka@SocialChange.org.np

Kalpana Rana Magar
Research | Kalpana.Magar@SocialChange.org.np

Anish Khatri
Communications & Graphic Design | Anish.Khatri@SocialChange.org.np

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To learn more about GMC Nepal, please visit GMCNepal.org.
To engage with our team, please email us at GMCNepal@SocialChange.org.np or follow us on Twitter at @GMCNepal.

To learn more about CSC, please visit SocialChange.org.np.
To engage with the CSC team, please email us at Nepal.socialchange@gmail.com or follow on Twitter at @Centre4Social.

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