PRI Publication No. 051

A Study of Nepal's Public Policy Processes: Policymakers' Perception and Use of Information in Decision-Making during the COVID-19 Pandemic

Research Report

नीति अनुसन्धान प्रतिष्ठान
Policy Research Institute
Kathmandu, Nepal

काठमाडौं विश्वविद्यालय
Kathmandu University
Dhulikhel, Nepal

A Study of Nepal's Public Policy Processes: Policymakers' Perception and Use of Information in Decision-Making during the COVID-19 Pandemic

Research Report

Chandra Lal Pandey, PhD
Deepak Kumar Khadka, PhD
Mani Ram Banjade, PhD
Mina Adhikari, PhD

नीति अनुसन्धान प्रतिष्ठान
Policy Research Institute
Kathmandu, Nepal

काठमाडौं विश्वविद्यालय
Kathmandu University
Dhulikhel, Nepal

Research Report No. 020

ISBN: 978-9937-9541-7-4 (Print)
ISBN: 978-9937-9541-6-7 (Electronic)

The views expressed in this paper are those of the authors and do not necessarily reflect the opinion and position of, or endorsement by, PRI. Dr. Deepak Kumar Khadka, one of the researchers of this research project declares no conflits of interest.

Suggested Citation:
Pandey, C. L., Khadka, D. K., Banjade, M. R., & Adhikari, M. (2022). *A study of Nepal's public policy processes: Policymakers' perception and use of information in decision-making during the COVID-19 pandemic.* [PRI Publication No. 051]. Kathmandu: Policy Research Institute.

Layout : Subin Ulak
Publication Date : July, 2022
Copies :

Policy Research Institute
Narayanhiti, Kathmandu, Nepal
E-mail: info@pri.gov.np
Web.: www.pri.gov.np
Phone: +977 1 4530517/4534979

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

APM	Attitude of Policymakers
ARC	Available Resource and Capacities
CCMC	COVID-19 Crisis Management Center
CDO	Chief District Officer
COVID-19	Coronavirus Disease
DRRM	Disaster Risk Reduction and Management
GoN	Government of Nepal
HDU	High Dependency Unit
ICU	Intensive Care Unit
ISB	Information Seeking Behavior
NHRC	Nepal Health Research Council
NPC	National Planing Commission
ONV	Organizational Norms and Values
PCR	Polymerase Chain Reaction
RDT	Rapid Diagnostic Test
SOP	Standard Operating Procedures
WHO	World Health Organization

नीति अनुसन्धान प्रतिष्ठान
Policy Research Institute

प.सं. :–
चनं. :–

मिति :–

Foreword

Policy Research Institute (PRI) has a broad mandate to carry out quality research to produce relevant knowledge to strengthen the public policies of the government of Nepal. To this end, it employs all modes of knowledge production, including in-house research, collaborative research and outsourcing as necessary. Among them, collaborative research with higher education institutions has been prominent. Such collaboration has two-fold benefits. One is an increased chance of human resource optimization and, as a result, a relatively better outcome. The other is an alignment of academic research to the policy needs of the nation.

Evidence-based and evidence-informed policymaking fundamentally requires high-quality knowledge of the relevant field, which can be generated only through collaboration with the institutions that have the domain knowledge. Aware of this knowledge dynamics, PRI has signed Memorandums of Understanding (MoUs) with nine higher education institutions and research institutions, including Kathmandu University, to promote collaborative research.

The study is a joint undertaking of PRI and Kathmandu University. The report probes deeper into how policymakers access, assess and make use of information for decision-making and what factors come into play along the way. The findings are expected to influence the development of a decision-making framework at the policy level as well as inspire broad and deep studies in this area of scholarship.

The study was undertaken by a team of experts comprising Dr. Chandra Lal Pandey, Dr. Deepak Kumar Khadka, Dr. Mani Ram Banjade and Dr. Mina Adhikari. I would like to thank the team for seeing through the study. Likewwise special thanks are due to Dr. Dipa Adhikari, Nirman Ojha, Prakriti Niraula and Saru Maharjan for their arduous efforts in collecting data dealing with research management issues. Prof. Dr. Sagar R. Sharma guided the study by sitting on the Advisory Committee formed to ensure the smooth implementation of the project. Dr. Bimala Rai, Dr. Hemant Ojha and Mr. Pushkar Khati also extended their support as Advisory Committee members. I would like to thank each of them for their support without which the study would not have been possible.

Thanks are also due to independent reviewers and the members of the PRI Publication Review and Recommendation Committee – Dr. Shobha Poudel, Dr. Hari Sharma Neupane, Mr. Dipendra Prasad Pant, Dr. Mandira Lamichhane Dhimal and Dr. Bikram Aaharya – who meticulously reviewed the draft report and provided useful comments that helped improve the quality of the report.

Bishnu Raj Upreti, PhD
Executive Chairperson
July 2022

नारायणहिटी, काठमाडौँ, नेपाल
फोन: ००९७७-१-४५३०५१४/४५३०५१७/४५३४९७९

Narayanhiti, Kathmandu, Nepal
Tel: 00977-1 4530514, 4530517, 4534979

Email: info@pri.gov.np
Website: www.pri.gov.np

Kathmandu University
Office of the Vice Chancellor

Foreword

It gives me an immense pleasure to see the first fruit of the Memorandum of Understanding for the research and academic cooperation and collaboration signed in April 2021 between Kathmandu University, a premiere institution promoting academic excellence and leadership in Nepal, and Policy Research Institute, a think tank of the government of Nepal devoted to generating high quality knowledge for public policy advancement in Nepal, in the form of the completion of the research "A Study of Nepal's Public Policy Processes: Policymakers' Perception and Use of Information in Decision-Making during the COVID-19 Pandemic" led and coordinated by Kathmandu University School of Arts.

The theme of the study is timely in terms of the unique research opportunity brought by the COVID-19 pandemic, and the findings are pertinent, significant, and highly practical in understanding the policy processes, both in a general situation and in an emergency situation. The research has also been instrumental in identifying major pathways for strengthening the policy making process and decision-making in Nepal. I congratulate the team of researchers for their intelligence and diligence in bringing out such an important research report. I also look forward to seeing more research and academic collaboration between our two institutions and other institutions sharing the common quest for high quality research aligned with societal and national needs in the future.

Prof. Dr. Bhola Thapa
Vice Chancellor

30 July 2022

Dhulikhel, Kavre, Nepal I +977 11 415001, 415100, 415200 I Fax: +977 415011
vc@ku.edu.np | info@ku.edu.np | **www.ku.edu.np** | GPO Box 6250, Kathmandu

Kathmandu University
School of Arts

Office of the Dean
School of Arts,
Kathmandu University,
Hattiban, Lalitpur

Preface

Policy decisions informed by rigorously established objective evidence always better serve the policy goals for improved quality of life for all. The practice of evidence-informed policy making is a more sophisticated, systematic and transparent process to facilitate well-informed decisions. However, studies in the past have made little substantive investigation on how Nepal's policy makers draw policy decision knowledge and the application of the knowledge acquired in policy-making. In this context, this study entitled, "A Study of Nepal's Public Policy Processes: Policymakers' Perception and Use of Information in Decision-Making during the COVID-19 Pandemic" led and coordinated by Kathmandu University School of Arts has made an important contribution. This research is timely to understand how policy makers of Nepal acquire knowledge and apply it in policy making in general context and in emergency context of COVID-19 pandemic. The findings of the study are practical and enlightening in understanding the policy process in both, the general and emergency situations. The study vividly presents the prospects and limitations of public policy making and offers concrete suggestions for strengthening policymaking processes and policy decision making in Nepal.

I would like to take this opportunity to express my sincere appreciation to the entire research team for their intelligence, diligence and tireless work to bring this report to its current shape. I would also like to thank Policy Research Institute (PRI) for this collaboration and look forward to materializing more research and academic collaboration between the two institutions in the future.

SCHOOL OF ARTS

Ms. Ekku Maya Pun
Acting Dean,
School of Arts, Kathmandu University
30 July 2022

कार्यकारी सारांश

नेपालमा सार्वजनिक नीति निर्माण कार्य – औपचारिक नीतिहरू तर्जुमा गर्नेदेखि सार्वजनिक प्रशासनका निर्णयहरूसम्म – मुख्यतया विद्यमान कानुनको कार्यान्वयन, राजनीतिक निर्देशनको पालना र कर्मचारीतन्त्रको अनुभवलाई प्रयोग गरेर भइरहेको छ। प्रमाणमा आधारित नीति निर्माणको अवधारणा नेपालका लागि नयाँ हो। १५औँ योजना (२०७६/७७ - २०८०/८१) मा स्वास्थ्य र सामाजिक क्षेत्रमा प्रमाणमा आधारित नीति निर्माण गर्ने सन्दर्भ उल्लेख छ (NPC, 2020)। कठोर वैज्ञानिक विधि अपनाई कुन कुराले काम गर्छ भनेर निर्क्योल गर्ने र सोही प्रमाणको आधारमा नीति बनाउने धारणा नै प्रमाणमा आधारित नीति निर्माण हो र यस्तो धारणा पहिले चिकित्सा क्षेत्रमा उत्पत्ति भई पछि त्यसलाई सामाजिक क्षेत्रमा समेत अनुकूलन गरिएको हो (Baron, 2018)। वैज्ञानिक ज्ञान अक्सर केही अनिश्चितताका साथ आएका हुन्छन्। अझ महत्त्वपूर्ण कुरा त नीति निर्माणको सन्दर्भमा वैज्ञानिक ज्ञानहरूले अन्य प्रकारका ज्ञानहरू र नीति प्रक्रियाका अनेक तत्त्वहरूसँग अन्तर्क्रिया गरेर आखिरमा केही सम्झौतासमेत गर्नुपर्ने हुन्छ। यसो हुँदा धेरैजस्तो सन्दर्भमा "प्रमाणमा आधारित नीति" भन्नु भन्दा "प्रमाण-सुसूचित नीति" भन्नु बढी सही हुन्छ (Cairney and Oliver, 2017; Chupein & Glennerst, 2018)।

वैज्ञानिक प्रमाण र अन्य सान्दर्भिक सूचना कसरी एकत्रित र प्रशोधन गरी नीति प्रक्रियामा प्रयोग गरिन्छ भन्ने विषय सार्वजनिक नीति, सार्वजनिक प्रशासन र सङ्गठन व्यवस्थापन क्षेत्रमा प्राज्ञिक अध्ययनको विषय हो। धेरै अध्ययनहरूले के देखाएका छन् भने नीति निर्माण र निर्णयहरू राजनीतिक प्रतिबद्धता, विभिन्न प्रकारका सूचना स्रोतहरू, सम्बन्धहरू र नीति कस्तो बन्दछ भन्नेमा नीतिमा कामगर्नेहरूको चासोमा भर पर्ने गरी प्रायः अति राजनीतिक वातावरणमा हुने गर्दछ (Bowen & Zwi, 2005; Oxman et al., 2009; Head, 2013, 2015; Snilstveit et al., 2016; Philips et al., 2020)। प्रमाणमा-आधारित निर्णय प्रक्रिया विशेष गरी महामारीको सङ्कटको बेला स्पष्ट देखिन्छ (Baekkeskov & Rubin, 2014; Baekkeskov, 2016) र कोभिड-१९ महामारीले त वास्तवमा नीति निर्माणमा प्रमाणको प्रयोगको आवश्यकता र जटिलतालाई झन् प्रकाश पारेको छ (Caestecker & Wissman, 2021; Gao & Yu, 2021; Rubin et al., 2021)। अभूतपूर्व प्रभावको र विश्वव्यापी तथा राष्ट्रियस्तरमा प्रतिकार्य गरिएको कोभिड-१९ महामारीले आपत्कालीन अवस्थामा प्रमाणमा आधारित र प्रमाण-सुसूचित नीति निर्माण अभ्यासको लागि एक अद्वितीय सन्दर्भ सिर्जना गऱ्यो। यस अवधिमा गरिएका केही अध्ययनहरूले प्रमाणमा आधारित निर्णय-प्रक्रियाले समान परिस्थितिहरूमा समान नीतिहरू नबनाउने र एक सन्दर्भबाट अर्को सन्दर्भले नसिक्नेसमेत अवस्था देखाइदिएको छ (Rubin et al., 2021)।

कोभिड-१९ विरुद्ध नेपालको नीतिगत प्रतिकार्य आकस्मिक स्वास्थ्य सेवा र व्यवस्थापनका लागि सङ्क्रामक रोग ऐन २०२० लाई सक्रिय गराएर तत्काल सीमा नियन्त्रण गरी प्रारम्भिक अवस्थामा नै

सुरु भएको हो। त्यसपछिका प्रतिकार्यहरूमा २०७६ फागुनमा उच्चस्तरीय कोभिड-१९ सङ्कट व्यवस्थापन केन्द्र (CCMC) को स्थापना र केस इन्भेस्टिगेशन एन्ड कन्ट्याक्ट ट्रेसिङ (CICT) टोलीहरूको गठन; २०७६ चैत ११ मा लगाइएको पहिलो बन्दाबन्दी; क्वारेन्टाइन र आइसोलेसन, निदान परीक्षण, शारीरिक दूरी, मास्क र सेनिटाइजेशनलगायत सार्वजनिक स्वास्थ्य प्रोटोकलका लागि निर्देशन र सहयोग; बिरामीहरूको क्लिनिकल व्यवस्थापन; राहत सामग्री वितरण र खोप; र प्रभावित आर्थिक क्षेत्रहरूलाई सहयोग गर्न मौद्रिक र वित्तीय नीतिहरूको घोषणा आदि मुख्य कार्यको रूपमा आए। संघ, प्रदेश र स्थानीय तहका सबै सरकारहरू नीति निर्माण, निर्णय र कार्यान्वयनमा विभिन्न रूपमा संलग्न भए।

यस अध्ययनको चासो नीति निर्माताहरू र निर्णयकर्ताहरूले नीति र निर्णयहरूको लागि आवश्यक जानकारी कसरी सङ्कलन र प्रयोग गर्छन् भनेर अन्वेषण गर्नु थियो। पूर्वशोधकार्यहरूको सर्वेक्षणले नेपालमा सार्वजनिक नीति प्रक्रियाको बारेमा अध्ययनको अभाव रहेको देखाएको छ। भएका केही अध्ययनहरूले राष्ट्रिय अनुसन्धान विरल रहेको देखाएको छ र ती अध्ययनहरूले नीति निर्माणका लागि पर्याप्त सान्दर्भिकता र गुणस्तर नभएको ज्ञान उत्पादन गरेका देखाएका छन् भने अनुसन्धान समुदाय र नीति समुदायबिच सञ्चार पनि कमजोर रहेको देखाएका छन् (Dhimal et al., 2016; Limbu, 2019; Dhakal, 2019; Pasanen et al., 2019; Tiwari et al., 2021)।

नीतिगत निर्णयहरूको लागि प्रमाण र जानकारी प्राप्त गर्न, प्रशोधन गर्न र प्रयोग गर्नका लागि व्यक्तिगत र सङ्गठनात्मक कारकहरू पहिचान गर्ने धेरै सैद्धान्तिक अध्ययनहरू (Lasswell, 1956; Kingdon, 2013; Bowen & Zwi, 2005) र नेपालको नीति प्रक्रियाको बारेमा गरिएका सीमित अध्ययनहरू (Dhimal et al., 2016; Pasanen et al., 2019; Tiwari et al., 2021) का निष्कर्षहरूलाई प्रयोग गर्दै यस अध्ययनको क्रममा निर्णयकर्ताहरूले सूचनाको अधिग्रहण, प्रशोधन र प्रयोग कसरी गर्दछन् र त्यसमा के के कारकहरूले भूमिका खेल्दछन् भन्नेबारे एक वैचारिक रूपरेखा विकास गरिएको थियो। त्यसपछि हाम्रो अनुसन्धान उद्देश्यहरू तय गरिएको थियो। अध्ययनको समग्र उद्देश्य नीति निर्माताहरूको ज्ञानका स्रोतहरू, ज्ञान प्राप्तिको प्रक्रिया, नीतिहरू बनाउन ज्ञानको प्रयोग र निर्णयलाई नक्साङ्कन गर्नु थियो र यसका विशिष्ट उद्देश्यहरू निम्नानुसार थिए:

१. नीतिगत निर्णयहरू गर्नका लागि नीतिनिर्माताहरू भर परेका सूचनाका स्रोतहरू पहिचान गर्नु।

२. नीति निर्माताहरूमा सूचनाको पहुँच र प्रशोधनलाई प्रभाव पार्ने कारकहरूको पहिचान र विश्लेषण गर्नु।

३. सूचना खोज्ने व्यवहार र ज्ञान प्रयोग गर्ने प्रक्रियालाई प्रभाव पार्ने संस्थागत र सामाजिक/राजनीतिक कारकहरूको पहिचान र विश्लेषण गर्नु।

तीन तहका सरकारका नीतिनिर्माताहरू, निर्णयकर्ताहरू, नीति कार्यान्वयनकर्ता, सल्लाहकार र सहजकर्ताहरू, जसलाई यस अध्ययनमा सामूहिक रूपमा "नीतिनिर्माता" भनी जनाइएको छ, उनिहरूका

धारणा र अनुभवको जानकारी सङ्कलन गर्न परिमाणात्मक सर्वेक्षण र गुणात्मक गहिरो अन्तर्वार्ताको संयोजन गरी मिश्रित अनुसन्धान विधि प्रयोग गरिएको थियो । सूचनाको स्रोत, सूचना खोज्ने व्यवहार, सङ्गठनात्मक मापदण्ड र मूल्यहरू, नीतिनिर्माताहरूको मनोवृत्ति र उपलब्ध स्रोत तथा क्षमताहरूका विषयवस्तुहरू समेटेर प्रश्नावली विकास गरिएको थियो । गुणात्मक खण्डका लागि सूचनाका स्रोत, सूचनाको गुणस्तर, सूचनामा पहुँच, सूचनाको प्रयोग र राजनीतिक ज्ञानका विषयवस्तु समेटिएका अर्धसंरचित प्रश्नहरू प्रयोग गरिएको थियो । यी शोध उपकरणहरूलाई उत्तरदाताहरूमाझ पूर्व-परीक्षण गरी अनुसन्धान टोलीमाझ गरिएको छलफलको आधारमा परिमार्जन गरिएको थियो ।

परिमाणात्मक सर्वेक्षणको लागि सङ्घीय सरकारका नीतिनिर्माताहरू र बागमती प्रदेशका एक महानगरपालिका, दुई नगरपालिका र दुई गाउँपालिकासहित पाँच स्थानीय तहका उत्तरदाता समावेश गर्न सुविधात्मक नमुना विधि प्रयोग गरी ७१ जना उत्तरदाताहरूबाट सूचना सङ्कलन गरिएको थियो । यसमा प्रधानमन्त्रीको कार्यालय, सङ्घीय स्वास्थ्य तथा जनसङ्ख्या मन्त्रालय, गृह मन्त्रालय, विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन प्राधिकरण, उच्चस्तरीय कोभिड-१९ सङ्कट व्यवस्थापन केन्द्र, प्रादेशिक तहमा मुख्यमन्त्रीको कार्यालय, सान्दर्भिक मन्त्रालयहरू, विपद् जोखिम न्यूनीकरण तथा व्यवस्थापनका प्रादेशिक समिति, विपद् जोखिम न्यूनीकरण तथा व्यवस्थापन जिल्ला समिति र विपद् जोखिम न्यूनीकरण तथा व्यवस्थापनका स्थानीय निकायका व्यक्तिहरू र वडाध्यक्षहरूसमेत रहेका छन् । सर्वेक्षण र अन्तर्वार्ता २०७७ चैत २० देखि २०७८ असार ४ सम्मको अवधिमा गरिएको थियो । यो अवधिमा नेपालमा दोस्रो पटक लकडाउन लागू भएकाले तथ्याङ्क सङ्कलन कार्यमा असर परेको थियो । उदाहरणका लागि, सर्वेक्षणको लागि २०० व्यक्तिहरूलाई योजना बनाएर सम्पर्क गरिएकोमा, ७१ उत्तरदाताहरूबाट मात्र तथ्याङ्क सङ्कलन गर्न सकियो । सर्वेक्षण तथ्याङ्क विश्लेषण गर्न एसपीएसएस प्याकेज प्रयोग गरिएको थियो । तथ्याङ्क प्रविष्टि र प्रशोधनपछि प्रत्येक प्रश्नको साथसाथै र दुई वा बढी प्रश्नहरूको तुलनात्मक विश्लेषण गरिएको थियो । सर्वेक्षणको नतिजालाई तालिका र चित्रात्मक आँकडामा प्रस्तुत गरिएको थियो । गुणात्मक तथ्याङ्क सङ्कलनका लागि सङ्घीय, प्रदेश र स्थानीय तहका २१ जना व्यक्तिहरूसँग अर्धसंरचित प्रश्नहरूको आधारमा अन्तर्वार्ता गरिएको थियो । कोभिड-१९ सङ्कट र बन्दाबन्दी अवस्थाको बिचमा तथ्याङ्क सङ्कलनको लागि धेरैजसो अनलाइन प्लेटफर्महरू (जूम) प्रयोग गरिएको थियो । अन्तर्वार्ताहरू रेकर्ड गरेर पछि लिखित रूपमा उतार गरिएको थियो र तिनमा विषयवस्तु र अन्तर्वस्तुको पहिचान गर्न विश्लेषणसमेत गरिएको थियो । नीति प्रक्रियाहरू, नीति निर्माणका नमुनाहरू, ज्ञानको लागि सूचना स्रोतहरू र नीतिसम्बन्धी दस्तावेजहरू अन्वेषण गर्न उपलब्ध भएका द्वितीयक पूर्वशोधकार्यको विस्तृत समीक्षा पनि गरिएको थियो ।

सार्वजनिक नीतिसम्बन्धी पूर्वशोधकार्यहरूको समीक्षाबाट नीति निर्माण प्रक्रियाले कार्यसूची निर्धारण, नीति तर्जुमा, अवलम्बन, कार्यान्वयन र समीक्षा गरी पाँच वटा फराकिलो चरणहरू पछ्याएको हुँदो रहेछ र राजनीतिक प्रतिबद्धता, किसिम किसिमका सूचनाका स्रोतहरूको उपलब्धता, सम्बन्ध र नीति

परिणाममा नीति खेलाडीहरूको चासो जस्ता विभिन्न कारकहरूले निर्माण गरेको उच्च राजनीतिक वातावरणमा नीति निर्माण हुने रहेछ भन्ने पत्ता लाग्यो । "प्रमाणमा आधारित नीति निर्माण" ले यस्तो तर्कसङ्गत ढाँचालाई बुझाउँछ जहाँ वैज्ञानिक प्रमाणहरूलाई नीतिको आधारको रूपमा लिइन्छ । अर्कोतिर, "प्रमाण-सुसूचित नीति निर्माण" ले प्रमाणका साथै नीति प्रक्रियाको क्रममा गरिएका अपरिहार्य व्यावहारिक सम्झौताहरूलाई ध्यानमा राख्दछ । प्रमाणका अंशहरू सधैँ नीतिमा ठ्याक्क प्रयोग गर्न योग्य सूचनाका रूपमा रहेका हुँदैनन् । यही कारणले गर्दा "प्रमाणमा आधारित" र "प्रमाण-सुसूचित" शब्दावलीहरू नीति शोध साहित्यमा प्रायः पर्यायवाचीको रूपमा प्रयोग गरिएको हुन्छ । यस अध्ययनका सहभागीहरूले "प्रमाण" र "सूचना" शब्दावलीलाई खुकुलो अर्थमा प्रयोग गरेका छन् र यसबाट निर्णय प्रक्रियामा सूचनाको प्रयोग कडिकडाउदेखि खुकुलो रूपमासम्म प्रयोग हुने कुरा जनिएको छ । यो कुरा नीति प्रक्रियामा "प्रमाणमा आधारित" र "प्रमाण-सुसूचित" अवस्थालाई एक अर्काको लागि पर्यायवाची रूपमा प्रयोग हुन सक्ने अवस्थासँग मिलेको पनि छ ।

नीति प्रक्रियाहरूको अध्ययन विश्वव्यापी रूपमा एक विशाल प्राज्ञिक कार्य हो । तर, नेपालमा अभ्यास भएका नीति प्रक्रियाको अध्ययन भने निकै कम छ । सामान्य समयमा र आपत्कालीन समयमा नीति प्रक्रियाहरूले फरक फरक मापदण्डहरू पछ्याउन सक्छन् । कोभिड-१९ महामारीले नीति निर्माताहरूका लागि अनिश्चित र द्रूत रूपमा विकास भइरहेको अवस्थामा द्रूत निर्णय लिनुपर्ने एउटा अभूतपूर्व चुनौती ल्यायो । नेपालमा कोभिड-१९ विरुद्ध प्रमुख प्रतिकार्यहरू आपत्कालीन स्वास्थ्य सेवा, व्यवस्थापन र द्रूत प्रतिकार्य टोली गठनको लागि सङ्क्रामक रोग ऐन २०२० लाई सक्रिय गराई नीतिगत निर्णय र गतिविधिसहितका शृङ्खलाहरू सहित सुरु भयो । यी निर्णय र गतिविधिहरूमा उच्चस्तरीय कोभिड-१९ सङ्कट व्यवस्थापन केन्द्र (CCMC) को स्थापना, केस इन्भेस्टिगेशन एन्ड कन्ट्याक्ट ट्रेसिङ (CICT) टोलीहरूका गठन, सीमा नियन्त्रण, बन्दाबन्दी, क्वारेन्टाइन, निदान परीक्षण, भौतिक दूरी, मास्कको प्रयोग र सेनिटाइजेशन सहितका सार्वजनिक स्वास्थ्य प्रोटोकल, बिरामीहरूको क्लिनिकल व्यवस्थापन, राहत सामग्रीको वितरण, खोप कार्यक्रम र प्रभावित आर्थिक क्षेत्रहरूलाई सहयोग गर्न बनाइएका मौद्रिक र वित्तीय नीतिहरू पर्दछन् । संघ, प्रदेश र स्थानीय तहका सरकारहरू नीति निर्माण, निर्णय र कार्यान्वयनमा विभिन्न रूपमा संलग्न थिए ।

यस अध्ययनको उद्देश्य भनेको अख्तियारवाला अधिकारीहरू, सल्लाहकारहरू र कार्यान्वयनमा संलग्न कर्मचारीहरू, जसलाई यस अध्ययनमा सामूहिक रूपमा नीति निर्माताहरूको रूपमा लिइएको छ, ले वास्तविक जीवन परिस्थितिहरूमा कोभिड-१९ महामारीको प्रतिकार्यमा नीति निर्माण र निर्णय कार्यका लागि सान्दर्भिक सूचनाहरू कसरी सङ्कलन, प्रशोधन र प्रयोग गरे भनेर पत्ता लगाउनु थियो । यस अध्ययनले सूचनाका स्रोत, सूचना खोज्ने व्यवहार, सङ्गठनात्मक मापदण्ड र मूल्यहरू, नीति निर्माताहरूको मनोवृत्ति र उपलब्ध साधन स्रोत र क्षमताहरू सहित नीति निर्माणका लागि सूचना प्रशोधनका विभिन्न पाटाहरूको प्रकृति पहिचान गरेको छ । यस अध्ययनका निष्कर्षहरू तल प्रस्तुत गरिएका छन् । यी निष्कर्षहरू अन्यत्र गरिएका अध्ययनहरूको निष्कर्षसँग व्यापक रूपमा मिल्दोजुल्दो

छन् र यिनले नेपालको नीति प्रक्रियाको अनुसन्धानमा रहेको खाडलबारे प्रकाश पार्नुका साथै नीति प्रक्रियामा सुधार र सबलीकरणका क्षेत्रहरू पहिचान गर्न मद्दत गरेका छन् ।

१) नीतिनिर्माताहरूले आफ्ना सञ्जाल, मिडिया, स्वअवलोकन, सरकारी दस्ताबेजहरू, परामर्शहरू, विशेषज्ञहरूको विचारहरू, सामाजिक सञ्जाल, जनमत, संस्थाका वेबसाइटहरू, अनुसन्धान, वैज्ञानिक प्रकाशन र वैचारिक विश्वासलगायत सूचनाका सबै स्रोतहरू प्रयोग गरे वा त्यसमा सहज थिए । स्रोतहरूको प्राथमिकतामा कुनै नाटकीय अन्तर थिएन, यद्यपि सङ्घीयस्तरका नीति निर्माताहरूले अन्तर्राष्ट्रिय प्रोटोकलहरू धेरै खोजे भने स्थानीयस्तरका नीति निर्माताहरू सरकारी निर्देशन र परिपत्रहरूमा बढी भर परेका थिए । नीति निर्माताहरूलाई सल्लाह दिने भूमिका भएका विशेषज्ञहरूले चाहिँ अधिक प्राज्ञिक प्रकृतिका स्रोतहरू र वैज्ञानिक अनुसन्धान निष्कर्षहरू खोजे ।

२) सूचना खोज्ने व्यवहारलाई प्रभाव पार्ने कारकहरूको बारेमा नीति निर्माताहरूको धारणा चाहिँ उनीहरूलाई बताइएको सबै कारक तत्त्वहरूमा धेरथोर समान रूपले बनेको पाइयो । यस्ता तत्त्वहरूमा आर्थिक अवस्था, नयाँ वैज्ञानिक खोजहरू, प्रविधिमा हुने परिवर्तन, स्वार्थ समूह, राजनीतिक गतिविधिहरू, व्यापारिक लबिङ, संस्थागत प्रोत्साहन, सामाजिक मान्यता, व्यक्तिगत चासो, सूचनाको पहुँच र प्रशोधन गर्ने क्षमता, सूचनाका स्रोतहरूको विश्वसनीयता, सूचनाको सान्दर्भिकता, सहज पहुँचयोग्य र प्रयोगयोग्य सूचनाको उपलब्धता रहेका छन् । व्यापारिक लबिङमा चाहिँ उत्तरदातामाझ केही कम सहमति देखियो । यद्यपि, सङ्घीयस्तरका नीतिनिर्माताहरूले व्यापारिक लबिङलाई कुनै खास सन्दर्भमा कर्मचारीतन्त्रीय चासोपछि अर्को अतिरिक्त कारकको रूपमा पहिचान गरेका थिए । आपत्कालिन अवस्था र सूचना अभावले पनि सूचना खोज्ने व्यवहारलाई प्रभाव पार्छ । यस्तो अवस्थामा अक्सर सेलिब्रेटी विज्ञहरूको प्रभावमा बन्न पुगेको जनभावनाले प्रभावित पारेको किसिमको निर्णय हुने गर्दछ । सामान्य समयमा लिइने नीतिगत निर्णयहरू र आपत्कालिन अवस्थामा लिइने नीतिगत निर्णयबिचको भिन्नता पनि यस अध्ययनमा प्रकट भएको छ । सामान्य समयमा अधिक बलियो वा अधिक वैध सूचनाहरू आवश्यक हुँदा रहेछन् ।

३) अधिकांश नीति निर्माताहरू सूचनाको विश्वसनीयता महत्त्वपूर्ण हुन्छ भन्ने कुरामा सहमत भए । तर, सूचनाको विश्वसनीयता भन्दा पनि सूचनाको सान्दर्भिकता र प्रयोग सहजतालाई बढी महत्त्व दिएको पनि पाइयो । नीतिनिर्माताहरूले के पनि स्वीकार गरे भने सूचना प्रमाणीकरण समय लाग्ने काम हो । हाम्रो कर्मचारीतन्त्रमा सूचना प्रणालीको अभाव र त्यसमाथि संस्थामा आउने नयाँ अधिकारीहरूलाई ज्ञान र सूचना नदिईकन अधिकारीहरू बारम्बार सरुवा गर्ने संस्कृतिले अवस्था झन् खराब बनाएको छ ।

४) विद्यमान नियामक संयन्त्र र सरकारको जनादेश, समर्थन, इच्छा र प्रमाण-सुसूचित नीति बनाउनको लागि चासो नै नीति निर्माण गर्न अनुकूल सङ्गठनात्मक संस्कृति र वातावरणको

लागि महत्त्वपूर्ण तत्त्वहरू हुन् भन्ने नीति निर्माताहरू सहमत थिए । सहभागीहरूले बाधापूर्ण प्रशासनिक संरचना र सङ्गठनात्मक परिवर्तनप्रति स्वयम् नीतिनिर्माताहरूको प्रतिरोधलाई प्रमाण-सुसूचित नीति निर्माण प्रक्रियामा बाधा पुऱ्याउने कारकहरूको रूपमा पहिचान गरे । गुणात्मक अध्ययनले यिनै कारकहरूका परिस्थितिहरूसहित थप प्रकाश पारेको छ । नीति प्रक्रियालाई तहगत प्रशासनिक प्रणाली र अन्तरसंस्थागत प्रतिस्पर्धाले निर्देशित गरेको देखियो ।

५) सङ्गठनात्मक स्रोत र क्षमतालाई पनि नीति निर्माणमा महत्त्वपूर्ण कारकका रूपमा पहिचान गरियो । कोभिड-१९ बारे नीतिगत पूर्वाधार र ज्ञानको प्रारम्भिक अभाव, विश्व स्वास्थ्य सङ्गठनमा प्रारम्भिक नीति निर्भरता, अन्तर्राष्ट्रिय अनुभवहरूको क्रमशः सिकाइ र अन्ततः सरकारी दिशानिर्देश र स्थानीय तथ्यका आधारमा स्थानीय विशिष्ट आवश्यकताहरूलाई सम्बोधन गर्नुले क्रमिक नीति सुदृढीकरणको अवस्था देखायो ।

६) नीति निर्माताहरूको अनुकूल मनोवृत्तिलाई प्रभाव पार्ने कारकहरूमा सामाजिक प्रतिष्ठा र मान्यता मा अभिवृद्धि, सङ्गठनात्मक प्रोत्साहन, पारस्परिक लाभ र समर्थन, अरूलाई गरिने मद्दतबाट प्राप्त हुने आनन्द र शक्तिको प्रभाव रहेका भेटियो ।

७) राष्ट्रियस्तरमा कोभिड-१९ लाई सम्बोधन गर्ने नीति निर्माणमा संलग्न नीतिनिर्माताहरूले भने सूचना-समर्थित नीतिहरू, प्राज्ञिक व्यक्तिहरू र विज्ञहरूसँगको संलग्नता, सरकारी उच्चस्तरीय समन्वय संयन्त्र, अनुसन्धान संस्थाहरूले उपलब्ध गराएका द्रुत अनुसन्धान र विश्लेषण अनि विश्वसनीय स्रोतहरूको प्रयोग जस्ता अपेक्षाकृत व्यावसायिक प्रक्रिया प्रयोग गरेको दावी गरे ।

८) नीति निर्माणमा सबैभन्दा महत्त्वपूर्ण बाधाहरूमा भरपर्दो सूचनामा सीमित पहुँच, वित्तीय स्रोतको कमी, राजनीतिक इच्छाशक्तिको कमी, ज्ञान र सीपको कमी पाइए । स्रोत साधन, राजनीतिक इच्छाशक्ति, मनोवृत्ति, सङ्गठनात्मक र व्यावसायिक संस्कृति, क्षमता र सूचनाका स्रोतहरूमा गरिने विश्वासले नीति निर्माणमा कुन हदसम्म सूचनाको प्रयोग हुन्छ भन्ने कुरा निर्धारण गर्ने रहेछ । कोभिड-१९ को सन्दर्भमा, सूचनाको अत्यधिकता, गलत सूचना र झुटा सूचना जस्ता अवस्थालाई पनि अवरोधका रूपमा पहिचान गरिएको थियो । नीतिगत निर्णयहरूको कार्यान्वयनमा चाहिँ उच्चतहको दिशानिर्देशहरूमा कठोरता वा लचिलोपनको कमी र स्रोतहरूको अभाव प्रमुख बाधाहरू थिए । सरकारका सबै तहहरूमा अन्तर संस्थागत समन्वयको अभाव मुख्यतया नीति कार्यान्वयनमा तर नीति निर्माण र नीतिहरूको समीक्षामा पनि अर्को प्रमुख बाधाको रूपमा देखा पऱ्यो । अन्तमा, दीर्घकालीन प्रभावलाई विचार नगरी तत्काल समस्याहरूलाई सम्बोधन गर्ने एक पटके नीतिगत निर्णयहरू पनि कोभिड-१९ को समयमा देखियो ।

यस अध्ययन, छलफल र शोध साहित्यहरूको समीक्षाको निष्कर्षको आधारमा सामान्य तथा आपत्कालीन अवस्थाको लागि नीति र निर्णय प्रक्रियामा सुधार गर्न निम्न नीतिगत सिफारिसहरू गरिएको छ ।

१) *निर्णय प्रक्रियामा प्रमाणको प्रयोगको लागि अधिनीति (meta-policy)* - नीति निर्माणको लागि

आमरूपमा नीति चक्र पछ्याउनु पर्ने एक अधिनीति हुनुपर्छ र निर्णयकर्ताको लागि स्थायी दिग्दर्शन वा मानक सञ्चालन कार्यविधि हुनुपर्छ जसले निर्णयकर्तालाई स्पष्ट रूपमा के निर्देशन देओस् भने कुनै पनि निर्णयको लागि पहिलो कदम भनेको सबै सान्दर्भिक सूचनाहरू सङ्कलन गरिएको छ र तिनीहरूको सान्दर्भिकता र विश्वसनीयताका जाँच गरेर प्रयोग गरिएको छ भनी सुनिश्चित गर्ने । यसका लागि सुशासन (व्यवस्थापन तथा सञ्चालन) नियमावली २०६४ लाई परिमार्जन गरी यस्ता निर्देशनहरू थप्न सकिन्छ ।

२) *सबल ज्ञान बिचौलिया पद्धति* - आपत्कालीन अवस्थामा बाह्य सहयोगी समूहबाट सहयोग लिन सकिन्छ । तर, यो पहिले नै अवस्थित सल्लाहकार प्रणालीको परिपूरक हुनुपर्छ । सुशासन (व्यवस्थापन र सञ्चालन) नियमावली २०६४ मा सल्लाहकार नियुक्त गर्ने व्यवस्था छ (दफा २२-२३) । बाह्य सहयोगी समूहबाट सहायता प्राप्त गर्ने सम्भावना पहिचान गर्ने नयाँ प्रावधान र सहयोगको संयन्त्रका लागि सामान्य दिशानिर्देशहरू यस उद्देश्यका लागि पर्याप्त हुनेछन् । प्रमाण-सुसूचित सार्वजनिक नीति निर्माणको बृहत् उद्देश्यको लागि चाहिँ अनुसन्धान र नीतिबिचको सन्धिस्थलको संरचनात्मक सुदृढीकरण गर्नुपर्छ ।

३) *नीति अनुसन्धानको लागि एक साझेदारको रूपमा प्राज्ञिक क्षेत्र* - प्राज्ञिक अनुसन्धान भनेको यसको विधागत सीमितता र खास किसिमको ज्ञान मीमांसा पद्धतिले गर्दा नीतिमा प्रयोग गर्न तयार प्रमाणको रूपमा हुँदैन जसले गर्दा नीति निर्माणमा यसको सान्दर्भिकता कम हुन जान्छ । हाम्रा अनुसन्धानकर्ताहरूलाई बढी नीति-सान्दर्भिक ज्ञान उत्पादन गर्न थप स्रोतसाधन, अभिमुखीकरण र उत्प्रेरणाका साथ प्रोत्साहन गरिनुपर्छ भन्ने स्पष्ट देखिन्छ । तसर्थ, नीति अनुसन्धानमा योगदान पुऱ्याउन प्राज्ञिक समुदायलाई अभिमुखीकरण र प्रोत्साहन गर्ने नीति र संयन्त्र बनाउनु पर्छ ।

४) *संस्थागत स्मृति र भण्डारण* - नीति निर्माणमा प्रयोग हुने सूचनाहरूको संस्थागत स्मृतिको लागि प्रणालीको अभाव एक महत्त्वपूर्ण समस्याको रूपमा देखा पऱ्यो । सार्वजनिक संस्थाहरूले गर्ने प्रत्येक प्रमुख निर्णय प्रक्रियाको लागि सूचना र सन्दर्भ सामग्रीहरूका भण्डारण गर्ने पद्धतिको विकास गर्नुपर्छ ।

५) *स्थानीयस्तरमा थप शक्ति र स्रोतहरू* - कोभिड-१९ महामारीको प्रतिकार्यको सन्दर्भमा स्थानीयस्तरका निर्णयकर्ता र कार्यान्वयनकर्ताहरूले उच्च अधिकारीबाट प्राप्त आदेश र परिपत्रहरू स्थानीय आवश्यकता र अवसरहरूमा अनुकूलन गर्न अत्यन्तै कठिन अनुभव गरेको यस अध्ययनले देखाएको छ । स्थानीय सरकारलाई, चाहे सामान्य समय होस् वा आपत्कालीन अवस्था, सबै परिस्थितिहरूमा सेवाहरू प्रदान गर्नको लागि स्थानीय सरकारलाई थप शक्ति र स्रोत उपलब्ध गराउनु पर्छ ।

EXECUTIVE SUMMARY

Public policymaking in Nepal, from formulating formal policies to making public administration decisions, has been primarily based on the implementation of existing laws, following political guidance, and incorporating bureaucratic experience. The idea of evidence-based policymaking is new to Nepal. The15th Plan (2019/20 - 2023/24) makes reference to evidence-based policymaking in health and social sectors (NPC, 2020). The idea of evidence-based policymaking, which demands a rigorous scientific method to produce evidence for what works and making policies based on that, originated in the medical sector and was adapted in social sectors as well (Baron, 2018). In view of the fact that scientific evidence often comes with a degree of uncertainty, and, most importantly, interacts with several factors of the policy process and other forms of knowledge, to be compromised in the end, evidence-informed policymaking becomes a more accurate characterization of the policy process in most contexts (Cairney and Oliver, 2017; Chupein & Glennerst, 2018).

How scientific evidence and other relevant information is gathered, processed, and used in the policy process is a topic of study in the scholarship of public policy, public administration, and organization management. Several studies demonstrate that policymaking and decision-making often take place in a highly political context relying on various factors such as political pledges, availability of a wide variety of input sources, relationships, and outcome interests of policy actors (Bowen & Zwi, 2005; Oxman et al., 2009; Head, 2013, 2015; Snilstveit et al., 2016; Philips et al., 2020). Evidence-based decision-making is particularly prominent in policymaking during pandemic crises (Baekkeskov & Rubin, 2014; Baekkeskov, 2016) and the COVID-19 pandemic indeed has highlighted the need and the complexity of evidence use in policymaking (Caestecker & Wissman, 2021; Gao & Yu, 2021; Rubin et al., 2021). COVID-19, an epidemic of unprecedented effect and global and national responses, created a unique context for practising evidence-based and evidence-informed policymaking in an emergency situation. Some studies conducted in this period showed that evidence-based decision-making does not necessarily yield similar policies in similar circumstances, nor much learning between contexts (Rubin et al., 2021).

Nepal's policy response to COVID-19 started early on with the activation of the Infectious Disease Act of 1964 for emergency health service and management, and a series of policy decisions and activities to contain the spread of disease starting

from the border control and formation of high-level COVID-19 Crisis Management Center (CCMC) and Case Investigation and Contact Tracing (CICT) teams in March 2020; the first lockdown imposed on 24 March 2020; and instructions and support for quarantine and isolation, diagnostics tests, public health protocol including physical distance, use of mask and sanitization, clinical management of patients, distribution of relief material, vaccination and monetary and financial policies for supporting the impacted economic sectors. All levels of government including federal, provincial, and local levels were variously involved in policymaking, decisions, and implementation.

Our interest was to explore how policymakers and decision-makers collect and use the information required for policy and decisions. The literature survey showed there is a scarcity of studies on the public policy process in Nepal. The few studies exposed that national research is scarce, and, on top of that, they have produced information of insufficient relevance and quality for policymaking, and there is poor communication between the research community and policy community (Dhimal et al., 2016; Limbu, 2019; Dhakal, 2019; Pasanen et al., 2019; Tiwari et al., 2021). Drawing from several theoretical studies that identified individual and organizational factors for acquiring, processing, and using evidence and information for policy decisions (Lasswell, 1956; Kingdon, 2013; Bowen & Zwi, 2005), and informed by the few studies done on Nepal's policy process (Dhimal et al., 2016; Pasanen et al., 2019; Tiwari et al., 2021), we developed a conceptual framework for the acquisition, processing and use of information by decision-makers, with factors at play at those steps. We then set our research objectives. The overall aim of the study was to map policymakers' knowledge sources, acquisition process, and application of the knowledge to make decisions and policies, and the specific objectives were as follows:

1. Identify the sources of information policymakers rely on to make policy decisions.
2. Identify and analyze the factors influencing the access to and processing of information by policymakers.
3. Identify and analyze the institutional and socio-political factors that influence information-seeking behaviour and knowledge use process

We used a mixed method research design combining a quantitative survey and qualitative in-depth interview to collect information on the perception and experience of policymakers, decision-makers, implementers, advisors, and

facilitators at three levels of government, collectively identified as policymakers in this study. A questionnaire was developed around the themes of information source, information-seeking behaviour, organizational norms and values, the attitude of policymakers, and available resource and capacities. For the qualitative part, semi-structured questions covering the themes of sources of information, quality of information, access to information, use of information, and knowledge of politics were used. We revised these tools based on their pre-tests and discussion among the research team.

We used convenience sampling to include policymakers from the federal government, and five local level governments of Bagmati Province including one metropolitan, two municipalities, and two rural municipalities. For the quantitative survey, we received responses from 71 respondents which covered the Office of the Prime Minister, Federal Ministry of Health and Population, Ministry of Home Affairs, Disaster Risk Reduction and Management Authority, CCMC, office of the chief ministers, relevant ministries of Provincial government including members of Provincial Committee for Disaster Risk Reduction and Management, District Committee for Disaster Risk Reduction and Management and Local Committee for Disaster Risk Reduction and Management including the Ward Chairs of local governments. The survey and interview were conducted during the period between April 2, 2021 and June 18, 2021. The time coincided with the imposition of the second lockdown imposed in Nepal and affected the data collection activities in the field. For example, we had planned and contacted 200 individuals for the survey, but we managed to collect data from 71 respondents. We employed the SPSS package to clean and analyze the survey data. Data entry and cleaning were followed by analysis for each question and between two or more questions. The results of the surveys have been presented in tables and graphical figures. For qualitative data collection, we conducted in-depth interviews with semi-structured questions with 21 people from Federal, Provincial, and Local levels. We used mostly online platforms (Zoom) in the journey of data collection amidst this COVID-19 crisis and lockdown situation. Interviews were recorded, transcribed, and analyzed for themes and content. We also conducted an extensive desk review of existing secondary literature to explore policy processes, models of policymaking, the information sources of the knowledge base, and policy documents.

Desk review of literature on public policy revealed that the policymaking process follows five broad stages which are agenda setting, policy formulation, adoption, implementation, and review, and often takes place in a highly political context relying on various factors such as political pledges, availability of a wide variety of

input sources, relationships and outcome interests of policy actors. Evidence-based policymaking refers to a rational model where scientific evidence are taken as the basis for policy. Evidence-informed policymaking takes into account the evidence as well as inevitable practical compromises made during the process. Since pieces of evidence are not always in a form of information translatable to a policy, the qualifiers evidence-based and evidence-informed are often used interchangeably in the literature. The participants in this study used 'evidence' and 'information' loosely to indicate a spectrum of rigour and use of information in decision-making, concurring the interchangeability of the terms evidence-based and evidence-informed in the policy process.

The study of policy processes in various contexts is a huge scholarly enterprise worldwide. However, there is very little study on the policy process practised in Nepal. Policy processes in normal times and an emergency might follow different norms. COVID-19 pandemic brought a unique challenge for policymakers to make quick decisions in an uncertain and rapidly developing situation. Major policy responses to COVID-19 in Nepal started with the activation of the Infectious Disease Act of 1964 for emergency health service, management, and formation of a rapid response team, and a series of policy decisions and activities to contain the spread of disease starting from the formation of high-level COVID-19 Crisis Management Center (CCMC) and Case Investigation and Contact Tracing (CICT) teams, border control, lockdown, quarantine, diagnostics tests, public health protocol including physical distance, use of mask and sanitization, clinical management of patients, distribution of relief material, vaccination and monetary and financial policies for supporting the impacted economic sectors. All levels of government including federal, provincial, and local levels were variously involved in policymaking, decisions, and implementation. The objective of this study was to find how officials with authority, advisors, and personnel involved in the implementation collectively identified as policymakers collected, processed and used information relevant for policy and decision-making in real-life situations mostly focusing on the response to the COVID-19 pandemic. This study identified the nature of various aspects of information processing for policymaking including information source, information-seeking behaviour, organizational norms and values, the attitude of policymakers, and available resource and capacities. The findings are broadly in concurrence with the findings of studies done elsewhere and filled a gap in the research of the policy process in Nepal and also helped identify areas of reform and rectification.

1. Policymakers used or were comfortable with all sources of information including networks, media and observations, government documents, consultations, experts' views, social media, public opinion, and websites of organizations, research, scientific papers, and ideological faith. There was no dramatic difference in preference for sources, except that while federal-level policymakers sought international protocols, local-level policymakers relied on governmental directives and circulars. Experts with roles in advising policymakers sought more academic sources and scientific research findings.
2. Policymakers' perception regarding factors influencing information-seeking behaviour was more or less equally distributed among all factors presented to them which included economic conditions, new scientific findings, technological change, interest groups, political activities, business lobbying, institutional incentives, social recognition, personal interest, capacity to access and process information, the credibility of information sources, relevance of information context, easily accessible and useable information. Business lobbying as a factor was slightly less agreed upon. However, this was identified as a factor in addition to bureaucratic interest in a certain context by federal-level policymakers. Emergency situations and information deficits also influenced information-seeking behaviour often leading to decision-making influenced by public sentiments shaped by celebrity experts. A difference between policy decisions in a normal time and an emergency situation was also revealed, the former requiring more robust or more legitimate information.
3. Most policymakers agreed that the credibility of information is important. However, relevance and the ease of the use of information received more importance than credibility of information. Policymakers also recognized that validating information is time-consuming work and it is aggravated by a lack of information system in our bureaucracy and, furthermore, a culture of frequent transfer of officers without transfer of knowledge and information to incoming officers.
4. Policymakers agreed that existing regulatory mechanism and government's mandate, support, willingness, and interest for making evidence-informed policy are critical elements for conducive organizational culture/environment to formulate policy. Participants identified hindering administrative structure and policymakers' own resistance to organizational change as factors hindering the evidence-informed policymaking process. The qualitative study particularly shed more light on the hindering factors by being more specific

regarding the situations. Hierarchical administrative system and inter-agency competition were identified as factors dictating the policy process.

5. Organizational resources and capacity were also identified as important factors in policymaking. Lack of policy infrastructure and knowledge about COVID-19, initial policy dependence on World Health Organization (WHO), gradual learning of international experiences and finally responding to local specific needs based on governmental guidelines and local information exemplified the situation and course of policy strengthening.
6. The factors that influenced policymakers' favourable attitude included enhanced social reputation/recognition, organizational incentives, reciprocal benefits/support, the joy of helping others, and power influence.
7. Policymakers involved in policymaking for responding to COVID-19 at the national level claimed a rather relatively professional process including information-backed policies, engagement with academics and experts, high-level coordination mechanism of the government, quick research and analysis offered by the research institutions, and use of the trusted sources.
8. Limited access to reliable information, lack of financial resources, lack of political will, and lack of knowledge and skills were the most significant barriers in policymaking. Resources, political willingness, attitude, organizational and professional culture, capacities, and trust in information sources determined whether and to what extent use of information is allowed in policymaking. In the context of COVID-19, a situation like information overload, misinformation, and disinformation was also identified as barriers. Rigidity or lack of flexibility in higher-level guidelines and lack of resources were the major constraints in the implementation of policy decisions. Lack of inter-agency coordination at all levels of government surfaced as another major barrier mostly in implementation but also in policymaking and review of policies. Finally, one-off policy decisions to address immediate problems without consideration of the long-term implication were also seen during COVID-19.

Based on the findings of the survey, discussion and literature review we have put forward the following policy recommendation to improve the policy and decision-making process in normal as well as emergency situations.

1. Meta-policy for use of evidence in decision-making - There should be a meta-policy for policymaking to follow the policy cycle in general and have a

standing manual or Standard Operating Procedure for decision-making that clearly instructs the decision-maker to follow a procedure with a first step of ensuring all relevant information is collected, screened for their relevance and reliability and used. For this, the Good Governance (Management and Operation) Rules 2007 (2064) can be amended to add such instructions.

2. Strong knowledge brokering - In an emergency situation, assistance from an external support group can be taken. However, it better complements the already existing advisory system. The Good Governance (Management and Operation) Rules 2007 (2064) has provision for appointing advisors (Article 22-23). A new provision to identify the possibility of getting assistance from an external support group and general guidelines for the mechanism of assistance would be adequate for this purpose. For a larger purpose of evidence-informed public policymaking, structural strengthening of the research-policy interface is imperative.
3. Academia as a partner for policy research - Academic research by virtue of its disciplinary limitation and epistemology is not in a form of ready-to-use evidence which reduces its relevance to policymaking. A clear need emerges that our researchers must be encouraged with more resources, orientation, and incentives to produce more policy-relevant knowledge. We recommend working out a policy and mechanism for orienting and incentivizing academia for contributing to policy research.
4. Institutional memory and repository - The lack of a system for institutional memory of the information used in policymaking surfaced as a critical problem. We recommend for public organizations have a repository of information and references for each major decision process.
5. More power and resources at the local level - In the context of response to the COVID-19 pandemic, this study revealed that local-level decision-makers and implementers found the orders and circulars from the higher authority too rigid to adapt to local needs and opportunities. We recommend more power and resource to the local government for services to people in all situations, whether normal time or emergency situation.

CHAPTER ONE
INTRODUCTION

1.1 Research Objectives and Research Questions

This study is aimed to create a novel benchmark of how policymakers of Nepal obtain knowledge about the policy issues and how and to what extent they have used such knowledge in policy decisions. The overall aim of the study was to map policymakers' knowledge sources, acquisition process and application of the knowledge to make decisions and policies. The case in focus were policies, strategies, and guidelines developed to contain and build resilience against Coronavirus disease (COVID-19). The specific objectives of the study were to:

Table 1: Research Questions and Objectives

Objectives	Research Questions
1. Identify the sources of information policymakers rely on to make policy decisions.	1.1. What are the main sources of information available for policymakers? 1.2. What sources of information do policymakers consider to make policy decisions and policies? 1.3. To what extent are the sources of information considered by policymakers credible?
2. Identify and analyze the factors influencing the access to and processing of information by policymakers.	2.1. What factors influence policymakers' information-seeking behaviour for policymaking? 2.2. How do policymakers process the available information?
3. Identify and analyze the institutional and socio-political factors that influence information-seeking behaviour and knowledge use process (policy cycle).	3.1. How do policymakers use the knowledge they have acquired from different sources of information while making policy decisions? 3.2. Why do policymakers use the knowledge they have acquired from different sources of information while making policy decisions? 3.3. To what extent does the institutional and socio-political context influence their ability to use the knowledge acquired from multiple sources?

CHAPTER TWO
BACKGROUND STUDY

2.1 Review of Theories of Public Policymaking

Policymaking is a complex interactive and iterative process. Policy scientists note that policy is not a single, one for all act rather it is best conceived as a process (Anderson, 1978; Jenkins, 1978; Rose, 1976; Rose, 1969). It is not simply a technical task of the government as the policy process is influenced by the diverse nature of socio-economic, cultural-political and structural, and other environmental factors. These forces play crucial roles to set up the policy context, process, and outcomes and these factors situate differently in developing countries and developed countries. In this backdrop, we reviewed the key frameworks/models/theories available in the policy literature to explore, if any of these inform Nepal's policy process, and are presented in the table below:

Table 2: Frameworks/Models/Theories of Public Policy Process

S.N.	Framework/Model/Theory	Author
1.	Stages or heuristic framework	Lasswell (1956)
2.	Systems framework	Easton (1965)
3.	Advocacy coalition framework	Jenkins-Smith & Sabatier (1994)
4.	Multiple streams framework	Kingdon (2013)
5.	Punctuated-equilibrium framework	Baumgartner & Jones (1993)
6.	Institutional analysis and development framework	Ostrom et al. (1994)

The review of these six frameworks suggests that there are diversities as well as commonalities among these policy frameworks. The review identified that there are, at least, five common stages in each of these frameworks. These five stages include agenda setting, policy formulation, policy adoption, policy implementation, and policy assessment. In agenda setting, the focus is on how the problems have emerged and been recognized, how much the attention they have received and how they have been scrutinized or framed—at the expense of one or many items on the

list. In policy formulation, the focus is on how the options of policymaking are considered, decided, and communicated to. Whether research and evidence-based findings align the policy formulation process or the 'intuitive administrative knowledge or something similar' or 'the influence of interest groups' plays a dominant role in providing options for policy formulation. It can tell us whose voice is captured and which voices have been ignored. Policy adoption involves how policies are understood, interpreted, and taken forward by relevant agencies for implementation. Policy substance is mediated by various factors and actors during the process of policy adoption, and the role of interest groups, bureaucracy, and media are critical in the extent to which a policy is implemented against its words and spirit. In the stage of policy assessment, the impact of policy implementation in praxis is monitored and evaluated. While being monitored and evaluated, the fundamental focus is on whether the objectives of the initiatives have been achieved or not.

These frameworks only demonstrate the linear type stages of policymaking and do not clearly articulate how research or data is used as evidence for policymaking in all arenas of policy systems inclusive of health policy. Contemporary policy studies have explored the use of evidence in policymaking and practice (Bowen & Zwi, 2005; Oxman et al., 2009; Head, 2013, 2015; Snilstveit et al., 2016; Philips et al., 2020). These studies demonstrate that policymaking -often takes place in a highly political context relying on various factors such as political pledges, availability of a wide variety of input sources, relationships, and outcome interests of policy actors. The Stages or Heuristic Framework of Lasswell (1956) suggests that policymaking is a logical, rational, and linear process yet in this framework also it is difficult for evidence to remain intact since the evidence is likely to interact with 'context' before any policy and practice is adopted. An abundance of literature also concurs that the academic world and knowledge system and the world of policymakers are two separate communities, poorly connected, and motivated by different reward systems, often resulting in the traction between scientific research, policy, and practice (Caplan, 1979; Dunn, 1980; Bowen & Zwi, 2005; Philips et al., 2020).

Bowen and Zwi (2005) note that evidence-informed policy and practice involve three active stages of progression and are influenced by the policy context. The three stages are: 1) sourcing the evidence, 2) using the evidence, and 3) implementing the evidence. In this study, we also aimed to investigate the sources of information of policymakers and/or how they source the information; how they internalize the information they have sourced and how they use the evidence for policymaking and

then how they implement the policies made. Evidence-informed policymaking uses different types of information from a variety of sources in a variety of forms and the types of evidence can be research knowledge, information, experiential ideas, interests of policymakers, and political and economic contexts. The evidence-based policymaking is to demonstrate that it works to solve the problem, it is feasible, doable, and can be cost-effective however most of the available literature highlight that evidence means empirical research (Bowen and Zwi, 2005). Yet, a variety of other sources, inter alia, such as historical documents, individual and communal experiences, pieces of legislation, social norms, values and beliefs, politicians' knowledge and existing agreements and protocols need to be considered as evidence (Sibbald & Ronald, 1997; Elliot & Popay, 2000; Philips et al., 2020). Policy theories view the evidence as data/information which affects existing beliefs of important people about significant features of the problem under study and how the problem of the undertaking can be either solved or mitigated (Bardach, 2000). In complex issues, where access to research-backed evidence becomes costly or not easily available, advice from the academic fraternity or experts in the field is also sought (Dicks et al. 2013).

Evidence-based decision-making is particularly prominent in policymaking during pandemic crises (Baekkeskov & Rubin, 2014; Baekkeskov, 2016) and the COVID-19 pandemic indeed has highlighted the need and the complexity of evidence use in policymaking (Caestecker & Wissman, 2021; Gao & Yu, 2021; Rubin et al., 2021). The current COVID-19 pandemic has exposed that evidence-based decision-making does not necessarily yield similar policies in similar circumstances, nor much learning between contexts (Rubin et al., 2021). In Nepal's context, the use of evidence in policymaking is a poorly studied area (Dhimal et al., 2016; Limbu, 2019; Dhakal, 2019; Pasanen et al., 2019; Tiwari et al., 2021). Dhimal et al. (2016) based on interviews with researchers and policymakers have identified national and international research findings and stakeholder/experts consultation as the source of information for policymaking. It also identified that the promotion of systematic review and meta-analysis of studies can contribute to promoting evidenced based health policy and plan formulation in Nepal. However, national researchers do not meet a high standard. In a similarly conducted study by Tiwari et al. (2021), it was identified that preferential use of anecdotal evidence, poor credibility of information obtained, poorly targeted dissemination, inadequate policy-based research, and policymakers and researchers operating within the spheres of their own with a feeble link to channel the flow of information between them were major hurdles. The same study suggested the publication of a one-pager research brief, the

conduction of nationally representative surveys especially quantitative studies, the practice of cost-effectiveness study, and policymaker's involvement during the research as facilitators for evidence-based policymaking. Limbu (2019) has analyzed development policy focussing on National Planning Commission and identified the lack of policy study unit and limitations of the current National Statistical System in Nepal. Pasanen et al. (2019) explored factors and pathways for successfully implemented policies. It identified mandate, ownership and willingness of implementing bodies, supporters with high political capital, smart donor support, and absence of organized interest groups among opposers as factors and pathways for successful implementation of policies. Our study aims to probe into how policymakers and decision-makers acquire and process information relevant for decision-making in general as well as in an emergency situation like the COVID-19 pandemic.

We also highlight, inter alia, a number of factors such as historical documents/evidence, systematic data collection and research, pieces of national and international legislations, and communal experiences as major sources of information/knowledge for policymaking, therefore, we explore, in the next section, the history of pandemics to investigate how pandemics were dealt in the past and what insights they, as historical evidence, have transferred to contain the new-pandemic like COVID-19.

2.2 Review of Pandemics History: Athenian Plague to COVID-19

The global population is now badly affected by the COVID-19 pandemic. According to World WHO, by 17 June 2021, there have been 176,693,988 confirmed infection cases of COVID-19 including 3,830,304 deaths (WHO, 2021) however a cursory review of human history shows that human civilization in history has encountered a number of pandemics before the arrival of COVID-19 at the end of 2019 and survived in times when there were not modern medical revolutions. The Athenian plague had spread in 430 BCE at the time of the Peloponnesian War between Athens and Sparta as documented by Thucydides—the plague survivor. Some epidemiologists have suggested that this plague could have been the Ebola virus hemorrhagic fever (Dey, 2021).

The Black Death, which originated in China in the 14th century, was a pandemic of unprecedented scale caused by the bubonic plague. Its impacts were immensely severe from 1343 to 1356 as it reduced the global population from 450 million to 300 million only—killing almost 60% of the European population. It contributed to changes in socio-political and religious courses on the one hand while also ushered

in an era of innovation that created many labour-saving technologies owing to the lack of labourers because of the unprecedented plague deaths (Benedictow, 2008 cited in CDC, 2021). The Spanish Influenza (1918-1920) occurred in the middle of World War I and had devastating effects across the world even in the era of modern medicine. The true origin of the Spanish influenza was Haskell County, Kansas in the United States of America (Liang, et al. 2021). This influenza killed between 50 and 100 million people and infected almost 500 million people while the COVID 19 has infected nearly 1.76 billion people from across the globe, with 3.83 million deaths to date but it is continuing.

Although all of these pandemics caused significant negative impacts on the global economy throughout the history of human evolution and civilization, COVID-19 in our own time is gravely affecting all aspects of the human ecosystem with very high tolls of human deaths, endangering our social, cultural, political, economic, and educational systems. These pandemics inclusive of Ebola, avian influenza (H5N1) and the flu of different types occurred at different times in human history, as there was no treatment available when they occurred, they had one thing in common, which is 'highly contagious and communicable' character. In general, when an infected person coughs, sneezes, or talks, respiratory droplets are generated and transmitted into the air and then they can be inhaled by others nearby to be infected. Therefore, the best treatment was considered to be 'keeping away and/or social isolation' from the infected person. During Black Death and Spanish influenza pandemics, as there were no effective drugs or vaccines to treat at that time, people were ordered to wear masks. Keeping the mantra of frequent and thorough social distancing/isolation, trips outside the house were limited, schools, theatres and businesses were shut down and special arrangements were made to dispose dead bodies either in makeshift morgues or mass graves or a sanitized cremation (Barenblatt, 2004). The safety net measures of lockdown, social distancing/isolation, wearing masks, sanitizing and frequent hand-washing were commonly practised in the fight against the Black Death and Spanish flu pandemics and have been used for dealing with other contagious diseases including COVID-19.

Following the measures, evidence and learnings of containing the pandemics in the past, the WHO, aligning with International Health Regulations (2005), issued an advisory note for the public stating: a) Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water; b) Avoid touching your eyes, nose and mouth; c) Make wearing a mask a normal part of your daily routine and make sure it covers your nose, mouth and chin; d) Maintain at least a

1-meter distance between yourself and others and avoid crowded or indoor settings, keeping rooms well ventilated (WHO, 2021). The WHO provided all these guidelines, derived from the measures taken in the past pandemics, to all countries of the world including Nepal for dealing with COVID-19 and the most technologically advanced countries such as the USA, the UK, China and Russia engaged in pandemic research to produce vaccines and made the vaccines available in less than a year time.

2.3 Policy Provisions for Addressing Infectious Diseases in Nepal

The government of Nepal has enacted various laws, policies, and regulations in the areas of general health and emergency management. In this section, we briefly touch upon major provisions in order to draw some key insights into the nexus of health and public policy. The Infectious Disease Act of 1964 is a brief document enacted long before the promulgation of the federal Constitution of Nepal in 2015. The Constitution recognizes that every citizen has the right to free basic health and emergency health services. Every citizen of Nepal has an equal right to access to health services; the right to access to clean drinking water and sanitation and the right to be informed about the treatment of his or her health. The Constitution mandates that the State needs to increase its investment in the public health sector by increasing the number of state-owned health care centres/hospitals, health human resources, and health insurance services, ensuring access for all to quality health services. The National Health Policy 2019 (NHP 2076 BS) include policies to adopt integrated preparedness and response measures to combat epidemics and disasters, and provide access to basic and specialized emergency health services to the people.

Aligning with the mandate of the Constitution of Nepal (2015) the Disaster Risk Reduction and Management (DRRM) Act 2017 was enacted to manage disasters occurring from natural changes and human activities inclusive of emergency situations that negatively affect people's lifestyle and human development. The Act has envisioned six layers of disaster management bodies, which include the National Council to Local Committee for DRRM (GoN, 2017). This Act (Article 8-R) primarily envisions the threats of natural and anthropogenic disasters, including pandemics and health emergencies and notes that healthcare facilities and infrastructures need to be built in adequacy for emergency treatment needs. The Public Health Service (PHS) Act 2018 was enacted to make necessary legal provisions for implementing the right of citizens to obtain free basic health services and emergency health services guaranteed by the Constitution of Nepal, making the healthcare infrastructure robust. Chapter 2 of the Act clearly states that 'Every

citizen shall have the right to obtain quality health service in an easy and convenient manner' and 'No citizen shall be deprived of health service'.

The Act has a separate section as Chapter 6 on emergency health service and management. Section 48 of chapter six notes that there shall be a rapid response team and emergency physicians' group as prescribed in order to extend health service immediately during emergency circumstances. The Federal, Provincial and Local governments need to develop emergency health plans and enforce as required in consonance with the standards and directives determined by the Federal law. The Local Government may declare a state of public health emergency in accordance with the prevailing law. Provided that the disaster occurs beyond one Local body, the concerned Province, and if it occurs beyond one Province, the Government of Nepal may declare a state of public health emergency. Provisioning prevention, information, and treatment of infectious disease, the Act notes that if any person is found to have been affected by infectious diseases, immediate treatment needs to be arranged by the concerned health institution and health worker and the information about the disease needs to be passed to the concerned body of the Government of Nepal. Furthermore, health institutions need to make necessary arrangements for the treatment of patients with infectious diseases and conduct research studies in collaboration with the Local, Provincial and Federal governments.

While the Constitution of 2015, DRRM Act 2017, PHS Act 2018, and NHP 2019 highlight the federal structures and provisions roles to the three layers of governments, the IDA 1964 was brought into practice before the promulgation of the 2015 Constitution and therefore it prioritized district-level administration of unitary Nepal. However, the invoking of the IDA 1964 to control COVID-19 and introduction of the new ordinance called COVID-19 Crisis Management Ordinance 2021, provisioning the key role to Chief District Officer (CDOs), ignoring the roles of federal structures are concerns, requiring considerations even to future implementation of the federal system. While all these policies highlight on how to contain pandemics and punish the public in violation, there is little attention to research, development, and innovation to liberate people from pandemics.

2.4 COVID-19 Crisis Management Center (CCMC)

COVID-19 Crisis Management Center-Operations (CCMC-Ops) was established on 1 March 2020 by the cabinet decision of the Government of Nepal to cope with the first wave of COVID-19, and contain and fight the spread of COVID-19 employing various measures including, inter alia, imposing national and local

lockdown, quarantine and isolation wards establishment and management, strengthening Intensive Care Unit (ICU) bed, ventilator services and High Dependency Unit (HDU), and facilitating to conduct Polymerase Chain Reaction (PCR) and Rapid Diagnostic Test (RDT) examinations, and contact tracing. To implement these measures and procure medical gears and medicines, CCMC has taken a number of decisions, and we provide a summary of a notable number of decisions in the sections below. The CCMC directed for COVID-19 screening of passengers travelling to Nepal and imposed restrictions on holding seminars, big meetings and cross-border movements except in emergencies. A national lockdown was imposed from 24 March 2020 under the provision of IDA 1964, empowering the role of CDOs and even activating Local Administration Act 1972 at the expense of the roles of Provincial and Local governments provided by the Constitution of Nepal 2015, Provincial Laws, Local Government Operation Act 2017 and DRRM Act 2017. The nationwide lockdown was lifted on 21 July 2020 after four months of its imposition. The decision to lift the lockdown was taken on the same day when Nepal was having 150 confirmed cases on 21 July out of 4,000 tests and the adjoining states like Bihar and Uttar Pradesh were re-imposing strict lockdown measures.

On 17 April 2021 nationwide lockdown was re-imposed in the districts which had 200 or more than 200 infected active cases but in the case of Kathmandu and districts of Terai the active cases had to be more than 500, however, there was not any clear medical logic or evidence behind the number cuts. In case any district reached the active cases ceiling number, the CDO was authorized to impose lockdown under Infectious Disease Act 2020 (BS). On 26 April 2021, the CDOs of Kathmandu Valley imposed a lockdown as a public health measure to help slow the spread of COVID-19. When the lockdown was imposed to contain the second wave of COVID-19, grocery shops were allowed to open for a limited time of two hours in the morning for two weeks and then a complete shutdown for another week but then again the groceries were allowed to open for three hours, and pharmacies and health-related shops were permitted to operate under normal hours. Most businesses except for some banks and certain government offices had been closed. Personal and public vehicles except emergency vehicles were prohibited. Most of the international and national flights were suspended and only a limited number of commercial flights were permitted and charter flights continued to operate periodically.

While the country was having lockdown due to the second wave of COVID-19, the Government of Nepal introduced a new ordinance called COVID-19 Crisis Management Ordinance 2021 establishing the COVID-19 Crisis Management

Center (CCMC) chaired by the Prime Minister to control and mitigate the spread of, and treatment of infected people from COVID-19 in an integrated approach. It provisioned that the Government of Nepal can declare a COVID-19 public health emergency, can impose lockdown, curtail the mobility of people, ban transport systems, close national borders, shut all governmental and non-governmental institutions, including schools and colleges, party palaces, theatres, dance bars, restaurants, gym clubs, religious places, public meetings and gatherings and also restrict rice feeding ceremony, marriage and death ritual ceremonies. It also empowers Chief District Officers as the mitigation officer in the district and can issue necessary orders to contain and mitigate the COVID-19 spread.

There is a provision for a unified central COVID-19 hospital, which will be operated under the directive of the Ministry of Health and Population (MoHP). It is expected that the central hospital will provide services such as COVID-19 screening clinics, fever clinics, counselling clinics, COVID-19 laboratory tests, radio imaging and other diagnostic services, treatment of infected people with adequate oxygen, isolation wards, HDU and ICU facilities, telemedicine, COVID-19 call centres, and home isolation follow-up services. It is also expected to operate in coordination with MoHP as a monitoring body and functions as a data and information collection centre about confirmed cases, deaths, recovered cases, and availability of beds.

The Ordinance also has provisions for punishment. It states that if someone tries to block the implementation process, s/he is subject to either one-year imprisonment or five lakh NPR or to both, and if someone does not follow the protocols aligning with the Ordinance, s/he is subject to either six months imprisonment or three lakh NPR or to both. It has also made special procurement arrangements as it provides special authority to the Directive Committee to purchase required medical supplies directly from authorized sellers or international agencies and no question can be raised anywhere against such direct purchases. While the Ordinance has provisions for Provincial and District level COVID-19 Management Committee, it is silent about local level COVID-19 Management Committee and it provides unlimited power to CDOs as mitigation officers to implement any measures in the name of COVID-19 containing measures and unlimited powers of procurement to Directive Committee, conflicting the essence of federal implementation.

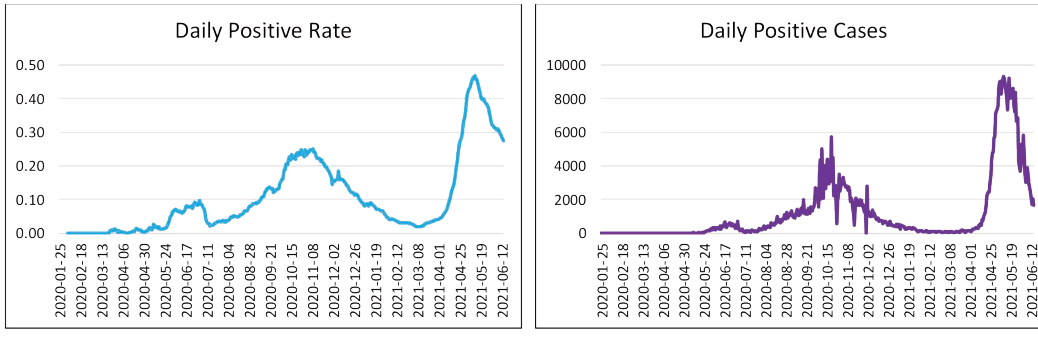
The ad-hoc CCMC committee decisions were often found to be guided by international practices and WHO regulations, however, the implementation of these policies and practices have often experienced challenges due to the lack of

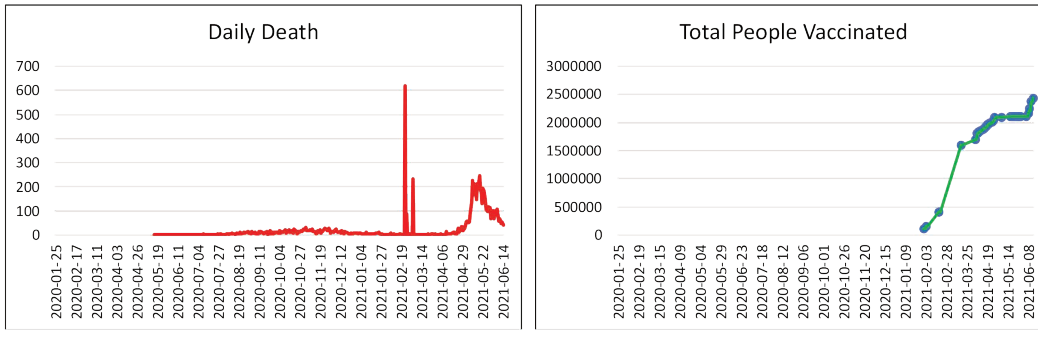
consideration of localized contexts of communities and the level of awareness. While Nepali Acts and policies focus more on punishment, command and control mechanisms, little consideration is given to enhanced localized capacity building and systematically dealing with pandemics.

2.5 Origin of COVID-19 and Response of Government of Nepal

The known first case of COVID-19 originated from Wuhan, Hubei Province, China on 31 Dec 2019, resulting in the public health emergency of international concern declaration on 30 January 2020. The WHO announced COVID-19 infection, COVID-19 as a pandemic on 11 March 2020. Until February 2020, China was the only country affected by COVID-19. But from the beginning of March 2020, it started to spread rapidly to South Korea, reached Italy in the second week of March and cases increased rapidly in Spain and other European countries in the third week of March. Eventually, cases were raised in the US, other countries in the Americas, Pacific, Asia and Africa. The recent spike (April-May 2021) of the global pandemic of novel COVID-19 is increasingly alarming. According to the WHO as of 17 June 2021, there have been 176,693,988 confirmed cases of COVID-19 worldwide, including 3,830,304 deaths and, as of 15 June 2021, a total of 2,377,780,590 vaccine doses have been administered. Nepal was not an exception to COVID-19 and was encountering a number of challenges to prevent the spread of infection. In Nepal, from 3 January 2020 to 17 June 2021, there were 615,984 confirmed cases of COVID-19 with 8,597 deaths, reported to WHO and as of 23 May 2021, a total of 3,153419 vaccine doses were administered. Details are provided in figure 1.

Figure 1: COVID-19 in Nepal: Daily Positive Rate, Cases, Death and Total People Vaccinated





Source: Our World in Data, COVID Data on Nepal

The first case in Nepal was identified on 23 Jan 2020 in a 32-year-old Nepali male student returning from Wuhan, China. After the identification of the first case, Nepal initiated measures against the spread of the virus, following international practices. The Government of Nepal arranged a health desk in the borders of India and China. On 1 March 2020, the government established a high-level committee also known as COVID-19 Crisis Management Center-OPs (CCMC-OPs), to prevent and control the spread of COVID-19. For the first time ever since the outbreak of the pandemic, Nepal closed its international borders on March 23. Likewise, international flights and long-distance buses were suspended. The government of Nepal announced a nationwide lockdown on March 24 (The Kathmandu Post, 23 March 2020). All non-essential services and manufacturing, except emergency services, were shut down along with all public movements outside homes, except to seek medical attention or purchase of essential foodstuff. On 14 May 2020, Nepal recorded the first COVID-19-related death when a 29-year-old postnatal woman from Sindhupalchok district lost her life. On 2 April 2020, the CCMC revised its lockdown decision to allow operations of development projects, and industries producing essential items, following the health protocol issued by the Ministry of Health and Population (MoHP).

The MoHP announced on 4 April 2020 that Nepal had entered the second stage of the pandemic following confirmation of locally transmitted cases (community transmission) of COVID-19 in the country. Confirmed COVID-19 cases were rising in India rapidly as well. Returning migrants from India were primarily found to be spreading the disease in the districts bordering India and in the Western provinces of Nepal. To control the spread, on 25 April 2020, the Ministry of Home Affairs (MoHA) coordinated with the relevant CDOs for coordination with the Indian counterparts to keep migrant Nepalis in quarantine on the Indian side and vice –

versa in Nepal—following the criteria set by the World Health Organization. The Government of Nepal introduced safety protocols, decisions and measures such as national lockdown (closures of all activities except emergency services), compulsory wearing of masks, and physical (social) distancing. The first lockdown that started on 24 March 2020 lasted for four months and the Government of Nepal (GoN) decided to lift the lockdown on 21 July 2020. A limited number of businesses and city-level transport systems would be able to come into operations following safety protocols strictly however schools, party palaces, trade exhibitions, banquet halls, gyms, religious sites, cultural festivals and long-distance transport systems including many other sectors had to observe the lockdown *NepaliTimes*, 21 July 2020). The country was experiencing a decline in the COVID-19 infections and death cases gradually until July 2021 however the sudden manifold rise of the infections by July, the GoN imposed the second lot of lockdown from 29 July 2021 to contain the second wave of the Novel COVID-19 infection (*The Kathmandu Post*, 28 July 2021). While the first imposition of lockdown began from the second case of confirmed cases in Nepal, the second imposition of lockdown commenced with 4,774 daily cases on 28 April 2021 which significantly rose to 9,317 daily cases by 11 May 2021 as a peak point and is gradually stabilizing. (*Worldometer*, 12 May 2021: https://www.worldometers.info/coronavirus/country/nepal/).

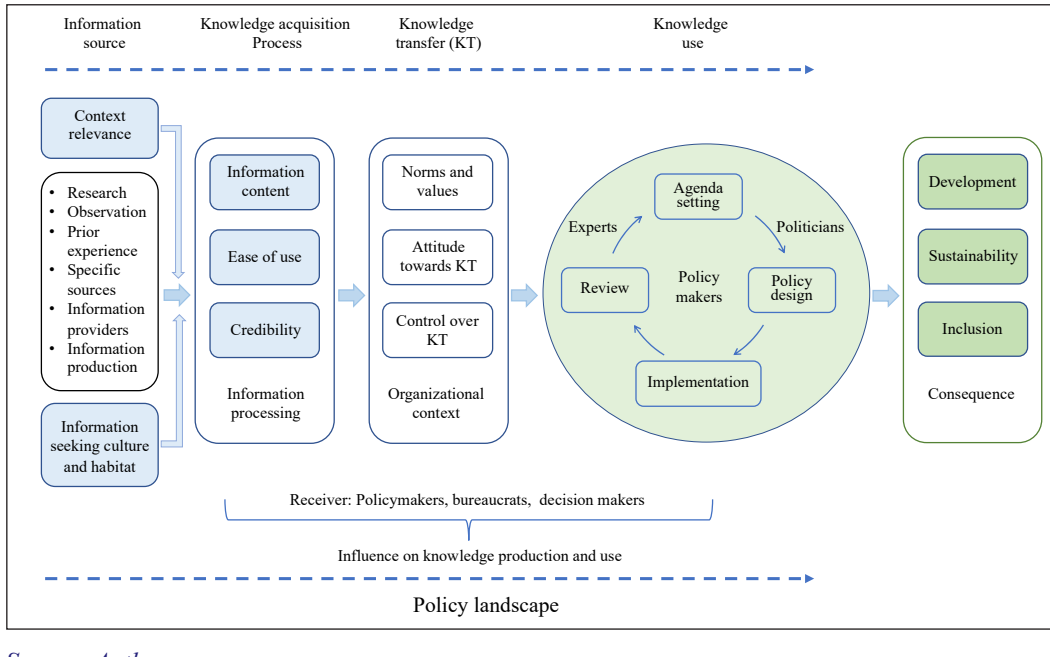
Although attempts to contain the COVID-19 were (are) being made by implementing safety measures like lockdown, wearing of masks, social distancing, use of sanitiser and soap-hand wash, RDT and PCR tests, contract tracing etc., Nepal is encountering, at the same time, a number of challenges such as inadequate hospital capacities inclusive of PCR testing machines and kits, contract tracing and data, quality quarantine space and hospital beds availability, unavailability of intensive care units (ICUs), ventilators, oxygen supply and disciplined awareness of COVID-19 infection from the mob either in the name of political power show-off or celebration of ceremonies and networked connections of the three levels of governments. Apart from these, the measures of prolonged nationwide lockdown have not only caused a famine-shortage of essential supplies such as vegetables, grocery items, medical supplies and Liquified Petroleum Gas (LPG) resulting into high price hike, it has also put daily wage labourers, poor and marginalized groups of the population at risk for their affordable incapacities. People working in the informal sector, urban and peri-urban labours and even remittance-dependent populations have had difficult experiences in meeting their ends with their limited resources and have often been forced to miss meals, indicating rising threats to their survival.

Many of the decisions made by CCMC and CDOs needed revisions and considered reflections. For example: 1) The decision of buying RDT and using them without having sound scientific knowledge about how to use them had to be brought under consideration; 2) The four months lockdown began on 24 March 2020 in the first wave of COVID-19 which started when Nepal had few cases. This contrasts with the second phase of lockdown which was imposed when there was already a wave of positive cases and death. Here, one of the notable points is that Kathmandu Valley was becoming a hotspot of COVID-19 but the government allowed people to travel to villages from Kathmandu for three days in which many people left the valley with COVID-19 infections and carried it to the villages, resulting into serious pandemic challenges in a rural setting in the second wave a contradiction to the first wave spread and containment. In addition to these concerns, one of the most important concerns is to act against the theory and practice of COVID-19 safety protocols. For example, opening essential shops only for a short time led to huge crowds of people, supporting a quick spread of the virus instead of containment. These showed that many of the policy responses and directives made and implemented by the government of the day were not based on localized needs, scientific understanding, and logical flows but rather on whims, rumours and political interests either to the lack of robust evidence or the neglect of available evidence.

CHAPTER THREE
RESEARCH METHOD

The study adopted a conceptual framework, as shown in figure 2, integrating policymakers' information sources, knowledge acquisition processes, and the use of knowledge in a policy landscape. The conceptual framework derived the concept, components, and variables from the literature on evidence-informed policymaking and the Theory of Planned Behavior (TPB), which have been widely used to predict the knowledge transfer process and innovation at the individual and organizational level (Ajzen, 1991; Imani-Nasab et al. 2017; Wehn & Montalvo, 2018). The conceptual framework we developed constitutes four key components: i) variables of information sources from which policymakers might draw information, ii) variables representing factors influencing the knowledge acquisition process and information-seeking behaviour, iii) policy cycle/process through which knowledge is expected to transfer, and iv) knowledge use with potential outcomes such as development, sustainability, and inclusion.

Figure 2: A Framework for Mapping Policymakers' Knowledge



Source: Authors

3.1 Data Collection

For this study, we employed a convergent mixed method approach for data collection following Creswell (2014). The sample universe of the quantitative data/survey constitutes the population of policymakers representing federal, provincial, and local governments. We used convenience sampling to include policymakers from the federal government, and five local level governments of Bagmati Province including one metropolitan, two municipalities and, two rural municipalities. We attempted to conduct the survey with 200 respondents. However, we succeeded to receive responses only from 71 respondents which covered the Office of the Prime Minister, Federal Ministry of Health and Population, Ministry of Home Affairs, Disaster Risk Reduction and Management Authority, CCMC, Office of the Chief Minister and Council of Ministers, relevant ministries of Province government including members of Provincial Committee for Disaster Risk Reduction and Management, District Committee for Disaster Risk Reduction and Management and Local Committee for Disaster Risk Reduction and Management including the Ward Chairs of Local Government bodies

As the study aimed to explore the public policy process in general and the case of COVID-19-related policy processes in particular, we prioritized institutions related to it from Federal to Local levels including the Office of the Prime Minister and CCMC. We covered policymakers from the Federal government, Provincial governments, and local governments along with key political figures and civil servants who have served in policymaking. In this study, policymaker is a general term for persons involved in policymaking, decision-making and implementation of policies inclusive of national policies, rules, regulations, directives, Standard Operating Procedures (SOPs), circulars, and institutional decisions. Experts who were involved in the policy process and provided information and advice to the officials are also included in the policymakers unless a distinction is made in the interpretation of data in this study. In order to collect qualitative data, we conducted in-depth interviews with semi-structured questions with 21 people from the Federal, Provincial, and Local levels to answer some of the why and how research questions. We used mostly online platforms (Zoom) in the journey of data collection amidst this COVID-19 crisis and lockdown situation. Interviews were recorded, transcribed, and analyzed for themes and content. We also conducted an extensive desk review of existing secondary literature to explore policy processes, models of policymaking, the information sources of the knowledge base, and policy documents.

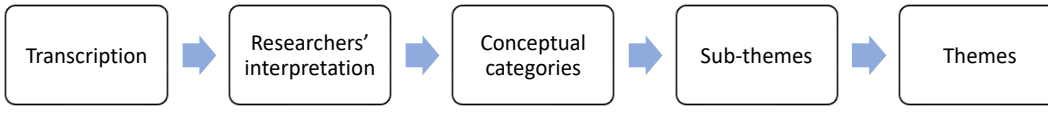
The study team developed questionnaires and a checklist for collecting quantitative

and qualitative data on the key variables identified in the conceptual framework: 'source of information'; 'level and style of accessing information'; 'use of information in policy decision'; 'information-seeking habit and culture'; 'content and format of information'; 'suppliers/providers of information'; 'information processing and analysis' and others.

3.2 Data Analysis

We employed the SPSS package to clean and analyze survey data. Data entry and cleaning were followed by analysis for each question and between two or more questions. The results of the surveys have been presented in tables and graphical figures and thematic analysis of the qualitative data obtained from literature review and in-depth interviews have been made conversant with the survey results for validity, reliability, and trustworthiness. About the qualitative data, after collecting the data from the field, the field team reflected on the data collected to keep a record of the data quality and prepare a brief note on the contextual data. The team engaged in data transcription and preparing summary reports of the collected data. First, the data were coded in open codes and themes and then axial coding was used to identify the linkage between different codes and themes to respond to research questions and objectives. Analysis of key informant interviews starting from the transcribing of the interviews to drawing the themes is shown in figure 3:

Figure 3: Qualitative Data Processing and Analysis



Source: Authors

Actual transcriptions were first interpreted in line with the conceptual framework and its variables discussed in the methodology section above: key sources, institutional and personal attributes influencing knowledge acquisition, knowledge politics, and use of knowledge in policy decisions. Actual narrations of the interviewees are included, and interpretation of their viewpoints form the basis of discussion and making sense of what had been said in the context of evidence-based policymaking. We sought information under five themes which include: 1) *Sources of Information,* capturing the sub-theme topics of WHO, international experience, disciplinary experts, regulatory provisions, experiences from others, media, and social media; 2) *Quality of Information*, capturing the sub-theme topics of adequacy

and credibility of information; 3) *Access to Information*, capturing the sub-theme topics of cost, information-seeking behaviour, the mechanism for information collection and analysis; 4) *Use of Information in Policymaking*, covering the sub-theme topics of strategies used to supply information in policy deliberations, disciplinary culture in evidence-based decision-making and institutional norms and incentives; 5) *Unfolding Knowledge Politics*, capturing the sub-theme topics of socio-political factors influencing policy processes, social media, and popular politics and policy implementation and feedback mechanism.

Some actual information in sub-themes is categorized into concepts, which are also substantiated by the interpretation of the actual narrations of the specific interviewee. For example, in order to identify the contrasting viewpoints in relation to informed policy processes, we identified that disciplinary culture is a sub-theme, where medical, security, public administration and politics would form the repertoire of categories. Our research participants having different disciplinary backgrounds had different approaches to dealing with policy processes in general and that of the pandemic in particular. More specifically speaking, the medical professionals, security personnel, civil officials and politicians looked at the significance of informed policy-making differently. Within a disciplinary culture, in the medical field, there is an emphasis, in general, on evidence-based decisions but during emergency situations like the COVID-19 pandemic, premature information was used, leading to questionable decisions, for example, on the use of Rapid Diagnostic Test (RDT), Remdesivir and Plasma Therapy and with due process of time with concluding evidence these decisions had to be revoked. Although there was a demand for evidence and experts' inputs, a centralized system of command and control was prioritized. In public administration, formal rules and guidelines were utilized with administrative authority and power. In politics, popular sentiments, territoriality and quick response to MPs or political leaders' own constituency played flagship mantras in terms of making responses.

CHAPTER FOUR
FINDINGS

The findings revealed that policymakers' knowledge for formulating policy is associated with the knowledge-seeking/acquisition process (information sources, knowledge-seeking behaviour), knowledge transfer process (organizational norms and values and attitude of policymakers) and knowledge use process (intention to use acquired knowledge and actual use of knowledge) within a socio-political and cultural setting. The findings are organized into five subsections. Section 5.1 provides an overview of the sample characteristics and data reliability of the study.

4.1 Population and Reliability

4.1.1 Characteristics of the Respondents

The survey was offered to around 200 participants, out of which 71 responded. The overall mean age of the sample was 43 years. The sample covered 85% males and 15% females. The academic qualification of the participants ranged from 10th grade (14%) to Master degree and above (48%). Science and technology, medicine and health, humanities and social science, management, education and others included areas of expertise with the highest percent (37%) of samples in humanities and social sciences. The geographic coverage extends from Bagmati Rural Municipality, Lalitpur; Balefi Rural Municipality and Chautara Sangachokgadhi Municipality, Sindhupalchok; Kathmandu Metropolitan City, Kathmandu to Bharatpur Metropolitan City and Ratnanagar Municipality, Chitwan and Panchkhal Municipality, Kavre districts. The present administration types that the participants are involved with included public health, medicine and nursing, pharmacy, rapid response team (RRT), supply of medical equipment, transportation, food and logistics management, information and communication technologies, public policies and good governance, coordination with stakeholders, foreign policy, WASH, shelter and quarantine management and others (Table 3a and 3b).

Table 3a: Characteristics of Participants by Mean, Frequency, Range and Percent (Age, Gender and Address)

Characteristics (n=71)	Mean/ Nos.	Range/ Percent
(a) Age		
Age	43	23-66

Characteristics (n=71)	Mean/ Nos.	Range/ Percent
(b) Gender		
Male	60	85
Female	11	15
(c) Education		
Up to 10th grade	10	14
Intermediate (10+2)	8	11
Bachelors	19	27
Masters and above	34	48
(d) Official address by municipalities		
Bagmati Rural Municipality	10	14
Balefi Rural Municipality	8	11
Bharatpur Municipality	17	24
Bhattedanda Rural Municipality	1	1
Bhumlu Rural Municipality	1	1
Chautara Sangachowkgadi Municipality	2	3
Kathmandu Metropolitan	1	1
Panchkhal Municipality	13	18
Ratnanagar Municipality	18	25

Table 3b: Characteristics of Participants by Frequency and Percent (Administrative Type)

Characteristics (n=71)	Mean/ Nos.	Range/ Percent
Administrative types		
Public health	12	17
Medical and nursing	2	3
Pharmacy	0	0
Rapid response team	1	1
Supply of medical equipment	2	3
Transportation	1	1
Food and logistics management	0	0

Characteristics (n=71)	Mean/ Nos.	Range/ Percent
Information and communications technologies	4	6
Public policy and good governance	13	18
Coordination with stakeholders	7	10
Foreign policy	0	0
WASH, shelter and quarantine management	8	11
Other	21	30

4.1.2 Assessment of Reliability

To measure policymakers' knowledge, multi-item scales/measures/variables were identified from the literature review and adapted to the context of Nepal. These scales are composed of multiple items, which require statistical analysis for internal consistency or how closely related a set of items are as a group. Cronbach alpha is a measure of scale reliability. In general, a score of more than 0.7 is usually accepted.

Table 4: Variables, Scale Mean, SD, Cronbach's alpha, CI & p-values [C1]

Variables	No. of items	Scale mean	Standard deviation	Cronbach's alpha	95% CI lower bound	95% CI upper bound	p-value
Information source (IS)	12	41.19	11.37	0.948	0.927	0.965	0
Information seeking behavior (ISB)	13	44.38	10.88	0.936	0.91	0.957	0
Organizational values and norms (ONV)	6	20.5	5.24	0.884	0.834	0.923	0
Available resources and capacities in organization (ARC)	5	17.42	6.1	0.974	0.963	0.983	0
Attitude of Policymakers (APM)	5	17.13	4.49	0.869	0.810	0.914	0
Intention to policy formulation (IPF)	4	14.14	4.38	0.963	0.945	0.976	0

Internal consistency for the (Cronbach's alpha) variables/measures Information sources (IS), Information-Seeking Behavior (ISB), Organizational norms and values (ONV), available resources and capacities in the organization (ARC), the attitude of policymakers (APM) and the involvement in actual policy formulation (IFP) was 0.965, 0.957, 0. 923, 0.983, 0.914, and 0.976 respectively demonstrating good reliability of the measure. Internal consistency of indicators representing the variables (IS, ISB, ONV, ARC, AMP, IPF) was also assessed.

After assessing the reliability of variables, the Spearman correlation coefficient was also estimated. The correlation only shows the relationship between variables. It does not ascertain the causality. However, we could not do higher-order analysis like regression due to the small sample size in the SPSS. The proposed model is a complex model with six composite variables with four to twelve items/indicators in each. This type of model with composite variables requires a large amount of data (Hair *et al.*, 2016). Future studies with this model should take this requirement into account.

In the next section, findings are presented according to the policymaking process highlighted in the conceptual framework (Figure 2).

4.2 Process of Knowledge Acquisition, Transfer and Use for Policymaking

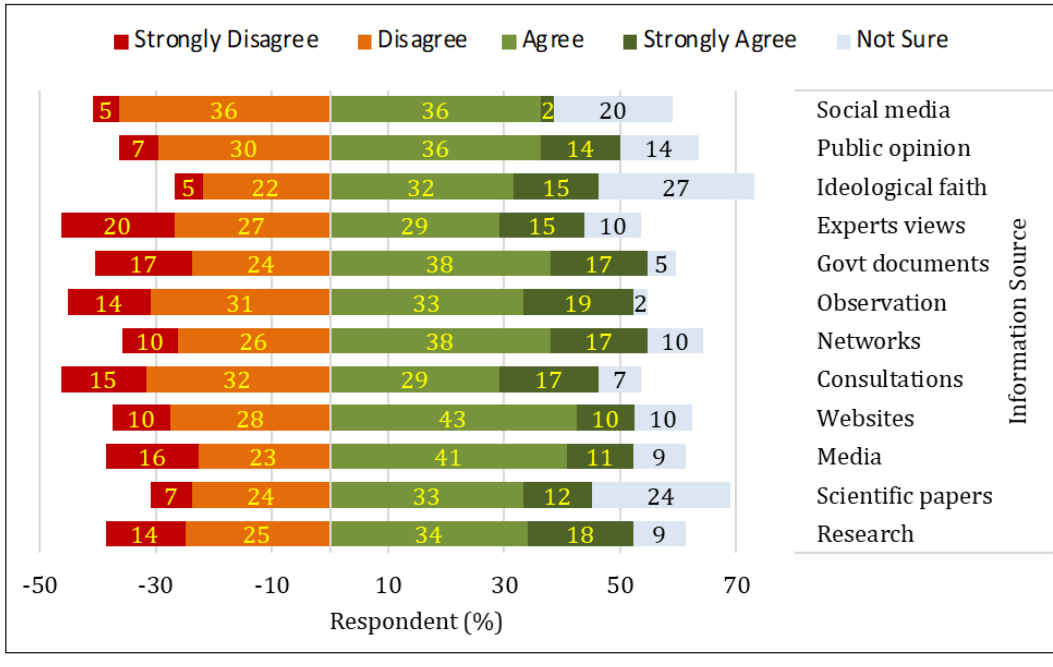
According to the conceptual framework, policymakers' knowledge for formulating policy is associated with the knowledge-seeking/acquisition process (information sources, knowledge-seeking behaviour), knowledge transfer process (organizational norms and values and attitude of policymakers), and knowledge use process (intention to use acquired knowledge and actual use of knowledge) within a socio-political and cultural setting. The first step to policy formulation is accessing information sources.

4.2.1 Information Sources

The findings revealed that policymakers rely on multiple sources of information while making policies for COVID-19 prevention and control. To assess which sources of information give policymakers evidence of knowledge, in the survey, a list of information sources that were asked participants to provide their responses on a five-point Likert scale ranging from strongly agree, agree, not sure, disagree, and strongly disagree was provided to respondents. Figure 4 depicts the results of the survey by information source types and percent of respondents relating to each source.

Do you agree that the following sources have been used to gather the information needed for policymaking as you may recall from the last five years?

Figure 4: Source of Information Used



Survey results depicted that networks, media and observations are the major sources of information. Similarly, government documents, consultations, experts' views, social media, public opinion, websites of organizations, research, scientific papers, and ideological faith are noted as other sources of information for policy formulation. Qualitative findings not only validated survey results but also provided why and how certain sources of information become critical for tackling the COVID-19 pandemic. Qualitative findings demonstrated that media, social media and government documents such as regulatory mechanisms were critical for COVID-19-related decision-making. Whereas in-depth interviews further confirmed that WHO information and guidelines, international experience, advice of disciplinary experts, regulatory provisions including decisions of committees (e.g. CCMC), and experience from others (e.g. other local governments), as the most used sources of information in COVID-19 response related policies and decisions. However, the access and utility of information sources varied by governance level. At the federal level, drawing on international experience was the starting point for Nepal to

respond to COVID-19, while some policy decisions (such as preparing protocols and guidelines) were also informed by Nepal's own experience. An interviewee (No.5) expressed his thoughts as:

While making COVID-19-related policies, we focused more on international experiences. We learned from European countries as they were the ones who first dealt with frightening situations and also from China about how effectively they were tackling the problem. We learned about international practices and local practices through the Google search engine. Likewise, we also read some research articles and peer-reviewed journals when needed.

Many policy-makers directly involved in shaping COVID-19-related policies and guidelines agreed that WHO-developed policies and Chinese experiences were mostly used as baselines (I3, I17) to develop policies for Nepal. Expert consultation was another important source of information for the government in making a decision. The government formed an advisory group of experts to provide policy inputs (I3). Moreover, the government established a knowledge café to receive ideas and information from the diaspora (I2, I3). *NHRC even welcomed Nepali scientists from the USA to help undertake quality research and offer inputs to the government* (I2). *Every protocol was finalized only after having a rigorous discussion with WHO experts, the medical council, health workers, and researchers* (I7). Medical professionals and doctors seem to have sought information from reputed academic institutions and science leaders throughout the globe and successful cases from our neighbourhood as well. One of the key people from CCMC told:

In terms of knowledge and SOPs, we are guided by WHO; the professionals and doctors regularly reviewed Lancet journals; followed Dr. Fauci [a leading expert in the field] to understand the happenings in the U.S.A; consulted the administration of Kerala (exchanged information through telephone or social media) (I19).

Similarly, institutions such as the National Planning Commission (NPC) and Nepal Health Research Council (NHRC) are the government think tank agencies empowered to provide research-backed recommendations to the government in overall development processes and the health sector respectively. As mandated, they proactively sought information from diverse sources. This is highlighted by one interviewee (I1) (similar views also expressed by many other interviewees such as I3, I5, I13, I16, I17):

Literature review, global learning, most of them followed guidelines of WHO, the review of previous documents in association with the Health Ministry and other related Ministries were very much helpful for NPC to develop guidelines, gathered

relevant sources and information from the international agencies, research institutes, international government and other organizational bodies

Though policymakers at the federal government mostly followed international protocols, as that would allow them to be on safer side, they also realized that there were instances when they used the protocol and process without contextualizing Nepal. The interviewees also suggested that it was a 'learning by doing' experience for Nepal. Interviewee I3 expressed his views as "*Based on the experience of the first quarantine centre in Kharipati, we prepared local quarantine centre establishment guidelines and provided them to local governments.* (I3)

While many of them accepted that they follow the MoHP Guidelines and instruction from the federal government, they also sought Doctors' suggestions through EDCD and NHRC and Knowledge Cafe, and lessons learnt from local practices. At the local level policymakers consult with the local community, seek doctors/health personnel's ideas, and consider popular will emanating from social media or through other means. COVID-19's impact ran across almost every sector, and the economy has been suffering severely. Nepal Rastra Bank assessed the impact of COVID-19 in Nepal's economy, which formed the basis for subsequent economic policies for the government of Nepal including reducing interest rates, providing additional time for loan repayment, injection of additional soft loans to the ruined enterprises, and providing guidelines for quick recovery of the economy (I12).

But municipal governments relied largely on information and policies, strategies and guidelines provided by the higher level besides seeking local consultations, and doctors' views. Many of them use multiple sources (I4, I5) as mentioned by a municipality ward chair:

We follow the instructions issued by the Ministry of Health and Population, follow the guidelines received from the federal, provincial governments and the municipality, and use newspapers, social media, and reports published by both government and private sectors. We also consult with experts (I4).

Though policymakers accessed different sources of information for making decisions, the knowledge acquisition process influences the decisions.

4.3 Factors Influencing Knowledge Acquisition Process

Seeking information sources is a starting point for acquiring knowledge about policymaking (Figure 2), while seeking information from different sources, information-seeking behaviour and relevance of information content, the credibility

of information sources, and usefulness of information sources affects the selection and use of information sources accessed.

4.3.1 Information Seeking Behavior

Information-seeking behaviour (ISB) influences access to and use of information sources. To measure information-seeking behaviour, ten indicators or items were identified from various literature and experiences of researchers and framed into a survey questionnaire with a five-point Likert scale ranging from strongly agree, agree, not sure, disagree and strongly disagree; for measuring ISB. The results of the survey are demonstrated in Figure 5.

To what extent do you agree that the following information influences the information seeking behaviour of policymakers?

Figure 5: Non-informational Factors Influencing the Information-seeking Behaviour

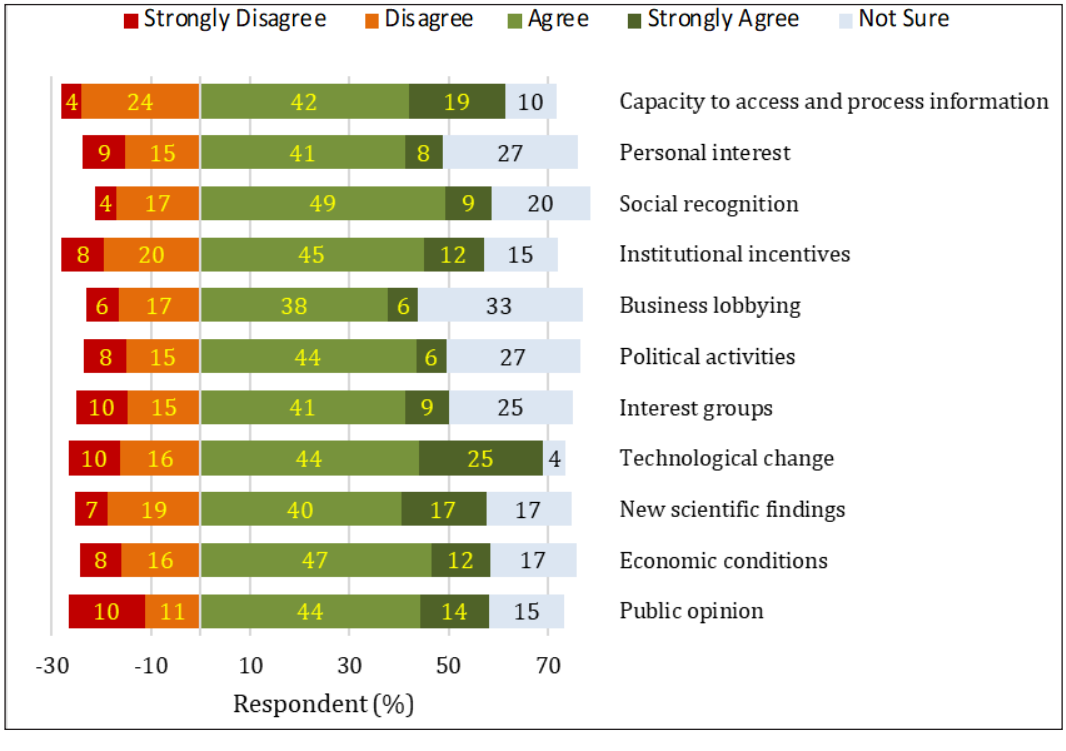


Figure 5 depicts the eleven determinants (indicators) of information-seeking behaviour (ISB) measured on a five-point Likert scale ranging from strongly agree,

agree, not sure, disagree and strongly disagree. The responses of the respondents are recorded in percentages. The scale of strongly agree and agree are summed into agreed for the-easier interpretation in text only. Technological change, public opinion, capacity to access and process information and economic factors, institutional incentives, social recognition, new scientific findings, interest groups, political activities and personal interest contributed to ISB while business lobbying contributed the least (41%) in comparison to all the indicators. The qualitative interviews expanded the survey results with further evidence on why and how these indicators influenced policymakers' information-seeking behaviour.

Interview data confirmed that the experience of interviewees in research, the disciplinary culture of evidence-based decision-making (e.g. approving a medicine to treat COVID-19), and institutional context and incentives (e.g. resources and information supplied by higher jurisdictions) shaped an authority's information-seeking behaviour. Business lobbying is often manifested by petty interests of certain business groups to favour their personal gains at the cost of public health risks. Further qualitative data revealed that policymakers relied on contextual information for dealing with the uncertainty associated with COVID-19. When the entire system had to operate into an information deficit, and without a prior proven technology, many decisions were made with premature information context. In this crisis condition, many decisions were based on the sentiment carried through public discourse. The opinion makers (e.g. medical experts and public health professionals) had a great influence in shaping public opinion.

At the local level, resource constraints and capacity to access and analyze the necessary information limited the informed decisions and effective implementation of policies emanated at federal and provincial levels (I4, I7, I11, I15). Therefore, they relied largely on public opinion, social gains and losses and the costs and benefits of their actions.

Qualitative findings showed a difference in source and quality of information input-seeking behaviour in regular policy processes and that of emergency response required as in the case of COVID-19 response, which is also coupled with disciplinary culture. In the normal policy process, the medical sector has claimed that policy decisions are taken based on proven research-based knowledge and sought such knowledge in peer-reviewed journal articles and other research outputs from highly trusted sources (I13). In contrast, in the case of a COVID-19 emergency, they largely relied on the information received from WHO or used search engines such as Google to explore quick information. Other sectors are often blamed for

less informed policies in normal situations as well, which are mostly guided by interest group influence or bureaucratic interest (I17; I3; I19; I20).

Individual attitude and behaviour also played a significant role in accessing information and analyzing them before making a policy decision. Some policymakers even attended relevant training and trained others for making effective contributions to COVID-19 response. One interview revealed (I16):

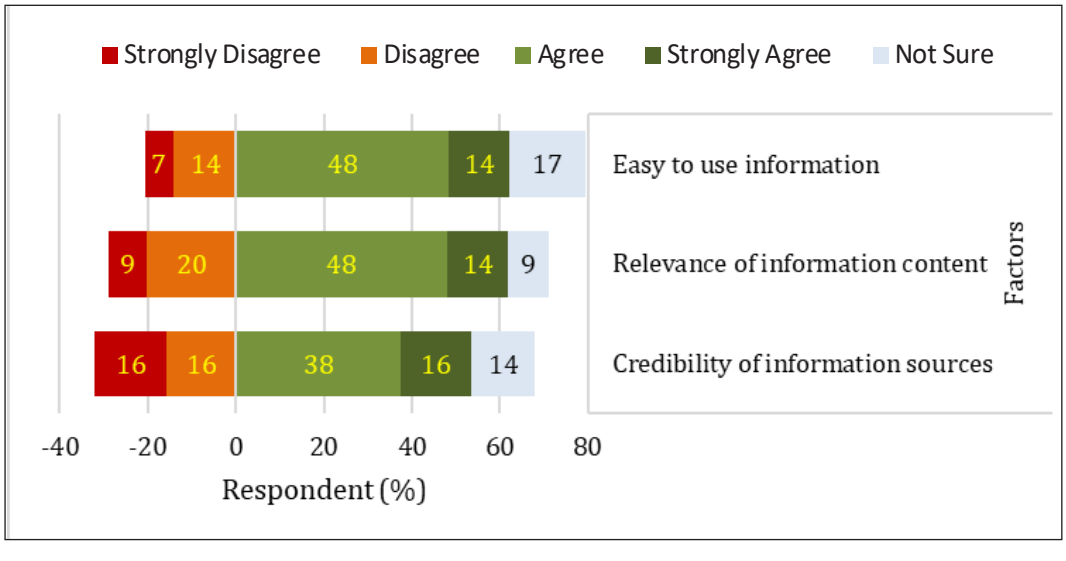
International training was taking place at that time. I also took training related to COVID-19 from John Hopkins University and encouraged other friends to take that training as well.

4.3.2 Access to and Quality of Information

Besides information-seeking behaviour, the knowledge acquisition process is often influenced by relevance, ease of use and credibility of information source and content. Figure 6 shows a) credibility of information source, b) relevance of information content, and c) ease of use of information content.

To what extent does (a) the credibility of information source, (b) the relevance of information content, (c) the ease of the use of information influence the information-seeking behaviour of policymakers?

Figure 6: Importance of Credibility, Relevance and Ease of Information



Among the survey sample, 54% of respondents agreed (strongly agree 16% + agree 38%) that the credibility of information sources is important to decide whether to use it or not. While 32% of respondents disagreed (strongly disagree 16% + disagree 16%) and 14% of respondents were not sure about it. Similarly, 62% of respondents agreed that relevance and ease of use of information content affect the decision to utilize any piece of information. This result was evident as many of the survey respondents were from local governments (municipalities) who were basically responsible for implementing policies enforced by the federal government during the COVID-19 emergency.

Results from in-depth interviews confirm credibility, relevance and ease of use as the main traits of information that determine the extent to which they could inform the policy decisions. In addition, conclusive evidence may take time to be validated, which may not be available at the time of policy decisions (I19). Information is considered as power by bureaucracy, hence lacking institutional memories when bureaucrats are transferred from one place to another. In other words, the culture of not sharing information by bureaucracy also minimizes the likelihood of access to information during policy-making (I17). In addition, except in certain research institutions, there is hardly any established information system that collates and provides analysis of real-time information useful to policy-makers.

4.4 Factors Influencing Knowledge Transfer

Policymakers collect evidence of knowledge from various sources while formulating policy. In this process, their information-seeking behaviour, the credibility of information and relevance and ease of use of information content determine the extent of use of the evidence for policymaking. However, policymaking processes occur within an organizational context and are often shaped by variables; organizational norms and values (ONV), available resources and capacities of organizations (ARC) and attitude of policymakers (APM) of organizational context. This section presents the results of ONV, ARC and APM and extends the findings with qualitative data on how organizational settings and processes promote or hinder policy processes in Nepal.

4.4.1 Organizational Norms and Values

Subjective norms or social norms are a pressure arising from the context in which the organizations responsible for policymaking function. An organization's social norms can be defined as the importance the policymakers give to their referents. Here, these referents are peers/staff, political leaders, stakeholders and the public.

Besides, organizational norms and values enable an environment resulting from the encouragement and support of government; in the CCMC, the mandate of government to formulate policy, existing regulatory mechanisms including policies that provide a foundation to prepare policies. In addition to these factors, the role of administrative structure and organizational change play a critical role in shaping policy processes. Here, these factors crucial to policymaking in an organizational context are considered as measures of ONV.

To what extent the following influence policymakers' ability to use knowledge while formulating policy?

Figure 7: Effect of Organizational Norms and Values on Information Seeking Behaviour

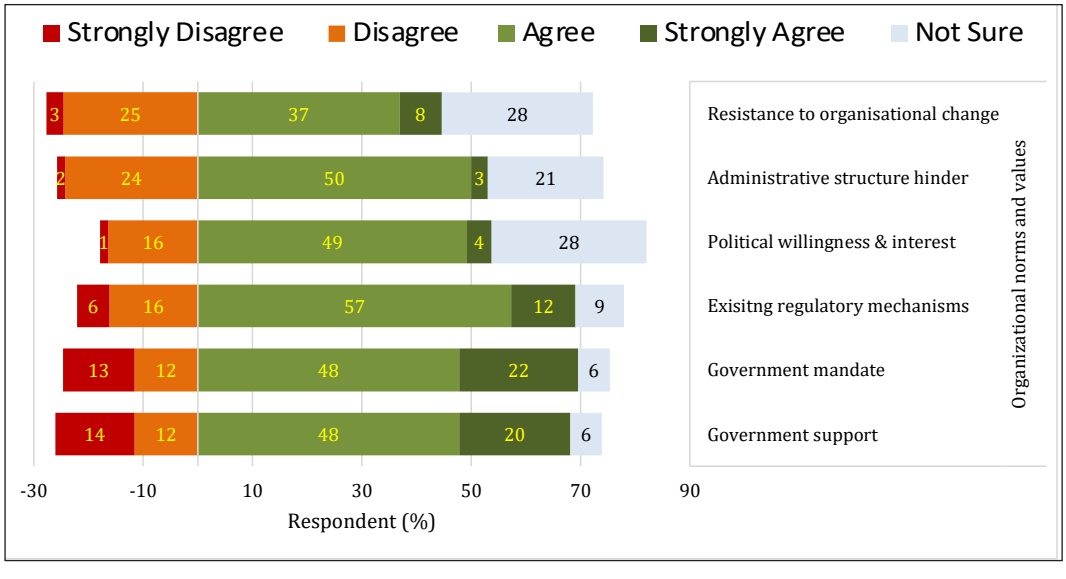


Figure 7 shows the indicators/measures of organizational norms and values (ONV) by percent of respondents reporting agreement and disagreement on a five-point Likert scale. Government support and mandate, existing regulatory mechanisms and political will are the enablers of policy formulation within an organization setting. A large proportion of respondents agreed (strongly agreed + agreed) that government mandate (70% of respondents), existing regulatory mechanisms (69%), government support (68%), and political willingness and interest (53%) as critical elements for conducive organizational culture/environment to formulate policy. Participants also indicated that hindering administrative structure (53%) and

policymakers' resistance to organizational change (45%) may derail the policy process. This survey result is validated by the qualitative findings. The qualitative finding confirmed that the present hierarchical administrative system and inter-agency competition dictate the policy process. Interviewees contextualizing institutional norms and incentives shared that "the government systems maintain a hierarchy; who initiates policy process and who goes to whose office also matters" in strategy development through policy deliberations (I19). The hindrance often occurs when there is interdepartmental, and inter-ministerial competition instead of complementing each other because of institutional egos (I19 & I20). Despite the government support and mandate to further develop new policies, the present authoritarian administrative structure and resistance to adapt to new changes hampered COVID-19 policy formulation.

4.4.2 Available Resources and Capacities of Organization

Available resources and capacities (knowledge and skills) are vital for an organization to be able to effectively contribute to policymaking. Available resources and capacities of organizations are measured with time to prepare policy, costs, knowledge and skills, access to information and need and demand for a policy.

To what extent resources and capacities of an organization influence evidence-informed policy formulation?

Figure 8: Effect of Organizational Resources and Capacities on Evidence-Informed Policy Formulation

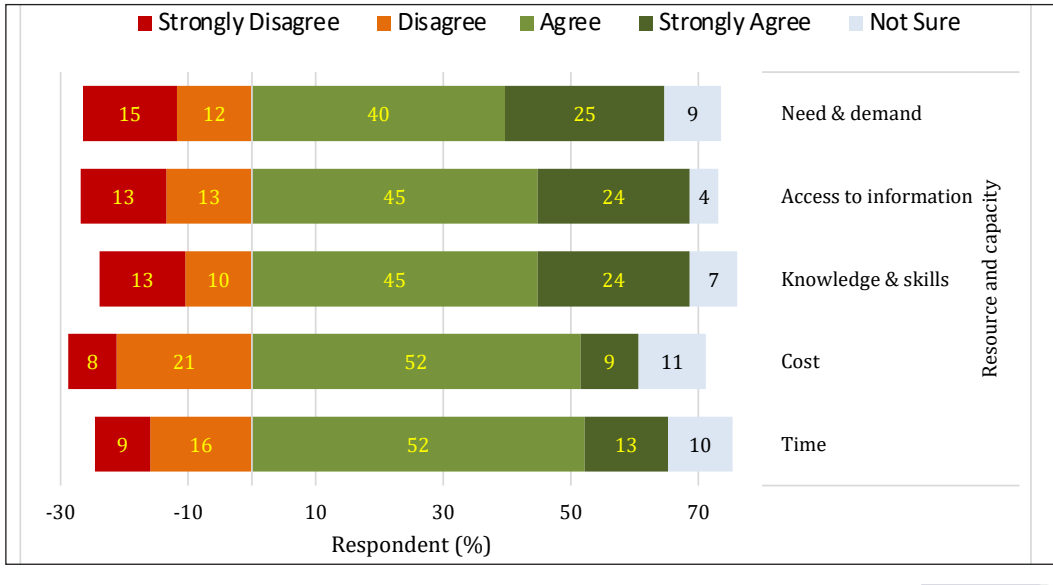


Figure 8 depicts percent of respondents' agreement and disagreement on each indicator of ARC in percent. Respondents indicated that all five types of resources are critical for policymaking in an organization. 69% of respondents accepted that knowledge and skills and access to information are critical within an organization for developing evidence-informed policies. Similarly, 65% of respondents also highlighted the need and demand of policy and time is vital while 64% of respondents indicated that costs are critical for policymaking. This means that time and costs are general resources while knowledge and skills, access to information and the need and demand of policy are specific resources needed for policy formulation in an organization.

The qualitative interviews substantiated that policymakers' limited knowledge and skills and resources for handling the COVID-19 emergency shook the socio-economic system. An interviewee (I3) expressed that the "*Lack of any knowledge and experience in handling pandemic have perplexed the world – many developed countries faced the health system failure due to the pandemic*". In countries like Nepal, which had poor health infrastructure and lacked research capacity and organizational culture of evidence-based policymaking, the pandemic shook the entire system. Owing to the limited knowledge and skills of many policymakers and implementers on how to deal with the crisis, they first relied on WHO information and guidance and subsequently started drawing lessons from other countries and regions that demonstrated the success in containing the virus. For example, *Cordon Sanitaire (lockdown) was a continuity of the successful interventions made during the pandemic incidents, such as the Black Death & Spanish Flu, in the past, and during the early period of the COVID-19 spread, China used the approach to contain the virus* (I3).

Apart from learning through international experience, local governments drew COVID-19 emergency management information from media guidelines provided by MoHP and through their personal contacts with experts and other local government officials, to enact and enforce measures like physical distancing, sanitizing hands in their jurisdiction. As the local government realized raising awareness among local communities is one of the key aspects to control the COVID-19 emergency. One of the ward chairs said that awareness raising was considered key among people. He said, *"We provided the information about physical distance, wearing masks, sanitizing the hands and using the soap to our people through miking and drama"* (I7).

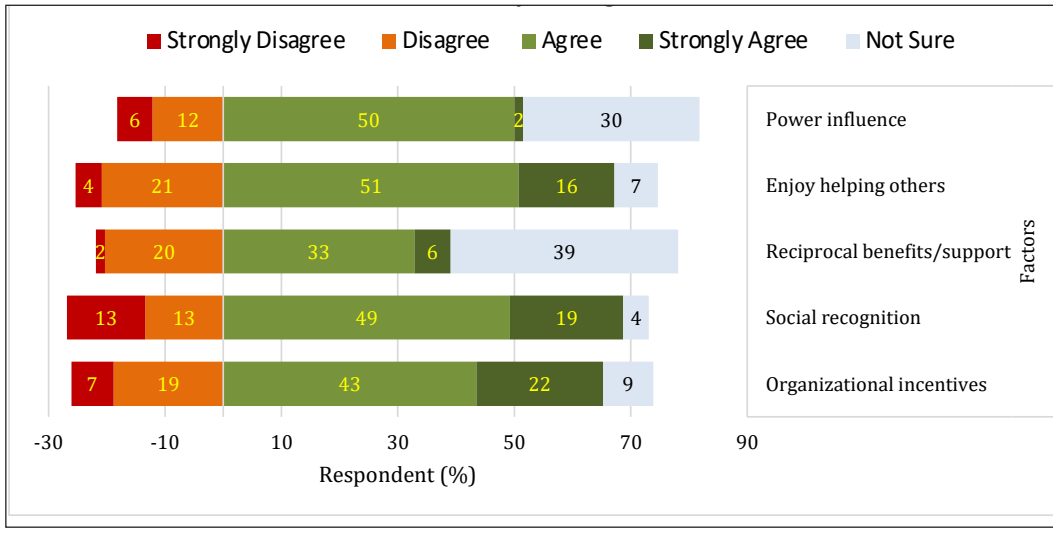
4.4.3 Attitude of Policymakers

Attitude is the 'attitude' towards engaging in knowledge transfer activities— a degree to which policymakers like or dislike any aspect arising from their

engagement in the knowledge transfer process. A positive attitude will support policy formulation while a negative attitude will hinder it. For example, negative attitudes include that applying the knowledge is risky, costly and time-consuming to develop insufficient economic rewards. The attitude of policymakers (APM) is measured with indicators/measures of organizational incentives, social recognition, reciprocal benefits/support, enjoy helping others and power influence. Figure 9 demonstrates the perception of respondents on a five-point scale of agreement-disagreement in percent. Spearman correlation coefficient (r_s) was calculated to measure the reliability of the ARC variable. The composite reliability of AMP with (r_s) 0.914 (Table 11). There was a strong and positive correlation between IFP-dependent variables and APM.

To what extent does the following information influence the attitude of policymakers toward formulating evidence-informed policies?

Figure 9: Factors Influencing the Attitude of Policymakers towards Evidence-Informed Policymaking



Social recognition followed by organizational incentives, enjoying helping others, power influence and reciprocal benefits were found to be major indicators of the attitude of policymakers. While social recognition and organizational incentives are the most favoured indicators, reciprocal benefits/support is the least preferred. Power influence comes out interestingly in the sense that almost only 2% strongly favoured it, but 50% of respondents favoured it anyway with 'agree'. The latter

probably means the power of influence is there but people are fearful to be too vocal about it. Policymakers are often influenced by the power of popular media, social movements and lobbying of powerful interest groups and we have elaborated on it in section 5.8. Manifestations of power are observed in policy deliberations or exerted in the form of tacit corruption and explicit coercive measures such as protests, and media campaigns, among others.

4.5 Knowledge Use in Policy Process

4.5.1 Intention to Prepare Policy

Intention to formulate policy is an outcome variable for predicting the behavioral intentions of an individual/policymaker for making policy. Intention shows the probability of action or actual behaviour. However, it does not guarantee that individuals always turn their intentions to actions. But psychological theories consider intention as a good predictor of independent variables. These theories claim that many factors can influence the relationship between intentions and actual behaviour (Sheeran & Webb, 2016). Here, instead of intention as such, we have measured actions as a proxy for the intentions of policymakers with four items/ indicators on a five-point Likert scale. The indicators and the responses of respondents are provided in Table 5.

Table 5: Response to Recalling the Last Policy in which Policymakers Contributed and Assess it on the Basis of the Following Aspects

Action	Responses				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Used the existing information by assessing the quality of the information critically.	16	52	9	15	8
Considered all stakeholders' opinions and views	13	44	22	13	8
Used standard formats to prepare policy	16	48	14	13	9
Considered the needs and interests of government and public	21	46	8	16	9

For assessing the association between intention to policy formulation (IPF) (dependent variable) and independent variables- information sources (IS), information seeking behaviour (ISB), organizational values and norms (ONV), the attitude of policymakers (APM) and available resources and capacities of organization spearman correlation coefficient was estimated. The results were significant for all the independent variables at *p* 0.01 (Table 6). There was a positive correlation between dependent (IPF) and independent variables (IS, ISB, ONV, ARC, AMP). However, this result should be carefully interpreted as a positive correlation between dependent and independent variables only shows a relationship or pattern between variables. Even if there is a correlation between the dependent and independent variables we cannot conclude that independent variables are causing a change in dependent variables. This correlation could be coincidental or their variable might be influencing the causality between dependent and independent variables. Therefore, further investigation is required to ascertain the causality between variables.

Table 6: Spearman Correlation Coefficient of Variables

Variables	Spearman correlation coefficient (r_s)
Information Source (IS)	0.742**
Information Seeking Behavior (ISB)	0.694**
Organizational Norms and Values (ONV)	0.720**
Attitude of Policymakers (APM)	0.640**
Available Resource and Capacities (ARC)	0.708**

***. Correlation is significant at the 0.01 level (2-tailed).*

Qualitative findings substantiated the quantitative findings. Interview results confirmed that policy decisions and their implementation are influenced by many factors such as finance, skilled human resource (ARC in quantitative findings), local support, integration into plans (ONV in quantitative findings), and perceived incentives (AMP in quantitative findings) to policymakers and implementers. However, emergencies either jeopardize the already weak policy system or might offer an opportunity to transform the existing dogmatic system. One of the key policymakers involved in CCMC leadership (I20) explains it as follows:

We make quick decisions but the implementation part is very weak because while implementing it, we need a space, knowledgeable people, plans and finance. It is very hard to address emergencies in the bureaucratic routine. We restructured and

re-engineered as well while relocating. We took this as an opportunity to adjust to the new realities.

Interviewees from the national level policy system claimed that despite the severity and urgency of the pandemic situation, COVID-19 response policies were largely backed by information. Engagement with academics and experts, high-level coordination mechanism of the government, quick research and analysis offered by the research institutions and identification of and constantly referring to trusted sources indicate that pandemic policies were much better informed than the regular policymaking with exception of medical policies. Medical professionals claimed it informed policies *as the experiences were gathered through different global platforms.* (I3)

In addition to the model parameters, we also collected and analysed information on barriers to policymaking.

4.6 Barriers to Policymaking

Policymakers face many challenges and encounter barriers while developing policies and protocols in a policy context enveloped by a socio-political and cultural setting in both normal and unusual situations. However, developing policies in disasters including the COVID-19 pandemic dictates working in a highly uncertain and complex environment. Policies developed during normal situations may become redundant in some cases while in others, those policies developed in normal situations may need significant modifications to incorporate the adaptive strategies needed for an emergent situation. For instance, the Government enforced COVID-19 preparedness and response protocol 2020 within weeks of the first case identification in Nepal in early 2020. This protocol was developed considering the WHO guidelines and preparatory instructions as there was little information about COVID-19, including its biological nature. Though there was a general policy and response strategy identified in the National Disaster Risk Reduction Policy, 2018 (NDRR Policy 2018), National Disaster Response Framework Amendment, 2018 (NDRF Amend 2018), and Disaster Risk Reduction Strategic Action Plan 2018-2030 (DRRSAP 2018-2030), the government, ignoring that strategy, developed a new protocol (MoHa, 2018, 2018; GoN, 2018; OPMCM, 2020).

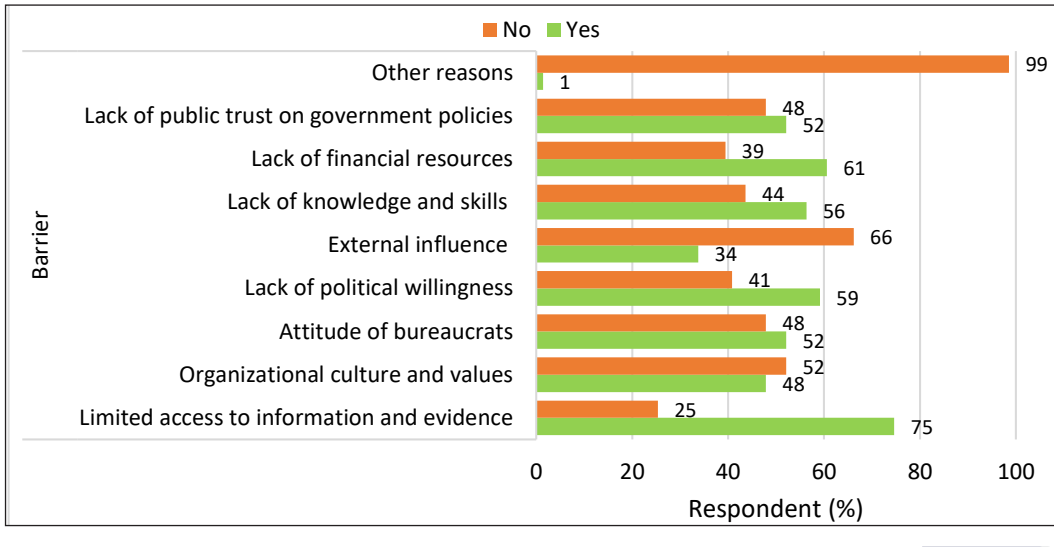
The research team investigated the barriers to COVID-19-related policy formulation for developing an understanding of what sort of barriers policymakers encounter while making policies in a pandemic situation characterized by high uncertainty. The survey results demonstrated that policymakers face many barriers, the most

significant ones are limited access to reliable information, lack of financial resources, lack of political will, and lack of knowledge and skills. External influence (indicated in the question as doner's influence) was identified as a barrier by the least number of respondents. (Figure 10).

The interviewees also confirmed the survey results that resources, political willingness, attitude, organizational and professional culture, capacities and trust in information sources determine whether and to what extent the use of information is allowed in policymaking. Limited access to reliable information or an overflow of misinformation is considered responsible for the rapid spread of COVID-19 and its severe health impacts. Social media and many online and other media created panic by amplifying the COVID-19 situation or its potential treatments. Politicians and experts circulated information regarding the prevention and treatment of COVID-19 symptoms by referring to scientifically not conclusive or premature information. Attitude and capacity of policymakers were found critical in whether they pursue informed policy decisions or go with the popular sentiment or their personal gains. Lack of resources is also constraining local level implementation (I7). For example, while the government provided the guidelines for establishing and running a quarantine centre to all local governments based on the experience of the one managed at the national level, *the quarantine centre establishment guidelines could not be followed due to a lack of resources, ideas and experiences with local governments*. (I3).

What are the barriers to evidence-informed policymaking in Nepal?

Figure 10: Barriers to Evidence-Informed Policymaking



Lack of intergovernmental coordination (among ministries, government departments and bodies as well as amongfederal, province and local governments) surfaced as one of the major barriers during the interviews from federal as well as the local level (I1, I3, I5, I13, I19, I20). The issue of coordination is characterized by the organizational culture, disciplinary divide and lack of previous experience of this scale. Other barriers include misinformation from interest groups and celebrity experts, social political and institutional interests and a lack of policy evaluation and monitoring. Initiation of the policymaking process in Nepal is also questioned by most of the interviewees:

Policymaking practice is wrong--it begins from 'tippani' (statement), not from research. The 'tippani' begins from under-secretaries who mostly have generic knowledge as they enter into the government system with general knowledge and frequently get transferred from one department to another and the policies they introduced generally do not make civil servants accountable (I3; I17; I19; I20).

In addition to these, failure to implementation is said to be the open border; no customized local solutions; less acceptance of IT; serious problems with procurement law; lack of data and understanding in regards to COVID-19; quarantine and isolation management; and preparation of health infrastructure.

4.7 Unfolding discursive politics influencing policy

Qualitative data revealed additional discursive politics as a key factor influencing policymaking during the pandemic emergency despite the factors discussed above. Normative conditions of rational and informed policymaking is prone to unfolding discursive politics in Nepal. Decisions are often the negotiated outcomes among various policy-makers. Various ministries have separate mandates: MoHP's clear mandate and position is saving people's lives and taking every step to stop the spread of the deadly virus, while the Ministry of Tourism also is concerned with saving the tourism industry from collapse. So, as one of the CCMC members mentioned, 'ministries put forward the agenda, others provide the input and make a decision' (I7). Based on the urgency of the issue and information supplied for and against the proposal, the proposals are passed, rejected or revised. The interviewee (I7) gave an example of deliberation within the CCMC meeting:

The Tourism Ministry once put the agenda of opening domestic and international flights with safety protocols considering the devastating situation of the overall tourism sector. The health ministry cautioned about the potential risk of triggering

increased mobility of people if we allowed flights that could be counterproductive as it would pose an additional challenge to contain the virus. Finally, the proposal was rejected by CCMC.

Many factors play out during the policy process that we discussed earlier. Discursive politics is one which is exerting immense pressure on policymakers and implementers these days. Social movements, interest group lobbying, mainstream media and social media are becoming prominent forces that policymakers cannot ignore.

The democratic system in Nepal is a result of a decade long struggle of people led by various political parties. Their role in a democratic polity and in addressing entrenched socio-cultural dogmatism is highly appreciated. While they have succeeded in fighting against the autocratic rulers and political systems such as Rana Oligarchy, partyless Panchayat and King's direct rule during the early 2000s, they are often criticized for not adequately performing to safeguard political rights and delivering development and satisfying people's legitimate aspirations.

With the advent of burgeoning digital and social media, people's voices are becoming louder in raising the voices of the subalterns and challenging sub-standard policy decisions. People are raising their voices and creating popular pressure often with substantive scientific evidence. With increased access to virtual public spaces, people's concerns are being augmented beyond conventional parties and political forces. People are cautioning the government against policies and other decisions that lack transparent procedures and rational justifications. Sometimes such popular voices might be misinformed and can be counterproductive in relation to making appropriate decisions by the government. One interview said:

After the 'enough is enough' protest, some changes to the policy were brought such as a 100% PCR test for both the affected and unaffected people. There was no such provision around the world where healthy people or those who were within contact tracing, were also getting tested (I13).

While spontaneous movement against any faulty policy or government decision is considered a critical component of a democratic society, they are sometimes blamed to serve the purpose of business interest or caught victim of bipartisan party politics. Some policymakers claimed that the 'enough is enough' movement was also a sponsored one:

I believe that the protest was also sponsored by business houses as those houses had already invested in buying PCR test kits. Before the protest, we did not have a strict

provision for doing PCR tests. But after that event, we were ordered by the Supreme Court to bring changes to the policy (I3).

There were vested groups, prioritizing their interests due to many factors such as their working norms, duties, ethics, territory, etc. They helped in controlling COVID-19 from day one but also had various issues regarding different decisions to be taken for different sectors or topics (I3).

Donor interests are also reflected in many public policies, so donors have also become a strong interest group in many policy decisions. They, at times, work directly with the government on certain policies while they provide funds to various development partners (NGOs and sometimes to the private sector) to advocate in their favour. Geopolitical forces also play a critical role in shaping some strategic policies.

There is an influence of interest groups while making policies. The influence of external development partners is also high while making policies. Some policies are funded by such partners and make sure that their country is also benefited from that policy. Medical suppliers played a huge role in modifying the policy. While making quarantine centres, it was expected that the number of people quarantined would be less. Unfortunately, a large number of people had to be quarantined because of a political dispute between India and Nepal (I3).

Politically aligned experts also often distorted policy discourses and hence misinformed the public sphere. Others having incomplete knowledge showed a perverted picture and influenced public and policy actors alike.

Informal sources/interest groups/celebrity experts heavily influence policymaking. On one hand, there are professionals and on the other, there are professionals who are also politically aligned. This latter group definitely influences policymaking (I19).

Interviewees opined that many 'good' and evidence-based policies could not be implemented because of the constraints imposed by bureaucrats and other business groups. One of the policy-makers interviewed shared this as their perception of barriers to policy implementation:

Though protocols and guidelines were made on the basis of gathered evidence, interest groups like different corporate houses created obstacles while implementing them. The influence of interest groups was so high that it pressured the policymakers

to bring changes in those protocols and guidelines. In general, the influence of interest groups in the policymaking process is high (I3).

Lack of coordination among government agencies and different levels of government was also a problem not only in shaping policies but also in implementing policy decisions. Often governments at the municipality and province levels expressed their displeasure for not allowing them the flexibility of testing innovative policy options, which could emerge from the local context.

There was no problem with coordination while we were working. Having a three-tier government has sometimes been a problem for the federal and sometimes local governments. When I was working in Province 2, I divided that region into 3 areas. One commander was stationed in each area. Later, a decision of the federal government also hampered it (I16).

Some policies were also resisted by local implementers as they were not suited for the local context. When there were few cases in certain localities, the central government's certain restrictive decisions were denied by local governments:

We challenged the central policy to close the business for 6 months, which would have impacted our economy very badly (I18).

Policies are often made to address the immediate problems often ignoring the long-term implications. Particularly, popular politics drive politicians to offer help to people in need. However, they might miss the opportunity to develop good systems and infrastructure. One senior official told:

When the cases were suddenly detected in Udayapur, the MPs mostly focused on providing relief materials, cash and increasing testing. They were not focused on setting up institutions, setting up policies, and evidence-based decision-making (I19).

CHAPTER FIVE
DISCUSSION AND IMPLICATIONS

The research results from quantitative (survey) and qualitative interviews confirmed most of the elements tested within information acquisition, processing and use by policy actors in making policy decisions during hard times of the COVID-19 pandemic. Many attributions of limited integration of research-backed evidence in a general policymaking system are also observed in COVID-19 response-related policy decisions. There were also many conscious attempts on the part of the government agencies and other non-state actors in seeking new information through various means including the commissioning of specific research and analysis from the respective research communities. The qualitative results also confirmed that policies are often made to address the immediate problems often ignoring the long-term implications as social movements, interest group lobbying, mainstream media and social media may play prominent roles that policymakers cannot ignore.

Studies conducted in the past have shown that there is a weak relationship between research and policy linkage (Newman, Cherney & Head, 2016; Caplan, 1979; Dunn 1980) because the research producers and research users have different interests and divergent rewards. For example, the academic focus on publishing is not directly directed toward policy use and policymakers do not tend to encourage academic research to address their policy complexities. Many policymakers and public servants see academic research, not as a plentiful resource of knowledge about the multitude of policy-relevant topics they encounter every day to help them address immediate policy priorities rather than as a conceptual source and intellectual output (Newman, Cherney & Head, 2016). On the contrary, emergency situations occur unpredictably and cause individuals and organizations to shift their focus and attention immediately to deal with the emerging situations (Van de Walle &Turoff, 2008) without much knowledge of what to do. The emerging emergency situations may not often be familiar situations, but rather hazards leading to disasters and pandemic, which create acute feelings of stress, anxiety and uncertainty in the population while there are no clear data, information and understanding about what needs to be done in terms of policy, protocols, directives and decision makings. Yet, decisions need to be taken to address the situation by comparing and contrasting existing available best of knowledge and resources, departing from the practice of making decisions based on conclusive research and evidence of normal situations of policymaking. However, decisions made for emergency situations also need to

be immediately revisited once evidence becomes available to match the essence of evidence-based policymaking practices. Relevant information from trusted and credible institutions is the fundamental basis for informing crucial policy decisions.

Policymakers also consulted experts for critical information during COVID-19 response initiatives, which has also become the norm these days in the policymaking process (Dicks et al. 2013). In addition, increased digital reach and burgeoning social media have transformed the public sphere, where ordinary citizens can discursively engage in the public discourse of what they perceive the problematic situation and what policy response they would like to get. At times, the preferences of people might lack the backing of well-researched evidence, and could largely be framed based on false or immature information (Kyza et al. 2020), which can endanger the key essence of evidence-based policymaking (Reisach, 2021). In Nepal, we noted that the social media campaigns also fueled the protest against the government under the banner of 'enough is enough'; the movement was criticized by some participants as a sponsored movement. However, the coverage of the 'enough is enough' movement in mainstream and social media could indeed force the government to take desired decisions and the movement has been praised for its peaceful and popular cultural style (Baral, 2020; Budhathoki, 2020; Lamichhane, 2021). On the other hand, rapidly circulating misinformation through social media and resulting in distorted public perceptions was the key concern for the government in its attempt to contain COVID-19-induced health and economic crises. Social movements, interest group lobbying, mainstream media and social media are becoming prominent forces to inform policy decisions and policymakers cannot ignore them however care must be given to scientific evidence more than to any other competing forces.

COVID-19 and other disaster response and recovery initiatives needed smooth coordination among multiple yet largely fragmented government machinery. Various disciplines that construct their own languages and disciplinary cultures add barriers to the transmission of information across the disciplinary divide. Understanding language of each other, and the attitude and behaviour of decision-makers in sharing information with or accepting information from other disciplines are the key factors for multi-stakeholder or multi-disciplinary decision-making processes (Ranade & Hudson, 2003; Ward et al., 2018; Lips et al., 2011). Drawing information from various government agencies, research institutions and other various sources and making them available during the policy process remained a key challenge (Garforth et al., 2005; Tiwari et al., 2021). In pandemic conditions,

these apparatuses are expected to operate swiftly. This study also highlighted a laggard nature of information exchange across various departments and ministries, and an authority clash on who should be accountable to whom within the bureaucratic hierarchy.

Under difficult policymaking situations in the case of COVID-19, the government needed to adopt certain measures to contain the further spread of the contagious virus even when there was inconclusive evidence available at the time of making a policy decision. The GoN also adopted a national lockdown strategy from 24 March 2020 to minimize the threats posed by COVID-19. The GoN prioritized and followed guidelines issued by WHO, International Health Regulation 2005, and international practices as being practised in India, China and Europe. While our findings suggested that evidence-based policymaking is at a minimal level in Nepal and the general practice begins from *tippani* of bureaucrats, COVID-19 has been a different and unprecedented case for Nepal. Despite the severity and urgency of the COVID-19 pandemic and lack of any conclusive institutional knowledge, memory and experience, relevant experts' consultations, quick research and analysis from health-related institutions using information from internationally trusted sources such as John Hopkins University and Centers for Disease Control and Prevention (CDC) were provided to the CCMC to facilitate its decision-making process. However, when the CCMC had to make decisions, it did not make itself entirely dependent on research and evidence provided, but rather contextualized multiple discursive entities inclusive of social, economic, political and interest groups' factors attaching little importance to evidence and localized context-specific solutions. The discursive politics shaping policies has already been recognized by many (Fischer, 2003; Hajer & Versteeg, 2011).

Our results also concur with existing literature on that the whole knowledge seeking to knowledge transfer and use of knowledge for policy development, and its implications occur within a socio-political and cultural setting in policy context and the socio-political, environmental and cultural setting influence the process of policy development and implementation (Bowen & Zwi, 2005, Head 2013). Socio-political and cultural environments have also affected research strength and research is often lacking in teaching learning and administrative practices, therefore, research is not considered indispensable in policymaking in Nepal. Moreover, most bureaucrats and other policymakers, as generalists, often have the inadequate capacity and knowledge to proactively explore reliable sources of information, and scientific research outputs and weigh different options before making a decision.

Political representatives on the ground have also very limited exposure to evidence-based decision-making and rely largely on regulations and guidelines from higher-level authorities. In regard to the regular policymaking practice, the main sources of information for policymakers are personal observations, learning by doing, networks and the media, and there are no standard procedures to make policies based on empirical evidence/research and neither are policies made in the past are reviewed and evaluated to identify its benchmark performance and areas of improvement. Lack of financial resources for undertaking research, accessing information, availability of the required knowledge and skills, analysis and use of information and limited access to credible information is the key constraints against evidence-based policymaking.

Institutional context has also served as a critical factor in times of crisis. There are many policies and institutions to deal with disasters in Nepal. Just to name a few, there are NDRR Policy 2018; PHS Act 2018; LGO Act 2017 and DRRM Act 2017. DRRM Act 2017 has provisioned to establish an Authority, which was established in 2019 and operating since with the mandates to deal with both unnatural disasters such as the COVID-19 pandemic and natural disasters. The MoHP has existed, for good, to deal with health and epidemic issues however the GoN decided to establish a new ad hoc body called CCMC to deal with COVID-19, which has on the one hand affected the role of other existing institutions and increased inter-institutional, inter-departmental and inter-ministerial conflict and competition to lead and fight for the institutional role instead of working in collectivity through an integrated system, complicating clear institutional roles and responsibilities to fight against COVID-19 and keep records for institutional memories because data and knowledge need to be archived for future references. If there is societal and institutional memory and prior experience of similar emergency disasters, they can be handled well provided there is knowledge, evidence and data about such disasters/pandemics to guide the emergency (Anthony et al. 2021). However, CCMC like ad hoc and one-off event dealing institutions does not have a knowledge management system and will not have any institutional memory.

Policymaking is a political process but it gets affected not only by social, cultural, political and economic factors but also by the media, the fourth estate (Pandey & Kurian, 2017) and social media today. A recent study has shown that the quality of research and how it is communicated can play a significant role in policy decision buy-in (Nurprabowo et al. 2021) and implementation of the policies adopted, and the role of media is paramount in both communication and feedback loops. Media

and social media are increasingly creating pressure in addition to other interest groups, on policy processes and policymakers (Kyza et al. 2020). The creative engagement with the media and social media is critical in recent years. Policymakers keeping a constant eye on social media can also respond to the popular opinion being formed in the public sphere as well as communicate their intentions and details of the policy options they are considering. However, it does not have to be at the expense of research and scientific evidence as captured above in the finding section that research and scientific evidence are least consulted and often ignored in policymaking in Nepal but social media, popular media and interest groups influence prominently in policymaking. Considering the growing use of social media by large masses, and these media often circulating malign rhetorics, careful analyses of such contents and responding to these was one of the key challenges the policymakers had to confront during the pandemic.

Our research also demonstrated that multiple actors with different disciplines and mandates discursively engage in the policy arena, thereby policies emerging from the engagement are the negotiated ones. The policies and guidelines developed by experts from the respective field and drawing on their own and global experience were not effectively implemented on the ground since the policies lacked understanding of the local priorities, resource constraints and capacities. Similar to 'policy formulation' 'policy adoption' is also discursively mediated by interest groups, media, social movements and other resource constraints. Therefore, advocates of evidence-based policy need to give a critical look at whether and how evidence is actually processed during policy engagement (McCaughey & Bruning, 2010; Oliver et al. 2014). In many instances, the powerful forces, civil society actors and experts coproduce scientific information (Blaikie and Muldavin, 2004) to be backed in policy formulation and implementation.

In sum, the key findings of the study clearly suggested that the pandemic situation was unprecedented when it commenced with inconclusive evidence but often research and evidence have been less prioritized for a number of reasons even after acquiring conclusive evidence. The COVID-19 first incident commenced in January 2020 and one and a half years time has been over since it began in Nepal. Although there had not been much research available at that time but now there is plenty of scientific research available today, however, there are no timely Plan B strategies customized and prepared for Nepal--a country with poor health infrastructure and social inequality as well as diversity. The beginning of customized health care measures could be, comparing the nationwide lockdown strategies with other

alternatives that could have been proposed to reduce infection and mortality rates and reduce the burdens on the healthcare, economic and social system. For example, instead of opting for entire lockdown situations, the government could have taken 'a heterogeneous mitigation strategy' ensuring that high-risk people (groups) stay home, and all wear masks mandatorily in public, avoid all non-essential travels, temporary closures of retirement homes to all visitors and increased health and safety precautions for this group of individuals and create trustworthy awareness among people about the importance of social distancing, use of sanitiser and washing hands after coming into contact of any foreign items. The government could have utilized the time to scale up hospital capacity rapidly to address spikes in COVID-19 patients' hospitalization.

A country like Nepal has to operate with extremely limited financial resources, poor institutional and human resource capacities and a lack of information. Developing countries lacked the capacity to spare the very scarce funding to experiment with policy options through research when resource constraints are short of saving the lives of their citizens. In this situation, donor dependence has increased with donor influence in the policy process as well. The role of the government to promote evidence-based policymaking highlighting research through sustainable funding is paramount to bringing the research communities and policy communities together; reducing donor-dependency with donors' interests' oriented research and development and addressing localized social and developmental challenges.

CHAPTER SIX
CONCLUSIONS

Public policy in the simplest term is the government's course of action to solve social problems or achieve certain developmental goals. The policymaking process follows five broad stages which are agenda setting, policy formulation, adoption, implementation and review, and often takes place in a highly political context relying on various factors such as political pledges, availability of a wide variety of input sources, relationships and outcome interests of policy actors. Evidence-based policymaking refers to a rational model where scientific pieces of evidence are taken as the basis for policy. Evidence-informed policymaking takes into account the evidence as well as inevitable practical compromises made during the process. Since evidence is not always in a form of information translatable to a policy, the qualifiers evidence-based and evidence-informed are often used interchangeably.

The study of the policy process in various contexts is a huge scholarly enterprise worldwide. However, there is very little study on the policy process practised in Nepal. Policy processes in normal times and in emergency situations might follow different norms. COVID-19 pandemic brought a unique challenge for policymakers to make quick decisions in an uncertain and rapidly developing situation. Major policy responses to COVID-19 in Nepal started with the activation of the Infectious Disease Act of 1964 for emergency health service, management and formation of a rapid response team, and a series of policy decisions and activities to contain the spread of disease starting from the formation of high-level COVID-19 Crisis Management Center (CCMC) and Case Investigation and Contact Tracing (CICT) teams, border control, lockdown, quarantine, diagnostics tests, public health protocol including physical distance, use of mask and sanitization, clinical management of patients, distribution of relief material, vaccination and monetary and financial policies for supporting the impacted economic sectors. All levels of government including federal, provincial and local levels were variously involved in policymaking, decisions and implementation. The objective of this study was to find how officials with authority, advisors and personnel involved in the implementation collectively identified as policymakers collected, processed and used information relevant for policy and decision-making in real-life situations mostly focusing on the response to the COVID-19 pandemic.

This study identified the nature of various aspects of information processing for policymaking including information source, information-seeking behaviour, organizational norms and values, the attitude of policymakers, and available resource and capacities. The findings are broadly in concurrence with the findings of studies done elsewhere and filled a gap in the research of the policy process in Nepal and also helped identify areas of reform and rectification. The conclusions of the study are presented below.

1. Policymakers, decision-makers, implementers, advisors and facilitators, collectively identified as policymakers or policy community in this study, used or were comfortable with all sources of information including networks, media and observations, government documents, consultations, experts' views, social media, public opinion, and websites of organizations, research, scientific papers, and ideological faith when it came to the collection of information. Networks, media and observations were chosen slightly more frequently. However, there was no dramatic difference in preference for sources, except that while federal level policymakers sought international protocols, local level policymakers relied on governmental directives and circulars. This indicates a lack of system or culture for weighing the merit of information sources in the system and the aversion to risk and bureaucratic culture on part of the policymakers. Experts with roles in advising policymakers sought more academic sources and scientific research findings.
2. Policymakers' perception regarding factors influencing information-seeking behaviour was more or less equally distributed among all factors presented to them which included economic conditions, new scientific findings, technological change, interest groups, political activities, business lobbying, institutional incentives, social recognition, personal interest, capacity to access and process information, the credibility of information sources, relevance of information context, easily accessible and useable information. Business lobbying as a factor was slightly less agreed. However, this was identified as a factor in addition to bureaucratic interest in a certain context by federal-level policymakers. Emergency situations and information deficits also influenced information-seeking behaviour often leading to decision-making influenced by public sentiments shaped by celebrity experts. A difference between policy decisions in a normal time and an emergency

situation was also revealed. In normal times, policy decisions need to be taken based on the proven research-based knowledge obtained from peer-reviewed journal articles and other research outputs from highly trusted sources however, in general, the current process of policy formulation starts from a government officer with a *tippani*. Nepal's policymaking also seems to be directed by social media populism and celebrity consultants' opinions. These are flawed in the process of evidence-based policy because the officer or all-seasoned celebrity consultant who gets engaged in preparing a note for policy often does not have an adequate understanding of the subject and is detached from state-of-art evidence on the topic. In case of COVID-19 emergency, they largely relied on the information received from WHO or used search engines such as Google to explore quick information. Personal attitude, for example, for training also played a role in information seeking.

3. Most policymakers agreed that the credibility of information is important. However, relevance and the ease of the use of information received more importance than the credibility of information. It was interesting to observe that some did not agree even with universal norms such as the credibility of information. Such disagreement can probably be related to the situation of bureaucratic norms to follow the orders of higher authority without questioning or the precedence of easiness over the quality of the information in low resource situation. Policymakers also recognized that validating information is time-consuming work and it is aggravated by the lack of information system in our bureaucracy and furthermore a culture of frequent transfer of officers without transfer of knowledge and information to incoming officers.
4. Regarding the influence of organizational factors in the use of information, a large number of policymakers agreed that existing regulatory mechanisms and the government's mandate, support, willingness and interest for making evidence-informed policy are critical elements for a conducive organizational culture/environment to formulate policy. Participants identified hindering administrative structure and policymakers' own resistance to organizational change as factors hindering the evidence-informed policymaking process. The qualitative study particularly shed more light on the hindering factors by being more specific regarding the situations. Hierarchical administrative system and inter-agency competition were identified as factors dictating the policy process. Inter departmental and inter ministerial competition arising

from institutional ego, hierarchy and personifying of policy process were recurring themes in identifying problems so much so that policymakers felt present authoritarian administrative structure and resistance to adapt to new changes hampered evidence-informed policymaking despite government's support, mandate and regulatory basis to further develop new policies to deal with COVID-19 in particular.

5. Organizational resources and capacity were also identified as important factors in policymaking. While survey participants recognized that the time available for preparing policy; the cost for preparing policy; the skills and knowledge of experts for preparing policy; access to research, knowledge, information and data; and the level of urgency to manage the COVID-19 crisis; all influenced the evidence-informed policymaking, interview participants elaborated these by giving examples of lack of policy infrastructure and knowledge about COVID-19, initial policy dependence on WHO, gradual learning of international experiences and finally responding to local specific needs based on governmental guidelines and local information.
6. The factors that influenced policymakers' favourable attitude included enhanced social reputation/recognition, organizational incentives, reciprocal benefits/support, the joy of helping others, and power influence. Participants identified all factors more or less equally. However, there was some reluctance to strongly identify a factor with a self-serving connotation, like a reciprocal benefit.
7. We found from the quantitative survey that the majority of policymakers used tools of policymaking, like assessing the quality of information critically, considered all stakeholders' opinions and views, used standard formats to prepare policy, and considered the needs and interests of the government and the public. These correlated well with their opinion on the aspects of information source, information-seeking behaviour, organizational norms and values, the attitude of policymakers, and available resource and capacities as described in this study. These findings were augmented and further informed by a qualitative study where participants identified skilled human resources, local support, integration of policy into plans, and perceived incentives to policymakers and implementers as factors in play. Policymakers involved in policymaking for responding to COVID-19 at the national level claimed a rather relatively more professional process including information-backed policies, engagement with academics and experts, high-level

coordination mechanism of the government, quick research and analysis offered by the research institutions, and use of the trusted sources. This indicated that pandemic policies were much better informed than the regular policymaking with exception of medical policies which are naturally more evidence-based than compared to other policies.

8. Regarding the barriers that policymakers face, the survey results demonstrated that limited access to reliable information, lack of financial resources, lack of political will, and lack of knowledge and skills were the most significant barriers. The external influence was interestingly not seen as a barrier. The findings of the qualitative study were in general agreement with that of the quantitative survey, and it identified that resources, political willingness, attitude, organizational and professional culture, capacities and trust in information sources determined whether and to what extent the use of information is allowed in policymaking. In addition, the qualitative study revealed a unique adverse situation in the context of COVID-19 created by what is known as information overload, misinformation and disinformation. Participants of the study shared that politicians and publicly visible experts sometimes circulated premature and scientifically inconclusive information and influenced public sentiments. This created a challenging environment for policymakers to pursue the right information and adhere to the fact-based policy decision. Some local activism also was viewed with suspicion by some interviewees. Development partners were also viewed as a strong interest group in policymaking. Rigidity or lack of flexibility in higher level guidelines also did not allow local level policymakers to make adjustments as per local conditions. Lack of resources was the major constraint in the implementation of policy decisions at all levels and more so at the local level. Lack of inter-agency coordination at all levels of government surfaced as another major barrier mostly in implementation but also in policymaking and review of policies. Finally, one-off policy decisions to address immediate problems without consideration of the long-term implication were also seen during COVID-19.

CHAPTER SEVEN
RECOMMENDATIONS

Based on the findings of the survey, discussion and literature review we have put forward the following policy recommendations mainly to improve the policymaking and decision-making process in normal as well as emergency situations. These recommendations, if followed, will significantly strengthen the research-policy interface by improving the policy relevance of research and the research-seeking nature of policy in Nepal.

1. **Meta-policy for use of evidence in decisionmaking** - This study indicated that most of the time decisions are made on an ad hoc basis to avert the risk of non-decision and to satisfy superior officials and higher-level structure's expectations, rather than to focus on solving the problem. While this arose from the lack of knowledge and practice of the policy cycle in general, evidence informing of the decision was particularly erratic and arbitrary. We recommend that there need to be a meta-policy for policymaking to follow the policy cycle in general and have a standing manual or Standard Operating Procedure for decision-making that clearly instructs the decision-maker to follow a procedure with a first step of ensuring all relevant information is collected, screened for their relevance and reliability and used. For this, the Good Governance (Management and Operation) Rules 2007 (2064) can be amended to add such instructions.
2. **Strong knowledge brokering** - As the study showed that in an emergency situation, the most crucial part is to collect reliable and usable evidence as quickly as possible and a support group that helps to gather reliable information by screening out misinformation, disinformation, and unreliable but influential views of celebrity and politicians, which might be quite prevalent in such times, is quite desirable and helpful. When using the assistance from such a group, care needs to be taken not only to ignore the existing advisory system but also to coordinate and complement these two. The Good Governance (Management and Operation) Rules 2007 (2064) has provision for appointing advisors (Article 22-23). A new provision to identify the possibility of getting assistance from an external support group and general guidelines for the mechanism of assistance would be adequate for this purpose.
3. For a larger purpose of evidence-informed public policymaking, structural

strengthening of the research-policy interface is imperative. Governmental think tanks as knowledge brokers as well as a facilitator of familiarization and communication between policymakers and researchers, and non-governmental think tanks as knowledge brokers, in their own right, play a very crucial role in the research-policy interface. Acknowledging the roles of think tanks and strengthening them to produce reliable and usable information is very important for evidence-informed policymaking.

4. **Academia as a partner for policy research** - This study showed that locally produced research publications were either scarce or not of adequate rigour for use as a source of evidence. This is also supported by other studies. Academic research by virtue of its disciplinary limitation and epistemology is not in a form of ready-to-use evidence which reduces its relevance to policymaking. A clear need emerges that our researchers must be encouraged with more resources, orientation, and incentives to produce more policy-relevant knowledge. We recommend working out a policy and mechanism for orienting and incentivizing academia for contributing to policy research. Policymaking institutions can provide pertinent policy issues to academic institutions and the latter can carry out research on those pertinent issues and provide policy recommendations to the policymakers. Integrating universities and think tank institutions to support information generation and analysis is inevitable.
5. **Institutional memory and repository** - The lack of a system for institutional memory of the information used in policymaking came out as another problem. This was particularly made worse by frequent transfer of officials and lack of deposition of knowledge in the old organization or transfer of knowledge to the incoming official by the outgoing official. Frequent transfer of officials for no good reason is itself a problem that reduces specialization enrichment. The practice of *tippani* system needs to be converted into a mechanism where research-informed policy experts and concerned stakeholders engage in agenda setting, identifying the information needs and decision-making. We recommend for public organizations have a repository of information and references for each major decision process. Such a repository can be purged after a certain time when the information becomes obsolete or no longer useful. Specialization enrichment must also be a part of good governance.
6. **More power and resources at the local level** - In the context of response to the COVID-19 pandemic, this study revealed that local-level decision-makers

and implementers found the orders and circulars from the higher authority too rigid to adapt to local needs and opportunities. This is not only in the case of medical measures but also in non-medical measures like relief distribution. Although this happened in emergency situations and decisions made under uncertainty, it still is not compatible with the spirit of federalism. It is possible that Schedule -5 (No. 16) of the Constitution of Nepal which lists communicable disease control as a federal power was at play here. Nevertheless, provincial and particularly the local government that was intimately in contact with people in response to COVID-19 could have performed better if they were given the flexibility and resources required for local adaptation. It is not difficult to see that giving more power and resources to local government serves better in providing service to people in all situations, whether normal times or emergency situations.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Anthony, M. C., Cook, A. D. B., & Chen, C. (2021). Knowledge management and humanitarian organizations in the Asia-Pacific: Practices, challenges, and future pathways. *International Journal of Disaster Risk Reduction*, 53, 1-10. https://doi.org/10.1016/j.ijdrr.2020.102007

Baekkeskov, E. (2016). Explaining science-led policy-making: pandemic deaths, epistemic deliberation and ideational trajectories. *Policy Sciences*, 49, 395–419. https://doi.org/10.1007/s11077-016-9264-y

Baekkeskov, E., & Rubin, O. (2014). Why pandemic response is unique: powerful experts and hands-off political leaders. *Disaster prevention and management*, 23(1), 81–93. https://doi.org/10.1108/DPM-05-2012-0060

Baral, B. (2020, June 16). Why Nepali youth on the streets of Kathmandu are saying 'Enough is enough'. *The Wire*. https://thewire.in/south-asia/why-nepali-youth-on-the-streets-of-kathmandu-are-saying-enough-is-enough

Bardach, E. (2000). *A practical guide for policy analysis: The eightfold path to more effective problem solving*. Seven Bridges Press.

Barenblatt, D. (2004). *A plague upon humanity.* Harper.

Baron, J. (2018). A brief history of evidence-based policy. *The ANNALS of the American Academy of Political and Social Science*, 678(1), 40–50. https://doi.org/10.1177/0002716218763128

Baumgartner, F., & Jones, B. (1993). *Agendas and instability of american politics*. Chicago: Chicago University Press.

Birkland, T. A. (2015). *An introduction to the policy process: Theories, concepts and models of public policy making*. Routledge.

Blaikie, P., & Muldavin, J. (2004). The politics of environmental policy with a Himalayan example. Asia Pacific Issues, 74, 1-8. East-West Center

Bowen, S., & Zwi, A. B. 2005. Pathways to "evidence-informed" policy and practice: A framework for action. *PLoS Medicine*, 2 (7), e166. https://doi.

org/10.1371/journal.pmed.00201660600-0605.

Budhathoki, S. (2020, June 18). Man who instigated 'Enough is enough' explains his cause. *Onlinekhabar*. https://english.onlinekhabar.com/man-behind-enough-is-enough-explains-his-cause.html

Cairney, P., & Oliver, K. (2017). Evidence-based policy making is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy?. *Health Research Policy Systems*, 15, 35. https://doi.org/10.1186/s12961-017-0192-x

Cairney, P., & Zahariadis, N. (2016). 'Multiple streams analysis: A flexible metaphor presents an opportunity to operationalize agenda-setting processes'. In N. Zahariadis (Ed.), *Handbook of Public pPolicy aAgenda Setting* (pp. 1-21). Edward Elgar

Caplan, N. (1979). The two-community theory and knowledge utilization. *American Behavioral Scientist*. 22 (3), 459-470. https://doi.org/10.1177/000276427902200308

CDC (Centers for Disease Control and Prevention). (2014). Plague history. https://web.archive.org/web/20150821062557/http://www.cdc.gov/plague/history/index.html

Chikina, M., & Pegden, W. (2020). Fighting COVID-19: The heterogeneous transmission thesis. https://www.math.cmu.edu/~wes/covid.html

Chupein, T., & Glennerster, R. (2018). Evidence-informed policy from an international perspective. *The ANNALS of the American Academy of Political and Social Science*, *678*(1), 62–70. https://doi.org/10.1177/0002716218764297

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage.

de Caestecker, L., & von Wissmann, B. (2021). COVID-19: decision-making in public health. *The journal of the Royal College of Physicians of Edinburgh*, *51*(S1), S26–S32. https://doi.org/10.4997/JRCPE.2021.238

Dennison, L., & Rana, P. (2017). *Nepal's emerging data revolution*. http://devinit.org/wp-content/uploads/2017/04/Nepals-emerging-data-revolution.pdf

Dhimal, M., Pandey, A. R., Aryal, K. K., Subedi, M., & Karki, K. B. (2016). Translation of health research evidence into policy and planning in Nepal: An

appraisal. *Nepal Health Research Council*, http://nhrc.gov.np/wp-content/uploads/2017/06/HEALTH-POLICY-book.pdf

Dicks, L. V., Hodge, I., Randall, N. P., Scharlemann, J. P., Siriwardena, G. M., Smith, H. G., Smith, R. K. and Sutherland, W. J. (2014). A transparent process for "Evidence-informed" policy making. *Conservation Letters*, 7, 119-125. https://doi.org/10.1111/conl.12046

Dunn, W. N. (1980). The two-community metaphor and models of knowledge use: An exploratory case survey. *Science Communication.* 1 (4), 515-36. https://doi.org/10.1177/107554708000100403

Easton, D. (1953). *The political system: An inquiry into the state of political science*. Alfred A. Knopf.

Easton, D. (1965). *A systems analysis of political life*. John Wiley & Sons.

Elliot, H. & Popay, J. (2000). How are policymakers using evidence? Models of research utilization and local NHS policymaking. *Journal of Epidemiology Community Health*, 54, 461-468. https://doi.org/10.1136/jech.54.6.461

Fischer, F. (2003). *Reframing public policy: Discursive politics and deliberative practices*. Oxford University Press.

Gao, X., & Yu, J. (2020): Public governance mechanism in the prevention and control of the COVID-19: Information, decision-making and execution, *Journal of Chinese Governance*, https://doi.org/10.1080/23812346.2020.1744922

Garforth, C., Holt, G., Subedi, A., Regmi, B., Mckemey, K., Gauchan, D., Tripathi, B., & Ellis-Jones, J. (2005). Linking field-level findings to policy and decision-making in Nepal. In M. Stocking, H. Helleman, & R. White (Eds.). *Renewable Natural Resources Management for Mountain Communities* (pp. 239-246). International Centre for Integrated Mountain Development. https://doi.org/10.53055/ICIMOD.434

Givel, M. (2010). The evolution of the theoretical foundations of punctuated equilibrium theory in public policy. *Review of Policy Research*, *27* (2),: 187-198. https://doi.org/10.1111/j.1541-1338.2009.00437.x

Government of Nepal (GoN). (1964). *Communicable Disease Act, 2020 (1964*). https://www.lawcommission.gov.np/np/wp-content/uploads/2019/04/2.-संक्रामक-रोग-ऐन-२०२०.pdf

Government of Nepal (GoN). (2017). *Disaster risk reduction and management Act, 2074 (2017)*. https://bipad.gov.np/uploads/publication_pdf/DRRM_Act_and_Regulation_english.pdf

Government of Nepal (GoN). (2018). *The Public Health Service Act, 2075 (2018*). https://www.lawcommission.gov.np/en/wp-content/uploads/2019/07/The-Public-Health-Service-Act-2075-2018.pdf

Government of Nepal (GoN). (2021). *Ordinance for COVID-19 crisis managment, 2078 (2021)*. http://rajpatra.dop.gov.np/welcome/book?ref=24545

Hair, J. J. F., Hult, G. T. M., Ringle, C., & SarstedT, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.

Hajer, M., & Versteeg, W. (2011). Discursive policy analysis. In *International Encyclopedia of Political Science*: SAGE Publications.

Head, B. W. (2013). Evidence-Based Policymaking - Speaking Truth to Power?. *Australian Journal of Public Administration*, 72(4), 397–403. doi:10.1111/1467-8500.12037

Head, B. W. (2015). Toward more "evidence-informed" policy making? *Public Administration Review*, 76(3), 472-484. https://doi.org/10.1111/puar.12475

History.com. (2020). Spanish Flu. https://www.history.com/topics/world-war-i/1918-flu-pandemic.

Imani-Nasab, M., Yazdizadeh, B., Salehi, M., Seyedin, H., & Majdzadeh, R. (2017). Validity and reliability of the evidence utilisation in policymaking measurement tool (EUPMT). *Health Research Policy and Systems*, 15(1), 66. https://doi.org/10.1186/s12961-017-0232-6

Kingdon, J. W. (1984). *Agendas, alternatives and public policies*. Pearson Education Limited.

Kyza, E. A., & Varda, C., & Panos, D., & Karageorgiou, M., & Komendantova, N., & Perfumi, S. C., & Shah, S. I. H., & Hosseini, A. S. (2020). Combating misinformation online: Re-imagining social media for policy-making. *Internet Policy Review*, 9 *(*4), 1-24. https://doi.org/10.14763/2020.4.1514

Lamichhane, Y. R. (2021). "Enough is enough": A cultural turn of youth activism in Nepal. *The Outlook: Journal of English Studies*, 12(1), 1–15. https://doi.

org/10.3126/ojes.v12i1.38741

Lasswell, H. D. (1956). *The decision process: Seven categories of functional analysis.* University of Maryland Press.

Lasswell, H. D. (1971). *A pre-view of policy sciences.* Elsevier Publishing Company.

Liang, S. T., Liang, L. T., & Rosen, J. M. (2021). COVID-19: A comparison to the 1918 influenza and how we can defeat it. *Postgraduate Medical Journal*, 97 (1147), 273-274. http://dx.doi.org/10.1136/postgradmedj-2020-139070

Lips, A. M. B., O'Neill, R. R., & Eppel, E. A. (2011). Cross-agency collaboration in New Zealand: An empirical study of information sharing practices, enablers and barriers in managing for shared social outcomes. *International Journal of Public Administration*, 34(4), 255-266. https://doi.org/10.1080/01900692.2010.533571

Majumdar, D. (2006). Collaboration among government agencies with special reference to New Zealand: A literature review. *Social Policy Journal of New Zealand*, 27, 183-198.

Ministry of Health and Population. (2019). *National Health Policy 2019*. https://mohp.gov.np/downloads/National%20health%20policy-%202076.pdf

Ministry of Health and Population (MoHP). (2019). *National Health Policy 2019 (2076)*. https://mohp.gov.np/downloads/National%20health%20policy-%202076.pdf

National Planning Commission (NPC). (2020). *The fifteenth plan (Fiscal Year 2019/20 – 2023/24)*. https://npc.gov.np/images/category/15th_plan_English_Version.pdf

Nurprabowo, A., Awang, S. A., Hardwinarto, S., Dharmawan, B., Daulay, M. H., & Maryudi, A. (2021). Poor science meets political neglect: Land use changes of high conservation value forests in Indonesia. *Forest and Society*, 5 (2), 199-208. https://doi.org/10.24259/fs.v5i2.13451

Oliver, K., Lorenc, T., & Innvær, S. (2014). New directions in evidence-based policy research: a critical analysis of the literature. *Health Research Policy Systems,* 12, 34. https://doi.org/10.1186/1478-4505-12-34

Ostrom, E., (2011). *Background on the institutional analysis and development framework*. *Policy Studies Journal*,. 39 (1),: 7-27. https://doi.

org/10.1111/j.1541-0072.2010.00394.x

Ostrom, E., Gardener, R., & Walker, J. (1994). *Rules, games and common pool resources*. The University of Michigan Press.

Oxman, A. D., Lavis, J. N., Lewin, S., & Fretheim, A. (2009). SUPPORT tools for evidence-informed health Policymaking (STP) 1: What is evidence-informed policymaking?. *Health Research Policy Systems*, 7, S1 (2009). https://doi.org/10.1186/1478-4505-7-S1-S1

Pandey, C. L., & Kurian, P. (2017). The media and the major emitters: Media coverage of international climate change policy. *Global Environmental Politics*,. 17 (4),: 67-87. https://doi.org/10.1162/GLEP_a_00430

Phillips, P. W. B., Castle, D., & Smyth, S. J. (2020). Evidence-based policy making: determining what is evidence. *Heliyon*, 6, e04519. https://doi.org/10.1016/j.heliyon.2020.e04519

Purtle, J., Nelson, K. L., Lengnick-Hall, R., Horwitz, S., Palinkas, L. A., McKay, M. M., & Hoagwood, K. E. (2022). Inter-agency collaboration is associated with increased frequency of research use in children's mental health policy making. *Health services research*, https://doi.org/10.1111/1475-6773.13955

Ranade, W., & Hudson, B. (2003). Conceptual issues in inter-agency collaboration. *Local Government Studies*, 29(3), 32-50. https://doi.org/10.1080/03003930308559378

Reisach, U. (2021). The responsibility of social media in times of societal and political manipulation. *European Journal of Operational Research*,. 291 (3), 906-917. https://doi.org/10.1016/j.ejor.2020.09.020

Rubin, O., Errett, N. A., Upshur, R., & Baekkeskov, E. (2021). The challenges facing evidence-based decision-making in the initial response to COVID-19. *Scandinavian Journal of Public Health*, 49(7), 790–796. https://doi.org/10.1177/1403494821997227

Sabatier, P. A. (2007). The need for better theories. In P.A. Sabatier (Ed.), *Theories of the policy process, pp. 2-20*. Westview Press.

Sabatier, P. A., & Weible, C. M. (2007). The advocacy coalition framework: Innovations and classifications. In P.A. Sabatier (Ed.), *Theories of the Policy Process, pp. 189-222*. Westview Press.

Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. *Social and*

Personality Psychology Compass, 10 (9), 503-518. https://doi.org/10.1111/spc3.12265

Sibbald, B., & Roland, M. (1997). Getting research into practice. *Journal of Evaluation in Clinical Practice,* 2, 15-21. http://dx.doi.org/10.1136/jech.49.3.225-a

Snilstveit, B., Vojtkova, M., Bhavsar, A., Stevenson, J., & Gaarder, M. (2016). Evidence & gap maps: A tool for promoting evidence-informed policy and strategic research agendas. *Journal of clinical epidemiology*, 79, 120–129. https://doi.org/10.1016/j.jclinepi.2016.05.015

Tiwari, B. B., Ban, A., Gurung, S., & Karki, K. B. (2021). Translating evidence into policy: opinions and insights of health researchers and policymakers in Nepal. *BMC Health Services Research*, 21(1), 1066. https://doi.org/10.1186/s12913-021-07102-y

True, J. L., Jones, B. D., & Baumgartner, F. R. (2007). Punctuated equilibrium theory: Explaining stability and change in policymaking. In P.A. Sabatier (Ed.), *Theories of the Policy Process, pp. 155-188.* Co-Westview Press.

Van de Walle, B., & Turoff, M. (2008). Decision support for emergency situations. *Information Systems and e-Business Management*, 6, 295-316. https://doi.org/10.1007/s10257-008-0087-z

Ward, K. D., Varda, D. M., Epstein, D., & Lane, B. (2018). Institutional factors and processes in interagency collaboration: The case of FEMA Corps. *American Review of Public Administration,* 48(8), 852–871. https://doi.org/10.1177/0275074017745354

Wehn, U., & Montalvo, C. (2018). Knowledge transfer dynamics and innovation: Behaviour, Interactions and Aggregated Outcomes. *Journal of Cleaner Production,* 171, 56-68. https://doi.org/10.1016/j.jclepro.2016.09.198

Weible, C. M., Heikkila, T., deLeon, P., & Sabatier, P. A. (2012). Understanding and influencing the policy process. *Policy Sciences*, 45 (1), 1-21. https://doi.org/10.1007/s11077-011-9143-5

Weible, C. M., Sabtier, P. A., & McQueen, K. (2009). Themes and variations: Taking stock of the advocacy coalition framework. *Policy Studies Journal*, 37 (1), 121-140. https://doi.org/10.1111/j.1541-0072.2008.00299.x

WHO. (2021). Coronavirus disease (COVID-19) advice for the public. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

Zahariadis, N. (2007). The multiple streams framework: Structure, limitations, prospects. In P. A. Sabatier (Ed.), *Theories of the Policy Process (pp. 65-92).* Westview Press.

PRI is a think tank of the Government of Nepal established on 26 September 2018 in accordance with the Policy Research Institute Board (Formation) Ordinance with a vision to contribute to effective and responsive public policy for national prosperity. PRI's mission is to establish itself as a credible institution that offers informed public policy and its goal is to generate reliable, evidence-based and transformative knowledge for public policy. Its seven core values – quality, objectivity, integrity, diversity, transparency, accountability and engagement – define its workings.

PRI carries out policy research on all issues and sectors of public policy concerns – through five thematic centres and 18 units – and recommends to the Government of Nepal what reforms it has to undertake in each of these policy areas. All researches are conducted in accordance with PRI's public policy research process and standard, which form part of a broad policy cycle.

Knowledge management is an important component of PRI. It operates a public policy dialogue forum as a regular mechanism for learning, sharing and debating policy issues. In PRI's belief, public policy formation requires the combination of three types of knowledge: (a) scientific knowledge generated through research and analysis, (b) administrative knowledge gathered through bureaucratic experiences and (c) societal knowledge developed through social and political processes, such as political debates, media advocacy as well as people's experiences.

9 789937 954174