

COVID-19 Led Migrant Returnees to Understand

Its Relationship With Border Security & Nepal's

Foreign Affairs

2021



Publisher

Institute of Foreign Affairs

Tripureshwor, Kathmandu, Nepal

Telephone : 00977-4266954, 4266955

Email : info@ifa.org.np

Website : www.ifa.org.np

The Institute of Foreign Affairs (IFA) commissioned an important study focused on COVID-19 forced migration return in eight districts of Province No. 2. The main objective of the study was to understand the impact of COVID-19 on the lives of both local people and returnees, in particular from India which borders all the eight districts studied. The study explored real-life challenges and associated difficulties faced by residents of the border region.

Declaration

The research and discussion presented in this study are the original work by the author. I confirm that this work has not been submitted at any conferences or the like or any tertiary institute or University for any purpose. Any material presented by any person or institute is duly referenced, and a complete list of all references is presented in the bibliography.

ISBN: 978-9937-9274-9-9

Design and Layout: Rikesh Dangol

Cover Photo: Credit Naresh Rimal

Copyright © 2021 Institute of Foreign Affairs

This research may be freely copied and distributed for private use and study, however, no part of this research or the information contained therein may be included in or referred to as pandemic-induced in any publication without prior written permission of the author and/or any reference fully acknowledged.

APA 7th Citation: Rimal, N. (2021). COVID-19 Led Migrant Returnees to understand its relationships with border security and Nepal's foreign affairs. Insitute of Foreign Affairs. Kathmandu, Nepal

Foreword

The Institute of Foreign Affairs (IFA) commissioned an important study focused on COVID-19 forced migration return in eight districts of Province No.2 in eastern Nepal. The main objective of the study was to understand the impact of COVID-19 on the lives of both local people and returnees, in particular from India which borders all eight districts studied. In addition, the study explored other real-life challenges and associated difficulties faced by residents of the border region.

IFA is pleased to receive this long-needed contribution from Dr. Naresh Nath Rimal, a committed and steady researcher who successfully carried out a reality and ethics-based study. The study required visiting relevant and strategic areas of all eight districts several times in person to interact with officials, security personnel, local residents, and returnees.

Dr. Rimal skillfully employed Grounded Theory and the Iceberg Model to focus on people's recent and past lived experience. His inquiries call attention to the border region's DasGaja or No Man's Land from the perspectives of all concerned agencies, stakeholders and the public at large. The study identifies key leverage areas that will be valuable for multiple agencies and the Ministry of Foreign Affairs. IFA is confident the study will be valuable to policymakers and research scholars.

The author's core suggestion is to improve the grueling life situations faced by local residents and returnees in the border region through strategic development interventions supported and enforced by much needed good governance in these eight districts which are strategically important to national interest and national security concerns.

The Institute is grateful to the author for his contribution accomplished within the stipulated time frame. We extend our gratitude to Mr. Maheshwor Neupane (Home Secretary), Mr. Balananda Sharma, Mr. Buddhi Narayan Shrestha, Dr. Jayaraj Acharya, Prof Dr. Khadga KC, Mr. Surendra Shah, Mr. Krishna Kumar Tamang, and Dr. Jeevan Baniya for their input and feedback.

Rajesh Shrestha
Executive Director
Institute of Foreign Affairs (IFA)

Acknowledgement

Most importantly, I acknowledge migrant workers seeking opportunities and livelihood globally, their plight inspired me to undergo this study. Secondly, I am indebted to my mentors who applauded my going to the field sites and starting to listen to those who were at the forefront of the chaos and concern caused by the COVID-19 pandemic in Nepal's Province No. 2.

I appreciate the time given to me by the officials of the Ministry of Defense, Ministry of Home affairs, Ministry of Foreign Affairs and the Ministry of Health and Population.

I highly appreciate the Armed Police Force, Nepal personnel, especially my former students engaged as commanders in the 8 districts in allowing me to interview them at the time of the COVID-19 disaster and lockdowns. I appreciate different levels of staff of APF engaged at the field level, who were under tremendous pressure to address COVID-19 challenges, despite often having worked 17-18 hours straight allowing me to ask questions at length. Senior APF officer at Chinnamasta Brigade gave me a 3-4 hours briefing on all aspects of COVID-19 challenges in the late evening in their office. It was a great insight for me. APF Nepal offices at districts fed me while no restaurants were open. I had the opportunity to interview retired senior ranking APF officials as well.

I am equally indebted to senior Nepal Army officials who offered me ample opportunity to understand national security and sovereignty issues. It helped me understand the nuances of national security concerns and foreign relationships. I am equally thankful for healthcare, legal and media professionals, and university faculty.

I am grateful to the Institute of Foreign Affairs (IFA) for support to undergo a second and third round of field visits and make this publication possible.

Finally, I am grateful to my wife, Sabina, and our children Amogh and Amresh for accepting my absence and elevated risks during my field visits and numerous meetings with key informants in Kathmandu during lockdowns.

Dedication

This publication is dedicated to law-abiding Nepali citizens who share sorrow
of living in the border areas



Acronyms

ADB	Asian Development Bank
APF	Armed Police Force, Nepal
BBC	British Broadcasting Corporation
BOP	Border Outpost
BS	Bikram Sambat
CCMC	COVID-19 Crisis Management Center
CER	Chure Ecological Range
CLM	Causal Loop Map
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Coronavirus SARS-CoV-2
CPI	Corruption Perception Index
CPR	Common Poor Resources
EIC	East India Company
FGD	Focus Group Discussion
FOB	Forward Operation Base
GDP	Gross Domestic Product
GEC	Global Environmental Change
GoN	Government of Nepal
GT	Grounded Theory
HDI	Human Development Index
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
ICD	Inland Clearance Depot
ICP	Integrated Check Post
IFA	Institute of Foreign Affairs
ILO	International Labor Organization
IOM	International Organization of Migration
Imap	Iceberg Map

LULC	Landuse Landcover
MoD	Ministry of Defence
MoFA	Ministry of Foreign Affairs
MoHP	Ministry of Health and Population
MoLESS	Ministry of Labor Employment and Social Security
NA	Nepal Army
NHRC	Nepal Health Research Council
NPR	Nepali Rupee
NSC	National Security Council
OECD	Organisation for Economic Co-operation and Development
OVC-TTAC	Office for Victims of Crime Training and Technical Assistance Center
SD	Sustainable Development
SDGs	Sustainable Development Goals
SSB	Sashastra Seema Bal
TI	Transparency International
UN	United Nations
UNDP	United Nations Development Program
UNU	United Nations University
USD	United States Dollar
VAT	Value Added Tax
WB	World Bank
WHO	World Health Organization

Table of Content

Chapter I	
<i>Introduction</i>	2
Chapter II	
<i>Literature</i>	12
Chapter III	
<i>Methodology</i>	24
Chapter IV	
<i>Iceberg contextualized</i>	30
Chapter V	
<i>Pandemic Precariousness: Resilience and Opportunity?</i>	36
Conclusion	58
References	

Chapter I

Introduction

परोपकारः पुण्याय पापाय परपीडनम् ¹

Two foundational aspects of life helping out of altruism and injuring with egotism are respectively humanity's highest and most despicable acts

1.1 Introduction

The above quotation highlights the insight that helping others is the core path to human spiritual attainment. This study aims to identify foundational relationships underlying participants' experiences assisting migrant returnees and others needing support while seeking to return to Nepal during the COVID-19 pandemic. Collaboration among communities and the security agencies during the lockdown were only possible through solidarity and expression of altruism. Mask wearing during the COVID-19 pandemic, although not scientifically documented as protection from diseases, supported "social solidarity" (Cheng et al., 2020), and helped citizens from "self-protection to altruism". Psychological analysis studies also suggest "prosociality" development because of imminent threat from COVID-19 driven real-life crisis (Vieira et al., 2020). This study undertaken in such difficult times and participants' collaboration by offering insights are the illustrations of altruism in response to difficult and threatening situations posed by COVID-19.

1.2 Background of the inquiry

Civil strife, inadequate infrastructure, institutional barriers, poor governance, limited educational opportunities, and lack of support for and interest, especially in agricultural but also in other entrepreneurial activities, led to increased emigration from and associated remittances to Nepal over the past two decades. The COVID-19 pandemic forced the return of a substantial portion of these out-migrants who bring key soft assets from migration-based learning, including place and people's livelihood security-focused experiential learning, that can enhance their contributions to communities. These assets include human resources (e.g. people, skills, and knowledge) and less tangible assets (e.g. information, professional experience, and reputation). Such assets are currently hardly valued and their identification and encouragement to support appropriate social progress, including economic and ecologically sensitive development intervention, requires rigorous time-sensitive assessment beyond that typically captured by conventional periodic evaluation. Mobilization of such assets could contribute significantly to communities' growth, stability, and satisfaction and directly and indirectly support the global Sustainable Development Goals (SDGs) also adopted by the Government of Nepal (GoN). Opportunity for such study has recently been enhanced by both pandemic-driven migrant return and community/environmental problems, which are fed and, except for remittances, have worsened because of initial out-migration, and complexly related opportunities and challenges. This well-timed study is especially important in the face of the pandemic's second-year upsurge. Several key aspects such as gender, age, stigma, and available assistance offer context for the research and enhance its potential to impact larger policy and institutional goals.

Border closure and associated restrictions impeded migrant worker return. What impact did border and repatriation delays have on returnees' general physical, social, mental health and, economic circumstances and, especially, exposure to risks of contracting the virus?

What was experienced regarding safety and security at border holding and quarantine centers? What have been the perceptions and behaviors of communities toward returned migrants? Was resentment or overt hostility in local communities experienced by returnees? This context resulted from COVID-19 and Nepal's impending issues of development and foreign affairs that dominated the returnee experience as discussed in Section 1.4.

This research, conducted in Nepal's Province No. 2's 8 districts, seeks an initial understanding of 'what's happening?' regarding COVID-19-driven migrant return under present conditions and regarding participants' futures given Nepal's employment realities and strategies for addressing upcoming concerns. These include the future of DasGaja-the unruly 20-yard border legacy of 19th Century, Raj-India and hereditary Nepali governance in this region and subsequent development intervention regarding Common Pool Resources (CPR) and governance including national security concerns and the entire continuum of social and cultural interactions and transformations. Because social and economic disturbances associated with COVID-19 are likely to endure for at least another year and possibly longer and to send waves of disturbance rebounding through all of the world's cultures and economies, there will be plenty of opportunity to more fully study and respond to such issues.

1.3 Problem statement

COVID-19 challenges government, community, and personal systems at all levels but is likely most degrading for the livelihood and aspirations of the neediest. It thus enhances concern for the security of humanity at all levels and challenges institutions to learn from experience and act to improve prospects for both current and future generations. Such experiential learning affects the full spectrum of Sustainable Development Goals (SDGs) including the security of places and people.

Many countries aspiring to address minimal SDG goals during pandemic stress face foundational health issues complicated by: resource limitations, increasing health consciousness, open and porous borders, unruly urban infrastructure planning and development, mal governance, greedy global "markets" and related instabilities and conflict. In the context of this study, inadequate screening of migrant returnees from India increased threats during both the first wave of the pandemic in 2020 and the new wave starting April-May 2021 for the continuing India-Nepal episode of COVID-19 which bequeathed the Delta variant to both other South Asian populations and the world. But, the global worrisomeness of variants and their higher likelihood of developing in dense poorly supported populations also give the entire, and especially the rich part of, the world reason to reconsider its attention to and support of global development.

Deployment of security forces to monitor cross-border activity poses other sets of security

concerns including, especially, likely divergence from forces' key mandate(s). Additionally, inadequate protective equipment and limited protocol coherence and awareness pose unwanted and likely unnecessary risks for security personnel, especially for APF Nepal, and compromises ability to perform mandated duties of managing “normal” cross-border activity and related national security concerns .

Initial, pre-research, scoping by the author in Province No. 2, especially in the border areas visited, identified daunting tasks and associated challenges for APF personnel who voiced massive fatigue from extended work hours and anxiety over life and death scenarios. Border checkpoints looked like ghost towns (Fig 1).Migrant returnees, desperately trying to re-enter their homeland, faced duty officers who themselves faced enormous challenges of managing unprecedented cross-border flows while attempting to follow national and international guidance regarding returnee exit and entry rights while satisfying public health practices like quarantine,temperature monitoring and distancing.

Simultaneously, security personnel exposed to the threat of COVID-19 while attempting to tend to multiple security and humanitarian challenges did their best to respond appropriately and humanely during lockdowns. Multiple, inadequately considered, responsibilities assigned to APF Nepal and civil Nepal Police for COVID-19 management including, but not limited to, quarantine security, lockdown regulation, curfew management, and general health service provision by the APF hospital, as converted to a hastily dedicated COVID-19 facility, all in addition to “normal” border management responsibilities, were daunting. This research examined the COVID-19 response as it progressed from the first episode of 2020 into the second one in 2021 exposing issues of national and border security and foreign relationships via key agencies and lived-experience of both individual officials involved in the overall management and migrant returnees confronting the challenges.

1.4 Research question

The overarching aspect of this research project is to examine how Nepal manages the phenomenon of COVID-19 migrant returnees while addressing governance, development, and policy blunders like DasGaja and learning from the resulting confusion. Generally, this will aid in understanding how COVID-19 and migrant return are causally linked.

The broad objectives of the research are set out while attempting to understand directions toward improving the future of the migrant's home community's challenges currently faced primarily by security and healthcare agencies. Hence the research question-driven objective is to:

- a. Understand/clarify perspective on the border situation which is dominated by the anachronistic No Man's Land-DasGaja phenomena in Province No. 2.
- b. Articulate border-complicated development intervention (e.g. SDG) vulnerabilities regarding security challenges and Common Pool Resource management and associated governance.

Given the above need, the research also identified strengths, weaknesses, opportunities, and threats migrants and stakeholders experience in their attempts to bring about a resilient society based on improved livelihoods of a large number of mostly young rural males seeking employment outside of the country and thus depriving challenged communities, mostly from rural areas of Nepal, of youth who should be key future-creating change-makers.

1.5 Implication of the inquiry

Study of the complexity of existing Nepali migration, development, and governance mechanisms requires holistic methodology to support understanding of interrelated and interconnected factors that drive trends by influencing patterns, values, and assumptions shaping the system. This approach is illustrated by an Iceberg Map (IMap) of multiple perspectives on factors affecting lived experience. Such analysis can, in turn, provide a basis for understanding the need to (re)frame development, security, and national identity issues that feed the lived experience of hundreds of thousands. There are an estimated 272 million international migrants which or 3.5 percent of the world’s population (IOM, 2020b). Estimated 6 million (20 percent of the total population) Nepali migrant workers are working outside of the country of productive age group of 20 to 40 years (Kunwar, 2015; Worldometer, 2021c) .While most people leave their home countries seeking better opportunities, millions are being driven away due to conflict, violence and Global Environmental Change (GEC) factors such as climate change (Abel & Sander, 2014).

This study offers both substantive and heuristic perspectives that can focus on local, regional, and international levels. The research contributes to debates on development, migration, SDGs, and national security from both socio-ecological and political-economic perspectives. The topic-focused literature review addresses migration, security, and development from meta-disciplinary perspectives. The study’s Grounded Theory and System Thinking approaches address complex behaviors of systems and the impact of policy alternatives. The meta-disciplinary approach seeks insights relevant to elusive issues of the complex interfaces among migration, health, and political-economic and ecologically-informed policy. The heuristic contribution addresses fundamental and practical considerations related to Nepal’s overall governance and collective human futures in the face of long-ignored global realities.

Furthermore, IMap and CLM help decision makers visualize and focus on interacting underlying factors that exacerbate problems. These maps address the complexity of issues and alert local, provincial, and federal governments and non-governmental agencies to opportunities for improvement. IMap helps identify latent issues and key leverage points for intervention and insight that can inform decisions and policy interventions in the context of realities faced by developing countries.

1.6 The inquiry

The research followed an inductive approach that co-evolved through the inquiry process to reveal central phenomena related to lived experience. The present study focused on the COVID-19 pandemic and associated large numbers of migrant returnees stranded at border checkpoints between India and Nepal. Despite the curfew-like mobility restriction imposed by the Government of Nepal, the researcher was able to travel throughout the 8 districts of Province No. 2 and generate a first-hand understanding of the situation. This is the closest province connecting the Kathmandu Valley with Nepal's Eastern Terai region which has several border checkpoints in addition to those at least 8 checkpoints in Province No. 2. Highway referred to as "BP Highway" is the shortest route, 160 kilometers (100 miles), between the Kathmandu valley and the Terai region. Most of the highway, which criss crosses multiple Mid hills regions with sharp, often hairpin, turns that are only wide enough for one vehicle, was in good condition. The empty roads felt almost like back country roads of Wyoming and Montana of the Western US or the Australian outback. Driving in such an empty and spacious environment on one of the, typically, most tailgated of Nepal's many hairpin-bend roads was a luxury that encouraged the journey undertaken. This initial travel was not to undertake any formal research but purely to support scoping of the problem by initial observation. The realities of driving on the empty roads and passing through the ghostly-looking towns and cities generated a sense of need to share results of the research to follow in both formal and publically-accessible media.

The researcher's low concern for risk of road incidences, pandemics, absence of any funding, and with only social capital for insurance without a hitch exemplifies the parable "foolishness brings blessings in disguise". The research when encountering the physical realities and people involved in pandemics, especially forces of APF in the journey, offered a sense of materializing the journey as something of value to society in a small way. The intuition to scratch the surface of the COVID-19 and migrant returnees phenomenon occurred naturally to me as perhaps offering useful insights from connecting Grounded Theory's (GT) "constant comparison" (Hallberg, 2006) with the deeper leverage offered by System Thinking's (ST) (Meadows, 2008) "Iceberg map". Such approaches can further understanding of what's happening with "inquiry that investigates a contemporary phenomenon in depth and within its real-world context especially when the boundaries between phenomenon and context are not [clearly] evident" (Yin, 2009 p. 18). Hence, the study uses the ST-inspired IMap to unravel boundaries, phenomena, and context while using GT as a vehicle for eliciting ordinary people's lived experience. But in this case the experience itself is fed by extraordinary, and unfortunately unwanted, circumstances.

But, despite unfortunate roots, perhaps the experience provides a remarkable opportunity to understand not only the present crisis but also other pending concerns. And, may be, those concerns are fed by some of Nepal's many social-, ecological-, and conflict-driven

experiences rooted in its, so far mostly tragic-seeming core history and, in a reversal of contemporary common perspective, its own regional and global periphery. At this point, it was time to move from scoping toward decision, the researcher was convinced that even without funding the work should be continued in an effort to add an extra bit of perspective as is expected of an exercise in true citizenship.

Upon returning, I determined to turn the first “scoping” journey to “the field” into some kind of study. As a freelance consultant to a government think tank I shared my scoping experience in a casual meeting with staff at the Institute of Foreign Affairs (IFA). Because they saw the issues as important, meaningful and timely, especially to foreign affairs, IFA agreed to offer token support and to own and publish the completed document.

The research included observation, open-ended questions, and informal conversations. Fortuitously, APF-Nepal personnel deployed at headquarters, brigade, battalion, Border Outpost (BOP) and Forward Operation Bases (FOB) levels. The participant list included various portfolios such as intelligence, human resources management, information technology, and forces in the field. Because of these relationships, engagement in exchanging information was intense, powerful and offered multiple contexts related to the pandemic.

Because it is time-bound, no research is ever complete. As current pandemic stories will not be complete for years to come. Thus one, and especially an early one, piece of research could never be fully comprehensive. Still, in an attempt to be as accurate as possible, data were validated via the Viber smart phone application group chat tool, which proved powerfully useful and safety-cost and time-effective during the COVID-19 second-year surge of 2021, to verify and validate information in the report. Cooperation from command elements of APF posted in all eight of the districts of province No. 2 provided extraordinary access to and validation of information, or data in GT terms, which would simple not be possible in most GT research context. This extraordinary opportunity both reduced the cost, in time and money, and credibility and thus enhanced the quality and timeliness of this GT exercise immensely. It also offered extraordinary access to Nepali border oversight personnel, migrant returnees, health professionals, border area residents, journalists and people who were in a position to share narratives by or about the most vulnerable groups of involved people, especially women and children.

1.7 Validity, suitability, precision and clarity, completeness and application

The objective helps engage participants with unstructured open-ended interviews which are key to the “grounding” of inquiry in participant’s perspectives’ thus called “Grounded Theory”. The research question is itself grounded in the ongoing migrant returnees’ involvement with the continuing Nepal-India border dispute. These aspects naturally

affect Nepal's achievement of its SDGs, including, at least implicitly, smooth international relations. Answers to this research question will offer both substantive research results and related heuristic recommendations.

The research problem appropriately reflects real-life situations related to larger Nepal-India relationships, national security concerns, need to support robust foreign relationships, and to achieve SDGs and it offers a valid research problem in the context of various COVID-19 precipitated concerns.

The research question addresses actual events: COVID-19 and continuing Nepal-India border issues. The project's objective is to expose veiled or hidden factors, not visible in "the tip of the iceberg", to provide information relevant to the research question. The objectives are guidelines toward achievable outcomes informed by the research question.

The research question is addressed in all aspects as it provides causally linked issues requiring unraveling the tip of the iceberg. However, no research itself is the final answer to the problem at hand. All any research can aspire to offer is further understanding of the phenomenon of 'What's Happening?'

Research findings require policy adaptation by aid agencies, government departments, and the academic world at large. Research outcomes can influence policy outcomes and implementation interventions but policy alteration can only be achieved through institutional collaboration where collaborating institutions, starting in this case with IFA in sponsoring the present study, share leverage to extend negotiated arrangements to expanding, and ever more powerful, networks of organizations both within and beyond Nepal for which this research and its initiators have limited access and linkages.

1.8 Scoping

During the time of the lockdown, I traveled to key areas of the eight districts of Province No. 2 (Figure 1) to carefully scan and observe general aspects of security concerns through the lens of COVID-19 management. Foundationally, this scoping provided perspectives on the phenomenon of 'what's happening?' at the local, provincial, and national levels. Such is the process of meta-disciplinary study. This field visit through observation and purposive engagement with government agencies involved investigation and discussions to assess effects a proposed study project could have on the local environment, province, federal government, and future binational relationships. Insights acquired during this period also helped refine research questions and objectives.

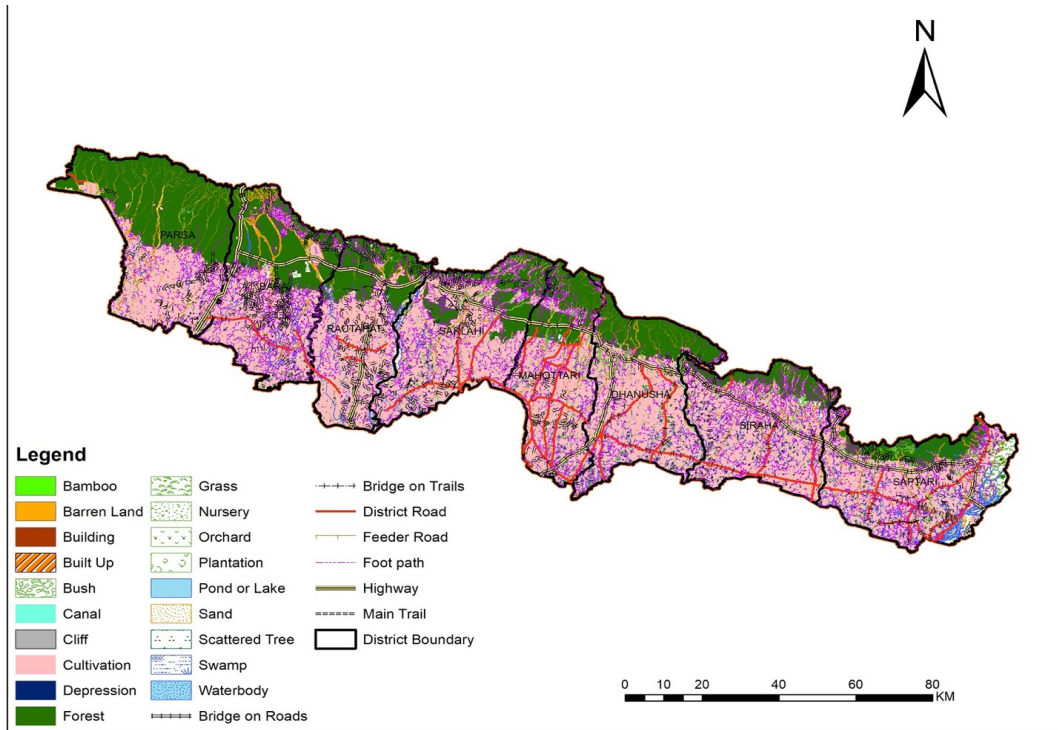


Figure 1. LULC map of Province No. 2 illustrating the northern vulnerable Chure Ecological Range
(Source: prepared from 2021 satellite image)

1.9 Outcomes

The study's outcomes provide valuable insight to support communities in need by offering new participant-grounded insight and expectations for programs administered by government agencies and development partners of Nepal at local, provincial, and national levels. At a larger scale the study and its suggestions provide leverage for addressing fundamental issues related to SDGs through mobilization of returnees' resources in the context of appropriate development interventions. Study outcomes relate to the present pandemic at the following levels.

- Gain perspectives from COVID-19 to prepare and safeguard communities.
- Use participant's stories to strengthen communities, national security and SDGs.
- Facilitate migrant returnees access to meaningful opportunities and further resilience in their communities.

1.10 Terminology

Recurring themes and terms used in this research are defined below. Some of these definitions are received from cultural definitions that need no reference, some are defined by the data to facilitate interpretation and some are anchored in methodologies that help understand the essence of arguments in the substantive chapter.

DasGaja

DasGaja literally means 10 yards¹, in this case 10 yards from each side of the India-Nepal border. The resulting twenty-yard-wide Noman'sland between Nepal and India was meant to be an empty buffer zone between the two countries. The total land parcel width is thus totals 20 yards. The name referring to Noman'sland is normally the land that is unoccupied or buffers between the countries. However, as English terminologies imply it rather is everyone's land given the uses and abuses of the land itself. DasGaja is often a central livelihood concern for people of limited means, while most often it is shrewdly manipulated, often from distance by less poor interests, in pursuit of unearned income called, from economic's history, rent, thus such free loading, almost theft-like, behavior is often called "rent-seeking".

The human geographer Alasdair Pinkerton at Royal Holloway, University of London states that the term Noman'sland was first used in Domesday Book in the 11th century to delineate parcels of land that were just beyond the London city walls(Caffrey, 2015). DasGaja was implemented in the tenure of hereditary Prime Minister Jugal Bahadur Rana during the late eighteenth hundreds when India was ruled under British Raj. The start date of the DasGaja is imprecise. The DasGaja became a place of rent-seeking activities and border disputes after the British left India.

IMap

Often referred to as the Iceberg Model in systems thinking literature, the present research uses IMap as a tool designed to help an individual or group discover the patterns of behavior, supporting structures, and mental models that underlie a particular event and to become clearer about leverages and their relative power for intervention in a problem situation. It includes and illustrates both seen and unseen aspects of a problem which become important in seeking sustainable approaches to problem-solving.

Causal Loop Map (CLM)

Causal Loop Maps are schematic illustrations of linkages, events, and feedback. Their heuristic seeds sprout into thought and conversation which invites revision. Thus, no CLM is ever finished.

SDGs

The Sustainable Development Goals (SDGs) or Global Goals are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030.

.....
¹ 1 yard=36 inches0.9144 meter thus, the initially 20 meter distance is actually 21.9 yards wide.

Chapter II

Literature

पथ्यं सति गदार्तस्य किमौषधि निषेवणैः । पथ्यंसति गदार्तस्य किमौषधि निषेवणैः ॥

Where is the need for medication if one is following the proper diet? Of what importance is any medication if one ignore the nutritional diet?

2.1 Introduction

The Sanskrit couplet above presents the core wisdom of Ayurveda, one of the oldest healthcare sciences, and poetically explains the contribution of a nutritional diet to human resilience. Ayurveda emphasizes lifestyle, medicinal intervention is useless without health-supporting food, and, by implication, a health-supporting environment, in the largest sense of the concept environment. Understanding from epigenetics confirms the Ayurvedic insight as it addresses the “manifested expression of life” towards integrity of the health of an individual and population homeostatically (Sharma, 2016). As the world grapples with COVID-19 and disparities in vaccination between the have’s and have-nots variants invariably bring challenges. Poor health results mainly from social and environmental neglect and extinguishing of ancient knowledge, wisdom and civilization. Simply vaccinating to retard the illness can not cure neglect-rooted problems(Marya & Patel, 2021)

The health-as-lifestyle perspective requires systemic understanding and response in context of a greater “whole”, it thus links individual health and livelihood and communities’ quality of life and understanding. Surviving today’s COVID-19 pandemic requires a strong personal, and community, health system that inoculation and other “modern” interventions alone simply cannot deliver. The shift from currently-considered traditional intervention-based “cure” and intervention focused “reactive healthcare delivery models” to a community-grounded and person-centred and preventive approach requires holistic and systemic guidance (Codagnone, 2009). As a research-informed literature review, this section discusses critical issues called forth by participant’s narratives about the broader context which grounds their, currently far from either Ayurvedic, or other systemically community-focused lived experience.

A core strand of the research approach for this study is constructivist Grounded Theory. That approach argues for selecting literature relevant to respondents’ lived-experience-informed contributions to development of the, thus grounded, theory. Thus this literature reviewed here addresses key areas of concern identified by the research process on the issues relevant to and raised by the COVID-19 pandemic and both border residents, pandemic manager/responders and migrant returnees’ lived experience. The participants’ narratives and associated observations helped situate the research in current academic debates regarding pandemic and migration studies. The literature builds on the outcome of participants’ narratives and relevance to Nepal’s multiple contexts on key research questions. Table 1 summarizes key areas of interest and elaboration in literature in the following section guided by the IMap.

Table 1. Key areas of interest and elaboration based on the data

Categories	Concepts
COVID-19 and migrants	migration, migration management, livelihood(s), and security
DasGaja-Nomansland	survival skills, policy blunders, market, and tragedy
Development	policy, planning approaches, Common Pool Resource uses
Governance	Security, inter/intra agency linkages, accountability, and decision-making

The overarching literature addressing nuances of concern during the confusing beginning of COVID-19 necessarily came first hand, from newspaper and electronic media. Since the context was brand new there was little formal literature to offer except that addressing the general experience of previous pandemics that aided in contextualizing the research question and identifying appropriate methodology. The GT recommended strategy of postponing literature review on substantive areas helped avoid bias from a prior anticipation and interpretation of data. After data collection and key concepts were drawn from interviews, relevant literature began to be explored.

2.2 COVID-19 and migration

Population is one of the major issues connected to migration in search of opportunities outside of the country. The flow of migration is inadequately represented by the available data from the sources and it is estimated that the substantial proportion of migration occurs between South and West Asia, from Latin to North America, and within Africa (Abel & Sander, 2014; Azose & Raftery, 2019). As in any developing country, emigration is important in Nepal. Emigration’s impact is still presumptive, not proven as either positive or negative for aspirations for the country. However, the large share of the rural population living in a remittance-driven economy leaves children, elderly people, and women in many Asian countries impoverished and poorly fed because agricultural land abandonment reduces informal local food supplies less dependent on market control(Sunam & McCarthy, 2016). When the migrant population returned during the COVID-19 pandemic, reduced local production increased demand for food grains from India(personal communication). During the nationwide lockdown in the first COVID-19 surge, the food production (e.g. egg, milk, vegetables) and other associated activities plummeted within the country and were wasted, whereas the country imported 16 metric tons of vegetables in the first 2 weeks of the lockdown (OCHA, 2020).

In developed countries, immigrant populations offer another dynamic of sustainable development labor and overall economic activity(Noja et al., 2018). Hence, while population is important for development activities, migration factors feed the need for

deeper understanding of site-specific dynamics to address key livelihood concerns. Migration is often led by livelihood concern defined as a "means of securing the necessities of life"(Adger et al., 2002) Livelihood includes access to dignified life experience supported by persons well-being rather than just legally defined rights and freedoms not supported by economic autonomy(Sen, 1999). It may include food, water, clothing, shelter, education, and health care and absence of fear, extortion, and unnecessary risk to support the survival of oneself and family within the context of a safe household and a supportive community.

Livelihood in Nepal faces many challenges including natural disasters (earthquake, landslide, flood, fire, etc) and vicious poverty for many communities and individuals(Panthi et al., 2016). Poverty is related to malnutrition, infant mortality, abject deprivation, and the weak social status of women, children and other marginalized and voiceless community members. Nepal's Human Development Index (HDI) value for 2020 was 0.602 which ranks Nepal in the lower medium human development category standing 142nd out of 189 countries and territories(UNDP, 2021b). Nepal's Infant Mortality rate in 2019 was 25.6 per 1,000 live births while, for comparison 1.53 out of 1,000 live births were estimated to have died in the first year of life in Slovenia in 2021 (Aaron O'Neill). The Alma Ata Declaration of 1978 which Nepal is a party to as a member country to WHO emphasized community-oriented preventive, promotive, and curative healthcare services. The sequel of this conference, held in 2018 reiterated the need for stronger primary health care to advance toward universal health coverage. Although Nepal continued to take steps to improve the lives of its citizens by establishing a network of primary healthcare facilities in addition to the community healthcare system(Schwarz et al., 2020), it seriously lacks equitable access to good health with large discrepancies between public and private facilities. The most common diseases in Nepal are ischemic heart disease, COPD, lower respiratory infection, diarrhoeal disease, stroke, and diabetes (Madan-Lala, 2017). The Corruption Perceptions Index (CPI) ranks Nepal 117 out of 180 countries worldwide (Transparency International -TI, 2020) which can severely impede progress toward broader access to both general livelihood and health care. Corrupt administration (Risk and Compliance Portal, 2020) compounds limited resources dedicated to healthcare as is reflected by 5 percent of the national budget dedicated for healthcare which is far from enough to support meaningful improvement. While the government encourages the growth of private hospitals, it has barely encouraged or funded intervention in public hospitals to support broader access thus leaving more than 22 percent of Nepalis with no access to basic health facilities (Madan-Lala, 2017).

The above scenarios put pressure on Nepal's key areas of concern especially focused on livelihood (e.g. income, food, health, the status of women and marginalized people, and public security). Public security is the responsibility of the government that includes municipal, provincial and federal agencies(Leuprecht, 2012). The public agency's

responsibilities can only meaningfully addressed with collaboration with community-based organizations (OVC-TTAC, 2021). The issues agencies handle can vary depending on location and population and include such as drug use, harassment, juvenile misconduct and etc. Natural disasters are often triggered by human action including poorly implemented road “construction” and related poorly managed and often times illegal road placement (Sudmeier-Rieux et al., 2019) and related burning of forest for logging (Siegert et al., 2001) and extraction of sand and gravel from river sources (Syah & Hartuti, 2018) often negatively impacting people's livelihoods and too often their lives (Yang et al., 2018).

2.3 DasGaja-Noman'sland (support, survival skills, policy blunders, market, and tragedy)

This study focuses on the Nepal-India border in the eight districts of Nepal's Province No. 2 in the lowland (Terai) region of Nepal. Because the lowland border region lacks any natural obstacle like a river or mountain range, early 19th-century binational “negotiation” established a, foolishly hoped-for, barrier called DasGaja, which means ten yards (Shrestha, 2013). The fantasy was that declaring a 20 yards-wide “No Man's Land” divided by the negotiated, but not naturally identifiable, “border” would “create” or “mimic” a more conventionally topographically identifiable, and at least somewhat difficult-to-cross, border. The reality, however, has been and remains that the “No Man's Land” by lacking a natural barrier became, “everyman'sland” or as a newspaper report put it “a playground for street urchins and smugglers”(G. N. Rimal, 2002).

The history of DasGaja is hazy and complex both historically and from management perspectives (Baral, 2018). The DasGaja was established after the Treaty of Sugauli, that established the boundary line of Nepal with present-day India ratified by 4 March 1816 between the East India Company and Raj Guru-Royal Advisor Gajaraj Mishra with Mr. Chandra Shekhar Upadhaya of Nepal following the Anglo-Nepalese War of 1814-16. The border was negotiated between the East India Company and the hereditary Prime Minister of Nepal (Mukarji & Mukharji, 2006).

The community relationship and its inherent support system, survival skills, existing market, and social, economic, and environmental tragedies are essential elements to describe DasGaja. There is increasing interest in DasGaja, primarily because of security-related issues where very scanty information in terms of in-depth literature review is available in border disputes. Literature is an important aspect of research in emerging areas. In the absence of grounded intervention, it is solidly focused in areas that lack any key peer-reviewed literature.

People who use DasGaja are often connected by cultural and familial relationships to both sides of the Nepal-India border (Pyakurel, 2015). The resilience of these residents who have learned to survive and coexist in No Man's Land in the midst of chaos and haphazard

surveillance are sometimes forced to bear tragedies caused by petty smugglers and criminals (Baral, 2018). These aspects are anecdotally presented but not studied empirically.

The context of modernity and modernization has to do with how we shape our society and what we do for our survival. The conversion of traditional and rural societies to a more complex form has been alluded to in this concept and has become part of world policy agendas through an economic and social transformation that shaped the present day's world (Castells, 2011). The political and social conflicts also bring divergence in society and create contradictions in social values and controversies over the use and management of resources and their management. However, some theories justify conflicts as good things as exemplified by social Darwinism (Sumner, 1963). The political conflict that lasted more than a decade (1996 to 2006) in Nepal affected rural agrarian society by mobilization in rural areas through recruiting of locals, training them in para-military skills, and the teaching of political fundamentals with no cultural or social context. Such activities have detrimental effects on resources especially those contributing to local livelihood including food security (Simmons, 2013). However, the traditional literature offers no context parallel with that offered by participants in their narratives.

Poverty and tragedy are a reinforcing loop (Posthumus et al., 2018). This often happens when systems involve immediate outcomes. Hence, poverty reduction via the development intervention lies in the international and regional development concept (Combaz, 2013) where the theory of development aid is situated. As development is a highly contested concept dominated by "power, greed, ignorance, self-deception and denial and often equated with economic development (Chambers, 2004, 2013).

The context of development concepts and practices and, especially results, emphasize inadequacies of dominant development theories guided either by orthodox capitalist or Marxist ideology (Durosomo, 1994). Historically, institutions within countries that receive a high proportion of aid are often weakened with meaningful replacement, thus compromising the aid-receiving nation's security and autonomy (Djankov et al., 2008; Knack, 2004). Such "aid" has been severely critiqued for much of the past seventy plus years from many perspectives. In addition, multilateral aid agencies like the World Bank are also used as a tool to extend the foreign policy agendas of their major shareholders (Dreher et al., 2009). Thus the failures of traditional approaches to "aid" have often led to various versions of tragedy (Jakupec, 2018) and, hence, to today's call, variously for sustainable and/or culturally and/or environmentally-ecologically- or culturally-friendly aid as are recently often associated with the phrase "Sustainable Development" but with, as yet, few meaningful responses (Castro, 2004; Ursul & Ursul, 2018)

2.4 Development intervention (policy, planning, and CPR use)

The history of pandemic experiences is typically expressed in terms of timing and, often estimated, numbers of deaths and occasionally in terms of other socioeconomic impacts. The scale of the COVID-19 pandemic impact is not as extensive as some preceding pandemics in terms of deaths. However, its spread, reflecting ever-increasing globalization, was and continues to be, wider and faster than past pandemics (Farzanegan et al., 2021). Experience with pandemics reflects livelihood, workforce and cultural/environmental factors frequently addressed as livelihood, security, and governance issues (e.g. transparency, accountability, etc) (Dutta & Fischer, 2021). Pandemic impacts all aspects of life experience.

COVID-19 pandemic discussions related to developing countries frequently address food and health services (Laborde et al., 2020), including prophylaxis advice and attempts at regulating behavior; health services delivery including vaccination and mobility including migration and global environment (Chakraborty, 2001); and national security governance and foreign relations (Monaco, 2020). Interaction between human needs and nature starts with food and thus agriculture and trade (Kerr, 2020) at community, regional and global levels and is distorted by attempts to control travel and socio-cultural interaction (Vandebroek et al., 2020) in the face of uncertainty. These issues are tied to basic human activities, thus require debated, modification, and intellectual and political analysis.

Currently, the COVID-19 pandemic is a central theme in global interactions shaped by institutional entities such as the World Health Organization (WHO) of the United Nations (UN) and attempts to address the needs and wants of communities and individuals. WHO highlights key global issues including public health, environment, human rights, SDGs, foreign relations, and migration (WHO 2021). Public health responses including behavioral advice and attempts at regulation, access to protective equipment, vaccines, and physical and mental health advice and, sometimes, services or intervention are key components in addition to the emphasis on social distancing, sanitation, and related prophylaxis. Anxiety about vaccination and other intervention and, sometimes, competition to access interventions complicate response (WHO, 2019) and may increase loss of life including increased cases of suicide (Pokhrel et al., 2021). Pandemic brings multidimensional impact at many scales². Many of the key causes of infections are outside of the purview of the health sector for its direct domination and control. Other factors that contribute directly and indirectly are poor housing, sanitation, and water supply system, ecological issues including climate change, education and awareness, and non-compliance with agriculture, trade, tourism, transport, and industrial agendas.

.....
2 The US National Institute of Allergy and Infectious Diseases (NIID) defines three levels of such diseases: a) outbreaks of disease not previously known, b) identified disease “rapidly increasing in incidence or geographic range” in the last two decades or so, and c) infectious disease hard to control and with high persistence. WHO elaborates (<http://www.emro.who.int/health-topics/infectious-diseases>) infectious diseases as caused by different priority pathogens categorized as A, B, and C (i.e.: diseases which cause high levels of mortality; diseases which place on populations heavy burdens of disability; and diseases which owing to the rapid and unexpected nature of their spread can have serious global repercussions)

Corona viruses belong to the Corona viridae family in the Nidovirales order where Corona is a crown-like spike on the outer surface of the virus (Ouassou et al., 2020). COVID-19 affects all aspects of life, challenges the world to see through a different lens, and cultural patterns, including those of business, may require change as survival needs are addressed. The United Nations estimates that global human development, education, health, and living standards could fall this year for the first time since 1990 (UNDP, 2021a). And, aspirations to meet Sustainable Development Goals (SDGs) are threatened from both humanity and planetary ecological perspectives. COVID-19 definitely impacted such aspirations at all levels and may require seeing and doing things differently including starting to address such concerns systematically rather than from current and historical piecemeal approaches. Perhaps given the new awareness of global trajectories and “realities” humanity will find more appropriate sustainability-related aspirations and a new will to pursue them.

The United Nations Development Program’s (UNDP) SDG integration project employs a systems approach to complex development challenges. It promotes learning to help countries reach their development ambitions. By harnessing systemic approaches, SDG integration connects issues across sectors and thematic areas and leverages the creativity and know-how of all of society from national and sub-national governments and communities to civil society, academia, and the private sector – to build solutions that respond to people’s daily realities. International Labor Organization (ILO) reports in Nepal, “higher than 70 percent of the economically active population is involved in the informal sector(ILO, 2021). With the ongoing COVID-19 crisis, this group together with migrants, daily wage earners, and small business owners face severe constraints in terms of making a living - on top of the health hazards posed by the virus - and risk falling back or deeper into poverty”(UNDP, 2020).

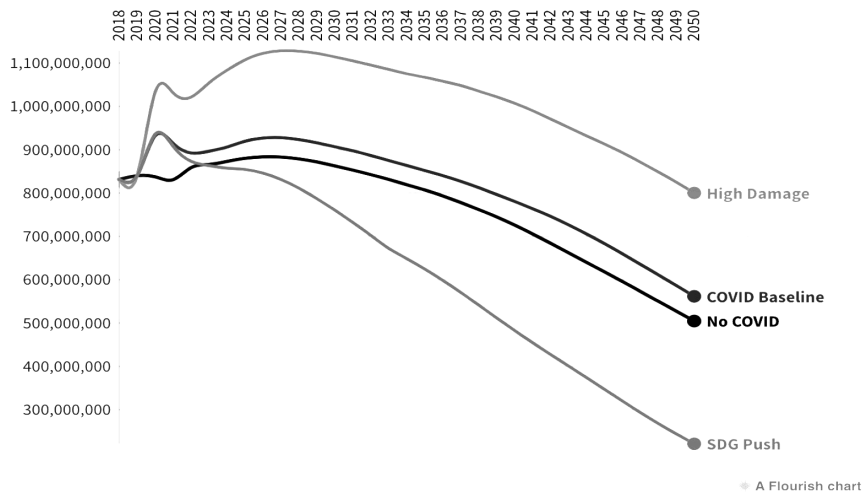


Figure 2. The UNDP’s SDG integration project’s alternative future trajectories (UNDP, 2020)

COVID-19 “baseline” scenario in Figure 2 indicate the current pandemic could bring from 44 to 251 million people into extreme poverty. It means the total number of 1 billion (~12% of the total population) in extreme poverty with major “income inequalities” with a high damage scenario by 2030. The UNDP’s more optimistic goals indicate that utilizing the pandemic as an opportunity can actually push the scenario to an even more positive-sum game with a tremendous decline in poverty fed by integrated SDG investments.

In the SDGs poverty reduction is the number 1 goal. The recent reporting by the United Nations University’s (UNU) World Institute for Development Economics Research warns the economic fallout from the present pandemic will likely increase global poverty by as much as half a billion people (UNU, 2020). A stark reversal of the decline in poverty that started in the 1990s. COVID-19 looms large in most developing countries and is disproportionately affects large-population developing countries with massive global impacts when more aggressive variants evolve. The current pandemic is thus not only a current health crisis but also a devastating and potentially spreading social and economic crisis further into the future (Begum et al., 2020; Buheji, 2020). While this research for this report was ongoing, a pandemic dichotomy was revealed in the first surge by higher mortality in high-income countries while developing countries with 85 percent of global population experienced only 21 percent of the mortality (Schellekens & Sourrouille, 2020). In the second year of the pandemic surge, mortality in the densely populated global south increased (e.g. India and Brazil). It is thus natural to expect OECD countries to do more to combat epidemics not only at home but also in developing countries for both moral concerns and to lessen the bounce-back effect of the pandemic wherever it survives, including as now, in potential donor countries. Such perspective is particularly important given that we live and operate in a global enviro-politico-health web. Thus, with appropriate redirection, COVID-19 could become the seed for which a much brighter global future. While the global-south effort to mitigate the pandemic, can seriously address mal-governance in-house and reduce aid dependency and generate possibilities of learning to the wise use of natural resources and a “resilient and youthful workforce” (Makau, 2021).

“Development” agendas dominated, and often overwhelmed, developing economies since the decade of the 1950s with, especially the somewhat optimistic, reorientation of the post-2015 Development Agenda which mixes many interrelated aspects spelled out in the UNs’ SDGs. The number 1 priority of addressing poverty is not new to global development efforts. Mensah (2019) offers detailed literature analysis on the sustainable development goals and offers a concluding support for today’s trajectory to require awareness and become conscious, cultured, and compliant with SD exigencies.

2.5 Governance (security, inter/intra agency linkages, accountability, and decision making)

Governance can be more effective if it clearly understands and addresses social, economic, environmental and political aspects of society that are clearly understood and addressed in a more pluralistic manner. One of the strategy toward such governance is clarified by the UN's seventeen interlinked SDGs goals. Clearly, operationalizing SDGs requires "good governance"(Rubasundram & Rasiah, 2019). Clear need for such governance is reflected in the chaotic livelihood situation in Province No. 2's border areas. However, governance in this and other poorly managed border areas include border customs-rooted acceptance of corruption related activities (Jancsics, 2019). Governance and the corruption aspects are linked to border security in Nepal (Tamang, 2013). Corruption is also related to weak civil society and negative incentives (Shah, 2018). Such factors are also relevant to and causally linked with illicit trade, smuggling, and cross-border crimes between Nepal and Indian border (Upreti, 2021). Inter and intra agency collaboration at various sectoral level are key to improving "cross-boundary" governance(Sayogo et al., 2020). Since the security issues are multi-faceted and links to resource-use and bio-cultural factors, common property management is also a key aspects of good governance (Ostrom et al., 1994). Border management often results in "fixes that fail" or the problem that recur because of reliance on "yesterday's solutions"(Senge, 1990). Addressing governance issues thus requires identifying "lesser know issues" (Savoia & Sen, 2012) which can improve contextual knowledge for redressing the problem.

2.6 Summary of the chapter

This chapter coevolved with the author's existing understanding and post-fieldwork showing the key areas of participant's concern identified by Grounded Theory (GT) and IMap. The narratives and associated observations assisted in situating the research within current academic debates that are current within the areas of pandemic impact, migrant returnees, and security concerns. The literature was selected based on, and builds from participants' narratives and the COVID-19 and migrant returnees phenomenon.

Although the area of study appears to focus on healthcare and migration in general and the domain of just the areas for the government to make an appropriate intervention at the policy level, the literature clearly identifies several areas appropriate for the systemic expansion of perspectives. The ideological and political orientation suggested remains far from holistic perspectives. The literature is still confusing and far from clear, divided on arguments based on future possibilities and the absence thereof at the socio-economic including, and political levels. The disconnect between health care and conventional pandemic intervention seems limited. The mindset that 'science' solves problems or shortages is still primary but, issues of migration, contested development, and security challenges remain. This slide-in Nepali context is clearly marked by transformation of social and cultural contexts leading to confusion and chaos as vaccines are treated as the "only"

solution for the problem. Meanwhile indigenous knowledge and its relevance to solving problems and how we live overall are still being offered as solutions amidst the cornucopia offered by the market and econometric alternatives. Although these options did not prevail in literature, people still spoke of and used them as an option for survival in practice. Thus the study as a whole clearly embodies not only mainstream but also cultural alternatives for any given local, regional and global socio-ecological concern. Any problem scenarios to strategies for intervention requires enriching our understanding through reflexive and deeper interpretation of an already existing body of knowledge that values the culture and lived experience of the people.

The next chapter deals with methodological strategies undertaken to operationalize the research by blending GT and IMap of Systems Thinking. Postponing literature review on substantive areas helped reduce bias from a prior anticipation and interpretation of data.

Chapter III

Methodology

“You think that because you understand “one” that you must therefore understand “two” because one and one make two. But you forget that you must also understand “and.”

-Donella H. Meadows, Thinking in Systems: A Primer

3.1 Introduction

As the above quotation emphasizes, any issues with two or more than two variables tend to be more complex, requiring deeper insights to gain perspectives of relationships and synergies. It, follows Aristotle’s dictum that “the whole is greater than the sum of its parts” which often leads human responses to complex challenges to generate, often unanticipated, interactions that require flexible tools (Wilkinson and Birmingham 2003) and approaches to help identify patterns underlying participants’ shared story-web-related experiences. The present research chooses constructivist Grounded Theory (Charmaz, 2017) and System Dynamics’ Iceberg Model. These approaches complement each other as they inform and help illustrate complexities associated with COVID-19-driven migrant returns. The iceberg model was propounded by Anthropologist Edward T. Hall in his book *Beyond Culture*, he suggested that culture is similar to an iceberg with external level visible 10 percent and 90 percent of culture is internal hidden below the surface (Hall, 1976).

3.2 Research approach

The study approach blends ‘Grounded Theory and Systems perspectives, especially the ‘Iceberg Model’. Systems Thinking provides the foundation for this approach (Toscano, 2006). System elements, levels, and interactions, and individual, group, national and international interests are inherently complex and causally linked. The ‘Iceberg Model’ (Figure 3) illustrates patterns of behavior, supporting structures, and mental models that underlie a particular event. Identifying system boundaries, elements, variables, and stakeholder’s interests makes it possible to visualize feedback schematically to identify leverage points and opportunities for intervention toward win-win opportunities.



Figure 3. Iceberg illustrating visible and invisible aspects modified (Hall, 1976)³

‘Grounded Theory’ approaches social research by starting from predominantly qualitative perspectives of people engaged with issues of concern. From this perspective, quantitative

³ Art by Anna Seeley and Abby Smith

data become secondary, and largely subordinate, to qualitative insight generated from participants, including stakeholders, returnees and non-migrant community members, and researchers, stories grounded in lived experiences with the processes studied. ‘Grounded Theory’ (which is “grounded” in the participant's experience) encourages incorporating all potential insight, from whatever source, into inductive cultural exploration and interpretation. For Grounded Theory data collection includes in-depth conversational interviews, Focus Group Discussion (FGD) guided by purposive sampling and observation, and, finally, not initially, review of apparently relevant available literature supported by potentially useful available quantitative data. This information is coded by thematic analysis of conversational interviews. Repeated ideas, concepts, or elements become apparent and are tagged with codes indicated by and extracted from the data. As more data are collected and re-reviewed, codes are grouped into concepts, leading to emergence of categories. These categories become the basis for theory, “grounded” by “data”, which inform understanding of causal relationships between and among the categories. Only at this stage, when the research process has begun to “tell its story” are the review of seemingly relevant literature and other existing data considered. This approach, which prioritizes insights from multiple participant’s lived-experience, views absence of literature and/or data regarding insights from such experience as bias in prior research: not as defect in participant’s recitation of their lived experience. Throughout the process interactions and feedback loops are illustrated schematically with Causal Loop Maps (CLM) to provide a coherent summary and overview to inform policy recommendations and intervention. CLM offers visualization of alternatives regarding current and possible alternative policy pathways to address the fundamentals of SDGs equitably and sustainably in the context, for this study, of the Covid-19 pandemic and national security. Vensim PLE software was used to develop CLM (García, 2021).

As the study advanced, more information sources were identified and used to complement research insights. The study reviews and analyzes the COVID-19 framework of intervention in Nepal’s Province No. 2 to illustrate detailed characteristics that help understand various individual, community, regional, and national security, interest, and foreign relationships. Both lived experiences of returnees and other information from frontline stakeholders were accessed. The thematic analysis helped identify the main variables that underpin general understanding.

3.3 Method

Observation, individual interviews, and Focus Group Discussion (FGD) followed by a review of relevant literature are key initial strategies for gathering Grounded Theory-informed data. Each method is useful for obtaining various types of data.

Observation

Observation data document naturally occurring behaviors in usual contexts. Observational information is primary and essential for guiding meta-disciplinary understanding.

Open-ended interview

More structured insights focused on individuals' personal histories, perspectives, and experiences, particularly when sensitive topics are being explored, grow from open naturally occurring conversational interviews. These conversations and interviews feed insight into participants' lived experience and provide a critical context for developing community-grounded story-webs or narratives.

Focus Group Discussion (FGD)

FGD elicits data on cultural norms, social practices, and community-held collective wisdom. Group interaction helps otherwise voiceless community members address unnoticed latent issues.

Literature review

Grounded Theory's most striking and important deviation from previously traditional methodologies: postponing literature review until the choice regarding whatever literature is reviewed can be "grounded" in, at least preliminary, lived-experience-based results, reflects GTs concern for remaining open to "new" insights.

Analysis of existing quantitative data

As with literature review, and for similar reasons, Grounded Theory is skeptical of pre-existing data, which, like existing literature are likely influenced by pre-existing theory and assumptions that can mask patterns and shade recognition of relationships important to "on the ground" realities that can influence and may even dominate "lived experience". Available quantitative data, like available literature, are thus complementary and supplementary to initial community-grounded exploration.

A total of 30 participants were interviewed as part of the primary data gathering via open-ended question-informed conversations. Although the interview questions were prepared before the field embarkation, they were revised based on local conditions to make them appropriate for different settings and to match different people and places' cultural and social nuances. Similarly, two FGDs were organized, with appropriate social distance and preparation, such as wearing PPE including visors, and masks at two different APF command locations. Conversational interviews with journalists were conducted directly in person and when necessary by mobile telephone contact and checked for validity toward the end of the report's completion. Some migrant return stories were also captured from the newspaper reports. In order to pluralize insights gender, age and stigma were given key consideration.

Gender

Engaged all genders, so that the findings can inform policy from gender equality and justice perspectives.

Age

Children sometimes accompany pandemic-induced returnees. What safety and security measures could be placed at the border checkpoints to protect children during the registration and in holding and quarantine centers was contextualized. More importantly, during scoping researchers observed critical pandemic-related social and economic hardships that increased the vulnerability and insecurity of children and adolescents.

Stigma

Some migrant returnees experienced discrimination or stigma that fed frustration, uneasiness, shame, and fear, causing anxiety and psychological distress among returnees and their families. In Province No. 2 where cross-border marriages are common, this fed stigmatization of cross-border residents and further complicated social interaction.

3.4 Timeline

The study was completed within a little over one year of the currently acknowledged start of the pandemic. Before approaching the setting, scoping set the context for efficient data acquisition, analysis, interpretation, and interactive reporting.

3.5 Ethics

This research and report are grounded in honesty, integrity, and ethics at all levels of research and engagement with participants in the context of COVID-19. Interviews were not undertaken with the migrant returnees during and after their immediate return to avoid likely emotional stress and added pain. Similarly, health professionals such as doctors, nurses, and managers were interviewed when they were not overwhelmed and thus able to offer interview time.

Chapter IV

Iceberg contextualized

If a writer of prose knows enough of what he is writing about he may omit things that he knows and the reader, if the writer is writing truly enough, will have a feeling of those things as strongly as though the writer had stated them. The dignity of movement of an iceberg is due to only one-eighth of it being above water. A writer who omits things because he does not know them only makes hollow places in his writing.

-Ernest Hemingway

4.1 Iceberg contextualized

The present research grew from concern to understand migrant returnees' experience and is grounded in participants' descriptions of their experiences of the COVID-19 pandemic and related massive Nepali migrant return which, together, created one of the more challenging contexts in modern Nepali history. While these two issues were the prime focus, initial research focused on understanding the lived experience of key players in relevant communities. Initial exploration fed understanding of participants' lived experience and fed insights to help increase leverage focused on security and management of the migrant return process. Accumulating story patterns revealed underlying shared characteristics of stories beneath the surface and fed the creation of an "iceberg map" -IMap to illustrate, mostly obscure patterns(Figure 4) and unveil "seen" and "unseen" aspects of the crisis. While there are five key categories of context developed from participant's experiences; the essential layers underneath the crisis (COVID-19 and migrant returnees) are the following which also make up the substantive chapter and unseen aspects of the iceberg map.

Dus Gaja-Nomansland

This historical absurdity dominates the geography of the place studied where people living with the human capital of support, help, survival skills, market, and presence of tragedies including criminalities and illegal activities are played out. These scenarios are the patterns of behavior indicative of the trend overtime at the place

Development intervention

Hidden beneath behavioral patterns is systems structure: which governs how each issue and elements or parts are related and actually influence patterns and outcomes. Based on further inquiries and observations, policy priorities that affect road construction and placement, urban planning and resource use such as land grabs prevalent in the area were identified.

Governance

Latent to any development intervention resides the mental models such as what values, assumptions, and beliefs shape the system. While attempting to seek maximum leverage, issues such as security, inter and intra (with India) agency linkages, accountability, and decisions emerged. These issues rose to prominence during discussion while key agencies which bring what are treated as foundational insights by decision-makers are simply not mentioned.

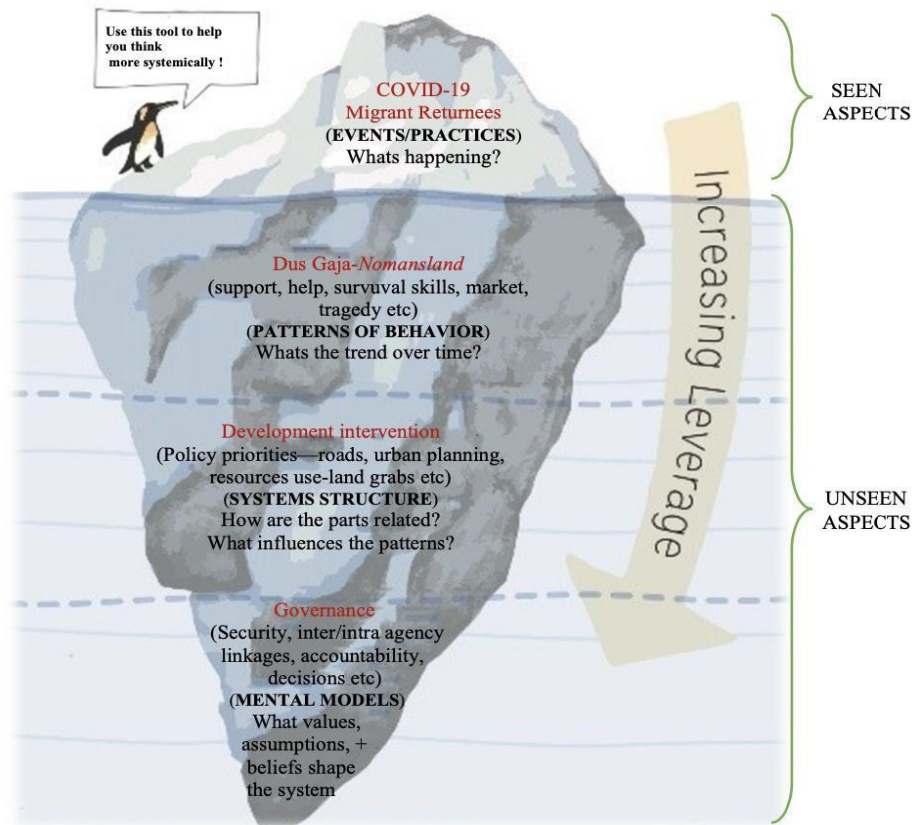


Figure 4. IMap to illustrate “seen” and “unseen” aspects of the COVID-19 crisis (Academy for Systems Change, 2021 modified by author)

Other associated categories are also linked in the Causal Loop Maps (CLM) based on narratives built on observation and insights from participants with whom the researcher engaged multiple times during the first year of the Grounded Theory research (Charmaz, 2017; Glaser & Strauss, 2017) informed research and various unfolding contextual aspects of the initial surge of COVID-19 in 2020 and 2021. GT conversational interviews, codes, concepts, categories, and theories as supported by various stages of the research process inform the CLM. Generally, a CLM is built based on categories relevant to or discovered by GT research and built into causally linked maps that illustrate relevant processes and interactions (N. Rimal, 2018). This mapping process involves a storyline for each category which is carefully noted during the follow-up to the iterative conversational data gathering process and includes the researcher’s own observations. A fundamental immediately recognized result of the study is the phenomenon called the “DasGaja ” which is equivalent to “no-man's-land”. The historic development of this no-mans-land, presumably intended

as a buffer between the two nations, unintentionally created a “playground for both village urchins and petty smugglers” (G. N. Rimal, 2002).

Figure 5 illustrates interaction among key categories suggested by conversation, observation, and IMap. Although any Causal Loop Map (CLM) of a complex process could include a large number of variables, the rule of thumb is to coalesce categories to reduce confusion and identify leverage points. CLMshelp unravel complexity. In this case, to understand the COVID-19-led crisis. Each category is, itself both, a conceptual summary of interactions that could be illustrated with CLM as a separately identifiable complex system, and part of the system of causal relationship between and among key elements identified from participants' COVID-19 focused story-web.

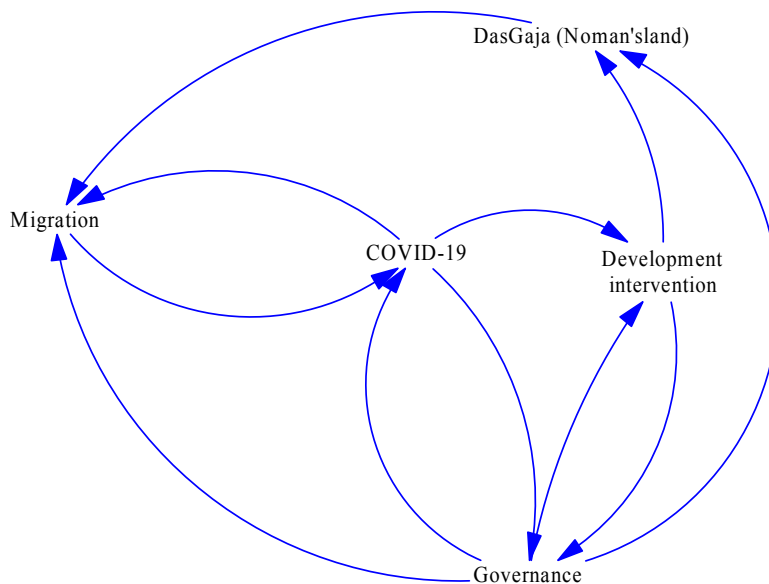


Figure 5. CLM illustrating migration and Covid 19 driven relationships (Source: Author created using Vensim software)

The CLM illustrates emergent properties of the coupled COVID-19 and migration phenomena and illustrates complexity and feedback in the system. Initial research focused on the two major social factors, migration and COVID-19. Economic, environmental, and political factors emerged as related variables and are presented in the diagram as governance, development, and the chaotic fictive-buffer area called DasGaja. More detailed aspects of these categories are mentioned in the IMap (Figure 4). These aspects, initially anticipated to be only latent and contextual, were revealed by the study process as central and inextricably linked to the study's focus. While more effective support to migrant returnees during pandemic (or other) crisis-driven return remains critical, contextual factors suggests other general points of leverage to improve forced return processes and experiences.

As identified in the CLM, these issues effectively addressed, can help generate “shared opportunity, security, justice, and identity” in the communities disrupted by pandemic, poverty, inequality, political abuse and climate crises (Homer-Dixon, 2020). It may even force to (re)think rent-seeking politicians and multiplying tiers of the government (Boffa et al., 2016). The good governance requires leadership with national “symbol of conscience” that represent voiceless and powerless (Dahal et al., 2001, p. 13).

The schematic emphasizes the critical importance of leveraging all levels and sectors of government to address the welfare and prospects of both migrant returnees and, in some cases, stayees, whenever urgent scenarios evolve. The immediate assistance should include friendly supportive welcome home authenticated by protection from disease, “psychological” disturbance and general well-being and livelihood support and advice including straight forward access to effective grievance response. In the long-term, border stability, and livelihood concern for the border region and its inhabitants, will likely require complete rethinking of both the DasGaja catastrophe and historic actions in the name of, so-called, “development”. A viable future for both the border region and country fundamentally relates to offering “hope and help”. While leveraging governance may be useful in some contexts, it is equally important to evaluate what worked and what did not in the country's development intervention contextualized with the market-fed tragedy among others in DasGaja and nearby CER. While this study was triggered by and directed at COVID-19-forced and -driven concerns, the entire study and, especially IMap and CLMs, emphasize that both COVID-19 and migration are parts of larger complex systems.

Chapter V

Pandemic Precariousness: Resilience and Opportunity?

5.1 General Background

Even in many of the world's richest economies large swaths of working people live under dark clouds of nearly constant socio-economic risk. (Kristof & WuDunn, 2020) invoke Dr. Seuss's "So be sure when you step, Step with care and great tact. And remember that life's a great balancing act..." in their 2020 book *Tightrope: Americans Reaching for Hope* to communicate this frightful reality. And, they are writing primarily, but by no means solely, about the United States (largest economy in the OECD countries) which in 2017 happened to rank 13th, with 350 percent and similarly neighboring China (largest economy in Asia and adjacent to Nepal's northern border) ranked 79th with 98 percent World PPP GDP per capita. Table 1 summarizes standing of South Asian countries. (Worldometer, 2021b).

Table 1. Economic Standing in 2017 of South Asian Countries⁴ in USD (Worldometer, 2021b)

Rank (190 Countries)	Country	GDP (PPP) per capita	GDP (nominal) per capita	vs. World PPP GDP per capita
168	Afghanistan	1,976	538	12%
147	Bangladesh	3,877	1,564	23%
109	Bhutan	9,392	3,391	55%
122	India	7,166	1,980	42
80	Maldives	16,688	9,802	98
159	Nepal	2,702	900	16 %
134	Pakistan	5,539	1,467	32%
98	Sri Lanka	12,863	4,135	75%

Clearly, and despite the last half century's remarkable progress, many, probably most, of humanity's nearly 8 billion people's life experience is haunted by precarity or worse even in "normal" circumstances. Add global health challenges and, inevitably, associated economic and cultural stress and everyday precarity quickly slides into a full-scale disaster for ever more people. And, especially so for those living in "developing" countries and regions where few life comforts are secure.

The second COVID-19 wave that started in March 2021 and continues in Nepal, massively disrupted virtually all aspects of social and economic life. Such pandemic stress forces health-related institutions and security agencies to become the immediate source of front-line workers delivering limited care, comfort, and vaccines and dealing with consequences for families who have lost breadwinners and thus face increased

stress in supporting surviving family members. While in rural communities most people

contribute to livelihood activities, for urban and suburban families in Nepal, a single person is typically the primary breadwinner. Participants explain how the loss of a family’s primary earner increased challenges for access to basic livelihood including food, health care, education, and social standing. In addition to such individual family risks, countries and regions face increased challenges in seeking to provide equitable management of disease intervention, and general health and well being awareness at the individual, community, and country levels to help individuals address increased risk of illness.

The COVID-19 pandemic and associated migrant return concerns reflect a coupled phenomenon that links to other issues including national security, national interests, and governance. Wedged between China where the pandemic originated from some yet-to-be-fully understood source and the second wave humanitarian crisis unfolding in India from April 2021 forward, Nepal somehow managed continued comparatively low impacts. But the rate of COVID-19 surge since the beginning of April 2021 to date is still alarming in terms of death (Figure 5).

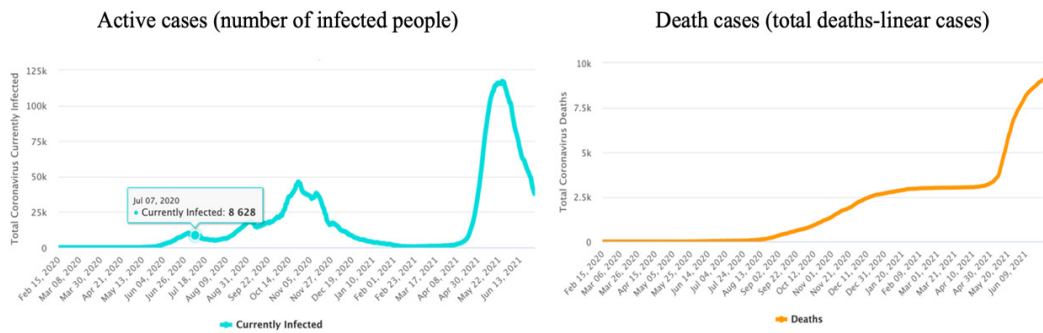


Figure 5. Covid-19 surge after April 2021 in Nepal (Worldometer, 2021a)

Beyond the immediate impacts of COVID-19, the pandemic also increased the impacts of mental illness, domestic violence, addiction, childhood trauma, and other long-standing concerns (Brooks, 2020; Kristof, 2021). Even before the pandemic, Nepal faced increasing suicide rates (Hagaman et al., 2017), presumably driven by increasing socio-economic stress and general malgovernance-fed cultural chaos. Although, remaining rural communities managed to bear the shock from returnees by relying on long-standing informal economic and subsistence strategies (Karki et al., 2020) The pandemic crisis was exacerbated by months-long unwavering inter/intra party political impasse that culminated out of puerile leadership engaging the Supreme Court of Nepal. The Court Orders and the defiance by the executive head of government equally generated lapse in an appropriate measure to be taken, given that the second wave of the pandemic expected after the year.

Roles played by different facilitating agencies are included in the COVID-19 Crisis Management Center- Operations (CCMC-Ops). At the onset of COVID-19 in 2020, CCMC

was established by the GoN. The CCMC plays a coordinating role against the pandemic crisis via the GoN wings representing civil (e.g. Ministry of Health and Populations) and security (Nepal Army, Nepal Police, Armed Police Force-Nepal) authorities and relevant stakeholders at federal, provincial, and local levels (CCMC, 2020). The CCMC's key assignment is to facilitate countermeasures to COVID-19 at three levels of government. CCMC, therefore, tasked relevant entities to address counter measures to the pandemic via tracking, tracing, testing, quarantine, isolation and treatment, and body management. To fulfill the above goals, CCMC foundationally executes its effectiveness through four major branches of operations as medical (health care and treatment), logistic (medicinal equipment and health materials supply services) security (peace and security monitoring and control work), and media and information technology (CCMC, 2020). At the primary level, the frontline to the disease is the pandemic intervener, mainly the security and health care workforce addressing the immediate need of saving lives of many and maintaining COVID-19 due diligence. In addition to the above, the most vulnerable, often unnoticed, are the essential service providers of key necessities (e.g. food, emergency transportation). Often these vulnerabilities are found complicated by unruly urban dwellings, informal and chaotic business operation sites, and substandard living accommodations of major cities and towns of Nepal. One of the factors that compound the risk of internal migration via political and economic instability is already existing non-communicable diseases among the urban poor (Oli et al., 2013)

5.2 Pandemic and COVID-19 trends over time

Figure 6 illustrates the historical timing and severity of pandemics in terms of human deaths (Le Pan, 2020). After the 1950s, increased knowledge of and communication about pandemics helped reduce their impact. While not typically referred to as a pandemic, Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) which effectively started in the 1980s is the contemporary world's deadliest infection. History's worst pandemic is called the Third Plague of 1885, affecting both China and India with the death toll reaching 12-15 million (Echenberg, 2002; Snowden, 2019). During this plague, the British East India Company led government measures to control the disease including quarantine, isolation camps, travel restrictions, and attempts to restrict traditional Indian and Arabic medical practices. (Mushtaq, 2009).

HISTORY OF PANDEMICS

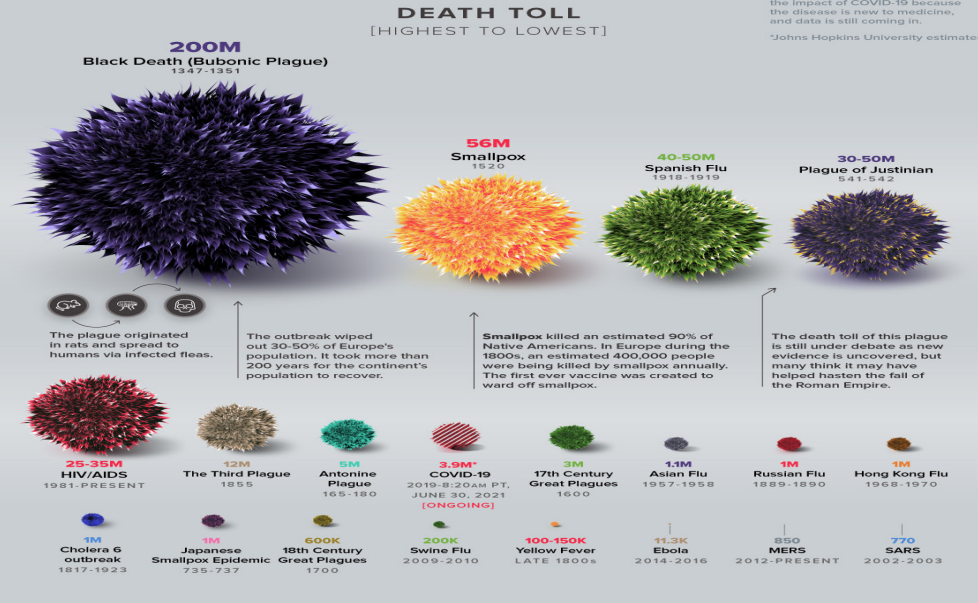
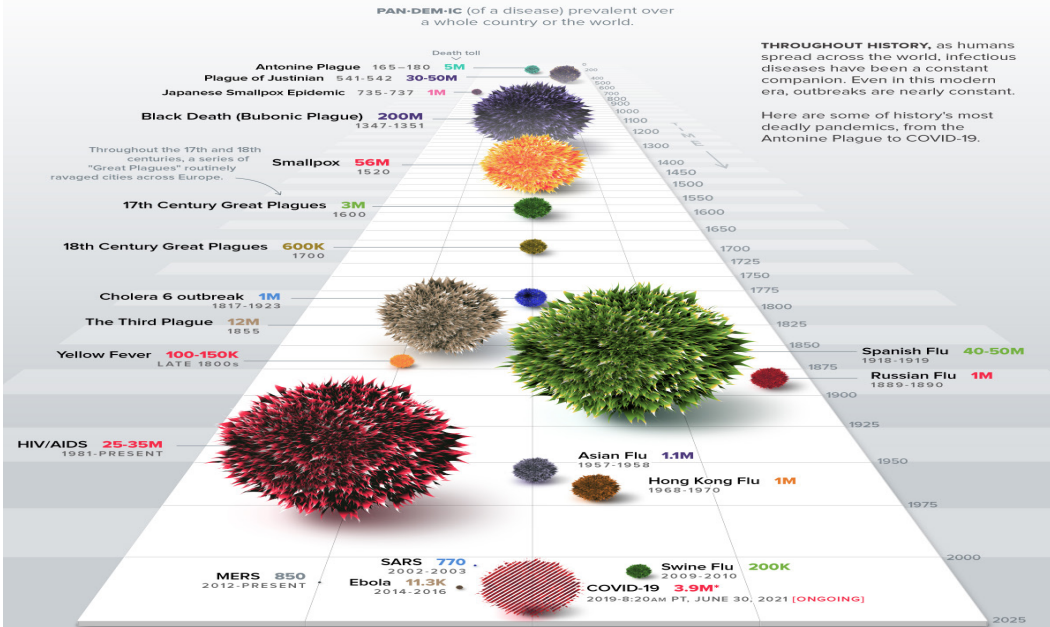


Figure 6. Extent of pandemic impact historically (LePan, 2020)

Nepal's rugged terrain-induced isolation probably limited or eliminated significant impact from this plague. Interestingly COVID-19's impact in Nepal, at least for the first year of the wave, was considerably lower than in many other places that pursued much more aggressive control efforts. Nepal's dense population relied heavily on traditional herbal remedies during the start of COVID-19 infections there and continues to this day. The most sought after herb is गुर्जो-Gurjo or *Tinospora cordifolia*. Use of of Ayurvedic medicinal plants although not noticed in mainstream literatur, remains widely used to treat patients infected COVID-19 (Pal et al., 2020).

By the middle of the 13th century, the Black Death pandemic killed 25-50 percent of the population wherever it spread (Singer, 2020). Great author and survivor Ibn Khaldun summed up the devastation of the pandemic:

"...civilization both in the East and the West was visited by a destructive plague which devastated nations and caused populations to vanish. It swallowed up many of the good things of civilization and wiped them out. It overtook the dynasties at the time of their senility when they had reached the limit of their duration. It lessened their power and curtailed their influence. It weakened their authority. Their situation approached the point of annihilation and dissolution. Civilization decreased with the decrease of mankind. Cities and buildings were laid waste, roads and way signs were obliterated, settlements and mansions became empty, and dynasties and tribes grew weak. The entire inhabited world changed. The East, it seems, was similarly visited, though [by] and in proportion to [the East's more affluent] civilization. It was as if the voice of existence in the world had called out for oblivion and restriction and the world responded to its call. God inherits the earth and whoever is upon it" (Gottfried, 1983, pp. 41–42)

Khaldun's summary suggests that whatever humanity seeks, Earth's processes often redirect because humanity is inextricable link to nature and, should thus seek environmental insight to understand pandemic processes(Gottfried, 1983). The present study's respondents also identify environment in their narratives. Many of which focus on several informal parallel road incursions perpendicular to the border between Nepal and India that create security challenges for agencies mandated to control illegal activities and discriminate between survival-driven activities and often questionably legal, rent seeking. The point is that our best leverage is to increase environmental sensitivity to Common Pool Resources (CPR) especially, in this case, the dense forest parallel to "DasGaja". Doing so can reduce budgetarily overlooked challenges now addressed by, already under-resourced, agencies like APF Nepal. "DasGaja " associated and often illegal rent seeking culture spreads from increasing near-border settlements near forest areas to vulnerable and thinning Chure Ecological Regions (Figure 1), it will be critical for security agencies, backed by enforceable law and associated budgets, to offer clear solutions for the future of the community and the country. The following section builds from participant-informed story-webs of the DasGaja-No Man's Land and it multidimensional causally linked aspects including migration, governance, CPR and national interest.

5.3 DasGaja-No-man's-land

Citizens of both Nepal and India live on untitled land in makeshift tents and shanty houses in the DasGaja, which literally means ten yards, and refers to the twenty-yard-wide No Man's Land established between the two countries. After the addition of land to Nepal called the Naya Muluk-New Nation post-Sugauli Treaty of 1816, the No Man's Land was established presumably as a hoped-for buffer between Nepal and India. But when security forces from either side vacate human settlements in No Man's Land, inhabitants reappear and settle the next day. Inhabitants say they receive help from both countries during emergencies such as fire, flood, and other incidents. This indicates cross-border and, likely, some security-civilian, familial, or social relationships provide cultural ties aka social capital, which support informal community-level security. This situation makes monitoring and managing the border impossible. "Protracted low-level conflict" and associated, sometimes illegal, culture-degrading activity (Reisman, 1988) is common in the area.

While international law prohibits residence in No Man's Land, according to participants, people from both countries have lived here for years and many have family ties in both countries and local inhabitants say the border of Nepal and India was placed where villages has long existed. Often heaps of garbage abound and domesticated animals freely roam the area and adjacent areas. India built dikes parallel to the border to protect from flooding on which it has built stretches of high road thus also protected from flooding. The structure obstruct the natural flow of water and, given the predominant slope, flood Nepali land and lives, especially during the monsoon.

Typically unregulated two-way traffic between Nepal and India reflects an open border requiring no documentation. Thousands of people cross the border every day for business, tourism, livelihood and family purposes. The Armed Police Force (APF) and Nepal Police are charged with regulating the border from Nepal's perspective while primarily in the Indian Counterpart Sashastra Seema Bal (SSB) supported by local police and other supporting agencies regulate the border from India's perspective. Often APF (Nepal) and SSB (India) perform joint patrols on the border. Local officials from both countries meet regularly to discuss security challenges and other issues on their respective border stretches. Such meetings are usually attended by the Chief District Officer (CDO), local APF and civil Nepal Police representatives, and customs chiefs from Nepal including a District Magistrates, local SSB representatives, and customs chiefs from India.

Understanding the "DasGaja" or the No Man's Land between Nepal and India is complex as it has many interconnected social and institutional aspects. It is also complicated because contexts are often driven by outside factors. The present study followed GT practice to address this complexity by focusing on three interconnected aspects drawn from "constant

comparison” (Hallberg, 2006)of issues related by participants and/or observation. The following storylines illustrate possible improved management of the buffer to increase stability by addressing border security and integrating the national interest of both countries.

Nepal’s Treaty of Sugauli-1816 with the East India Company (EIC) demarcated the Nepal-India border when Nepal’s territorial size was sliced heavily (Figure 1).Border pillars were constructed following the treaty.

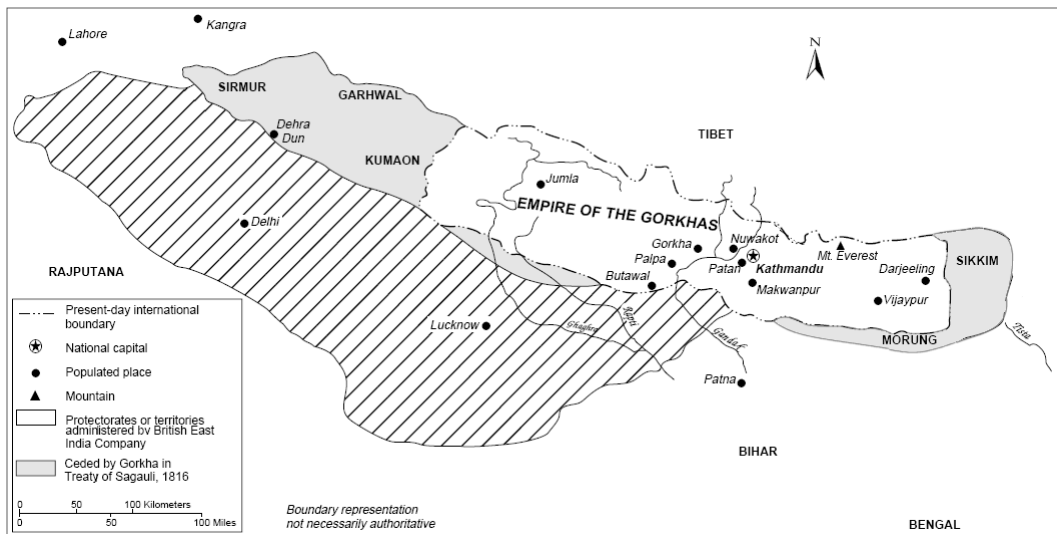


Figure 1. Nepal ceded territory (Redcoat, 2019)

Thirty-nine years later, Nepal’s 8th Prime Minister (Jung Bahadur Rana-1857-1877) supported the Sepoy Mutiny or First War of Independence against British rule in India between 1857–59. Nepal offered monetary and military support to EIC. The economic crisis following the mutiny led EIC to return 4 districts (called Naya muluk-new territory) to Nepal in return for the support it received during the war. Hence, another Treaty was signed in 1860 between the two entities. For this, the hereditary rulers of Nepal remained allied with EIC until 1947 when the Raj ended in India. Following the independence of India, in 1951, hereditary Prime Ministership in Nepal was abolished. Although a connection between these two events other than both became obsolete for similar if not identical reasons is contestable, but, Nepali diaspora in India during the time was heavily influenced by the Indian fight for independence against British Raj and was attracted to overthrow the then dictatorial regime in Nepal.

Border management was effective through the power relationship between the EIC and hereditary ruler of Nepal until the middle of the 19th century. Border demarcation was maintained by border pillars and artificially created barriers of “sacred fig trees, bamboo bushes, and ponds on undulating surfaces”. These natural barriers also supported the

cultures and mostly subsistence farming, of local inhabitants. During the time, border management in Terai was handled by a Nepal Army lieutenant with survey knowledge. Feudal landlords were accountable to the hereditary ruler and were responsible for border surveillance. Occasional gambling in the border area would be punished by the appropriate landlord by corporal punishment from twisting and pulling ears. After the middle of the 19th century, proper documents, documentation, and continuous management of the border diminished which lead to recurring border disputes and confusing and chaotic use of the border region which became what has, since been called DasGaja.

Subsequent regime change fed opportunistic market-driven behavior that led to degradation of ethics and exploitation of porous borders and and desperation for personal benefit. While DasGaja, defined by ten yards on each side of the border, is bureaucratically labeled No Man's Land, it functions as everyone's land. People use this strip of land for multiple interests starting from those seeking out basic living and undertaking knowingly or unknowingly, illegal, transborder activities. Often local people struggling for existence become entrapped by those who control the illegal activities from a distance thus avoiding becoming implicated. In the globalized world, the local experiences are dependent on pattern of consumption, investment political networks and issues of environmental sustainability (Cochrane & Talbot, 2008, p. 128). The area is thus prone to legal, illegal, and livelihood-driven activities at multiple scales. Often people seeking livelihood opportunities are exploited to support humans, small arms, and drug trafficking⁵. These activities are "managed" from a distance, by an organizer by employing, often either unaware of, or from desperation or indifference to, risk locals constantly seek livelihood opportunities as transporter or carriers. The life of the poor who have no option but to "accept the 'options' offered" by the DasGaja does not seem to change the livelihood circumstances especially those whose existence is primarily parental lineage and familial relationship on both sides of the border. Both sides of Nepal-India border is characterized by poor infrastructure and people in abject poverty (Naidu, 2017, p. 43). The following are statements of participants in open-ended interviews about these issues.

- *"Peepal plant-sacred fig intermediated by bamboo bushes and ponds at undulated surfaces in a row used to demarcate borders and thus maintain border security".*
- *"Dasgaja is a common courtyard rather than a No Man's Land".*
- *"Dasgaja is used for the smuggling of drugs, silver, and gold, counterfeit currencies, small firearms, CITES, and kidnapping".*
- *"Ganja-Cannabis sativa smuggled to India and synthetic drugs are smuggled to Nepal".*
- *"Improvised firearms come from Bihar and Uttar Pradesh provinces of India".*
- *"Lieutenant of the Nepal Army used to be the surveyor represented in the Office of Amini in Terai".*
- *"Landlords were responsible for managing the vital interest of the border and punish petty gamblers by corporal punishment such as twisting and pulling the ear".*
- *"Chaos in Dasgaja increased after the British left India".*

⁵ Arms smuggled are often found made in the US, China, and India.

Improvised small firearms made in the Bihar and Uttar Pradesh provinces of India are in demand in most of the hinterland of Terai. Such arms are commonly used for the recovery of personal loans, extortion, and ठुलोपल्टिने maintain superiority within gangs and communities and symbolize the increasing sphere of influence of “crime culture” in Bihar province of India. Crime patterns in Bihar support a phenomenon where Indo-Nepal cross-border crime is supported by social and political factors that encourage a crime-learning environment. Often Tarai youth are recruited into Indo-Nepal cross-border crime and become targets of security concerns (Kumari, 2020). Although the fact of crime is prominent, labeling youth as criminals represents superficial analysis. The youths from economically and socially backward realities are bound to live in limitation and their “youth and suppression by the state and oligarch portray them as the vulnerable is a crime” (KC, 2017).

The country-made pistols called “katuwa banduk” are a favorite among criminals of the Indian provinces of Uttar Pradesh and Bihar (Ahlawat, 2021). The demand for these illegal ‘Made in Munger⁶’ firearms was high during the Maoists movement in Nepal. Such simple arms colloquially called “Saturday Night Special” in the US are crude metal made, inexpensive, compact, small-caliber handguns that were common in 19th and 20th century America (Cook, 1981).

5.4 Migration (stayees and returnees)

Homo erectus, along-extinctpre-human species, moved out of Africa some 1.75 million years ago. Humans (Homo Sapiens) seem to have originated in Africa some 150 thousand years ago and spread from there to Europe, Asia and the Pacific, and elsewhere (O’Connell et al., 2018). Similarly, humans moved around the places required for both survival and fulfilling their aspirations which gained momentum during the industrialization period (Vilallonga, 1998).

Additionally, cultural, political, and commercial factors also encouraged migration within and to and from Nepal historically. The most recent trend of migration started some thirty years ago when cultural chaos drove people to seek seasonal employment in India. This trend expanded to seeking employment overseas for the last 2 decades when Nepal liberalized its out-migration policies and encouraged privatization supported by multilateral development partners especially the Asian Development Bank (ADB, 2019). Many government-owned industries that employed a large proportion of the rural population were privatized which created a major socio-economic shock for Nepali people(Dahal, 2002). While privatization started in 1993, Nepal also experienced increased out-migration in response to a decade-long (1997-2006) Maoist insurgency and related cultural and political instabilities

.....
⁶ Munger district has a 200-year-old association with indigenous gun-making. During the First World War, the gun manufacturers here came into prominence by developing the cartridge gun. During the Indo-China War of 1962, India’s Defence ministry purchased 410-bore muskets, produced by Munger Ordinance Factory. After the factory was shut down unemployed workers set up private lathe workshops or mini-factories to manufacture the simple firearms.

and indoctrination (Das, 2007; Lawoti, 2009). Many youth and adolescents opted for a peaceful exit to the global, especially Pacific, labor market to avoid informal conscription to Maoist combatant groups, among many other reasons.

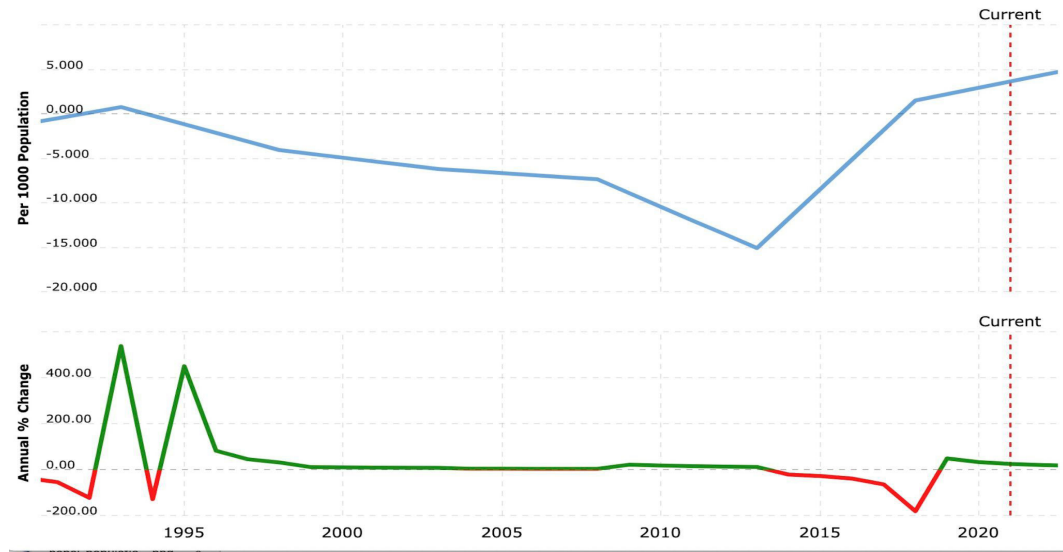


Figure 7. Nepal’s net migration pattern between 1990-2021per 1000 population(Macrotrend, 2021)

The net migration rate pattern (Figure 7) indicate an outflow of migrant from Nepal. Similarly, the Figure below illustrates the trend of labor migration outflow steadily increasing from 2010 to date (MoLESS, 2020). However, labor statistics regarding Nepali citizen in India don’t exist, the total is estimated at 1 to 3 million. But, Nepali migrants in India mostly represent mere survival rather than improvements in living standards (Bashyal, 2020)

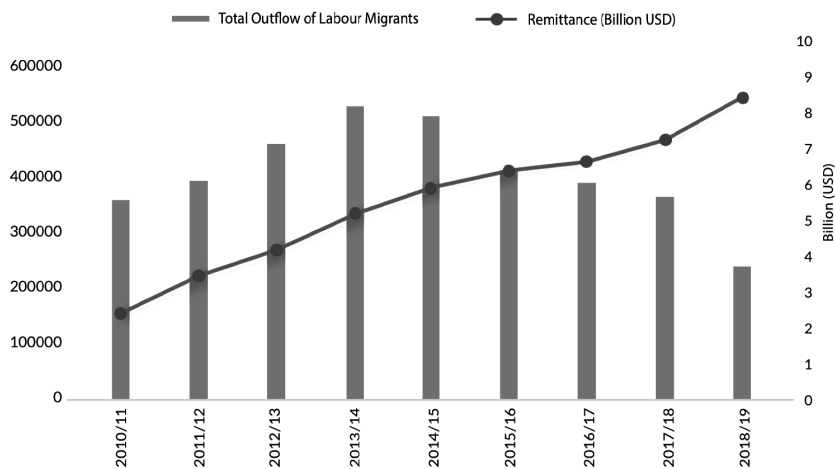


Figure 8. Labour out-migration and associated remittance(MoLESS, 2020)

Foundational impacts of this emigration include youth detached from socio-cultural participation in society and abandonment of historic farmlands and associated loss of traditional subsistence knowledge and practice (Altieri, 2009; Subedi et al., 2021).

Return migration, especially in the context of the COVID-19 pandemic, complicated public health issues and process of grief (Corpuz, 2021) the world over. As part of this study, exploration of environmental health scenarios deepened understanding of ongoing health and related issues for returnees and their communities. Many migrants were stranded abroad and regional returnees, especially from India, also experienced unanticipated delays in entering the country. The researcher explored the impacts of such bureaucratic obstacles on returnee migrants and their families including anticipated, but unavailable, assistance from the GoN.

The first two months of the first COVID-19 surge of 2020 were increasingly chaotic because of the large number of migrants seeking entry at the border. More Nepali migrant returnees entered Nepal than Indian migrants leaving for India. The influence of the pandemic for the first six months was minuscule in Nepal, this encouraged more people to enter Nepal. Border security estimates based on daily entry data suggest that at least half a million came at the onset of the pandemic and that another half million came when border closure and lockdown were enforced. Most returnees were students, labor, and retired security personnel living in India. The migrant returnees were mostly 20-40 years old. Returnees with children ranged up to 50 years of age.

Returnees seemed to be concerned less about the disease and more about their finances and livelihoods. Although concerned about infection from the pandemic they did not voice concern about death. The experience made clear that maintaining basic standards of safety requires not only government agencies and health professionals, but also individuals and communities, to collaborate and cooperate.

Major grievances of returnees' were long-distance travel and associated fatigue, lack of food and water, transportation security, and health and cash in hand and future trajectory of their livelihood. Approximately 12 percent of the labor migrant are from Province No. 2 of which the retrunees expect fincial aid, conducive work environment and network development from the government to engage in production and service sectors (IOM, 2020a). While there were few women and children, the situation posed a higher risk to them regarding health, water, sanitation, and hygiene. Border closure and quarantine, isolation and tracing, and tracking took a long time and increased the risk of both pandemic infection and other diseases. Such circumstances forced returnees to enter from wherever possible along the chaotic porous border.

Participants reflected that migrant returnees if welcomed, valued, and offered hope are likely

to contribute to growth in economic activity and community satisfaction. When returnees are treated respectfully and issues are addressed from the beginning during reentry when returnees are medically assessed and treated, briefed, and, preferably, offered support and encouraged to return to their homes, they will be more likely to bring innovation in their country. All of these opportunities depend mainly on appropriate welcome at the border. Inadequate resources such as infrastructure, technology, and safety equipment, and other public concerns were difficult for overworked healthcare and security personnel to provide in circumstances of inadequate resources including personnel. The border entry problems confused migrant returnees, most of whom had little money or food and water and suffered associated anxiety. One of the challenges of migrant returnees is disease spread which poses challenges of tracing and tracking. Especially because people can enter through 10 to 20 checkpoints, and innumerable informal passageways, monitoring activity to reduce disease spread in cities and villages is challenging. Awareness was important to returnees for effective entry. There was ambivalence between the stayees in accepting returnees in their villages, some were inclined to hide their returning family members and friends, and some exhibited feelings of stigma or unwantedness. The returnees were treated with both empathy and stigma of disease spread in their respective communities (IOM, 2020a).

The above scenario reflects generally declining status of livelihood in the country which encouraged citizens to leave the country to seek opportunities elsewhere, especially in India. While Nepal started a major shift in governance in 2006 by, officially specifically seeking to fundamentally turn the nation, at federal, provincial, and municipal levels, toward getting its people out of poverty, the border situation and associated anti-government slogans suggest what may happen in Nepal if increasing unemployment, detachment from agriculture, and disenchantment with living standards continue and further degrade. The atmosphere of unease between stayees and returnees is not just one of existential conflict. The status of returnees is based on skills and engagements for livelihood while stayees continue to experience desperation and hopelessness. Such factors lead more people to aspire to leave the country and is likely to have a short-term direct impact on the country caused by the absence of youth in its workforce. And in the long-term when they return in old age will likely be unproductive and without any social security. The following are some of the iconic statements by the migrant returnees themselves and some are the more relevant narratives by others associated with the returnees.

- *“I worked till 1 AM and started working back 5 AM, only 4 hours of rest*
- *“Health workers received incentives but not the security forces, morale boost is required for forces to operate, how is it possible without the PPE”*
- *“If drafted from multiple government agencies for COVID-19 intervention would have not looked like a “curfew”, it would have sent a different message to the public at large”.*
- *“Will return to India soon, when things become better”.*
- *“Now more people returning to India in fear of losing the livelihood”*
- *“Migrants do not like to work in their own place. It is mainly due to peer pressure and*

inferiority”.

- *“We have no option than to go back because of the lack of opportunities in our country”.*
- *“I entered from the porous border anyhow because of the fear of standing and waiting for too long”.*
- *“Home quarantine for those not able to afford was acceptable and those who can afford to stay in the hotel”.*
- *“We chanted anti-government slogans for not able to enter properly with ease as before”.*
- *“While entering the border, migrant returnees bowed to their soil entering Nepal”.*
- *“We are subject to hatred and despise while leaving India as well as entering Nepal”.*
- *“Children are not less prone to diseases because of their isolation it is so”.*
- *“As a health care professional, I am into a high level of anxiety, I am taking medication to overcome it”.*
- *“As a woman with children, it was hard for me to withstand the uncertainties and proper hygiene”.*

5.5 Governance

The first surge of COVID-19 led the Government of Nepal to create a COVID-19 Crisis Management Center (CCMC) to execute medical, logistics, security, and media and information technology activities. The key government stakeholders to manage the pandemic outcome include the Ministry of Health and Population, the District Administrative Office (DAO), Nepal Army, Nepal Police, and the Armed Police Force, Nepal. When cross-border commercial and business activities were halted, the challenge became to just manage migrant return humanely.

Regional development in Nepal fed by the perceived need for alternatives challenged rural living and associated Midhills migration leads to the development of regional urban hubs in agriculturally highly productive lowland Nepal-India border areas. The process accelerated with a displacement of the forest by agriculture to enhance commercial activity and government revenue from Terai (Regmi, 1994). Most of these growing cities in Province No. 2 and elsewhere in Nepal-India border areas serve as market hubs. This process began when Nepal started to “modernize” by opening its border to the outside world in the 1950s. This political-economic change, now called “New Economic Geography” drove centralization and intensification of previously peripheral economic activity (Pokharel et al., 2021). This study’s participants note that these market centers enhance opportunities for smuggling and other illegal activities in the subsequently created Nepal-India No Man’s Land-border.

Additionally, participants relate that the porous border encourages smuggling of Nepali-produced natural drugs such as marijuana (*Cannabis sativa*) to and import of synthetic drugs (e.g. ecstasy, LSD, and methamphetamine) from India via an alternative, loosely guarded, local routes. The rapid increase in the production of “designer drugs ” in India (Rathod et al., 2017) poses social, economic, and security challenges in Nepal. Such problems are of

importance to Nepal and India. However, common security agenda in South Asia is unlike in Europe because of the “suspicion and animosity” and influence of one country to the other (Engelmeier, 2009, p. 37; Khatri, 2006, p. 31).

There are 7 major and 35 minor border crossing points and because of the open porous border many more unregulated informal crossing areas exist between Nepal and India. The Indian Integrated Check Posts (ICP) are in use for processing cargo customs and immigration entry for citizens of third countries traveling via Nepal.

Both before and after COVID-19, Nepal-India cross-border chaos is obvious to any passer by: “no rules’ is the norm”, mal-governance-fed limited opportunity, population growth, cultural conflict, and disengagement from agriculture and other entrepreneurial activities lead, especially male, youth to either migrate out of the country or fall into poverty’s many traps. Limited opportunity also feeds a vicious reinforcing cycle between despair-driven chaos and mal-governance. Abundant cross-border illegal activities encourage poor governance and vice versa. These scenarios driving out migration and pandemic-forced return leading to increased chaos in border areas draw attention and concern. However, normal market behavior that attracts Nepali buyers to access cheaper goods of all sorts in Indian border cities emphasizes the larger problems caused by centuries of and recently increased opportunities for, mal governance. Both mal governance and market chaos are mischievously fed by misguided belief or deliberate deception that “free” markets provide the greatest possible equity, opportunity, and prosperity even when mal-governance enjoys greater opportunity for corruption behind the “smoke and mirror” charade of so-called “free” markets by corruption-driven tariffs on imports that can be avoided by purchasing in India in relatively small quantities. But, the charade is documented by the desperation of Nepali consumers to find cheaper products for household management. It’s partly the fallacy of market fundamentalism (Block & Somers, 2014). These are some of the reasons “why nations fail” and extractive economic institutions that precludes communities to “save, invest and innovate” (Robinson & Acemoglu, 2013, p. 372) Excessive demand for goods and services encouraged by copycat capitalism is not invulnerable, as is documented by cross-border nuisance, chaos, and inhumane living. Poor are seen barely earning a living in a vicious cycle of hopelessness and helplessness. Mere survival is not good living. As Maya Angelou says “My mission in life is not merely to survive, but to thrive; and to do so with some passion, some compassion, some humor, and some style”. Thriving requires that individuals, communities, and societies collaborate humanely in a win-win context with their communities of concern. Markets can be useful in this win-win dance but they are never the whole answer.

Vested interests too often distort security-related needs and governance goals. Rose-Ackerman (2004) states “governments [that] waste resources through malfeasance or

inadvertence are a drag on growth and undermine the achievement of other goals”. While in 2006, Nepal officially moved in 2006 from being a constitutional Monarchy to as a republic, its index of corruption and governance is plummeting (Transparency International, 2020).

Sometimes when media release information untimely without consultation, it encourages those under the radar of security to get hidden or lost. When information gets out too early, the blame game starts that precludes agencies from doing the right thing and becoming trapped in controversies. Media is not always form public interest it rather formed by it (Kahneman, 2011, p. 138). Subsequently security agencies get trapped in trivial concerns and lose their prime focus including border security.

Additionally, for example, after a major structural change in the governance of 2006 in Nepal, the Ministry of Foreign Affairs was not given priority, and subsequently was overlooked. Thus foreign policy lacks coherence and mostly just reflects various overall domestic concerns. Without effective decision-making a much needed culture of consultation, interagency coordination and effective governance never developed. Participants mentioned ways to address border disputes and other concerns by effective codes of conduct in line with the ministry, establish citizens committees and political will, support continuous border planning and evaluation, and farmland utilization. Use of farmland will engage youth and create opportunities while reducing market food dependency and generating a sense of independence and self-esteem. The following statements by the participants represent at such governance scenarios.

- *“International politics controlled national decision making; WHO protocol includes domination of western nation’s control in most of their narratives.”*
- *“300-400 returnees not received appropriate treatment and started marching forward with the nationalistic slogan angry at the Prime Minister”.*
- *“Diplomacy misses small things that matter”.*
- *“Shortcomings in governance are because of political and personal interest to address the problem”.*
- *“India is our closest neighbor connects socially, culturally and spiritually”.*
- *“Bureaucracy should be a permanent one, not one that changes with change in politics”.*
- *“Contract killing in Nepal is increasing, due to a culture of impunity after the politics of insurgency”.*
- *“Given the present trajectory of politics, if not timely addressed, people will de-taste politics because political parties rallied for a “right-based” on everything with little delivery to common people”.*
- *“Small nation like us need to be more efficient and that is how we can improve diplomacy, it makes us effective internally and externally, learn from Singapore, the key is efficiency”.*
- *Reappearing border disputes are due to bureaucracy lacking innovation and politics lacking will”.*
- *“We are directed by external needs at the political level”.*
- *“Effective governance is key to defoil the nexus between criminals”.*
- *“Dilution of statehood is led by clandestine behavior of politics”.*
- *“Ineffectiveness of security surveillance is because of clandestine behavior of the electoral*

system”.

Governance matters for development such as pursuance of SDGs (Biermann et al., 2014). Accountable institutions perform effectively on multiple issues ranging from economy to human well-being. Governance must provide more than economic growth, and should address other aspects of developmental achievements (OECD, 2021).

Many countries from around the world participate in Nepal’s development activities. Ministry of Foreign Affairs’ role in development activities via support to provincial and municipal levels in communication through well articulated national interest can contribute to the need of development agenda to help change both livelihood experience and people’s perception of government authority. Because Nepal is an International Aid dependent country, MoFA, line ministry and national planning including security agency need to collaborate in choosing and encouraging policy-appropriate aid by effectively communicating national interest. Institute of Foreign Affairs can play a pivotal role in facilitating such possibilities. Many Nepalis informally go to India seeking employment, a mechanism to share such information to MoFA will enhance communication with Nepali residents, when a disaster such as COVID-19 appear. The following are the key participant statements relevant to strategic development intervention in Nepal.

- *“MoFA promotes national interest, development initiative has to be communicated not only at the project level and specific funder but a national movement to address both needs and wants”.*
- *“Seeking self-dependency and talk on globalization prospects will not address SDG”.*
- *“Security is linked to food and foreign relations because we are dependent on the import of food”.*
- *“Province No. 2 employment potential if equal opportunities for all is offered”.*
- *“Party-based prioritization is an obstruction to possibilities of fair employment. Nepotism and favoritism will not address development appropriately and life of the underprivileged in Province No.2 will not change”.*
- *“Augmentation of skills of Nepali labor is critical so they do not end up in high-risk jobs”.*

5.6 Common Pool Resources

The Chure Ecological Region (CER) comprising of the youngest and most ecologically vulnerable mountains in Nepal, is located between the flat plains-Terai in the south and the Midhills (Mahabharat range) in the north. It is also often referred to as inner Terai. This region has suffered deforestation due to migration from the Midhills, overgrazing, logging, and encroached deforestation for agricultural activities. CER comprises 13 percent of the national landmass or approximately 2 million hectares of land covered 73 percent by forest. It is shared by more than 36 districts of all 7 provinces of Nepal. CER’s more than 5 million inhabitant’s livelihoods depend mostly on subsistence farming and community forests. It is hotspot of biological diversity that conglomerates the major and minor watersheds that recharge groundwater for the flatland Terai (Achet & Fleming, 2006). It also provides ecological connectivity to major protected areas of Nepal and mediates temperature between the hot lowland Terai plains and high-altitude mountains. The CER

supports widely varied bio-cultural features(Allison, 2019; Eriksson, 2018) including various indigenous communities, subsistence farming, and rich agro-biodiversity.

Large incessant and smaller sporadic CER rivers are mined for, often smuggled, construction materials like boulders, gravel, and sand. Similar mining operations that need to be contextualized politically are run by mafia who are treated as patrons offering income opportunity to the poor (Hoffmann, 2020). Unchecked sand and gravel mining along riverbeds in flat plain Terai are similarly problematic; rivers sink deeper, which speeds erosion of the surrounding land and river degradation higher up in CER. Upstream degradation from “imposed increase in river slope” by natural or man-made phenomenon should be controlled (Galay, 1983). CER is a vulnerable ecosystem landmass because of its geological composition (Gyawali & Tamrakar, 2018). Its landmass is made up of loose materials causing forest and other landcover degradation that increase its vulnerability. A wide range of risks can affect major livelihood opportunities including the potential for tourism, and ability to address the disaster. CER cannot be conserved in isolation. Vested interest groups are engaged in the extraction of its natural resources including illegal logging that affects both Terai and Chure (Chakraborty, 2001; Ghimire, 2017; Nightingale & Ojha, 2013). Hence, addressing sustainability at such fronts require interdisciplinarity, collaboration and research at the level of conceptualization and implemetation (Dixit, 2019). These participant comments address such interrelated problems.

- *“Natural resources are smuggled out of Nepal from the chure regions sand and gravel mining with large trucks that can easily cross small rivers.*
- *“Excessive road incursions without proper planning are leading to the development of land parcels, it allows for misuse of common resources affecting agricultural, forest, grassland, and water systems”.*
- *“Nepal is an agricultural country, a federal republic to be effective, agriculture must be be made prestigious.*
- *“Our urban planning is leading to the loss of services such as functioning natural pollination of crops, clean air, extreme weather mitigation, and human mental and physical well-being”.
“Middleman in the agriculture sector needs to be disincentivized with direct market access”.*
- *“Need for the link between and amongst social, educational, and agricultural aspects of society”.*
- *“Road dykes in the Indian side of the territory paralleling to border makes impoverished Nepali farmers vulnerable to disaster and diseases and livelihood in agriculture”.*
- *“International law and practices are overlooked by dyke road-building in nearby Nepal border by India”.*
- *“Social status of my country is poorer than the host country, we are lured to go back seeking opportunities”.*
- *“We call for nationalistic value, as an agricultural country, we import most of our food”.*
- *“We are growing neither in quantity nor in quality we are dependent on the market (India)”.*
- *“Hydroelectricity unless used productively, has environmental, economic, social feedback”.*

5.7 National interest and security

There are many different approaches to border crossing management among the ninety-three international borders around the world (D., 2016). The characteristics of a specific border perhaps reflect the relationship between the countries involved and also human and environmental life around that particular space. Nepal shares borders with China (1414 Km) and India (1880 Km). The border with India is normally open with free access to both sides while China and Nepal require a travel document. Historically, Nepal practices three different types of border systems. The closed border system existed for third country national until the Sugauli Treaty of 1816. The controlled border was initiated after 1816 for Indian nationals and the open border started slowly and unknowingly after the restoration of Naya Muluk in 1860 (Personal Communication).

Border and national security concerns and related relationships with immediate neighbors are critical to Nepal's security and development. One of the cases of recent encroachment and dispute was on "large chunk of encroachment by India in Kalapani Limpiyadhura area (Ravikant, 2017, p. 13). For landlocked Nepal maintaining friendly relations with big neighbors China and India while also managing international borders to support appropriate flows of people and goods is challenging. Without specific physical barriers, border security management depends on an effective and well-deployed conceptual framework. "A comprehensive, integrated system; planning; appropriate equipment; and training and exercises are essential to border management" (Galay, 1983). Although Nepal has only air and land ports, long porous borders with India essentially make serious border management impossible. Similar problems are also faced in African countries sharing porous border with multiple illegal activities hard to monitor (Akinyemi, 2019).

An Integrated Check Point (ICP) is a multipurpose customs checkpoint, operating on both sides of the border, to facilitate cross-border trade and movement of people. An ICD⁷ (Inland Clearance Depot) is a dry-port, purposely built to handle import, export, intermodal transfer, temporary storage, and customs clearance of goods, with storage capacity, terminal buildings, and logistics handling equipment. It is a combination transport terminal and customs clearance point at an inland facility. Most ICD's in Nepal are operated on the border, next to an ICP (Birgunj, Bhairahawa), but it can also be located some distance away from the border customs checkpoint or ICP (as in Biratnagar, Kathmandu).

Attempts at the efficient processing of goods entering the country at organized checkpoints occur in the context of the dry port. Nepal recently became a member of the Inter-governmental Dry Ports and is now able to directly receive cargo through its Inland

.....
7 According to the Nepal Intermodal Transport Development Board (NITDB), ICD at Birgunj, Biratnagar, Bhairahawa, and Tatopani is in operation. The updated information on ICP and ICD is available at <http://nitdb.gov.np/en>

Clearance Depots (ICDs). The Treaty of Transit between Nepal and India allows Nepal to use the Kolkata Port of India as a designated gateway port that receives goods via 26 border Crossing points and 1 railhead through a Rail-Service Agreement between Nepal and India. Similarly, through a Nepal-China Agreement, there are 6 Border Crossing Points (BCP). India-Nepal has 929 recognized border entry and exit points from 26 districts that borders with India.

The absence of seaports and weak transport infrastructure raise the cost and risk of international trade. The higher cost of logistics and transit transportation for landlocked countries create problems for those countries to compete in world markets with coastal countries (Arvis et al., 2007). Dry ports play a significant role in reducing trade costs for landlocked countries like Nepal and make monitoring of illicit trade by the APF of Nepal more manageable. The following was the statement by the participant in charge of security provision in the Birgunj Dry port.

Dry ports offer one-stop trade management, with managed warehousing, well-equipped, and managed parking facilities, security of goods, and trade facilitation. Without such integrated management, more temporary checkpoints often suffer poor urban-environmental conditions with abysmally poor sanitation prone to disease. Key statements from the participants include the following.

- *“We are not managing the border holistically, we are just thinking APF will be able to regulate everything, this mindset with limited resources will not address the short/long-term border problems”.*
- *“APF is not as well equipped for border control activities as Indian counterpart”*
- *“While India’s Sashastra Seema Bal (SSB) is a border guarding force of India deployed along its border with Nepal and Bhutan, its major responsibility is to manage the border, whereas Nepal’s APF is not mandated for full management of the border, this is the core problem with Nepal’s current border management”.*

National and border security are essential to support national interest. National interest is defined by Hans Morgenthau as “survival-the protection of physical, political and cultural identity against encroachments by other nation-states” (Morgenthau, 1949) (Navari, 2016). National interests are served by aspects of national and border security (Gerstein et al., 2018). The dimensions of national interest therefore can be broadly categorized regarding social, economic, and environmental resources and concerns of the country. This contextualizes and clarifies multiple aspects of national security expressed by the participants.

Nepal’s National Security Council (NSC) established under Article 266 of the Constitution of Nepal makes a recommendation to the Government of Nepal, Council of Ministers for the formulation of a policy on overall national interest, security, and defense of Nepal, and the mobilization and control of the Nepal Army under the leadership of the Prime Minister.

NSC submits an annual report to the President to be laid before the Parliament by the Prime Minister. The National Security Policy of 2016 elaborates the responsibilities of the three major security implementing agencies: Nepal Army, Nepal Police, and Armed Police Force, Nepal (MoD, 2016).

NSC was created in 2019 BS (1962) under King Mahendra. The Council was to advise and assist the King on national security and foreign policies. The Council also served as the King's principal arm for coordinating these policies among various government agencies. After 24 years in 2042 BS (1985) Nepal's security policy was articulated in the National Core Policy Doctrine (NCWA, 2021, p. 38). Between 2047 BS (1991) and 2064 BS (2006) the Constitution of Nepal tied the National Defense Council with the Nepal Army. Between these dates, policy changes reduced the role of the Nepal Army (NA). However, based on the current 2078 BS (2021) defense strategy and defense policy, NA's role has become quite vague roles due to border monitoring and survey voids among technical aspects of articulation of national sovereignty issues. Most often information and debates focus on survey aspects more than sovereignty concerns leaving a gap between policy and the constitution. Information gathering should connect with broader legal implications of security challenges based on better articulation regarding the level of policy development.

NSC's Secretariate's role developed incrementally and now includes security analysis at regional and international levels. While country-level analysis is also undertaken by the Ministry of Foreign Affairs received at its ambassadorial level represented in each country and the region. Collaboration between the NSC Secretariate and the MoFA can be effective for developing national security briefings to articulate urgency and sensitivity especially since NSC is lead by the PM who is required to play a proactive role.

Often border information received from APF Nepal is synthesized along with intelligence reports of the Nepal Army to prepare a special report based on strengths weaknesses, opportunities, and threats. Such work is completed at regular intervals given the sensitivity of the national security prioritized under resource constraints.

Well-connected foreign relations and national security including border security can support effective diplomacy and defense but doing so requires multidisciplinary and contextual knowledge. Immediate actions on legal, professional and community relationship are important because of the federal constitutional framework (Thapa, 2010). Therefore maintenance of intelligence regarding border security is necessary to support national pride. A nation is a "cohesive whole" that represents distinct traditions, culture, and language, values, and its survival history. The following table summarizes what participants' border related comments.

- *“Chinese and Indian government delegations accompany security representatives during most bilateral meetings. In such meetings, Nepali security agencies are not included. Such practice*

of exclusion of representation has been the norm in successive political changes”.

- *“Review of Ministry of Foreign Affairs operation was necessary while nation underwent regime shift 2006”*
- *“Diplomatically, we are not able to articulate our need effectively”*
- *“Border protection is to maintain sovereignty and “bread and butter” of the NA”*
- *“Border protection is just not a survey and mapping concern, it is how we manage border”*
- *“Valuation of national security concern is every hour of duty of any security agencies”*
- *“modernize border management via tools and technology, strategic planning, appropriate budgeting. Border security task is risky and where forces operate without a life vest”.*
- *“For effective border security, PM and MoFA need to be abreast of the situation and become strategic interveners”.*
- *“Customs and culture need to be respected in order for society to be stronger at all bases. Reciprocal institutional arrangements are important aspects of border security effectiveness. In the Birgunj Indian Consulate General office is present whereas Nepal does not have similar reciprocal arrangements”.*
- *“Regulated border via identity card is effective given India’s concern for third-country intelligence via porous border.*
- *“Committed and strategic focused plan for border dispute fundamental”*
- *“Nepal-India EPG report needs be public for implementation to the benefit of both countries”*
- *“Nepal is an intelligence hub for countries because of its strategic location and weak governance”.*
- *“Use of counterfeit currencies causing India’s concern”.*
- *“Nepali politics has to understand that “nation does not have heart it only has an interest”.*
- *“National pride requires national intelligence leading to effective national interest via its tools”.*

5.7.1 Border Security

The 1880 kilometer stretch of border between Nepal and India is an open and porous international border. Proper border management is vital to national security and involves coordination by administration security, intelligence and integrated framework (Holloway, 2010). The unequal size of the two countries and their respective economies have natural effects on border management for small countries like Nepal. However, Nepal can also learn from India which has 15106 km of land border with multiple countries. Effective border security under resource constraints requires learning from best practices elsewhere to address both immediate needs and long-term aspirations. This may require support for a robust research and development component of border security institution(s).

Border security is a tool to enhance national interest. COVID-19 led to lockdown for the first time in history that halted open Nepal-India border activities. During this time increased coordination and interaction showed the possibility of increased border management effectiveness. Security personnel handled issues carefully and collaboratively which

suggests a dimension of the Nepal-India relationship that is rarely explored in either Media or at national levels by either country. The open porous Nepal-India border is easily accessible at many important border cities. The municipalities of these border cities need to assess foreign relations concerns more professionally to better understand and manage ground-level bilateral reality.

Often, border security becomes challenging and ineffective because of discrepancies between available public services. Locals always compare services, including electricity, road, and livelihood opportunities, with their counterparts living on the other side of the border. These services influence how security personnel and agencies are perceived and supported by communities and individuals. Perception management at the border is thus important for effective border security (Anand, 2017). Effective border security requires minimal global political influence and reduced political instability can lead to more effective policy interventions that address livelihood concerns of the poor that inhabit the place (Khan et al., 2020).

- *“Border security is strategic coordination between agencies in both countries”*
- *“Border problem identification, detection, and protection require collaboration between the security forces of both countries via a real-time information-sharing”*
- *“Intelligence information is not open to the public, but certain things get so quickly politicized, it reduces effectiveness in border security enforcement”.*
- *“Border security has to be taken as a “whole”.*
- *“Media sensitivity to security is important to the safety of communities and individual”.*
- *“APF-Nepal and the SSB-India solve problems collaboratively”.*
- *“Destruction of border pillars needs to be addressed via national interest”.*
- *“Fast-changing tenure of security forces leads to lapses of memory failing vital interest”.*
- *“If security agencies will operate differently at federal, provincial, and local level, it will lose the chain of command leading to unintended consequences”.*
- *“Border outpost (BOP) and Forward Operating Base (FB) infrastructurally poor and supported by inadequate manpower”.*
- *“For effective border management, no structures within one kilometer of the border”.*
- *“Need continuous crime analysis”*
- *“Collaboration between Nepal Police (NP) and the Armed Police Force (APF”.*
- *“Monitoring and surveillance technology”.*
- *“Overworked forces are often anxious, fatigued and generate feelings of uncertain future”.*

Conclusion

The present meta-disciplinary study identifies complex interfaces among migration, health, political-economy and natural resource use. The study contributes to straight forward, or heuristic, understanding of fundamental and practical considerations related to Nepal's overall governance and collective human futures in the face of long-ignored global realities. Initial focus on COVID-19 and migration lead to conclusions about how humanity can and must, even with limited resources, turn pain into prosperity. This is the core problem that Province No.2 breaths every day as it inhales despair and exhales hope. The desperation of people forced to struggle for minimal survival amidst rich potential must change toward inhaling hope and exhaling despair.

Humanity advanced with collaboration that accumulated into inheritable social capital. The combination of social and human capital present in Province No. 2 is a gift of human cultural interaction that seems to have been taken for granted, or, worse, appropriation. The common cultural heritage and familial relationships in the border areas provide opportunity and complementarities. When these legacy resources are utilized at local, provincial, and federal levels, people can see and grow from government initiative and management in support of human welfare. Hence, any serious problem that arises in society can be turned into an opportunity. Systemic honing of governance, development, and the chaotic fictive-buffer area called DasGaja can help address long-standing poverty, political authoritarianism, security, and CPR management ranging from CER to the border. It requires governance centered on people's needs unaffected by either orthodox Marxist or populist capitalist ideologies, or, especially, government-grounded exploitation. Immediate intervention can begin from effective support to migrant returnees and stayees whose tragic life histories are contextualized by political and market-fed tragedies, among others, in DasGaja and nearby CER. Province No. 2, and all of Nepal, should follow the dictum, "We all lose when it's about my money. We all win when it's about our wellbeing" (Korten, 2021). The border and national security are intrinsically connected to national interest and foreign relationships which require effective development courses that follow a trajectory grounded by good governance.

References

- Abel, G. J., & Sander, N. (2014). Quantifying global international migration flows. *Science*, 343(6178), 1520–1522.
- Academy for Systems Change. (2021). Leverage points and the Iceberg model in economic development [www.academyforchange.org]. <https://www.academyforchange.org/2019/12/07/leverage-points-iceberg-model-economic-development>
- Achet, S. H., & Fleming, B. (2006). A watershed management framework for mountain areas: Lessons from 25 years of watershed conservation in Nepal. *Journal of Environmental Planning and Management*, 49(5), 675–694.
- ADB. (2019). Macroeconomic update Nepal (Volume 7, Number 1). Asian Development Bank <https://www.adb.org/sites/default/files/institutional-document/495276/nepal-macroeconomic-update-201904.pdf>
- Adger, W. N., Kelly, P. M., Winkels, A., Huy, L. Q., & Locke, C. (2002). Migration, remittances, livelihood trajectories, and social resilience. *AMBIO: A Journal of the Human Environment*, 31(4), 358–366.
- Ahlawat, D. (2021). Naxal insurgency in India: Genesis, ideological precepts, and security challenges. In *Terrorism, Security and Development in South Asia* (pp. 80–98). Routledge.
- Akinyemi, O. (2019). Porous borders and increasing human trafficking in West Africa: Issues and challenges. *International Journal of Social Science Research*, 7(2).
- Allison, E. (2019). Deity citadels: Sacred sites of bio-cultural resistance and resilience in Bhutan. *Religions*, 10(4), 268.
- Altieri, M. A. (2009). Agroecology, small farms, and food sovereignty. *Monthly Review*, 61(3), 102–113.
- Anand, A. (2017). Border out post@ resource centre for border population (Policy Paper CPP_PGPPM_P17_02). Indian Institute of Management Bangalore. <http://repository.iimb.ac.in/handle/123456789/11282>
- Arvis, J.-F., Raballand, G., & Marteau, J.-F. (2007). The cost of being landlocked: Logistics costs and supply chain reliability (Vol. 4258). World Bank Publications.

- Azose, J. J., & Raftery, A. E. (2019). Estimation of emigration, return migration, and transit migration between all pairs of countries. *Proceedings of the National Academy of Sciences*, 116(1), 116–122.
- Baral, T. N. (2018). Border Disputes and Its Impact on Bilateral Relation: A Case of Nepal-India International Border Management. *Journal of APF Command and Staff College*, 1(1), 28–36.
- Bashyal, K. (2020). A Survey on Nepali migrants in India: An empirical study. *The Geographic Base*, 7, 54–64.
- Begum, M., Farid, M. S., Alam, M. J., & Barua, S. (2020). COVID-19 and Bangladesh: Socio-economic analysis towards the future correspondence. *Asian Journal of Agricultural Extension, Economics & Sociology*, 143–155.
- Biermann, F., Stevens, C., Bernstein, S., Gupta, A., & Kabiri, N. (2014). Integrating governance into the sustainable development goals (Policy Brief #3). UNU-IAS.
- Block, F., & Somers, M. R. (2014). *The power of market fundamentalism*. Harvard University Press.
- Boffa, F., Piolatto, A., & Ponzetto, G. A. (2016). Political centralization and government accountability. *The Quarterly Journal of Economics*, 131(1), 381–422.
- Brooks, R. (2020, January 31). For working-class Americans, disaster is only a misstep away. *The Washington Post*. https://www.washingtonpost.com/outlook/for-working-class-americans-disaster-is-only-a-misstep-away/2020/01/30/1555ac5a-36d0-11ea-9541-9107303481a4_story.html
- Buheji, M. (2020). Stopping future COVID-19 like pandemics from the Source-A Socio-Economic Perspective. *American Journal of Economics*, 10(3), 115–125.
- Caffrey, J. (2015). *Adventures in No Man’s Land*. British Broadcasting Corporation. <https://www.bbc.com/news/magazine-34319540>
- Castells, M. (2011). *The rise of the network society*. John Wiley & Sons.
- Castro, C. J. (2004). Sustainable development: Mainstream and critical perspectives. *Organization & Environment*, 17(2), 195–225.
- CCMC. (2020). Health sector emergency response plan: COVID-19 pandemic. Government of Nepal Ministry of Health and Population. https://ccmc.gov.np/doc_upload/Emergency%20Response_Covid_19-Endorsed-May%202020.pdf

- Chakraborty, R. N. (2001). Stability and outcomes of common property institutions in forestry: Evidence from the Terai region of Nepal. *Ecological Economics*, 36(2), 341–353.
- Chambers, R. (2004). *Ideas for development: Reflecting forwards*. Institute of Development Studies.
- Chambers, R. (2013). *Ideas for development*. Routledge.
- Charmaz, K. (2017). Constructivist grounded theory. *The Journal of Positive Psychology*.
- Cheng, K. K., Lam, T. H., & Leung, C. C. (2020). Wearing face masks in the community during the COVID-19 pandemic: Altruism and solidarity. *The Lancet*.
- Cochrane, A., & Talbot, D. (2008). War, disease and human security. In *Security: Welfare, crime and society*. Open University Press.
- Codagnone, C. (2009). Reconstructing the whole: Present and future of Personal Health Systems. Seventh Framework Program. <https://www.digitalhealthnews.eu/images/stories/pdf/phs2020-book-rev16082009.pdf>
- Combaz, E. (2013). Regional development programmes and poverty reduction. GSDRC Applied Knowledge Services Helpdesk Research Report.
- Cook, P. (1981). The Saturday Night Special: An assessment of alternative definitions from a policy perspective. *Journal of Criminal Law and Criminology*, 72(4).
- Corpuz, J. C. G. (2021). Beyond death and afterlife: The complicated process of grief in the time of COVID-19. *Journal of Public Health*, 43(2), e281–e282.
- D., L. (2016). 93 International Borders Around The World. Boredpanda, Travel. https://www.boredpanda.com/international-borders/?utm_source=google&utm_medium=organic&utm_campaign=organic
- Dahal, D. R. (2002). The current trade union situation in Nepal. 19–20.
- Dahal, D. R., Uprety, H., & Subba, P. (2001). Good governance and decentralization in Nepal. Center for Governance and and Development Studies.
- Das, P. K. (2007). *Cross-brder terrorism in South Asia*. Sumit Enterprises.

- Dixit, A. (2019). Institute for social and environmental transition-Nepal. In Strengthenin policy research (pp. 79–93). SAGE Publications India.
- Djankov, S., Montalvo, J. G., & Reynal-Querol, M. (2008). The curse of aid. *Journal of Economic Growth*, 13(3), 169–194.
- Dreher, A., Sturm, J.-E., & Vreeland, J. R. (2009). Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions? *Journal of Development Economics*, 88(1), 1–18.
- Durosomo, E. B. (1994). The problem of unsustainable development: International development projects and the environmental crisis in sub-Saharan Africa [Phd Dissertation]. University of Delaware.
- Dutta, A., & Fischer, H. W. (2021). The local governance of COVID-19: Disease prevention and social security in rural India. *World Development*, 138, 105234.
- Echenberg, M. (2002). *Pestis redux: The initial years of the third bubonic plague pandemic, 1894-1901*. *Journal of World History*, 429–449.
- Engelmeier, T. F. (2009). *Nation-building and foreign policy in India: An identity-strategy conflict*. Cambridge University Press India Pvt. Ltd.
- Eriksson, O. (2018). What is biological cultural heritage and why should we care about it? An example from Swedish rural landscapes and forests. *Nature Conservation*, 28, 1.
- Farzanegan, M. R., Feizi, M., & Gholipour, H. F. (2021). Globalization and the outbreak of COVID-19: An empirical analysis. *Journal of Risk and Financial Management*, 14(3), 105.
- Galay, V. (1983). Causes of river bed degradation. *Water Resources Research*, 19(5), 1057–1090.
- García, J. M. (2021). *Theory and practical exercises of system dynamics: Modeling and simulation with Vensim PLE*. Preface John Sterman. Juan Martin Garcia.
- Gerstein, D. M., Adler, A., Davenport, A. C., Grill, B., Kadlec, A., & Young, W. (2018). Managing international borders: Balancing security with the licit flow of people and goods. RAND Corporation.
- Ghimire, M. (2017). Historical land covers change in the chure-tarai landscape in the last six decades: Drivers and environmental consequences. In *Land Cover Change and Its Eco-environmental Responses in Nepal* (pp. 109–147). Springer.

- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of Grounded Theory: Strategies for qualitative research*. Routledge.
- Gottfried, R. S. (1983). *Black death*. The Free Press.
- Gyawali, P., & Tamrakar, N. K. (2018). Landslide susceptibility assessment of the Chure Khola Catchment area of the Siwalik region, Central Nepal. *Journal of Nepal Geological Society*, 56(1), 19–30.
- Hagaman, A. K., Khadka, S., Lohani, S., & Kohrt, B. (2017). Suicide in Nepal: A modified psychological autopsy investigation from randomly selected police cases between 2013 and 2015. *Social Psychiatry and Psychiatric Epidemiology*, 52(12), 1483–1494.
- Hall, E. T. (1976). *Beyond culture*. Anchor Books/Doubleday.
- Hallberg, L. R. (2006). The “core category” of grounded theory: Making constant comparisons. *International Journal of Qualitative Studies on Health and Well-Being*, 1(3), 141–148.
- Hoffmann, M. P. (2020). Digging for sand after the revolution: Mafia, labor, and shamanism in a Nepali sand mine. *Dialectical Anthropology*, 1–17.
- Holloway, S. (2010). Measuring the effectiveness of border management: Designing KPIs for outcomes. *World Customs Journal*, 4(2), 37–54.
- Homer-Dixon, T. (2020). *Commanding Hope: The power we have to renew a world in peril*. Knopf Canada.
- ILO. (2021). *Informal economy in Nepal*. International Labor Organization. www.ilo.org/kathmandu/areasofwork/informal-economy/lang--en/index.htm#:~:text=In%20Nepal%2C%20more%20than%2070,informal%20economy%20is%20rapidly%20expanding.
- IOM. (2020a). *Status of Nepali migrant workers in relations to COVID-19*. International Organization for Migration. <https://publications.iom.int/books/status-nepali-migrant-workers-relation-covid-19>
- IOM. (2020b). *World migration report 2020* (p. 498). International Organization for Migration. <https://publications.iom.int/books/world-migration-report-2020>
- Jakupec, V. (2018). A Critique of the Development Aid Discourse. *Development Aid—Populism and the End of the Neoliberal Agenda*, 37–52.

- Jancsics, D. (2019). Border corruption. *Public Integrity*, 21(4), 406–419.
- Kahneman, D. (2011). *Thinking, fast and slow*. Penguin Books.
- Karki, S., Burton, P., & Mackey, B. (2020). Climate change adaptation by subsistence and smallholder farmers: Insights from three agro-ecological regions of Nepal. *Cogent Social Sciences*, 6(1), 1720555.
- KC, D. K. (2017). Labeled or learned? Youth in Indo-Nepal cross-border crime. *Dhaulagiri Journal of Sociology and Anthropology*, 11, 164–183.
- Kerr, W. A. (2020). The COVID 19 pandemic and agriculture: Short and long run implications for international trade relations. *Canadian Journal of Agricultural Economics*, 68(2), 225–229.
- Khan, A., Siddiqui, S. H., Bukhari, S. H., & Iqbal, S. M. H. (2020). Human development, political stability and economic growth: The way forward. *Review of Economics and Development Studies*, 6(2), 351–361.
- Khatri, S. K. (2006). What is the “new” security agenda for South Asia? In *Non-traditional security: State, society and democracy in South Asia*. Adroit.
- Knack, S. (2004). Does foreign aid promote democracy? *International Studies Quarterly*, 48(1), 251–266.
- Korten, D. (2021, May 25). Ecological civilization from emergency to emergence. *Living Economies Forum*. <https://davidkorten.org/wp-content/uploads/2021/08/Korten-EcoCiv-08082021-1.pdf>
- Kristof, N. (2021, May 29). ‘If you would go out on a limb for us, it might just save our lives.’ *The New York Times, Opinion*. www.nytimes.com/2021/05/29/opinion/sunday/covid-impact-us.html
- Kumari, R. (2020). Socio-economic perspective on crimes in Rohtas District, Bihar. *Research Review International Journal of Multidisciplinary*, 5(1).
- Kunwar, L. S. (2015). Emigration of Nepalese people and its impact. *Economic Journal of Development Issues*, 77–82.
- Laborde, D., Martin, W., & Vos, R. (2020). Poverty and food insecurity could grow dramatically as COVID-19 spreads. *International Food Policy Research Institute*. www.ifpri.org/blog/poverty-and-food-insecurity-could-grow-dramatically-covid-19-spreads

- Lawoti, M. (2009). Violent conflict and change: Costs and benefits of the Maoist rebellion in Nepal. In *The Maoist Insurgency in Nepal* (pp. 324–346). Routledge.
- LePan, N. (2020, March). Visualizing the history of pandemics. *Visual Capitalist*. <https://www.visualcapitalist.com/history-of-pandemics-deadliest/>
- Leuprecht, C. (2012). Public safety in federal systems: A primer. *L'Europe En Formation*, 363, 417–434. <https://doi.org/10.3917/eufor.363.0417>
- Macrotrend. (2021). Nepal net migration rate 1990-2021 [Macrotrends.net]. *Macrotrends*. www.macrotrends.net/countries/NPL/nepal/net-migration
- Madan-Lala, R. (2017, July 27). Common diseases in Nepal and why the country is susceptible. The Borgen Project. <https://borgenproject.org/common-diseases-in-nepal/>
- Makau, W. M. (2021). The impact of COVID-19 on the growing North-South divide. *E-International Relations*. www.e-ir.info/2021/03/15/the-impact-of-covid-19-on-the-growing-north-south-divide
- Marya, R., & Patel, R. (2021). *Inflamed: Deep medicine and the anatomy of injustice*. Farrar, Straus and Giroux.
- Meadows, D. H. (2008). *Thinking in systems: A primer*. Chelsea Green Publishing.
- Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, 5(1), 1653531.
- MoD. (2016). National Security Policy, 2016. Ministry of Defence. <https://nepalindata.com/resource/National-Security-Policy--2016>
- MoLESS. (2020). Nepal labor migration report 2020. Ministry of Labour employment and Social Security, Government of Nepal. <https://moless.gov.np/wp-content/uploads/2020/03/Migration-Report-2020-English.pdf>
- Monaco, L. (2020). Pandemic disease Is a reat to national security.
- Morgenthau, H. J. (1949). The primacy of the national interest. *The American Scholar*, 207–212.
- Mukarji, D., & Mukharji, D. (2006). A perspective on Indo-Nepal relations. *Indian Foreign Affairs Journal*, 1(3), 32–42.

- Mushtaq, M. U. (2009). Public health in British India: A brief account of the history of medical services and disease prevention in colonial India. *Indian Journal of Community Medicine*, 34(1), 6.
- Naidu, S. K. (2017). *India-Nepal border: Regional cooperation and cross border trade*. Gaurav Book Center Pvt. Ltd.
- Navari, C. (2016). Hans Morgenthau and the national interest. *Ethics & International Affairs*, 30(1), 47–54.
- NCWA. (2021). *Nepal's National Security in a changed context*. In *Nepal: Standing up to domestic and foreign challenges*. Nepal Council of World Affairs.
- Nightingale, A. J., & Ojha, H. R. (2013). Rethinking power and authority: Symbolic violence and subjectivity in Nepal's Terai forests. *Development and Change*, 44(1), 29–51.
- Noja, G. G., Cristea, S. M., Yüksel, A., Pânzaru, C., & Drăcea, R. M. (2018). Migrants' role in enhancing the economic development of host countries: Empirical evidence from Europe. *Sustainability*, 10(3), 894.
- OCHA. (2020). *Nepal COVID-19 food security & vulnerability update 2 (Reliefweb) [Situation Report]*. United Nations Office for the Coordination of Humanitarian Affairs. <https://reliefweb.int/report/nepal/nepal-covid-19-food-security-vulnerability-update-2-16-april-2020>
- O'Connell, J. F., Allen, J., Williams, M. A., Williams, A. N., Turney, C. S., Spooner, N. A., Kamminga, J., Brown, G., & Cooper, A. (2018). When did Homo sapiens first reach Southeast Asia and Sahul? *Proceedings of the National Academy of Sciences*, 115(34), 8482–8490.
- OECD. (2021). *Governance for development*. <https://www.oecd.org/development/governance-for-development.htm>
- Oli, N., Vaidya, A., & Thapa, G. (2013). Behavioural risk factors of noncommunicable diseases among Nepalese urban poor: A descriptive study from a slum area of Kathmandu. *Epidemiology Research International*, 2013.
- Ostrom, E., Gardner, R., Walker, J., Walker, J. M., & Walker, J. (1994). *Rules, games, and common-pool resources*. University of Michigan Press.

- OVC-TTAC. (2021). Community-based partnerships [Government]. Human Trafficking Task Force E-Guide:Strengthening Collaborating Respo9nseth. <https://www.ovcttac.gov/taskforceguide/eguide/3-operating-a-task-force/31-task-force-membership-and-management/members/community-based-partnerships/>
- Pal, S., Banerjee, A., & Maity, A. (2020). Traditional Indian medicinal plants in the treatment of patients infected with human Coronavirus 2019 (SARS-CoV-2): A Review. *IOSR Journal of Pharmacy and Biological Sciences*, 15(2).
- Panthi, J., Aryal, S., Dahal, P., Bhandari, P., Krakauer, N. Y., & Pandey, V. P. (2016). Livelihood vulnerability approach to assessing climate change impacts on mixed agro-livestock smallholders around the Gandaki River Basin in Nepal. *Regional Environmental Change*, 16(4), 1121–1132.
- Pokhrel, S., Sedhai, Y. R., & Atreya, A. (2021). An increase in suicides amidst the coronavirus disease 2019 pandemic in Nepal. *Medicine, Science and the Law*, 61(2), 161–162.
- Posthumus, H., de Steenhuijsen-Piters, B., Dengerink, J., & Vellema, S. (2018). Food systems: From concept to practice and vice versa. Wageningen Economic Research. <https://library.wur.nl/WebQuery/wurpubs/fulltext/464054>
- Pyakurel, U. P. (2015). *Nepal-India Open Borders: Problems and Prospects*. Vij Books India Pvt Ltd.
- Ravikant. (2017). *Indo-Nepal open border: Interlinkages and interstate migration*. Gaurav Book Center Pvt. Ltd.
- Redcoat, R. (2019). History of Nepal [Wikipedia.org]. [https://commons.wikimedia.org/wiki/File:Greater_Nepal_\(with_Nepalese_Tibetan_war_expansions\).png](https://commons.wikimedia.org/wiki/File:Greater_Nepal_(with_Nepalese_Tibetan_war_expansions).png)
- Reisman, M. (1988). No man's land: International legal regulation of coercive responses to protracted and low level conflict. *Houston Journal of Intrnational Law*, 11(317). <http://www.hjil.org/articles/hjil-11-2-reisman.pdf>
- Rimal, G. N. (2002, April 1). The ties that bind. *Himal South Asian*. <https://www.himalmag.com/the-ties-that-bind/>
- Rimal, N. (2018). *A Grounded Theory of food security in Nepal: Surviving market fundamentalism [PhD Dissertation]*. Central Queensland University.

- Risk and Compliance Portal. (2020). Nepal corruption report. <https://www.ganintegrity.com/portal/country-profiles/nepal/>
- Robinson, J. A., & Acemoglu, D. (2013). *Why nations fail: The origins of power, prosperity and poverty*. Profile Books.
- Rubasundram, G. A., & Rasiah, R. (2019). Corruption and Good Governance. *Journal of Southeast Asian Economies*, 36(1), 57–70.
- Savoia, A., & Sen, K. (2012). Measurement and evolution of state capacity: Exploring a lesser known aspect of governance. *Effective States and Inclusive Development Research Centre Working Paper*, 10.
- Sayogo, D. S., Gil-Garcia, J. R., & Yuli, S. B. C. (2020). Determinants of Cross-boundary Information Sharing Success: Comparing Intra-agency, Inter-agency, and Cross-sectoral Collaboration Initiatives. 138–146.
- Schellekens, P., & Sourrouille, D. M. (2020). COVID-19 mortality in rich and poor countries: A tale of two pandemics? *World Bank Policy Research Working Paper*, 9260.
- Schwarz, R., Thapa, A., Sharma, S., & Kalaunee, S. (2020). At a crossroads: How can Nepal enhance its community health care system to achieve Sustainable Development Goal 3 and universal health coverage? *Journal of Global Health*, 10(1).
- Sen, A. (1999). *Development as freedom*. Anchor Books.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday.
- Shah, R. (2018). Corruption in nepal: An analytiCal study. *Tribhuvan University Journal*, 32(1), 273–292.
- Sharma, H. (2016). Ayurveda: Science of life, genetics, and epigenetics. *Ayu*, 37(2), 87.
- Shrestha, B. N. (2013). The natural environment and the shifting borders of Nepal. *Eurasia Border Review*, 4(2), 57–74.
- Siegert, F., Ruecker, G., Hinrichs, A., & Hoffmann, A. (2001). Increased damage from fires in logged forests during droughts caused by El Nino. *Nature*, 414(6862), 437–440.

- Simmons, E. (2013). *Harvesting peace: Food security, conflict, and cooperation* (Environmental Change and Security Program). Woodrow Wilson International Center for Scholars.
- Singer, R. (2020). The black death in the Maghreb: A call to action. *Journal of Medieval Worlds*, 2(3–4), 115–123.
- Snowden, F. M. (2019). The Third Plague pandemic: Hong Kong and Bombay. In *Epidemics and Society* (pp. 332–356). Yale University Press.
- Subedi, Y. R., Kristiansen, P., Cacho, O., & Ojha, R. B. (2021). Agricultural land abandonment in the hill agro-ecological region of Nepal: Analysis of extent, drivers and impact of change. *Environmental Management*, 67(6), 1100–1118.
- Sudmeier-Rieux, K., McAdoo, B. G., Devkota, S., Rajbhandari, P. C. L., Howell, J., & Sharma, S. (2019). Invited perspectives: Mountain roads in Nepal at a new crossroads. *Natural Hazards and Earth System Sciences*, 19(3), 655–660.
- Sumner, W. G. (1963). *Social Darwinism: Selected essays* (Vol. 7). Englewood Cliffs, NJ: Prentice-Hall.
- Sunam, R. K., & McCarthy, J. F. (2016). Reconsidering the links between poverty, international labour migration, and agrarian change: Critical insights from Nepal. *The Journal of Peasant Studies*, 43(1), 39–63.
- Syah, P. R. I., & Hartuti, P. (2018). Land Use and River Degradation Impact of Sand and Gravel Mining. 31, 09034.
- Tamang, K. K. (2013). *Practice of good governance and corruption control along Nepal-India border administration* [PhD Dissertation, Singhania University]. <http://103.69.125.248:8080/jspui/handle/123456789/47>
- Thapa, R. R. (2010). Security sector reform and development. In *Conflict peace and development: Theory and practice in Nepal*. Sangam Institute.
- Toscano, P. M. (2006). The study of global solutions: A postmodern systems thinking view of grounded theory/grounded action. *World Futures*, 62(7), 505–515.
- Transparency International. (2020). Corruption perceptions index. <https://www.transparency.org/en/cpi/2020/index/npl>

- UNDP. (2021a). COVID-19 and the SDGs: How the ‘roadmap for humanity’ could be changed by a pandemic. <https://feature.undp.org/covid-19-and-the-sdgs/>
- UNDP. (2021b). Human Development Report. United Nations Development Program. <http://hdr.undp.org/en/countries/profiles/NPL>
- UNU. (2020). COVID-19 fallout could push half a billion people into poverty in developing countries. United Nations University. <https://unu.edu/media-relations/releases/covid-19-fallout-could-push-half-a-billion-people-into-poverty-in-developing-countries.html>
- Upreti, Y. (2021). Issues in border security of Nepal. *Journal of APF Command and Staff College*, 4(1), 152–160.
- Ursul, A., & Ursul, T. (2018). Environmental education for sustainable development. *Future Human Image*, 9(1), 116.
- Vandebroek, I., Pieroni, A., Stepp, J. R., Hanazaki, N., Ladio, A., Alves, R. R. N., Picking, D., Delgoda, R., Maroyi, A., & Van Andel, T. (2020). Reshaping the future of ethnobiology research after the COVID-19 pandemic. *Nature Plants*, 6(7), 723–730.
- Vieira, J. B., Pierzchajlo, S., Jangard, S., Marsh, A., & Olsson, A. (2020). Perceived threat and acute anxiety predict increased everyday altruism during the COVID-19 pandemic.
- Vilallonga, M. A. (1998). Labor migration during the first phase of Basque industrialization: The labor market and family motivations. *The History of the Family*, 3(2), 199–219.
- WHO. (2019). Immunization stress-related response. A manual for program managers and health professionals to prevent, identify and respond to stressrelated responses following immunization (CC BY-NC-SA 3.0 IGO.). World Health Organization. <https://apps.who.int/iris/bitstream/handle/10665/330277/9789241515948-eng.pdf>
- Worldometer. (2021a). Coronavirus [Worldometers.info]. Coronavirus. www.worldometers.info/coronavirus/country/nepal/#graph-cases-daily
- Worldometer. (2021b). Global GDP this year. Worldometer. www.worldometers.info/gdp/
- Worldometer. (2021c, August 19). Nepal population [Www.worldometers.info]. <https://www.worldometers.info/world-population/nepal-population/>
- Yang, H., Dietz, T., Yang, W., Zhang, J., & Liu, J. (2018). Changes in human well-being and rural livelihoods under natural disasters. *Ecological Economics*, 151, 184–194.
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage.