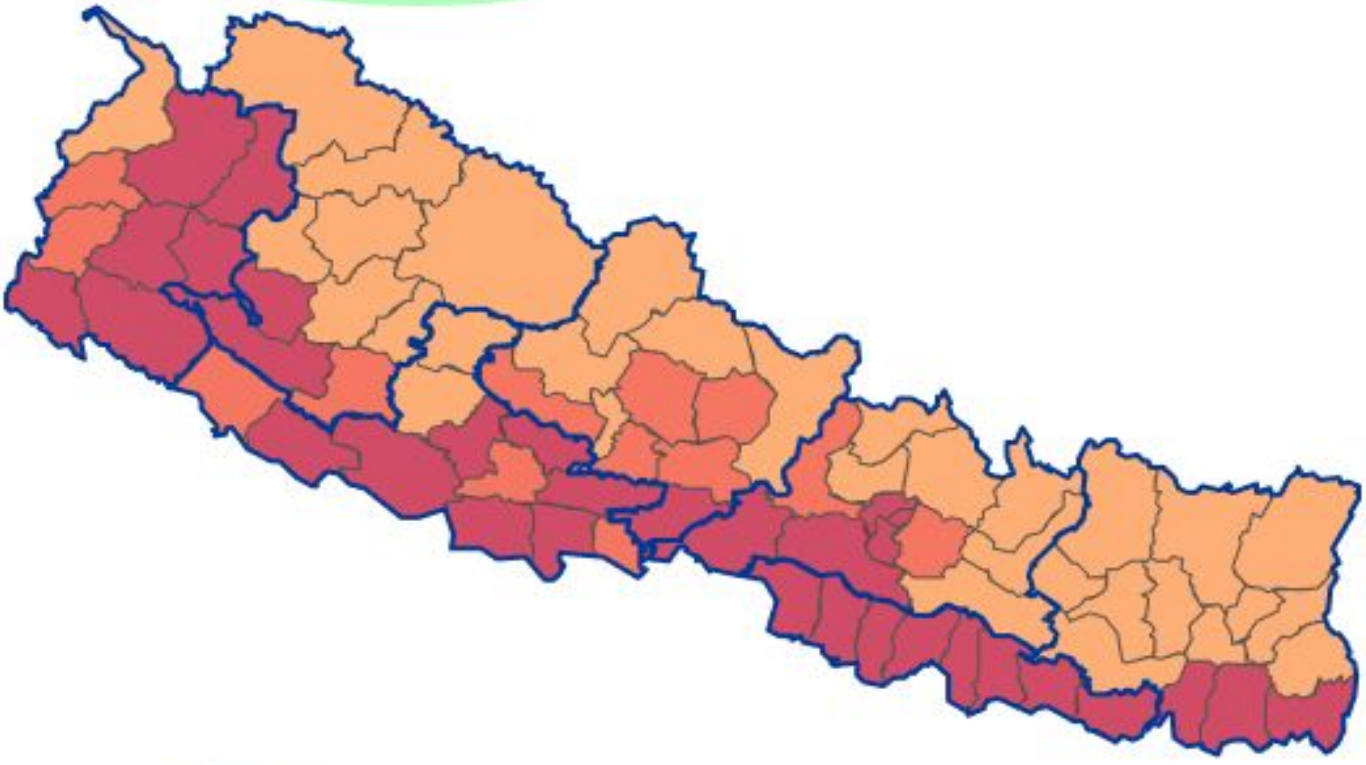
ASSESSMENT OF PROVINCIAL GOVERNMENTS' RESPONSE TO COVID-19



Foundation *for* Development Management

NIPoRe
Nepal Institute for Policy Research

ASSESSMENT OF PROVINCIAL GOVERNMENTS' RESPONSE TO COVID-19

Co-publication of Foundation for Development Management (FDM) and Nepal Institute for Policy Research (NIPoRe)

ABOUT US

Foundation for Development Management (FDM) is a private limited company registered under the Company Act of Government of Nepal in 2000 as a development support organization. Over its past two decades of operation, FDM has conducted a number of assignments pertaining to Research, Monitoring and Evaluation (M & E), Capacity Building and Institutional Development. FDM's mission is to contribute to the societal development by injecting effective management practices in public, private, and social organizations.

Having served over 35 national and international clients comprising of government, non–government and donor organizations, FDM primarily works under the thematic areas of education, health, governance, child rights, DRR and GESI. FDM is based in Kathmandu, Nepal and has 15 full-time program staff, over 100 consultants and pool of enumerators spread over 67 districts. In its two decades of operation, it has successfully completed more than 100 M & E and research assignments.

Nepal Institute for Policy Research (NIPoRe) is an independent and non-partisan think-tank based in Kathmandu, Nepal. It aims to generate evidence-based debates among citizens and critical actors of development in both the public and private sectors on contemporary policy issues from Nepal and Asia. Our team members represent the diversity of academic disciplines, professional backgrounds, and geography. We adopt a multi-disciplinary approach in our analysis of policies and research, supported by researchers trained in prominent universities and professional environments (from) across the globe.

Established in 2019, NIPoRe is one of the youngest policy institutes in the country. It has a global team of over 25 scholars spread across different parts of the world. The institute publishes research commentaries, policy briefs, and monthly reviews regularly. Besides, NIPoRe works with its partner institutions from Nepal and outside on areas of mutual interest.

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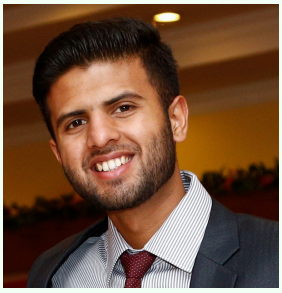

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This Report titled 'Assessment of Provincial Governments' Response to COVID-19' is a sincere effort by Foundation for Development Management (FDM) and Nepal Institute for Policy Research (NIPoRe). However, this would not have succeeded without the contributions of many people and institutions.

Firstly, we would like to express our since gratitude to all the elected officials, government officials, security officials, health workers, health experts, journalists, business people and federations, local shopkeepers and local people among others. They availed themselves to an interview despite their focus on fighting COVID-19 pandemic. We can unequivocally say that their contributions was critical in terms of understanding the impact of COVID-19, activities undertaken by the provincial and local government, and the effectiveness of those activities. It was particularly important because we could not carry out field work due to the pandemic, and hence had to rely on telephone interviews and published materials by the public offices and news among others.

Secondly, we would like to thank the authors who worked tirelessly for few months. Despite the limited resources and lack of field-work, they were able to produce high-quality output. Finally, we would like to thank all the people who are working on the frontlines to fight the pandemic including all the health workers, security officers, administrative staff, private citizens/organizations etc who have dedicated their time despite the associated risks. They are the true heroes and deserve praise and support if we are to be able to control the pandemic at the earliest.

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LIST OF ABBREVIATIONS

APF	Armed Police Force
BPKIHS	BP Koirala Institute of Health Sciences
CBS	Central Bureau of Statistics
CCMC	COVID-19 Crisis Management Centre
CDO	Chief District Officer
COVID-19	COVID-19 Disease 2019
DAO	District Administration Office
DCMC	District Crisis Management Committee
DCMC	District COVID-19 Crisis Management Centre
FAO	Food and Agriculture Organization
FDM	Foundation for Development Management
GDP	Gross Domestic Product
GoN	Government of Nepal
HDI	Human Development Index
HEOC	Health Emergency Operation Centre
ILO	International Labour Organization
IMF	International Monetary Fund
IMR	Infant Mortality Rate
MoFAGA	Ministry of Federal Affairs and General Administration
MoHP	Ministry of Health and Population
MPI	Multi-dimensional Poverty Index
NDRRMA	National Disaster Risk Reduction and Management Authority
NHRC	Nepal Health Research Council
NIPoPe	Nepal Institute for Policy Research

NRN	Non-Residential Nepalese
PCMC	Provincial COVID-19 Management Centre
PCR	Polymerase Chain Reaction
PHCC	Primary Health Care Centres
PPE	Personal Protective Equipment
RDT	Rapid Diagnostics Tests
SEE	Secondary Education Examination
UNDP	United Nations Development Programme
UNWTO	United Nations World Trade Organization
VTM	Viral Transport Medium
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

The Assessment of Provincial Government's Response to COVID-19 was undertaken by Foundation and Development Management (FDM) and Nepal Institute for Policy Research (NIPoRe) primarily to understand and critically look into how the seven provinces of Nepal have handled the COVID-19 pandemic. The study analyzed provincial governments' emergency response policies, resources, mechanism and the effectiveness of the response. Moreover, the team also looked into the coordination between federal government, provincial government and local governments in handling the crisis and identified the challenges and the gaps experienced during the management.

Because field-work was infeasible, the team gathered information from online resources comprising those from official government portals, portals of Nepal-based development partners, sites of research institutions and think-tanks and in some cases reports from trustworthy daily newspapers (both regional and national) in Nepal and outside. Following the collection of information, key stakeholders including provincial government authorities, health experts, journalists and security personnel were interviewed over the phone.

One of the major findings of the study was that despite provincial government's dedicated efforts in managing the pandemic, all the seven provinces suffered a severe shortage of resources and mismanagement. This was evidenced in the form of poor management of quarantines and shortage of medical equipment especially in Province 2, Province 5, Karnali and Sudurpaschim. In Province 2, for instance, in the absence of functional lab service for a long time, swab samples had to be sent to Kathmandu or Dharan, which largely delayed PCR results. In Karnali, the number of migrants coming in from India was so high that the quarantine facilities were inadequate to accommodate them. Crowded quarantines consequently became a breeding ground for COVID infections.

While provincial and local governments appeared to have taken decent preparatory measures in terms of resources, the fact that they unexpectedly faced a huge influx of migrants from India, particularly from the end of May when India started running special trains, situation turned dire. Since local governments were provided only limited funding and most of them had to utilize their own fund, they were unable to provide proper facilities and services. Moreover, although quarantine, testing and other guideline did exist, it was found that most of these guidelines had been formulated at the federal level and they were

simply not pragmatic for provincial and local governments to follow. Lack of proper support from federal government was highlighted as a big issue by provincial stakeholders.

The performance of local government was also found to be a deciding factor in management of the pandemic. In Province 1 for instance, the proactivity of local government with support from NGOs and CBOs was one of the reasons why the management of pandemic had been effective. In another case, while Province 5 showed urgency and was largely able to develop health infrastructure at a rapid pace, not all local units showed the same level of urgency and were slow to prepare for the effects of pandemic which ultimately had an impact on their management.

Although the study showed that Province 1 and Bagmati province were able to manage the pandemic relatively better than the other provinces, with the easing of lockdown and likely resumption of flights from September, all seven provinces now stand at a very vulnerable position. For Province 1, which has the highest number of migrants working in Gulf, the management of returnees could prove particularly challenging while for Province 3, influx of people in the capital, Kathmandu poses a huge threat. In this light, one of the first tasks the provincial governments is to provide contextual policy guidance and financial support to the local governments so that they will be better equipped to handle huge influx of returnees. Another urgent task is making better provisions of facilities particularly ventilators and isolation beds as death rate and infection rate has increased in all seven provinces. On the long term, provincial governments need to formulate a pandemic management strategy so that they will be handle the pandemic on a more systematic manner.

On the part of the local government, it appears that one of the main things that they need to do is raising awareness amongst people regarding the need of precautionary measures to control the pandemic. Local governments should also resort to partial sealings where cases have been on the rise. In the long run, they also need to better prepared financially by taking innovative steps such as the establishment of a revolving fund which can be useful in the long term.

The report shows reasons for optimism. The rapid pace at which some provincial and local governments were able to mobilize resources implies that those units are not institutionally incapable despite several limitations. It also shows the importance of local units in coming up with a localized solution and in implementation of the policies. However, the health infrastructure of all the provinces was stretched to the limit. If any province were to experience community spread, which was seen only in few places by the time this report was written, it could break the whole system. Therefore, further preparation from the provinces and local units is warranted.

INTRODUCTION

Global outlook

The COVID-19 Disease 2019 (COVID-19) pandemic is one of the greatest public health crises ever recorded in modern history. The first cases of the disease were reported in Wuhan, the capital city of China's Hubei Province, in late December 2019[1]. By 20 July 2020[2], the disease has spread to 188 countries and regions in the world. As per World Health Organization (WHO)'s 182nd Situation Report released on 20 July 2020[3], just within seven months, the world has recorded a whopping 14,348,858 confirmed cases of the disease, i.e., about 2,049,836 new cases each month or about 71,033 new cases each day between 1 January 2020 and 20 July 2020. During this period, the countries around the world have confirmed 603,691 deaths from the disease - about 86,241 deaths each month or about 2,988 deaths each day.

Considering the severity of the disease, the WHO declared[4] COVID-19 a public health emergency of international concern on 30 January 2020. And on the 41st day after making this declaration and after the disease spread to all WHO classified regions and the countries across those regions began reporting increasing numbers of new cases, the WHO declared[5] the disease a pandemic on 11 March 2020.

As of 20 July[6]; the Americas alone have reported more than half of the world's total confirmed cases and deaths (7,584,675 | 309,309)[1] - highest among the six geographic regions used by the WHO, followed by Europe (3,079,218 | 207,535), South-East Asia (1,436,141 | 34,388), Eastern Mediterranean (1,387,295 | 34,686), Africa (597,223 | 9,691), and Western Pacific (263,565 | 8,069). At the country-level; the USA (3,685,460), Brazil (2,074,860), India (1,118,043), Russia (777,486) and South Africa (364,328) remain the five countries with the highest numbers of confirmed COVID-19 cases so far. Similarly, in terms of human casualties; USA (139,468), Brazil (78,772), United Kingdom (45,300), Mexico (38,888), and Italy (35,045) are the five countries with highest COVID-19 related deaths.

[1] Note: The numbers of confirmed cases are followed by the numbers of COVID-19 related casualties in each regions as classified by the World Health Organization

Impact on global economy

The COVID-19 pandemic has proved to be one of the most devastating multifaceted crises of our time as it has severely affected key sectors of the highly globalized modern world. The World Bank, in its June update of the Global Economic Prospects[7], has projected the world economy to contract by 5.2 percent in 2020 - the worst global recession since the Second World War. Similarly, analyzing the overall impacts of the pandemic on the global economy, the June update of the International Monetary Fund (IMF)[8] has further downgraded the global growth forecasts for 2020 (-4.9 percent only) and cautioned that the current crisis could also reverse all the progress made in terms of reducing extreme poverty in the world since the 1990s.

The 2020th edition of The State of Food Security and Nutrition in the World report[9] has estimated COVID-19 adding between 83 and 132 million people to the total number of undernourished in the world in 2020 alone. Similarly, a July report[10] published jointly by Food and Agriculture Organization (FAO) and World Food Programme (WFP) has estimated the disease to result in a heightened level of hunger across 25 countries in the coming months. In addition, the study has also estimated that the Pandemic could add about 121 million acute food insecure people across those at-risk countries and result in deaths of up to 6,000 children each day over the next six months if necessary steps are not taken on time.

The impacts of COVID-19 on global tourism are also estimated to be huge. As per the United Nations World Trade Organization (UNWTO)[11], the lockdowns imposed across countries as their response to the crisis has caused a 98 percent fall in international tourist numbers in May when compared to the data from 2019. Similarly, there has been a drop of (y-o-y) 56 percent in tourist arrivals between January and May 2020, i.e., a fall of 300 million tourists and loss of USD 300 billion in international tourism receipts.

On education, as of 20 July 2020, UNESCO estimates[12] COVID-19 affected about 1,066,817,855 learners (almost 60.9 percent of the total enrolled learners) from country-wide closures across 107 countries. Similarly, the International Labour Organization (ILO) has estimated[13] that as a result of COVID-19, the world has lost 5.4 percent of global working hours (equivalent to 155 million full time jobs) during the first quarter of 2020 as compared to the fourth quarter of 2019. The organization has also estimated the losses for the second quarter of the year, relative to the last quarter of 2019, are likely to reach 14 percent (almost 400 million full-time jobs).

Policy responses

Nationwide lockdowns and strict restrictions on international travel were two of the key measures taken by governments around the world to limit people's movement within their economies and across borders to better prevent and contain the disease. In addition, the affected countries and companies around the world also relied on an additional set of measures to minimize economic fallout from the Pandemic. They included cash transfers, support with the workers' wages and employment, deferrals (cancellation and exemptions in some cases) of tax payment deadlines. As per the WHO[14], to better prevent and contain COVID-19 pandemic, 198 countries/areas/territories have put a ban on international travels between January and July 2020. As of 23 July, 63 of these countries have loosened their measures in their attempts to return to the new normal. Similarly, to manage the humanitarian crisis caused due to the pandemic, the UN has revised its COVID-19 Global Humanitarian Response Plan[15] and with the amount of USD 10.3 billion humanitarian plan package, it is the largest appeal made in the UN's history.

National outlook

According to the Ministry of Health and Population (MoHP)[16] Nepal confirmed the first case of COVID-19 on 23 January 2020 in a Nepali citizen who returned to Nepal from the Chinese City of Wuhan earlier that month. By 20 July 2020[17], Nepal has confirmed a total of 17,844 confirmed cases. Of whom; 40 have lost their lives, 11,868 have recovered from the disease and the remaining 5,936 were kept in isolation. On average, between 23 January and 20 July 2020 (a total of 180 days), Nepal reported about 99 new cases each day or about 713 new cases each week or about 2,974 new cases each month. In terms of COVID-19 related deaths on an average basis, during this period, Nepal reported one new death every fifth day or almost 2 deaths each week or about 7 deaths each month.

Impact on Nepali economy

The World Bank has estimated[18] Nepal to grow at 1.8 percent in fiscal year 2020, compared to 7 percent in fiscal year 2019, with the service sector growing at 1 percent (lowest since fiscal year 2002) and industrial sector at 3.2 percent (lowest in four years) due to massive decline in overall growth resulted from COVID-19 related lockdown and restrictions. Similarly, between March and May 2020, the pandemic has also contracted services exports, goods exports, remittances and government revenue by 57.4 percent, 62.1 percent, 43.4 percent and 51 percent respectively as compared to the same period in

2019. An ILO estimate[19] shows about 3.7 million workers working in high-risk areas (wholesale and retail trade, manufacturing, construction, transportation and storage, accommodation and food service) standing at the risk of facing short- to long-term economic shortage due to the pandemic and related lockdowns in Nepal. Similarly, COVID-19 is likely to disrupt between 1.6 and 2 million jobs in Nepal - either these jobs will disappear or would result in reduced working hours and wages. A United Nations Development Programme (UNDP) study[20] has projected Nepal's growth rate to drop from pre-COVID-19 8.5 percent to below 2.5 percent in 2019-2020. Similarly, the same study has estimated Nepal to lose about 60 percent of tourism receipts (worth USD 400 million) in 2020 from the COVID-19 related lockdowns and travel restrictions. Similarly, the same study has also estimated a 15-20 percent decline in remittance to Nepal this fiscal year. In addition, the nationwide lockdown has also resulted in job losses for 31.5 percent of the total workers - women (41 percent) and men (28 percent). Similarly, early estimates[21] from The Asia Foundation has projected COVID-19 contracting Nepal's construction sector by 0.31 percent over the previous year and affecting works of about 1.4 million workers (about 82 percent of total jobs in the sector) in some ways.

An estimate[22] by the Central Bureau of Statistics of Nepal has concluded Nepal's Gross Domestic Product (GDP) to grow at 2.27 percent during FY 2076/77, compared to 6.75 percent in the last fiscal year. In addition, the study has also concluded that the government imposed nationwide lockdown has severely affected key sectors of Nepal's economy including agriculture, manufacturing, construction, wholesale and retail trade, hotel and restaurant, transportation and tourism and education among others. As the disease still continues to unfold, the final consequences of the crisis are still uncertain but the Pandemic is likely to have severe short- to long-term dents on Nepal's economy across key sectors.

Nepal's Policy response

The Government of Nepal (GoN) has used a mixture of policy measures to better prevent and contain the virus. The provincial governments and local governments, in addition to the major policy measures taken by the federal government and the key institutions at the centre, have used their own measures to tackle the crisis depending upon the severity of the pandemic in their respective places. The policy response of individual provinces and selected local levels will be dealt with in details in the following chapters of the study.

Below is the timeline of key steps taken by the Federal Government of Nepal aimed at managing COVID-19 Pandemic in the country:

Day	Measures
28 Jan	Closure of Rasuwagadhi Border with China[23]
16 Feb	Evacuation of 175 Nepalis from Hubei Province, China[24]
27 Feb	Temporary suspension of sending Nepali workers to South Korea[25]
29 Feb	Formation of a high-level committee to prevent and control COVID-19 in Nepal under the leadership of the Deputy Prime Minister and Minister of Defence Ishwor Pokhrel[26]
01 Mar	Suspension of Visit Nepal Year 2020 promotion campaigns in foreign countries[27]
02 Mar	Announcement of temporary halting of visas on-arrival for citizens from China, Italy, Iran, Japan and South Korea (to be effective from 10 March onwards)[28]
09 Mar	Temporary suspension of visas on-arrival for citizens from France, Germany and Spain[29]
12 Mar	Temporary suspension of visas on-arrival for tourists from all countries and cancellation of all spring mountaineering expeditions, including Everest ascents for the duration of 14 March - 30 April 2020[30]
13 Mar	Temporary suspension of visas on-arrival for all foreign travellers and Non Residential Nepalese (NRNs) arriving in Nepal via Tribhuvan International Airport for the duration of 14 March - 30 April 2020. In addition, GoN makes it mandatory for all foreigners and the NRNs travelling to Nepal submit a swab test Polymerase Chain Reaction (PCR) health certificate (issued maximum 7 days prior to their arrival date to Nepal). Furthermore, if foreigners with diplomatic, official, business, study and working visas arrive in Nepal, GoN made it mandatory for them to stay in home quarantine for at least 14 days from the date of their arrival. Finally, GoN also announces to shut down all land ports of entry in the country for the duration of 14 March - 30 April for the foreigners from third countries.[31]
19 Mar	A ban on entry of citizens from COVID-19 affected nations, ban on gatherings of more than 25 persons at public places, closure of all malls and recreation centers, suspension of classes at all academic institutions, extension of visas of foreign nationals whose visas have expired during the closedown period[32] Suspension of all planned examinations of the Public Service Commission of the Government of Nepal, suspension of Secondary Education Examination (SEE) and all examinations of the Tribhuvan University[33] Suspension of meetings of the House of Representatives until further notice[34]
20 Mar	Prime Minister KP Sharma Oli addresses the nation, his first address to the nation since Nepal confirmed a COVID-19 case in late January 2020[35]

	Announcement to contribute NPR 100 million to the SAARC COVID-19 Emergency Fund[36]
	Suspension of National Assembly until further notice[37]
	Temporary suspension of trekking permits for foreign trekkers[38]
	Decision to close courts across the country for two weeks[39]
24 Mar	Nepal imposes a nationwide lockdown (initially imposed for a week but later was extended until 21 July 2020 for a total of 120 days)[40]

Province 1

Executive summary

Foundation for Development Management (FDM)/Nepal Institute for Policy Research (NIPoRe)'s analysis showed that Province 1 has managed the pandemic relatively better than other provinces. With 12 cases emerging on 17 April in Bhulke of Udaypur, many had expected Province 1 to be the hotspot for COVID-19. However, by 20 July (the day before the lockdown was formally lifted in the country), cases had reached only 793 out of which, 702 had already recovered. The rate of increase of infection in the province was also relatively lower than that of other provinces while the rate of recovery has been very quick amongst the infected.

Most of the stakeholders that FDM/NIPoRe spoke to credited the success of Province 1 in containing the pandemic to swift measures adopted by the local government as well as the provincial government. For instance, the provincial government had already decided to set up a dedicated COVID hospital in the province much before the first case appeared. Moreover, following the cases in Bhulke, Udaypur, the district was immediately sealed and contact tracing was swiftly done amongst the first contact points of the infected. One of the reasons PCR tests could be swiftly done in the province was because the provincial government had set up two PCR testing centres – BP Koirala Institute of Health Sciences (BPKIHS) in Dharan and Koshi Zonal Hospital in Biratnagar well before the first case appeared in the province. Backlogging of swabs did not take place and testing was carried out efficiently to ensure that infections were contained.

It was also found that the support from civil society as well as Non-Government Organizations (NGOs) and Community Based Organizations (CBOs) were instrumental in assisting Province 1 tackle the pandemic. In Jhapa, organizations like Mechi Abhiyaan and Kakkadbhitta Society not only helped feed the migrant workers, they also provided resources like Personal Protective Equipment (PPE) suits, KN 95 masks, Viral Transport Medium (VTM) kits among other essentials to the local governments. There were similar efforts from civil society in Biratnagar and Ilam as well. Local governments were merely provided with financial support of NPR 1 million (municipality) and NPR 500,000 (rural municipality), they could not have managed the quarantines and resources without support from civil society and NGOs. Swift

movement from local governments as well as security forces to keep incoming migrants in quarantine as well as increase the rate of PCR tests and reduce Rapid Diagnostics Test (RDT) was also instrumental in quickly identifying the infected and treating them.

One of the reasons Province 1 was better able to manage the pandemic was because of the relatively smaller number of migrants coming in from India. While other provinces like Karnali and Suduparschim provinces saw huge influx of migrants due to the large volume of migrant workers working in India, Province 1 had very few workers working in India, as a result of which their management was not as challenging as it was for other provinces.

However, there are certain areas where the government of Province 1 could have done better. To begin with, it has not yet provided health professionals, government frontline workers and security professionals with the pledged amount of incentives and insurance plans which can act as a huge discouragement for them in the near future. Moreover, the provincial government hasn't ensured enough budgets for the local governments. An amount of NPR 1 million for municipalities and NPR 500,000 for rural municipalities is not enough to manage quarantine and migrants. While provincial decisions on monetary relief has been commendable, the government has not clearly identified how the fund will be disbursed.

With nearly 200,000 migrant workers expected to come in after international flights resume, Province 1 needs to be better prepared than other provinces to brace the incoming crisis. For this, quarantine facilities need to be increased and PCR tests kits need to be made ready for testing. Moreover, the provincial government needs to ensure additional budget for local governments to tackle this additional inflow of migrants. It also needs to ensure better sealing of its border with Province 2 where cases have been rising. In addition, there is also a need for the provincial government to revise its guideline and action plan as many of them were formulated at the beginning of the pandemic and might need revisions in light of the changed context.

Part 1: Background

Province 1 covers the Eastern most area of Nepal and came into existence following the promulgation of the Nepali Constitution 2015. With Biratnagar as its provincial headquarter, the province is home to cities like Dharan, Itahari, Inarua, Birtamod and Damak. The province plays an important role in the country's economy contributing 15.7 percent to the GDP, only second to Province 3 (Bagmati)[1]. It has an area of 25,905 square kilometer and has three-fold geographical division: Himalayan in the north, Hilly in the middle and Terai in the southern part of Nepal, varying between an altitude of 70 m and 8,848 m. The province is bordered by the Tibet Autonomous Region of China to the North, the Indian states of Sikkim and West Bengal to the East, and Bihar to the South, and Bagmati Pradesh and Province No. 2 to the West. The province shares border with India at four major points - Kakarbhitta, Pashupatinagar, Bhadrapur and Biratnagar.

Province 1 is divided into 14 districts. The 14 districts are in turn divided into a total 46 municipalities and 88 rural municipalities. The province is home to one metropolitan city – Biratnagar and two sub-metropolitan cities – Itahari and Dharan. A detailed description of the local units as per the districts has been presented below:

Table 1: Number of municipalities and rural municipalities per district (Province 1)

District	Rural municipality	Municipality
Bhojpur	7	2
Dhankuta	4	3
Ilam	6	4
Jhapa	7	8
Khotang	8	2
Morang	8	8
Okhaldhunga	7	1
Panchthar	7	1

Sankhuwasabha	5	5
Solukhumbu	7	1
Sunsari	6	4
Tapjeung	8	1
Tehrathum	4	2
Udaypur	4	4
Total	88	46

Source: Province 1 official website. Compiled by FDM/NIPoRe

The total population of Province 1, as per the Central Bureau of Statistics (CBS) census 2011, stands at 4.535 million. In terms of ethnicity, the Province has the highest population of Chettri who constitute 14.7 percent of the total population. This is followed by Brahmin – Hill (12.1 percent), Rai (11.4 percent) and Limbu (8.1 percent)[2]. In terms of districts, Morang has the highest population (965,370)[3] followed by Jhapa (812,650)[4]. The least populated district of the province is the mountain district of Solukhumbu (105,886)[5]. The top 5 population centers have been presented below:

Table 2: Top 5 population centres in Province 1

City	District	Population
Biratnagar	Morang	214,663
Itahari	Sunsari	140,517
Dharan	Sunsari	137,705
Mechinagar	Jhapa	111,797
Triyuga	Udaypur	87,557

Source: Province 1 official website. Compiled by FDM/NIPoRe.

Province 1 has a decent Human Development Index (HDI) of 0.553 which is ranked as 'medium' in the country's context[6]. It has a literacy rate of 73.68 percent. Province 1 contributes the highest number of

migrant workers for foreign jobs, among all provinces in Nepal, according to a report on labour migration. It ranks number one for the last nine years, sending 25.51 percent of foreign workers from fiscal year 2008-09 to 2016-17[7]. NPC's Multidimensional Poverty Index of 2018 shows that Province 1 has the third lowest Multi-dimensional Poverty Index (MPI) at 0.085 which is below the national MPI of 0.127[8]. The headcount ratio of multidimensional poverty in the Province is 19.7 percent meaning that nearly 20 percent of the population is multi-dimensionally poor, which is still lower than the national figure of 28.6 percent.

The GDP of Province 1 stands at NPR 550.29 billion at present with an economic growth rate of 6.5 percent as per the 2018/2019 data[9]. The province has a thriving agricultural area. Already existing in Taplejung and Panchtar are cardamom farming and production, orthodox tea in Ilam, ginger in Tehrathum and fruits in Khotang and Okhaldhunga. There is also existing livestock farming in Udayapur. Sankhuwasabha has the possibility of generating income through Rudraksha beads while Bhojpur, Jhapa and Sunsari have possibility of production of orange, betel nuts and turmeric, respectively for economic development.

According to CBS data, Province 1 has a high penetration of mobile, internet and radio, making it an effective medium of information dissemination. Out of the total population, 508,329 have access to radio, 385,638 have access to television and 647,167 have mobile phones. However, only 15,715 have access to internet[10].

For FY 2077/78, Province 1 announced a budget of NPR 40.89 billion. Out of this budget, the province has decided to allocate NPR 1.10 billion to strengthen health infrastructure and increase medical services. Some key provisions regarding spending in the health sector include provisioning NPR 500 million to purchase medicines and necessary health infrastructure for Biratnagar's Koshi Hospital, the designated frontline COVID-19 hospital, provisioning NPR 230 million to purchase medical equipment including ventilators for Mechi Hospital in Jhapa and allocating NPR 50 million 'rural healthy mother' programme, which will provide emergency medical evacuations by air for pregnant and post-delivery women with serious complications. In other areas, it has also focused on promotion of agriculture and infrastructure development, among others. The province has allocated NPR 3.83 billion for the development of the agriculture sector and NPR 4 billion for the irrigation sector. It has launched a NPR 120 million 'My agriculture, My pride' programme under which interest-free loans will be provided to young people who

wish to engage in commercial agriculture. The programme will focus on using the skills of migrant workers who have returned home due to the pandemic[11].

Part 2: Health background/risk factors

According to the National Annual Review 2017/2018 prepared by the Ministry of Health, Province 1 has 18 public hospitals, 40 Primary Health Care Centres (PHCCs), 648 Health Posts and 133 non-public facilities. A report published by the MoHP shows that out of the entire health facility in the province, only 0.6 percent of the health facilities had all the 18 tracer/essential medicines identified by the survey[12]. According to the National Demographic Health Survey, the Province's Infant Mortality Rate (IMR) (deaths per 1000 births) stands at 31 while under 5 mortality stands at 36. Both the figures are below the national average which stands at 32 and 39, respectively[13].

While the Province had formulated a health policy, FDM/NIPoRe could not avail it online. Hence, it was unable to assess whether the Province has a dedicated policy or protocol for pandemics, disasters or natural disasters. Upon enquiry with the local contact, it was found that even the local contact was unaware about the provision of any such protocol.

Since Province 1 shares four major borders with India, the biggest risk it has faced in regards to the current pandemic is from people sneaking into the Province through proxy routes. Although the government did seal the formal borders starting 22 March, many were reported to have entered into the province using proxy routes in Jhapa and Morang. The first 12 cases of the province, which was seen in Bhulke of Triyuga municipality in Udaypur was found to have been a result of this. The outbreak of the virus in Jhapa was also found to have been amongst people who had sneaked into Nepal but were kept in quarantines after local government intervened. However, due to timely intervention by the local government and the provincial government, further risk was averted in the province.

As per Labour Ministry's study, Province 1 had the top source (at 25.51 percent) of Nepalese labour migrants which translates into a figure of 57,640. However, since most of these migrant workers work in the Gulf region and not India, most of them do not pose a risk as far as international flights remain suspended. According to the Nepal Labor Survey, only 5.7 percent of migrant workers of Province 1 work in India as compared to 90.3 percent of Sudur Paschim and 73.6 percent of Karnali. 58.4 percent of the workers work in Gulf countries followed by 32.8 percent who work in Malaysia[14]. The provincial

government has already predicted that 200,000 migrant workers are expected to come back to Nepal after the resumption of flights – the government in that case might need to take serious precaution.

Part 3: Urgency and Preparation

Key findings:

- *The study showed that in terms of preparation, Province 1 was relatively well prepared to handle the pandemic.*
- *Province 1's preparedness was evident through the setting up of multiple PCR testing labs well before the first case appeared in the province.*
- *Compared to other provinces, backlogging of swabs did not happen and contact tracing was done swiftly in the province.*
- *The support provided by the private sector and NGOs in providing resources as well as managing quarantines in Province 1 was commendable.*

Formation of committees: In terms of preparation, the province was well prepared to handle the pandemic with steps such as establishment of COVID hospital well before the first case was found. To begin with, Province 1 has formulated multiple committees to manage the pandemic. The highest-level committee is the COVID-19 Management Direction Committee formed under the leadership of Chief Minister. The Committee held its first ever meeting on 20 March where it issued a statement saying it would provide all necessary support to the work of the High-level Committee to control COVID-19 at the federal level. Following this, four other committees were formed on March 29 to make the management more efficient. The committees were classified as local level coordination, communication and awareness committee; quarantine, transportation and security management committee; essential/daily goods supply management committee; and, isolation, specialized hospital and laboratory management committee. The different committees were headed by different ministers.

Action plan formation: Secondary data available online shows that the province made its first ever action plan for the management of pandemic on 18 March which is almost two months after the first case appeared in Nepal and a month before the first case appeared in the province. The guideline contains tasks to be undertaken mostly by Social Development Ministry, local governments, provincial government and security agencies. The province has also formulated a COVID-19 guideline; however, its date of formulation could not be found. While other leaders have not yet held any public event since the

pandemic, the Chief Minister while appearing in public has adopted social distancing and safety measures. He was seen wearing a mask, using a sanitizer and speaking to the journalists and other officials from a distance.

Availability of resources: The province, as with many other provinces, faced a shortage of resources including shortage of PPE suits at the beginning. On March 26, health workers at Koshi Hospital in Biratnagar even staged a protest, stating that the hospital administration had not provided them with protective gears, including face masks to deal with suspected patients. There were reports that KN95 masks, which normally cost NPR 50 were being sold for as high as NPR 500. However, this problem was addressed by the provincial government as well as local civil society organizations which provided the required resources. As of 20 July, the Province had storage of 1,518 PPE sets amongst which 1,423 had been mobilized. The COVID-19 Hospital Chief that FDM/NIPoRe spoke to informed that they did not have shortage of resources including PPEs currently and were well capacitated to conduct treatment, tracking and tracing of COVID patients. As of July 20, the province had the capacity of 465 quarantine facilities with 12,776 beds, 52 isolation centres with 507 isolation beds, 44 ICUs and 3,308 holding areas. The facilities were enough to accommodate the existing influx of migrants. 2,312 had been quarantined as of last date of data collection for this study, 376 had been put in the holding area while 3,295 have been asked to remain in home quarantine[15]. One of the unique approaches taken by Province 1, as informed by the COVID Hospital Chief was the creation of Level 1, Level 2 and Level 3 hospitals for COVID patients. As informed to FDM/NIPoRe, level 1 hospital admitted asymptomatic patients while if condition of the patient worsened, they were moved to Level 2 and then to Level 3.

Quarantine/Isolation facilities: The construction of quarantines as well as isolation rooms was done primarily by local government in all the districts. Local government representatives that FDM/NIPoRe spoke to said in most of the cases schools as well as community buildings were turned into quarantine centres. When asked how they managed funds to manage the quarantine centres, they said that they utilized the fund that the provincial government had provided them and also used their own resources. As per the provincial government's decision on April 13, each metropolitan was provided with NPR 2 million, sub-metropolitan city with NPR 1.5 million, municipalities with NPR 1 million, rural municipalities with NPR 500,000.

While quarantine centres were relatively better off than many others in other parts of the country (as the number of migrants coming in was relatively lower), most still lacked basic amenities. According to the

security official FDM/NIPoRe spoke to, due to the local government's limited resources, in many quarantines people complained of basic amenities such as adequate drinking water and nutritious food. In Jhapa's Kanchankawal rural municipality, which had the second biggest outbreak after Bhulke in Udaypur, 25 percent of those in the quarantine were found to be infected with COVID due to the inability to maintain social distance. Around 400 migrants returning from India were kept in a quarantine, which had been managed in a local school. But due to limited space and overflow of crowd, it was not possible to maintain proper distance. However, none of the quarantines were constructed using make-shift materials as was found in Karnali and Sudurpaschim.

Record of migrants: The record of incoming patients was maintained by Nepal Police after they were let in through Armed Police Force (APF)'s border checkpoint. At the border checkpoint, their name and address were noted and they were provided with SIM cards so that contacting them would be easier. The Security official FDM/NIPoRe spoke to said that following this, the Nepal Police in coordination with the respective local governments took the migrants to the quarantine centres established in each of the local units. Where local government was unable to take responsibility of the migrants on time, they would be kept in the holding centre, the official said.

Information dissemination: According to the journalist that FDM/NIPoRe spoke with, information dissemination has been done extensively throughout the district. The most used medium in this regard is the radio where Public Service Announcements have been broadcasted. Since Nepali is commonly spoken all over the Province, localization of the language was not direly required. Moreover, the Province government has also mobilized the local governments to set up notices as well as used wards and Local Committees to spread awareness about the pandemic. The ward is also responsible for monitoring if any person enters the community through informal channel.

Consultation/coordination with private/civil society: The support provided by the private sector and NGOs in providing resources as well as managing quarantines in Province 1 was commendable. The private sector, mainly comprising of local businessmen were instrumental in providing PPE suits, masks and other resources to the provincial government. Some of the organizations that were hugely credited in this were the Mechi Abhiyan and Kakkadbhitta Society. Mechi Abhiyan provided PPE suits to security personnel, health authorities and even 500 VTM kits for PCR test to eight of the municipalities in the district. They were in process of providing additional 500 VTM kits. Kakkadbhitta Society provided free food to people who were stuck at the Kakkadbhitta holding area. The provincial authority that

FDM/NIPoRe spoke to verified this and lauded the support of civil society and NGOs in managing the pandemic. This was also one of the successes of province 1. When asked whether collaboration was also sought in terms of policy decisions, the official said that it was not so. Even the private sector complained that the provincial as well as the federal governments should have asked for their inputs during policy decisions, especially while making decisions pertaining to lockdown.

Part 4: Activities and Effectiveness

Key findings:

- *While the provincial government was largely successful in controlling border movement, the use of proxy routes meant that many entered without detection.*
- *With Udaypur emerging as one of the first 'hotspots', there were fears that Province 1 would see a huge surge of cases. However, with quick action, further disaster was averted.*
- *As compared to other provinces, Province 1 had relatively fewer number of migrants coming in from India, which comparatively lowered the risk.*
- *In recent days, the higher number of PCRs and lower RDTs has highlighted the effort put in by the province in controlling the pandemic.*

Implementation of lockdown: Activities in Province 1 were brought to a halt with the announcement of the nationwide lockdown starting from 24 March. The implementation of lockdown appeared to have taken place without any major issue in the first few weeks. While there were sporadic instances of people violating the lockdown, major violations did not take place. The lockdown was further implemented strongly in the Province with Udaypur emerging as the country's first hotspot around the third week of April.

However, the continuous haphazard extension of lockdown resulted in frustration among locals as well as businesses, across the country. Local news media reports from May show that people started moving out more frequently and some businesses opened in cities like Jhapa, Biratnagar, Itahari, Ilam and Taplejung. Security official interacted with in the course of this study said that they were simply unable to control the flow of the people as violations happened in mass. By the time the nation-wide lockdown was relaxed on 11 June, movement had been more frequent. While police action was stringent in the first month of lockdown, by the time the lockdown relaxed, police action also had been lenient with violators. For instance, pedestrians were not arrested and limited vehicular movement was not stopped or obstructed. A

local journalist reported that public opinion was increasingly against extending the lockdown or easing the lockdown to some extent to allow local shops to operate beyond morning and evening hours (as the police had been doing). Moreover, with daily wage laborers finding it difficult to manage their livelihood, there was an increasing pressure from a large chunk of the population to ease the lockdown.

Locals said that the federal government should have revised the lockdown modality after a month or two of lockdown as their province had been successful in handling the pandemic. On the other hand, local businessmen provided a mixed response to the implementation to the lockdown. FDM/NIPoRe spoke to some big businesses who said that they did not find any problem with the lockdown as it largely helped curb the risk in the province. One of the businessmen said that had the lockdown not been extended, they would have met the fate of other provinces like Sudurpaschim and Karnali where the number of infected are extremely high. However, they did complain that the federal government should have extended the lockdown with proper consideration. For instance, one of the businessmen said that despite the lockdown, the banks still asked them to pay installments for their loan. The government, according to them, should have made arrangements for such matters. When asked whether the provincial government would have done anything to intervene, a representative of Jhapa Udyog Banijya Mahasangh said that they understood it was a matter of the federal government, and the provincial government could do nothing in this regard.

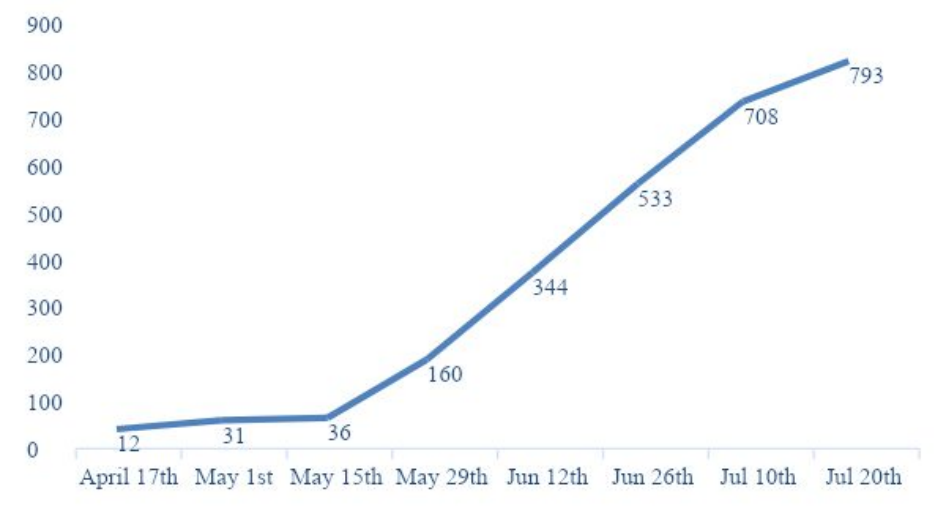
On the other hand, local businesses reported to have been severely affected. According to them, the government was grossly inadept in handling the crisis. A local businessman from Jhapa claimed that the federal government was acting single handedly to implement the lockdown without taking any inputs from the provincial or local level. Another respondent who had a business in Ilam said that their business had to face 'irreparable' loss due to the haphazard extension of lockdown. Another businessman from Biratnagar opined that the Provincial government could have put in more efforts to pressurize the government to ease the lockdown.

Border closure: As with the implementation of lockdown, the provincial government had little decision on the border shut-down. But it did however effectively implement the federal government's decision to strictly seal the border. The meeting of Cabinet in the Province on 20 March had planned to suggest the federal government to close down its border which was aptly done by the federal government two days later, on 22 March. Following this decision, the border closure was strictly observed with the Nepal Police and Armed Police Force being deployed to control the influx of people. However, despite closure of the formal border, influx of Nepalese living in India, particularly migrant workers, was challenging for the

authorities to control[16]. While the government was largely successful in ensuring strict security at the four major borders – Biratnagar's Jogbani border, Bhadrapur border, Kakkarbitta border and Ilam Pashupatinagar border, hundreds resorted to using informal channels to enter into the country by using proxy routes[17]. Moreover, although the provincial government did seal the border on 23 March as per the federal government's instructions, thousands were reported to have entered through informal routes before that posing a big risk in pocket areas of the Province. The local authorities did not have data of any of these informal entries. News reports showed that most of the infected in Udaypur had entered Nepal after the borders were sealed through proxy routes.

Management of quarantines: As with many other provinces, the poor quality of quarantine facility was observed in Province 1 as well. However, as compared to other provinces, Province 1 had slightly better quarantine facilities; in the sense that most of them were concrete structure unlike in some other provinces where make shift huts had been used as quarantines. One of the reasons why quarantine management in the Province 1 has been relatively well is because of the relatively fewer number of migrants coming in from India as compared to other borders in Karnali province or Sudurpaschim province or Province 2. While exact figures of how many migrants entered Nepali is not available, local authorities claimed that 12,000 – 15,000 migrants might have entered Nepal from India after lockdown which was below the expected number of 20,000. Thus, quarantines did not have to face the problem of overcrowding as was the case in many other quarantine facilities across the country.

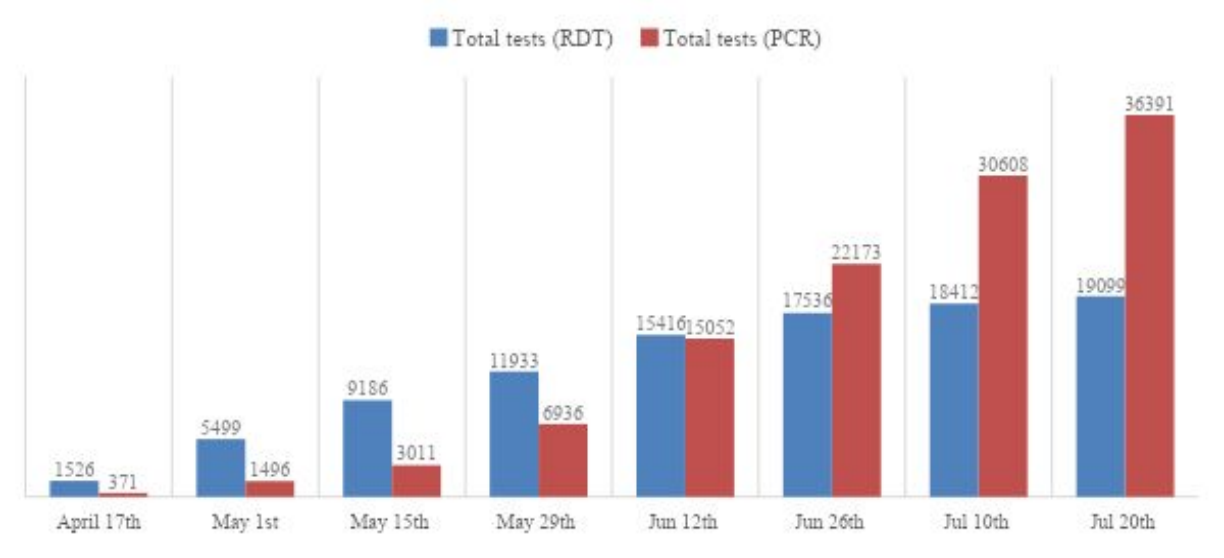
Figure 1: Number of infections starting from the first date of infection (Province 1)



Source: Social Development Ministry, Province 1. Compiled by: FDM/NIPoRe

Testing: As of 20 July, Province 1 had conducted a total of 36,391 PCR test as compared to 19,099 RDT tests. It has recorded 1 death. The Province currently has 3 testing centres – Koshi Zonal Hospital, Biratnagar, BPKIHS Dharan and Province level Public Health Lab, Biratnagar. The Koshi Zonal Hospital has carried out 14,879 tests as of now, BPKIHS has conducted 12,662 tests and Provincial Public Health Lab has conducted 12,472 tests. The contact tracing has been swift in the province and the Province has experienced a much better recovery and tracking rate than other districts. As of 20 July, the province had an infection figure of 793, out of which 702 had already been discharged. As compared to other provinces, Province 1 is at a fairly advantageous position in terms of contract tracing and tracking.

Figure 2: Number of RDT and PCR tests conducted by Province 1



Source: Social Development Ministry, Province 1. Compiled by: FDM/NIPoRe

One of the reasons why contact tracing and testing has been swift in the province is because of the province's swift setting up of PCR testing centers. For instance, between March 29 and April 10, the province already had 2 testing centres set up; the first one in BPKIHS and the second one in Koshi Zonal Hospital. Within the next few days, the Province had the third PCR testing centre ready. With three centres ready before the first case appeared, the province was already well placed to conduct swift tests without creating backlog of swabs, as was seen in other provinces.

Health experts FDM/NIPoRe spoke to who were not associated with the provincial government also accepted that the tracing and testing had been swift in Province 1. When Bhulke of Udayapur emerged as the first hotspot, the provincial government as well as local authorities swiftly moved towards sealing the area and increasing contact tracing. While reports did come in that the authorities did not have adequate resources to contain the area when the outbreak happened in Bhulke, local authorities however were quick to seal the area. When the first 12 COVID positive cases were found in the district on 17 April, the district was completely sealed on 21 April. One of the reasons community transmission was stopped in Udaypur was because of swift contact tracing. To put it in figures, Province 1 has accounted for only 4.2 percent of the infection out of the 13,564 infections in Nepal. Hence, the surge has not been a big challenge to manage. However, with the government expecting around 200,000 migrant workers to come back in the coming year, the risk cannot be written off completely.

Management of migrants: Once India started running the Shramik Special trains which ferried migrants wanting to return home, the Nepali government started to accept Nepali migrants around the fourth week of May. With the government deciding to let migrant workers in, the number of people returning from proxy routes decreased. The first batch of 250 Nepalese migrant workers in Province 1 entered through Jogbani border, whose temperature were checked and sent directly to quarantine centres[18]. Following this, the APF police personnel at the border in coordination with Nepal Police as well as local government ensured that each of the returning migrant was kept in quarantine.

Incentivizing health professionals: To encourage health workers who have been working to manage the pandemic, Province 1 government has announced incentives. On 13 April, Province 1 decided to provide an incentive allowance without duplicating the federal incentives. The amount was not disclosed. The provincial government also decided to provide NPR 5 million in insurance to the doctors, medical staff, security personnel, ambulance drivers and other related staff involved in control, prevention and treatment of COVID-19[19]. When FDM/NIPoRe checked with the COVID Hospital Chief whether this fund had been mobilized, he said it was yet to be and he held on information on when it would be mobilized.

To gather resources for COVID-19, the provincial government formulated the COVID 19 Public Protection Fund and contributed NPR 100 million in it. Moreover, on June 5, announcing its budget and yearly planning, the Provincial government clarified that due to the loss created by COVID 19, Health and Agriculture would be getting the maximum priority in next year's planning. As per this, the government announced the setting up of Corona Rehabilitation Fund and the initiation of Chief Minister Youth Entrepreneurship Program and 'My Agriculture, My Pride' program. The exact modality of these programs was not revealed. Similarly, the government announced a relief package of NPR 450 million specifically targeted for farmers.

As per the description provided by the government, Province 1 has already spent 250 million (as of 20 July) for crisis management. According to Minister of Internal Affairs, the fund has been derived from Public Welfare Fund, Budget of Social Development Ministry and from Nepal Government.

Part 5: Collaboration between federal, provincial and local government

One of FDM/NIPoRe's first observation while assessing the decision-making structure/flow was the centralized system. The current decision-making process is highly centralized with the federal level Crisis Management Coordination Committee taking the central role. This has created serious problems and many have criticized the federal government for acting against the spirit of federalism. A major problem with the federal level making most of the high-level decisions is that decisions are being made without proper evidence or feedback from local level. It has caused resentment among provincial governments. Decisions like giving the District COVID-19 Crisis Management Centre (DCMC) major responsibilities and sending instructions to local government directly to local governments by by-passing Ministry of Federal Affairs and General Administration (MoFAGA) has not gone down well with provincial governments. In addition, the local governments have complained that since the guidelines are formulated at the central level, many of them are not pragmatic.

FDM/NIPoRe's study showed that the government's hesitance in involving provincial governments in decision making process is due to multiple factors. Firstly, many federal leaders still hold 'centralized mindset' and feel empowered by holding onto power. Governance specialists FDM/NIPoRe spoke to said that federal level officials not wanting to let go off their power has been a major problem in many other areas as well. The second reason stems from the skepticism of provincial governments. Many federal level ministries still feel that the provincial governments are not capacitated enough to carry out their responsibility fully. Thirdly, involvement in the decision-making process, especially procurement of medical supplies provides a lucrative opportunity for leaders to get commissions and other financial benefits, as a result of which federal leaders do not choose to delegate authority.

Local representatives FDM/NIPoRe interacted with said that this attitude of the federal government was highly detrimental in their work. The federal level agencies simply asked them for information without providing any concrete support. Instead, local representatives said that they had been receiving support mostly from provincial government. The local representative from Triyuga municipality, where Bhulke is situated expressed their frustration over federal government's inaction during the outbreak. Representatives from Jhapa and Morang also verified this and said that they received funding and support from mostly the provincial government. While they did communicate with the district-level COVID-19 Crisis Management Centre (CCMC), it was mostly to relay information as well as receive guidelines. The

setting up of quarantines was mostly done by local governments through their own funds and through the funds provided by the provincial government. However, the local governments did say that they had to report to multiple authorities which was a challenge right from COVID response team to District CCMC as well as MOFAGA – all of whom provided a range of instructions.

Part 6: Recommendation

- One of the first recommendations for Province 1 is increasing the capacity of quarantines, isolations and ICU centres. While the current capacity might be enough to accommodate migrants coming in from India, once international flights resume and workers from Gulf countries and Malaysia start coming in, the government needs to be well capacitated to handle the influx. Since the provincial government itself has expected around 200,000 migrants to return, it is necessary for the government to consult with experts and increase the number of quarantines for such migrants on an immediate basis.
- Moreover, there have been reports that in many of the border points like the Bhadrapur border, many cargo trucks are being ferried in without the driver being administered temperature or being sanitized. Steps such as these will increase the risk of infection rate shooting up in the province and security forces need to pay special attention to ensure that this does not happen across any of the four border points. Security needs to be beefed up across all four borders and all vehicles as well as individuals need to be thoroughly checked, their records collected and quarantined after they come in.
- While Province 1 has been fairly successful in managing the pandemic, it still faces a lot of challenges from its bordering province, especially Provinces 2, where the number of infected stands at 3,288. While state borders have been sealed and strict security has been maintained, it is imperative for the government to seal the border indefinitely as long as the infection rate in Province 2 does not go down. Infiltrations from Province 2 can be extremely risky for Province 1 which has averted community transmission as of now.
- Swift tracing and tracking have been possible in the province due to the effort put in by health workers as well as security forces. This has been validated by the locals as well as local authorities. However, they have not yet been provided with the incentives or insurance that has been committed to them. In this regard, it is imperative for the provincial government to immediately act upon its pledge and provide the promised incentive so as to further encourage the health workers who might feel demotivated otherwise.

- Since the role of civil society, NGOs and CBOs has been commendable in Province 1, the local governments should seek to mobilize their support in managing resources as well as overall management. The provincial government's one window policy might not be relevant here. Since it is understood that local governments cannot manage the resources on their own and the provincial government's resources are limited, the local governments will greatly benefit if they use organizations in managing resources like PPE suits, VTM kits or food for people staying in quarantine. This can be a possible solution to the resource crunch facing local governments.

Province 2

Executive Summary

Due to dense population, porous border and resource constraints, Province 2 has remained highly vulnerable to COVID-19 pandemic as compared to other provinces. However, the early preparedness by provincial government was praiseworthy and notable. Although the first COVID-19 infection appeared in the province quite late than other provinces, the rate of escalation was relatively quicker. FDM/NIPoRe's study found that necessary arrangement of quarantine facilities and isolation wards was rapid in the province. However, laboratory services were largely inadequate and delayed. The number of ventilators and ICU were also limited in number; however, not a single COVID-19 patient was admitted to any of the ventilators as of the study's reporting date.

On the part of the government, the study observed a noteworthy effort on formulation of policies and their enactment, enforcement of pragmatic procurement mechanisms, insurance for human resources working on combating the crisis, funds for security personnel, relief packages and other incentives, among others. Provincial COVID-19 Management Centre (PCMC)'s role in coordination and communication of developing recommendations and suggestions to CCMC was also found to be generally effective. Coordination with regards to contact tracing and quarantining the people coming from abroad (especially India), was also found efficient at the municipal and local level. Information dissemination regarding COVID 19 in Province 2 was also highly effective.

Nevertheless, despite the efforts and a number of effective actions undertaken, the provincial government also lagged behind in terms of provisioning for adequate resources for uninterrupted laboratory service. In absence of functional lab service, swab samples had to be sent to Kathmandu's Teku or BPKIHS in Dharan, which largely delayed PCR results. Likewise, medical logistics including VTM, PPE, and masks were always scarce. The quarantine management in Province 2 has been criticized from all quarters for as there were instances when even the infected people were not immediately taken to isolation. In addition, the provincial government even failed to abide by the crucial national guidelines for quarantine management, as the result of which, basic quarantining standards including provision for hygienic food and sanitation practice were affected.

The provincial government has aimed to equip the province with proper medical infrastructure in future establishing tropical hospital and provincial laboratory. Although such strategies are good initiative for future respite for the province, these cannot fulfill the immediate COVID-related needs of the province. Especially as the experts have been stating that the second wave of COVID-19 transmission in Province 2 is yet to begin, government needs to extensively focus on establishment of medical infrastructure and logistics to handle serious consequences in the future. In that light, establishment of infrastructure, provision of uninterrupted medical supplies, storage facility for medical logistics and construction of more laboratories are the need of the hour in Province 2.

Part 1: Background

Province 2, located in the southeastern-region of Nepal was formed after the adoption of the Constitution of Nepal in 2015. It is Nepal's second most populous province, and smallest province by area. It borders Province 1 to the East, Bagmati Pradesh to the North, and India to the South. It has an area of 9,661 km2 (3,730 sq mi) with a population of 5,404,145 per the 2011 Census of Nepal, making it most densely populated province of Nepal. It occupies 6.6 percent of total land area of Nepal (Economic Survey of Nepal 2018/19). All eight districts of the province share borders with India. The length of eight districts of Province No. 2 bordering India is 428 km.

As per a 17 January 2018 Provincial government cabinet meeting, Janakpur has been declared as the interim capital of Province No. 2. It occupies total 18 percent of local bodies of Nepal comprising 13 percent of rural municipalities, 26 percent of Municipality, 27 percent of sub-metropolitan city, 16 percent of metropolitan city and 19 percent of wards.

Table 3: Number of local units in Province 2

SN	Local Levels	Numbers
1	Metro-Politian City	1
2	Sub-Metro Politian City	3
3	Municipality	73
4	Rural Municipality	59
5	Total number of local government bodies	136
6	Total number of District Coordination Committee	8
7	Total number of Wards	1,271
8	Total Population	5,404,145

Source: Province 2 official website

The GDP of Province 2 contributes 13.6 percent of total GDP size of Nepal which is NPR 471.146 billion with an economic growth rate of 6.5 percent as per the FY 2075/76 data. Province 2 has 45.2 percent of economically active population while unemployment rate is 20.1 percent.

Province 2 has 72 percent of the people living in the municipality area. Parsa district has the lowest number of people (59 percent) and Rautahat district has the highest number of people (93 percent). The top five populated cities of province two are listed below.

Table 4: Top-5 population centres in province 2

Sn	Cities	Population
1	Birgunj	281,802,
2	Janakpurdham	178,930
3	Kalaiya	145,631
4	Jitpur Simara	138,612
5	Lahan	93000

Source- CBS, 2011

The National Census 2011 counts the occupations of the most economically active population. Often, the active population measures the economic activity of the population within 12 months before the census. Accordingly, in this province, the highest population of 53.9 percent is in the field of skilled and semi-skilled work related to agriculture, forestry and fisheries. Similarly, 19.5 per cent of the population is engaged in general or elementary occupations. Most of the active population comprises 7 percent serving and selling workers in shops and markets and 8 percent as workers in crafts, handicrafts and related businesses. Similarly, Province 2 is also second largest contributor of labor migrants in Nepal. It contributes 29.8 percent of total labor migration in Nepal according to Labour Migration for Employment - Status Report for Nepal: 2015/16 -2016/17.

The annual budget of Province 2 is NPR 38.72 billion. While NPR 19.11 billion has been set aside for recurrent expenditure, NPR 19.26 billion is being used for capital expenditure. The government has allotted the budget of NPR 30 million for each constituency in accordance with the Constituency

Infrastructure Development Special Program. The program primarily focuses on agriculture, education, and health. The key highlights of the budget for this province are priorities on education, health, and agriculture sectors. Likewise the budget also endorses women literacy programme like "Beti Bachao, Beti Padhao" (Save the daughter, Educate the daughter), which was also launched in India in 2015. The budget also continues the "Prime Minister Agriculture Modernization Programme" and the government's vision of constructing district-level hospitals in each district within the province.

Part 2: Health background/ risk factors

According to MoHP, Health Emergency and Disaster Management Unit and Health Emergency Operation Centre (HEOC), Province 2 has 13 hospitals, 32 Primary health care centers, 745 health Posts, 17 urban health centres, seven community health units and eight other facilities. There are altogether 991 facilities out of which, there are 822 public health facilities and 169 non-public health facilities. There are 13 public hospitals and 6208 Female Community Health Volunteers. The infant mortality rate of the province is 43 per thousand. This is more than the national average of 32 per thousand. Similarly, the average life expectancy is estimated to be 67 years for women and 66.6 years for men.

Province 2 has higher multidimensional poverty (48 percent) than the national average (29 percent). 1.3 percent of the total population has some form of disability. Most of the people in this province (82 percent) use tube-wells as source for drinking water. Only about 11 percent of households have access to tap water. The literacy rate is about 50 percent. BMI (KG/Sq m) is measured in accordance to height and weight of the body. Normally healthier people fall in the range of 18.5 to 24.9. While in province 2.38 percent of male and 40 percent of female of the (15-59) age group of population are not in range and are highly prone to health hazards. 58 percent of women and 59 percent of children suffer from anemia. Similarly, 37 percent of children are stunted and underweight due to malnutrition.

Similarly, there is a prevalence of six major communicable diseases in province 2, according to Health Management Information System. They are - HIV Positive (6.6 percent), TB (17.6 percent), Kalazar (13.8 percent), Hepatitis B (18.35), Dengue (17.2 percent), Traukoma (10.9 percent), and Leprosy (40.3 percent). Province 2 does not have any existing protocol or policy documents for epidemics response. However, the higher authorities of the province as well as health experts have stated that they have completed a draft a policy on the province's epidemics response, which will be published and enacted soon.

One of the major risk factors, especially in the context of COVID-19 pandemic, is the size of migrant population along with porous border. In FY 2072/73 a total of 108,031 people have taken labor permit. Owing to the trend of labour migration, 12 percent of the total population of Province 2 is currently absent. A larger proportion of the population informally migrates to India for seasonal employment. Similarly, thousands of Indian migrant communities are also currently residing in Province 2, the exact number of which is still unrecorded.

Part 3: Urgency and Preparation

Key findings:

- *The urgency and preparation shown by provincial government to combat COVID-19 was full of rigorous effort, comprehensive and integrated planning and swift execution at primary stage.*
- *The information dissemination policy was also very effective as daily media briefing was conducted under Ministry of Social Development.*
- *The lacking resources were mainly VTMs and PPEs.*
- *The expansion and improvement of laboratory services were also delayed due to resource constraints.*
- *The national guidelines for quarantine management was adopted but lack of early preparation, logistics and expertise to manage quarantines were observed.*

Formation of committees: After the WHO declared COVID-19 as pandemic on 11 March, federal and provincial governments together identified the COVID-19 crisis as an urgent matter. The national lockdown that started on 24 March, and was followed by the provincial government. More effective measures were taken from 25 March where provincial level COVID 19 Direction and Control committee was formed under the leadership of chief secretary of Province 2. The following sub-committees were formed to take essential measures to combat the crisis.

- COVID-19 Prevention, Control, Treatment and Management Committee under Minister for Social Development
- Information Collection and Security Management Committee under Minister for Internal Affairs and Law

- Daily Commodities Supply and Market Management Committee under Minister for Industry, Tourism, Forestry and Environment
- Health Infrastructure Construction and Improvement Committee under Minister for Physical Development

Action plan formulation: Similarly, the task force formed for regular monitoring and reporting system took an initiation to establish database of PPE and medical inventories required, and asked for necessary support from the federal government. The task force also decided to formulate integrated plans and policies for daily wage workers and labors through rehabilitation packages. Moreover, it decided to provide policy insurance of NPR 2.5 million for the medical staff, nurses, health technicians, FCHVs, cleaners, ambulance drivers, among other front-line workers.

Information dissemination: The provincial government also started intensive preparations like awareness programs, identification of suspected infected people, and preparation for construction of isolation wards, set up health desks at 30 places bordering eight districts of the state. Health desks were also set up in all three airports of the state -- Janakpurdham, Simara and Rajbiraj. Awareness campaigns were launched to encourage people coming from affected countries to go to the nearest health center if there is any respiratory problem.

Availability of resources: An isolation ward with 60 beds at Janaki Medical College at Ramdaiya in Dhanusha and a 20-bed isolation ward at Janakpur Sub-Metropolitan City Hospital were prepared for immediate treatment for any persons suspected of COVID-19 infection. Moreover, isolation wards with 35 beds were set up at the National Medical College in Birgunj and the plan was made to setup isolation wards in three places in eight districts keeping central, eastern and western parts of the Province (Janakpur, Rajbiraj and Birgunj).

An isolation ward with 80 beds was prepared in Janakpur. Similarly, feasibility study was conducted to set up quarantine in the highway area of eight districts. "The guest houses, cinema halls and empty buildings for quarantine at eight places including Lahan, Bardibas and Dhalkewar, were studied. Preparations were also started for the selection and training of quarantine health workers. The laboratory of the Janakpur-based provincial hospital was kept ready to collect blood or swabs of the suspects while another laboratory was under preparation at Janaki Medical College, according to a senior health administrator of health directorate.

Part 4: Activities and effectiveness

Key findings:

- *Right from the beginning, the province's efforts in combating the crisis appeared faulty with resources not functioning properly at times and at times falling short.*
- *In terms of test and diagnostics, the province initially relied on RDT tests owing to lack of equipped laboratories, VTM and PPE. Until mid-May, RDT tests outnumbered PCR tests.*
- *One of the serious issues that was observed in Province 2 was the use of authority in breaching lockdown and quarantine rules. 'Powerful people' often got by without adhering to proper lockdown/quarantine rules.*
- *Cross border coordination and communication to send and receive peoples from the borders at proper timings and in numbers was direly lacking.*

Major initiatives: The provincial government formulated a two-tier strategy to address the rise of COVID-19 cases. Under plan "A", COVID-19 infected individuals found in Saptari, Siraha, Dhanusha and Mahottari districts were arranged to be treated in a 20-bed isolation ward set up at Janaki Medical College Brahmapuri in Janakpur. Similarly, 50-bed isolation ward was set up at the National Medical College in Birgunj in case of infections in Sarlahi, Rautahat, Bara and Parsa. Plan "B" was to be executed after availability of equipment in sufficient condition to expand the isolation wards in the district level. Meanwhile, in case of suspicion or signs of infection, the government planned to manage to set up more than 500 quarantine wards in eight districts in coordination with the local government and the district administration authority. An official from Provincial health directorate said that quarantine arrangements were done earlier in the district hospitals including National Medical College, Narayani Sub-Regional Hospital and Janakpur-based provincial hospital before any cases were found.

Testing: The first COVID-19 case was recorded on 12 April, and as of end of the June, it escalated to worsen the situation of public health in Province 2. The Provincial government with help of local government maintained adequate numbers of quarantine and isolation bed which reduced gradually with fall of number of cases.

Table 5: Details of facilities, tests, and deaths in Province 2 due to COVID -19

Status	Numbers
Total Facilities	
Quarantine	376
Bed Capacity	23667
Quarantined Pop	2673
Home Quarantine	6157
Isolation Bed	2233
Isolation Pop	444
Total PCR Test	
Swab Collection	51607
Swab resulting awaiting	1628
Positive Cases	4264
Negative Cases	45715
RDT Test	
RDT Test	25884
Positive	1165
Negative	24719
Discharge	
Discharge cases	2833
Deaths	
Deaths	6

Source: Health Directorate, Province 2

Implementation of lockdown: Soon after the first few cases in mid-April, the government enforced a strict lockdown in the province. However, the lockdown measures were not fully complied with at the local level. Situation in the rural areas of the province was even more chaotic. Security personnel deployed to enforce the lockdown faced challenges in a number of places. For instance, a police constable was attacked in Janakpur while confronting some youths walking in the streets, violating lockdown. The police constable had to put six stitches on his head after the jaywalkers pelted stones at him. Likewise, in Siraha, police had to fire 23 rounds in the air to enforce the lockdown. However, some locals were even accusing the security personnel of committing atrocities in the name of lockdown. A police officer reported, "It was very challenging to enforce the lockdown. Especially in rural areas, there were repeated reports of violation of the lockdown". In some places, locals erected fences at the entrance of the village and blocked the movement of strangers. However, in most places, the lockdown was not fully observed. In some places, even the locally elected representatives were found to be violating the lockdown.

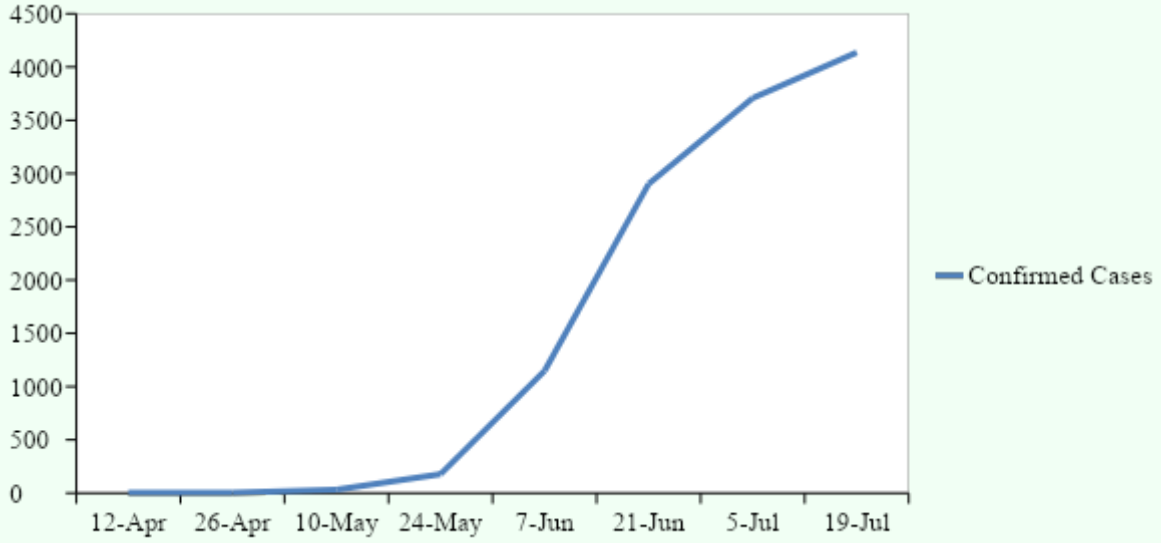
Border closure: The APF concentrated its human resource in the border area keeping in mind the possibility of people entering from the open border. Province 2 has 464 kilometers of open border. Before the lockdown, 550 people were deployed at 110 border areas. According to a representative of Armed Police, after COVID-19 cases started emerging, 2,208 armed police personnel were mobilized in one shift in 425 places of the bordering stretch of the province. He also said that the movement of people was completely stopped by sealing the border using vehicles, mobiles, motorcycles, bicycles and foot patrols, emergency checks and intelligence. The official claimed that great care was taken even while transporting food items to the province, which remains entrance as supply of essential items for the entire country. Strong agitation and pelting of stones at security forces of Nepal were observed also from the other side of the border, as people were trying to infiltrate. Lack of proper logistic supplies, tents and other accommodation materials were some of the key issues faced by security personnel deployed at the border. To overcome risks, the provincial government also coordinated with the local level to keep tracing the movement of people from India and keep them in quarantine. It was especially challenging to quarantine those who went to India for employment and those who came secretly through informal channels in the border as the lockdown continued. The local government has succeeded to some extent in this and no transmission has been seen at the community level by the date.

Quarantine management: However, as the number of returnees from India has been increasing, quarantine has gone beyond the capacity of local government. As of 21 July there were 376 quarantines throughout the province; however most of them were reported to be largely unorganized. As of 21 June, a

total of 6644 individuals were kept in these quarantine facilities. The National guideline for quarantine operation and management 2020 has provisions of separate rooms accommodating three people each. A common toilet and bathroom should be provisioned for six people each. As per the standard, an area of about 75 square feet per person or a minimum distance of 3.5 feet from one bed to the other should be maintained. However, only a little of these standards have been maintained, owing to several challenges at the provincial as well as local level. In some instances, quarantine facilities were also reported to have protested as even the COVID-19 infected patients were not taken to isolation. Nine people, whose PCR tests came positive, were not isolated for four days at Chandra Higher Secondary School Quarantine at Bode Bersain-5 in Saptari. Likewise, in some of the quarantine facilities, for instance in Ganeshman Charnath Municipality-4 of Dhanusha, those with proven COVID-19 infection were accommodated in the same place as other non-infected persons, significantly increasing the risks of transmission. A number of quarantine facilities throughout the province did not have enough beds, as individuals were found sleeping on classroom desks and benches. While some quarantine centers did not have proper drinking water facility, others did not have electricity. "I eat on the bench and sleep on the bench," said a quarantine facility official. "Food is packed in plastic bags and delivered in the quarantine. Paper and plastic used to wrap food, snacks and tea are scattered everywhere and there seems to be no protocol or provision for cleanliness, sanitation and hygiene."

Testing: COVID-19 testing laboratory was set up in the provincial hospital of Janakpur on March 8, way before the first case appeared on April 12. However, the lab did not work deliberately because PCR machine could not function properly giving wrong report. Another PCR machine was connected in the second week of April while it also did not give true report. As and incidence, the swabs of 23 journalists of the Dhanusha district were collected and examined in the laboratory of the Provincial Hospital, Janakpurdham. Although the machine showed a negative report, a journalist was found positive when swab of the some journalists were taken to the Central Laboratory in Kathmandu for re-testing. This also raised questions about the PCR machine being connected for the second time in Janakpur.

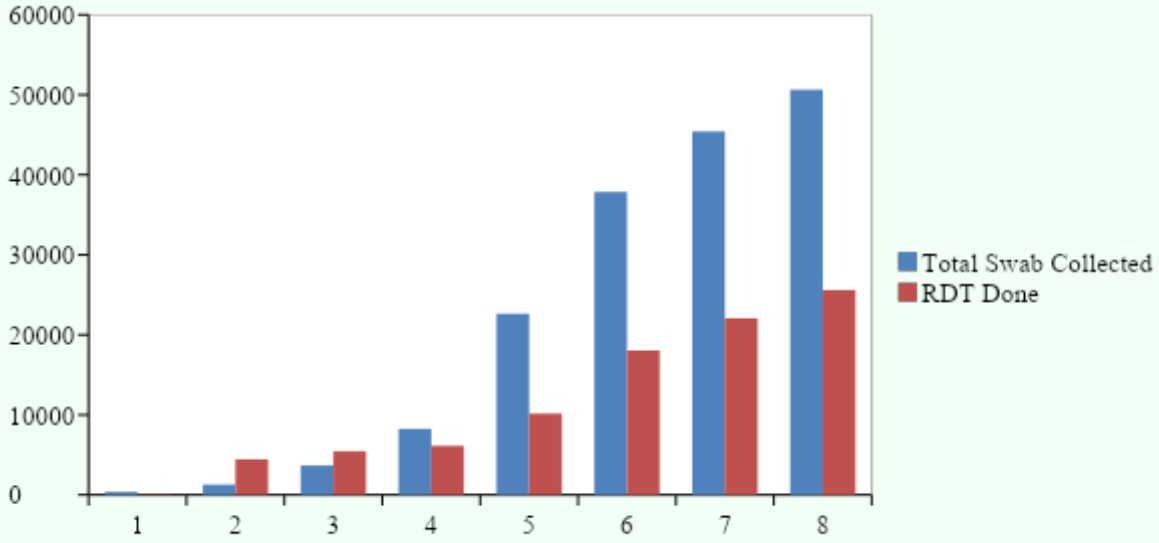
Figure 3: Number of infections in Province 2



Source: NDRRMA, 2020, compiled by FDM/NIPoRe

In terms of test and diagnostics, the province initially relied on RDT tests owing to lack of equipped laboratories, VTM and PPE. Until mid-May, RDT tests outnumbered PCR tests. However, PCR testing rate was later doubled, and by the end of May, number of PCR tests outnumbered RDTs. As of 21 July, a total of 51,607 samples were collected for PCR tests, while the number of RDTs undertaken was stagnant at 25,884.

Figure 4: Number of RDT and PCR tests conducted in Province 2



Source: NDRRMA, compiled by FDM/NIPoRe

Incentivizing health professionals: The provincial government also took measures to incentivize health professionals through insurance policy program worth NPR 10 million. They also declared to give additional credentials to the health professionals serving the frontline in the fight against COVID-19. The training packages on safety methods while collecting swabs were provided to health professional. The government has also decided to pay NPR 5 million in compensation, in case of the deaths of health workers, employees, drivers, and others working in the prevention, control and treatment of COVID-19. The government of Province 2 is going to spend NPR 2 billion for the prevention, control and treatment of COVID-19. The Ministry of Economic Affairs and Planning has disbursed NPR 2 billion for this.

Regarding rehabilitation packages, since 96 percent of the population in the province lives in their own homes, government has not thought about freezing house rents. Province government has contributed farmers with NPR 60 million relief packages on agricultural loan. Provincial government has distributed relief packages in coordination with local government bodies in two phases. The first phase included distribution of relief worth NPR 2.5 million for metropolitan city, NPR 2 million for sub-metropolitan city, NPR 1.5 million for municipality and NPR 1 million for rural municipality to feed the poor and the vulnerable during the lockdown during lockdown period in 136 municipalities through local ward committees.

Part 5: Collaboration with federal, provincial and local government

Federal government supported provincial government to setup with two PCR labs before any COVID-19 cases were observed in the province. However, both the machines reportedly did not function well and had to be replaced. The federal government also coordinated at the district level and local bodies to ensure tightening of the borders. A committee was formed under the coordination of local ward chairpersons of the border area to monitor movement and spread awareness. Coordination among Nepal Police, Nepal Army, National Investigation and local bodies and health workers supported in tightening of the borders, arrangements for hand-washing facilities in several locations, microphone announcement for public awareness in local (Bhojpuri and Maithili) languages, among others.

The federal government coordinated with local bodies to establish a monitoring committee under the coordination of the concerned local level chiefs comprising of the chief district officer, security officials and the head of the health office, to obverse the status of quarantines and isolation wards. However, monitoring activities were not regularly practiced. This resulted in mismanagement of quarantine and isolation facilities.

The province government provided budget of NPR 5 million each to the disaster management committees of all eight districts to prepare for the COVID-19. The government also provided NPR 2 million each to the provincial offices of the Nepal Police and Armed Police Force; and NPR 500,000 to the national investigation department. The government also coordinated with municipal and local authorities for establishing quarantines and management of incoming migrants from across the border. Coordination with private sectors, I/NGOs, CBOs, journalists, among others, resulted in financial, logistical and information dissemination support. Accumulating donation and supports from private sector, I/NGOs, banking institutions and individuals, the COVID-19 fund of Province 2 has reached up to NPR 20 million so far.

Part 6: Recommendation

- One of the worst experiences for province while combating COVID-19 was quarantine management. This was a result of non-compliance with national guidelines. Most of the quarantines were chaotic/ crowded, unhygienic and unsafe. Now, especially as the federal

government is preparing to rescue those stranded in third countries, concerted effort towards management of proper quarantine facilities is of utmost importance.

- Province 2 is well-off in terms of availability of physical infrastructure, in comparison to the hilly districts. This should be turned into a real strength by utilizing school and campus buildings to expand the number of quarantines and isolation wards meeting national standards.
- Lockdown is not essentially a viable alternative to combat COVID-19 since it has resulted in frightening mental health issues, ensued mainly by loss of economic activities. Therefore, it is essential to introduce creative interventions towards bringing about behavioral change in the public, with regards to their individual actions and precautions against the pandemic. Province government can work to increase public awareness regarding behavioral adaptation with the COVID-19 crisis through social/ physical distancing, proper sanitary practices and public support and participation in contact tracing.
- The provincial government should work towards increasing the number of available epidemiologists and public health experts. Tropical hospital, proper laboratory services and logistics should be made easily accessible and available since the province has dense population and any epidemic can go out of control because of lack of medical equipments and services.
- Private schools and hospitals have comparatively better infrastructure. However, there has not been enough coordination among relevant authorities to bring these infrastructures to the best use for common welfare at the time of crisis. In that regard, the government needs to take swift action and coordinate with private sectors.
- Civil service providers, especially teachers, were not mobilized to share good lessons, public awareness and building confidence at local level to combat COVID-19. This is a missed opportunity to better spread public awareness throughout the province. Government should take this into account while designing future interventions directed towards raising public awareness.

Bagmati Province

Executive Summary

Along with Province 1, Bagmati Province's COVID-19 management has been relatively better and swift than most of the other provinces. Being the first province to observe COVID-19 case, as of July 20, it has seen 859 cases with 451 being discharged. Stakeholders that the team talked to in the course of this study, praised the province's response after the first two cases of COVID-19. They believed the local and provincial government acted fast to establish testing centers, expanding them to a total of nine testing centers as cases rose, and setting up quarantines and isolation wards. This gave Bagmati Province an upper hand considering the availability of resources and testing centers. Since the province did not have a sharp rise in cases in the months from March till June, the resources in the province were adequate to handle the crisis. The locals from the province credited the effectiveness of local government in setting up quarantine centers, conducting tests given the resources available, and swiftly executing contact tracing to limit community transmission of the virus.

The province also had an advantage given that there were no major borders through which people entered the province. Management of dead bodies was also done swiftly in the province and the security personnel contacted mentioned how, unlike other provinces, there was a set method to take care of the deceased and cremate them, without any problems arising. The team set for funeral purposes were supplied with adequate PPE gear.

However, the provincial government failed to keep up the same efficiency as the cases increased. With the increase in the number of people entering the province and increasing number of cases, not only did the quality of the quarantine decrease but problems with testing started arising. Due to the high volume of swab samples, not just from the province but other provinces as well, despite the large number of testing centers, the provincial government failed to meet the demand of resources. So, while the Province started off strongly, due to lack of coordination and management of resources, it faced further challenges.

Part 1: Background

Bagmati province[1] was established by the constitution of Nepal in September 2015. The province is centrally located and includes the national capital Kathmandu. It covers an area of 20,300 km^2 which is about 14 percent of the country's total area. The province borders the Tibet Autonomous Region of China to the north, Province no. 1 to the west and both Province No. 2 and the Indian state of Bihar to the south. Hetauda was declared the provincial capital on January 12, 2020, which was previously the headquarters of the central development region. The province covers 13 of the 77 districts of Nepal and 119 of the 753 local bodies. It provides 66 constituencies to the Provincial Assembly and 33 constituencies to the House of representatives.

Table 6: Details of local units in Bagmati province

No.	Details	Number	Percent of the total
1	Districts	13	16.88
2	Local Governments	119	15.80
3	Rural Municipalities	74	16.09
4	Municipalities	41	14.86
5	Sub-metropolitan City	1	9.09
6	Metropolitan Cities	3	50

Source: Bagmati Province official website

Bagmati Province is the most populated among the seven provinces, with a total population of 5.5 million, as per the CBS census 2011. It holds 20.87 percent of the total population of Nepal. The province has a higher population growth rate of 1.91 than the national growth rate of 1.35. The population density is 272 per sq. km, significantly higher than the national population density of 180 per sq. km.

Based on the 2011 census, 42.5 percent of the population in the province is below the age of 30, with the highest proportion of the population between 10-14 years followed by 5-9 years. The population growth

rate of the province is 1.91. 42.5 percent of the population is economically active. The sex ratio (number of females per males) in this province is 98.8, with the male population being 2,747,633 and female population of 2,781,819 according to the 2011 census. The average family size is 4.35 and 337608 of 1,270,797 households are female-headed. The top 5 populated districts of the province have been listed below:

Table 7: Top 5 population centres in Bagmati province

No	Name	Population
1	Kathmandu	2,011,978
2	Chitwan	644,219
3	Lalitpur	525211
4	Makawanpur	443976
5	Kavre	394229

Source: CBS, 2011

Bagmati province has most of Nepal's major ethnic, cultural, religious and linguistic groups. In terms of ethnic groups, the population of the province includes 18.28 percent Brahmins, 17.28 percent Chhetris, 20.42 percent Tamangs, 16.92 percent Newars. There are, in total, 101 ethnic groups each representing fractions of less than one percent of the population in the province. In terms of linguistic diversity, some 57.42 per cent of the people in the province speak Nepali language, while there are significant proportions of people speaking the Tamang (18.32 percent), Newar (12.3 percent), Magar (1.82 percent), Tharu (1.34 percent), and Maithili (1.21 percent) languages.

The province is the economic hub of the country, contributing almost a third (31.90 percent) of the country's GDP. The GDP of the province (FY 2074/75) is NPR 959,330 million. Nearly 81 percent of the province's GDP comes from non-agricultural sectors mainly services, industry and manufacturing. The province generates nearly half of the national revenue. Five of the 15 highest earning districts (Lalitpur, Kathmandu, Rasuwa, Chitwan, and Bhakatpur) in the country are located in this province. The Per Capita Income of the province is USD 1,767 annually, compared to the national per capita income of USD 1160.

Poverty is recorded to be lower in Bagmati province than the national average and most other provinces. There is a lower incidence of poverty in the six most populated districts around Kathmandu Valley. 15.3 percent of the people in the province live below the poverty line. As per the five-year periodic plan, the aim is to reduce the poverty line to 7 percent by FY 2080/81. With a value of 0.051, this province has the lowest MPI among the 7 provinces[2]. With a HDI of 0.558, the province has better human development indicators than the other provinces[3]. The literacy rate for this province is 74.85 percent, the male literacy rate stands at 82.82 percent and the female literacy rate stands at 67.04 percent.

According to the 2019 CBS data[4], there is a high abundance of electronic and print media in the Province. There are 776 newspapers, 163 FM radio stations, and 64 television channels in operation. Of the total households in the province, 743,625 households (58.6 per cent) have access to radio, 685,850 to television (54 percent), and 496,841 to cable television networks (39.1 per cent).

For the FY 2077/78, the Bagmati province Minister for Economic Affairs and Planning allocated a budget of NPR 51.42 billion. NPR 26.28 billion was dedicated as recurrent expenditure and NPR 25.14 billion was dedicated as capital expenditure. The budget has focused on specific programmes to fight the COVID-19 pandemic. NPR 17.8 billion has been allocated to infrastructure development in hopes of creating more employment opportunities for those who've lost jobs or returned from abroad. Bagmati Province has earmarked NPR 194 million to combat COVID-19 and another NPR 563 million for the development of medical infrastructure. The provincial government has continued with the construction of the Bhimphedi-Kulekhani tunnel highway and construction of a province level ring road. In addition, it has also continued its 'one school, one nurse' programme by allocating a budget of NPR 198 million.

Part 2: Health background/risk factors

According to the National Annual Review 2074[5] prepared by the MoHP, Bagmati province has 33 public hospitals, 43 PHCCs, 640 health posts, and 1163 non-public facilities. Among the sanctioned MoHP posts, the proportion of posts filled with human resources are-48.8 percent consultant, 61.5 percent MD-GP, 62.7 percent MO, 70.2 percent Nurse, 63.8 percent paramedic and 65.9 percent all providers. According to the National Demographic Health Survey, the province's newborn mortality rate (number per 1000 live births) stands at 17, infant mortality rate stands at 29 and child mortality rate stands at 36.

According to the Nepal Demographic and Health Survey 2016, around 82.8 percent of families in Bagmati have access to a family toilet. Likewise, 31.1 percent of families in the province use toilets that can be flushed and are linked to a sewage system. 35.9 percent have toilets with a septic tank. In this province, 91 percent of households have access to basic drinking water. Some families depend on groundwater, including that extracted from hand pumps (8.8 percent), wells (5.3 percent) and direct sources (2.9 percent). The province also has the highest proportion of facilities with safe final disposal of healthcare waste of 82 percent. 93.5 percent of the facilities segregate waste at the time of collection, 89.6 percent make sure to safely dispose of sharps waste, 86.7 percent safely dispose medical waste and 82.3 percent safely dispose both sharps and medical waste.[6]

From Bagmati, in the last 10 years before the survey for the NDHS 2016 document was taken, 20 percent female, 17 percent males migrated, with a total of 18.3 percent migration rate. For women, 1.9 percent have migrated to India, 4.6 percent to the middle east and 10.3 percent to other countries. For men, 4.6 percent have migrated to India, 21.4 percent to the Middle East and 26.7 percent to other countries. Since the Province does not share any major border with India from where people could enter, and the border with China was totally sealed, people sneaking into the province were not a major problem. The border at Madi did see a few people enter, however, due to establishment of health posts; the province did not have a major problem. In addition, as the majority of the workers work in the Middle East and other countries, Bagmati province was not at a major risk of transmission from the borders. However, as the number of people brought back in repatriation flights increase, and the government looks into opening the airport, Bagmati province will be at a higher risk of exposure. Thus, the government, in that case, might need to take serious precautionary measures.

Part 3: Urgency and preparation

Key findings:

- *First case observed on 23 January 2020 when a 31-year old student who had returned to Kathmandu from Wuhan on 9 January 2020 tested positive.*
- *In the presence of the Minister for Social Development and in coordination with the Secretary, a high-level Monitoring Committee was formed to monitor the provincial activities for the prevention and control of COVID-19 on 13 March, 2020.*
- *Province COVID-19 Crisis Management Center as well as Disaster Management Committees in each of the 119 local units were established on 29 March 2020.*
- *A relief fund of NPR 500,000 established by the District Coordination Committee exists in all 13 districts of the province*

Formation of committees[7]: The first case of COVID-19 in Bagmati province as well as Nepal was seen on 23 January 2020 when a 31-year old student who had returned to Kathmandu from Wuhan on 9 January 2020 tested positive. Between the months of January and March, the Province, under the leadership of the Chief Minister, took steps to increase public awareness about the disease as well as procuring essential supplies, equipment and medicine, upgrading health infrastructure, and training medical personnel. After the first detected case, a 24-hour operating health desk was established at the Tribhuvan International Airport, Kathmandu. A network of five hubs and several satellite hospitals were mobilized in Kathmandu, with all hospitals in the network having developed hospital disaster preparedness plans. On 29 January, 15 PPEs were prepositioned at Patan Hospital, 5 in Sukraraj Tropical and Infectious Disease Hospital, and 5 in Tribhuvan International Airport. On 10 February, 86 healthcare workers were trained on quarantine and screening at the National Health Training Center.

On 13 March, in the presence of the Minister for Social Development and in coordination with the Secretary, a high-level Monitoring Committee was formed to monitor the provincial activities for the prevention and control of COVID-19. The provincial government along with the committee released an activities and strategies plan for the response and containment of COVID-19 in the province. It included clauses on PPE distribution, training of health professionals and isolation strategies for people returning from abroad. In every hospital in the province, isolation rooms were created with at least 2 beds each.

Availability of resources[7]: Exactly after 2 months after the first case, on 23 March, Bagmati province as well as Nepal recorded its second case of the novel COVID-19, when a 19-year-old female who flew back to Nepal from France via Doha, Qatar tested positive. The second case increased the alertness in the province, introducing now plans and programmes for the containment and response of COVID-19. A cabinet meeting was held on 29 March, which approved a working guideline formulated to control the COVID-19 outbreak and provide special treatment to the affected people. The provincial government, to provide support, established a Province COVID-19 Crisis Management Center as well as disaster management committees in each of the 119 local units. The provincial government also announced its plan to provide NPR 500,000 to a relief fund established by the District Coordination Committee in all 13 districts of the province. The amount will be used to control the spread, set up isolation wards and quarantine facilities, purchase medicines and medical equipment and provide relief to the impoverished families. On 31 March, the provincial government decided to add Rs 400 million to set up an effective COVID-19 response. For COVID-19 control and treatment, Bharatpur Hospital was allocated NPR 10 million, Ratnanagar nagarpalika was allocated Rs 2 million and Dhulikhel Hospital was allocated NPR 2 million. Likewise, NPR 37.7 million was allocated for health service supply center through the social development ministry, NPR 5 million to Hetauda hospital, NPR 4 million to Bhaktapur hospital, NPR 3.1 million to Dhading Hospital and NPR 3.1 million to Trisuli hospital, among others.

Initiatives by local government[7]: Planning and preparation have been done by local and district level as well. Municipality heads have stepped up to take precautionary measures for COVID-19 including separating funds and raising awareness in their districts. In Madhyapur, an emergency fund of 30 million was allocated for distribution of relief materials. In Dhading municipality, local authorities established health desks for the prevention of COVID-19 and monitored people who came into the district from other districts and from abroad. Makwanpur Mayor established a COVID-19 Control and Treatment Emergency Fund of NPR 7.5 million, which has been mobilized with relief distribution guidelines. Similarly, Kamalamani Municipality contributed NPR 724,868 and 5 days-worth salary of government officials to the government's COVID-19 control and treatment fund. Sailung Municipality established a COVID-19 prevention and control fund with NPR 3 million and provided NPR 100,000 to each ward in order to carry out COVID-19 prevention and containment activities. In rural municipalities of the province, health institutions and police posts were provided NPR 75,000, along with NPR 10,000 treatment money and free ambulance service for COVID-19 infected persons, and NPR 100,000 each to frontline workers.

On 10 April, the office of the chief minister and the council of ministers organized an all-party meeting with an agenda of COVID-19 Control and Treatment for Bagmati Province. In the meeting, the ministers shared the province government's interventions and plans to fight against the COVID-19 outbreak. Following the meeting, the province government started RDT testing in all 13 districts on April 14th. The federal government provided 5000 kits to begin with to the provincial government. On 16 April, the provincial government sent NPR 136 million and NPR 700,000 each to all thirteen districts to be distributed to all the local levels and coordination committee for the crisis management. According to the cabinet meeting of Bagmati Province, the metropolitan received NPR 2 million, sub metropolitan received NPR 1.5 million, municipalities received NPR 1.2 million, and rural municipalities received NPR 1 million for COVID-19 management and containment. The District Coordination Committee's Crisis Management received NPR 500,000.

Part 4: Activities and Effectiveness

Key findings:

- *Bagmati province started off strongly while setting up quarantine centers. However, with the increasing number of cases, the provincial as well as local governments have struggled with maintaining the quality of quarantine facilities.*
- *Unlike other provinces, migration through the Indian borders was not much of a problem for the Bagmati province. However, Bagmati Province served as a transit between different provinces making it a high-risk province.*
- *As of July 20, Bagmati Province has recorded 859 total cases and 541 people have been discharged from different places over the province. Bagmati province has recorded 9 deaths so far.*
- *Health experts mentioned that contact tracing and testing has been done efficiently in the province, given the resources. However, as the labs in the province get swab samples from other provinces as well, and due to the high influx of people from foreign countries, the resources at hand are not sufficient to continue efficient tracking and testing.*

Implementation of lockdown[8]: Bagmati Province went to a complete lockdown when the Nepal government announced the nationwide lockdown on 24 March. All public movement outside houses, except to seek medical attention and purchase essential food was halted. All public and private vehicles, except for those with prior permission, those belonging to security forces and those for health workers

were forbidden from the streets. While there were no major issues in the implementation of the lockdown in the province, an apparent number of people were found to be defying the lockdown. Vehicles that defied the prohibition were confiscated and people were given awareness if caught outside.

The province did not see a rise in the number of cases within the two months of lockdown. This aroused question concerning the relevance of halting economic activity in the pretext of COVID-19 precaution. With more and more people, from small business owners to daily wage workers being affected economically, people started protesting against the lockdown and more people were seen defying the lockdown. In Kathmandu, following the 10 June decision of the government to relax the ongoing nationwide lockdown by opening banks and financial institutions, agricultural sectors and industries, the flow of people and vehicles increased extensively. Nonessential stores and activities also started to operate, and people were found stepping out of houses even without any urgency. As the number of people defying the laws increased, the Metropolitan Traffic Police Division faced a challenge as they were not able to punish the jaywalkers due to large movement. Security officials that the team talked to mentioned the lack of instructions from the provincial government, making it difficult to manage and control the people defying the lockdown. Small businesses, which were among the most affected by the pandemic, started resuming their businesses as the extension of the lockdown increased mental stress among the traders. Over a phone interview, an owner of a small bakery expressed concerns over having to pay taxes and rent despite lost revenue, and said that small businesses were ready to take all the precautionary measures to deliver safe services, as long as they were allowed to operate. People opposed the extension of the lockdown and at the same time resented meager preparation on the part of the government to face the widespread financial distress.

A local grocery store owner that FDM/NIPoRe talked to expressed the initial ineffectiveness of the lockdown in the valley, as people were only allowed to leave their houses to buy essentials during a certain period of time. According to the grocer, this increased crowds during the time, as not many people followed social distancing. When the stores were allowed to open throughout the day, the crowd was scattered, decreasing the risk of infection. Locals in the province that were contacted had differing views regarding the lockdown. Some locals believed that the government took the right steps at the right time by imposing a nationwide lockdown and reduced the number of infections in the province. On the other hand, some locals strongly opposed the modality of the lockdown and would have preferred if economic activities were not brought to a complete halt. All, however, agreed on the fact that daily wage workers are going to suffer more because of loss of incomes, than the virus, as relief packages were not sufficient

for the long run. According to them, the government only offered short term help, not considering impacts in the longer run.

While the modality and the planning of the lockdown faced a lot of questions from the public, the response from the government after the first case of COVID-19 in Nepal was generally praised. If the government had been consistent with the response and containment measures, the virus would not have spread to this level. A public health official that FDM/NIPoRe contacted mentioned the effectiveness of the government in bringing back 175 nationals from Wuhan. The communication between the central government and provincial government played an important role in the safety of nationals in testing and quarantine. They further mentioned that if the Bagmati provincial government had remained that swift and in communication with the local government, the virus would have been better contained. In addition to lack of communication and coordination, the provincial government did not prepare for the crisis even when they had all the information beforehand. However, they also did point out that the provincial government had little control over planning the containment strategies and lockdown protocols.

Border closure[9]: Unlike other provinces, migration through the Indian borders was not much of a problem for the Bagmati province. According to security personnel that the team contacted, there were no open borders through which people could enter the province directly. While the China border was fully closed, the Indian border was not used by people entering the country. Only in Chitwan did some people cross borders, however, it wasn't a major threat as there were health posts and professionals deployed in the border to take effective containment measures. However, Bagmati Province served as a transit between different provinces. The two main apparent problems were providing passes to vehicles to enter Kathmandu Valley, and exposure to the virus from people using the province as a transit to reach their destination. With the 11 June ease of the lockdown, allowing businesses to operate, Kathmandu valley saw an increase in people entering the valley and a high number of vehicles without passes, claiming that they had businesses in the valley. Sanga, another entry point to Kathmandu via Bhaktapur district also saw a rise in people entering the valley, with more than 3000 vehicles entering the valley on 15 June alone. Despite police's claim of allowing entry to only those with passes, locals said that people were entering the valley uninterrupted. Similarly, as the province has the nation's only international airport, all the Nepalis rescued from different nations in repatriation flights were flown to the capital. This increased the exposure of COVID-19 in the capital, as well as in the province when people were transported to their respective provinces. While the number of people entering the province is not definite, the security personnel said that around 7000 people had already entered the province and an estimate of around 93,000

people are yet to come back. The main problem in the province in terms of returnees is going to be management of quarantine facilities and testing.

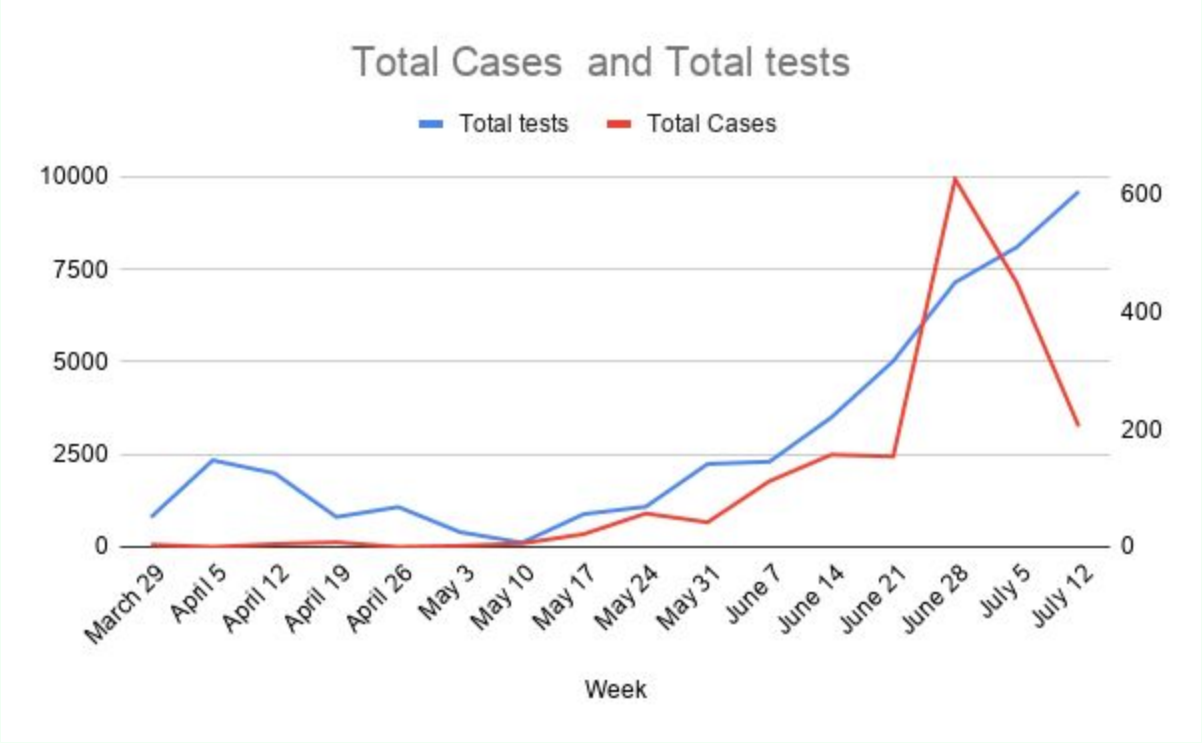
Management of quarantines[9]: Bagmati province started off strongly while setting up quarantine centers. In the beginning, the province's Disaster Management Director's Committee, set up a quarantine center for up to 500 beds at different places in the province. To begin with, the province had a total capacity of 36 beds at different hospitals, but more beds were added to expand the total capacity to 229 beds. Local governments have made provisions for isolating individuals with suspected COVID-19 infection and quarantining them for 14 days in community halls, schools, or in tent-houses set up on open grounds.

However, with the increasing number of cases, the provincial as well as local governments have struggled with maintaining the quality of quarantine facilities. Without proper supervision and failed precautionary measures in the facilities, people are getting infected in quarantine centers as well. In Madi, 21 people from the same quarantine facility tested positive due to lack of awareness among the infected people about social distancing and isolation, despite the local government setting up separate beds and toilets for each of the infected. Starting May, as cases started to increase in the province, a scarcity of testing kits became a major problem along with inadequate spaces in quarantine facilities. On 24 May, due to lack of PCR testing kits, the swab examination in Vector-Borne Disease Research and Training center's laboratory came to a halt. The isolation ward of Hetauda sub metropolitan reached its full capacity at the end of May.

In the months of June and July, Bagmati province recorded more than 5000 foreign returnees except from India. With the surge of incoming people, the province faced the challenge of conducting COVID-19 tests. Due to lack of testing kits, laboratory and other equipment, throat swab samples of most foreign returnees have not been collected and those previously collected also await testing. According to the government authority the team talked to, the provincial government awaited kits and laboratory equipment required to offset the increase in returnees, but due to the lack of resources provided by the central government, there was a challenge in conducting tests. Similarly, a health official mentioned that the local government was acting very efficiently to conduct tests and arrange quarantine facilities; however, due to lack of support from the provincial and central government, testing decreased and the management of quarantine facilities became a challenge. Despite Bagmati province having a comparatively higher testing capacity than the other provinces, testing slacked due to lack of efficient response from the central government.

Testing: As of 20 July, Bagmati Province has recorded 859 total cases and 541 people have been discharged from different places over the province. Bagmati province has recorded 9 deaths so far. The province has nine, the highest number, of testing centers.

Figure 5: Total number of tests done against total number of cases registered in Bagmati province



Source: NDRRMA. Compiled by FDM/NIPoRe

Health experts mentioned that contact tracing and testing has been done efficiently in the province, given the resources. However, as the labs in the province get swab samples from other provinces as well, and due to the high influx of people from foreign countries, the resources at hand are not sufficient to continue efficient tracking and testing. Even though the province only accounts for 4.8 percent of the total 17844 nationwide cases, the Kathmandu valley has seen an increase in the number of cases and is at risk with the number of people entering from other provinces and foreign nations.

Part 5: Collaboration between federal, provincial and local government

Decision making for COVID-19 response and management has been centralized, with the federal government's Crisis Management Coordination Committee taking the central role. The health expert FDM/NIPoRe reached out to mention this being the main reason behind general ineffectiveness in the planning and management of COVID-19 response. A government official at a local level said that the federal government made policy decisions without considering their fiscal and technical capabilities. Without decentralization and feedback from local units regarding the actual needs has created disconnect between the resources provided and policies framed by the federal government and its effective implementation.

The federal government formed the high-level committee and creation of the framework for intergovernmental cooperation on 1 March. According to the framework, provincial and local governments were responsible for establishment and operation of emergency funds, laboratory expansion, and management of hospitals for treatment, data collection, setting up and monitoring quarantine, among others. In Bagmati Province, similar to the other provinces, the High-level Monitoring Committee established on 13 March consisting of ministers of relevant provincial ministries, earth directorate, hospital and local representatives coordinated to implement various decisions of the provincial government. The District Coordination Committee, District Administration Office, representatives of security bodies at the district level, and representatives of political parties had coordinated at the district level and with local units. Local units were sending information over the telephone and email to the Ministry of Federal Affairs and General Administration, the province's Social Development Ministry, and the District Administration Office. This coordination between the three government levels looked similar across provinces in Nepal.[10]

According to a CSO representative that the team contacted, the federal government did a good job while planning policies and giving direction. However, the problem seen in the province was during execution and implementation of the policies. They further mentioned that people on the ground level lacked coordination, and many took self-serving steps than what would actually benefit the people. The security personnel FDM/NIPoRe contacted had a similar stance on the coordination of the different levels of governments. They emphasized that the province disaster management committee did give out good directions, and the local governments tried their best to manage funds and coordinate, however, people

working on the ground level failed to implement the policies. On the other hand, a journalist whom FDM/NIPoRe spoke with, said that the local government did a good job while setting up quarantines and contact tracing. However, due to poor execution and support from the provincial government, and lack of budget, the local government lacked resources to give their best.

Local authorities also mentioned that due to lack of transparency and poor dissemination of information, collaboration between the governments ended up being poor, affecting mostly the quarantine facilities and testing in the province. Despite local levels setting up quarantines, due to lack of funds, they could not keep up the quality. According to a health official, despite setting up a good number of testing centers in the Province, the National Public Health Laboratory was swamped with swab samples. Only later did the government decentralize the testing process and increased testing in the other labs. This delayed the process of effective testing in the Province. Overall, while there was some well-intentioned planning by the three tiers of governments, disconnect was seen for the plans and policies to be implemented effectively.

Part 6: Recommendation

- With the increasing number of cases, Bagmati province needs to fully utilize its testing centers and expand testing while simultaneously improving the mobilization of health workers and providing them with necessary equipment and safety kits. There were less frequent hours of duty per person for healthcare workers by having frequent rotations which limited exposure to the virus. However, despite limited exposure, protective equipment became less available with the increase of cases. One of the major concerns of health workers was inadequate support received by the provincial government, which posed a threat to their own personal health and safety.
- There is little to no support given to frontline workers, which has not helped to motivate them. At the provincial level, the government should prioritize well-being and support health workers, doctors and police personnel working in the frontline, through benefits, insurance, and safety kits.
- While there is no immediate threat to the province in terms of managing the borders with India, the provincial government should manage the people coming into the province from other provinces and increase checking at the airport. Testing should be done to all the people entering the country via TIA upon arrival, which will limit the exposure Bagmati province has to the virus. For travel from other provinces, people as well as vehicles entering the province should be checked and sanitized.

- While there are enough quarantine facilities set up in the province, given the number of cases, there needs to be better cleanliness and supervision in the quarantine facilities, so that the quarantine centers themselves do not turn into the hub for transmission. However, given the estimation of around 93,000 additional people entering the province in the coming months, quarantine facilities, ICU centers and isolation centers should be expanded accordingly.

Gandaki Province

Executive Summary

Gandaki province was considered to be a high-risk zone for the virus due to the initial cases that were seen in the province and the large number of returnee migrants from India. While the province did not immediately see a rise in number of cases after the first two cases were seen in the province on 28 March and 3 April, by 30 June, the number of cases in the province had exponentially risen to 1021.

The province government and the local governments both worked to prepare the province to combat COVID-19. The province government formed various committees and delineated responsibilities to these committees to ensure smooth handling of operations. Health desks, quarantine facilities, and isolation wards were established all over the province. The province government also mapped out the way to transfer swab samples from all the districts to the testing labs in Pokhara. Local governments were provided financial support and logistical support by the provincial government.

However, the province faced some difficulties with managing the patients with the influx of migrant workers. Initially, quarantine facilities and isolation wards had been unused due to the preference of the local population to stay in quarantine at home. With the large number of returnee migrants, these facilities began to be used quickly and the local government had to scramble to build new quarantine facilities and isolation wards. There has been delay in sending infected people to isolation wards from the quarantine facilities due to lack of space. The people using these facilities have also complained about the poor condition of the facilities. Further problem has also been raised due to the delay in getting results of the PCR tests.

The Province government faces similar challenge for the future as the number of migrants returning to the province is bound to increase as migrants return from Gulf countries and other countries. The government will have to work to ensure that there are enough quarantine facilities and isolation wards and must ensure that the facilities are in good condition. Furthermore, with the province suffering from natural disasters such as landslides, the government must be vigilant about the spread of COVID-19 in the community. For the people who are being moved to safer place and for people who have been displaced due to the

destruction of their home due to landslides, the government must provide masks, hand wash and hand sanitizers along with other relief materials.

Part 1: Province Background

Gandaki Province borders Bagmati Province in the East, Karnali Province in the West, Province no. 5 and Uttar Pradesh state of India to the South, and Tibet Autonomous Region of China to the North. Formerly named Province no. 4, the Provincial Assembly changed the name of the province to Gandaki, after the river Gandaki in July 2018. The province has 11 districts of which 26.8 percent area falls in the Himalayan region, 67.2 percent falls in the Hilly region, and 6 percent falls in the Terai region. The 11 districts in the province are- Kaski, Parbat, Myagdi, Tanahun, Baglung, Manang, Mustang, Nawalpur, Syangja, Gorkha, and Lamjung. The province has been divided into a total of 85 local level bodies, of which, there are one metropolitan city, 26 municipalities, and 58 rural municipalities. It covers an area of 21,733 sq.km, 15.3 percent of the total area of Nepal. Pokhara is the capital city of the province. The current Chief Minister of the province is Prithivi Subba Gurung.

Table 8: Number of municipalities and rural municipalities per district

Districts	Metro-Politan City	Municipality	Rural Municipality
Kaski	1	-	4
Parbat	-	2	5
Myagdi	-	1	5
Tanahun	-	4	6
Baglung	-	4	6
Manang	-	-	4
Mustang	-	-	5
Nawalpur	-	4	4
Syangja	-	5	6
Gorkha	-	2	9
Lamjung	-	4	4

Source: OCMCM, 2020.

According to the 2011 national census[1], the population of the province is 2,403,757 with the population density being 112 per sq. km. The population of the province is 9.1 percent of the total population of the

country. 60.5 percent of the total population of the province lives in municipalities and 39.4 percent of the population live in rural municipalities. The dependent population is 43.1 percent and the independent population is 56.9 percent of the total population of the province. 2.3 percent of the population are persons with disabilities. Brahmin-Hill (21.5 percent), Magar (20.9 percent), Chhetri (13.4 percent), and Gurung (8.4 percent) are ethnic groups with the highest population in the province. 82.89 percent of the population are Hindu, 13.68 percent are Buddhists, 1.56 percent follow Christianity, and 0.77 percent follow Islam. Other religions followed in the province include Bon and Prakriti. A total of 88 languages are spoken in the province with Nepali (68.8 percent) being the most spoken language, with Magar (9.025 percent) and Gurung (7.855 percent) being the second and third most spoken language respectively.

Table 9: Top 5 population centres in Gandaki province

Sn No.	District	Population
1	Kaski	492,098
2	Tanahu	323,288
3	Nawalpur	311,604
4	Syangja	289,148
5	Gorkha	271,061

Source: CBS, 2011

According to the Economic Survey 2018/19[2], the growth rate of Gandaki province for the fiscal year was 7.1 percent. The province's contribution to the overall GDP stands at approximately 9.4 percent. The literacy rate of the province is 74 percent[3]. The HDI of the province is 0.513. According to the Nepal Labor Force Survey 2017/18[4], the unemployment rate of the province stands at 9 percent, the employment to population ratio of the province stands at 32.5 percent, and the labour force participation rate stands at 35.7 percent. 39.7 percent of the population of the province is employed in the formal sector and 60.3 percent are employed in the informal sector. 17.1 percent of the population of the province have formal employment and 82.9 percent have informal employment. The median monthly earning of employees is NPR 18,250. The data from NPC Multidimensional Poverty Index (MPI) 2018[5] shows that Provincial Monetary Poverty is 21 percent for Gandaki province. The MPI of the province is 0.061, headcount ratio 14.19 percent, and the intensity of poverty 42.9 percent. 43,378 households in the province have access to radio, 21,470 households have access to television and 315 households have access to internet

connection[6]. Telephone access is available in 1764 households and mobile phone access is available in 40,950 households.

The annual budget for FY 2075/76[7] of the province was NPR 32.13 billion. According to the budget, the province government set a target to collect taxes of NPR 3.2 billion for the FY 2019/20. For the FY 2018/19, the revised budget had set a target of collecting NPR 2.5 billion revenue through taxes. While the major focus of the budget was on infrastructure development, tourism sector, agriculture sector, and development of industries and powerplants, healthcare sector was also included as a priority. The major expenditure for the healthcare sector was for construction of hospital buildings in Mustang, Manang, Kaski, Nawalpur, and Parbat for which NPR 150 million had been allocated. Furthermore, NPR 10 million had been allocated for construction of Pokhara Nursing Campus, NPR 5 million for vaccination program, and NPR 11 million for health camp and screening for diseases such as HIV/AIDS, tuberculosis, and leprosy. The budget also listed making health insurance accessible, starting dialysis service in Parbat, Myagdi, Syangja, Gorkha, and Lamjung, creating maternal health and childcare services, establishing blood banks, and highway mobile hospitals as a priority.

Part 2: Health background/risk factors

According to the National Annual Review Report[8] published by the Ministry of Health and Population in 2074/75 by the Department of Health Services, Gandaki province has 15 public hospitals, 24 PHCCs, 491 health posts, and 100 Non-Public facilities. Department of Health Services' data published in fiscal year 2073/74 states that there are 121 permanent and 117 contracted doctors, 1047 permanent and 207 contracted nurses. In addition, there are 5525 Female Community Health Volunteers in the province.

The distance to nearest health facilities is less than 30 minutes for 46.5 percent of the population, the distance is between 30 minutes to 60 minutes for 39.7 percent of the population and more than 60 minutes for 13.7 percent of the population[9]. There are 133 ICU Units and 54 ventilators in 14 hospitals (which includes both private and public hospitals) in the province. Diagnostic health laboratories are present in 13 hospitals, 24 PHCCs, and 22 health posts across the province. National health insurance program has been implemented in Baglung, Myagdi, Kaski, Gorkha, and Tanahun.

The life expectancy in the province is 71.7 years. For women aged 25 to 49 years, the average age of marriage is 18.4 years whereas the average age of marriage for men aged 25 to 49 years is 22 years. The

IMR in the province is 23 deaths per 1000 live births[10], the CMR of the province is 4 per 1000 live births, and the Under 5 Mortality Rate is 27 deaths per 1000 live births. 29 percent of the children under 5 years of age are moderately or severely stunted. Communicable diseases such as tuberculosis, malaria, and kala azar are prevalent in the province. According to a study conducted by Nepal Health Research Council (NHRC)[11], diabetes mellitus, chronic kidney disease, artery disease, and chronic pulmonary obstructive disease are the most prevalent non-communicable diseases in the province. 6.7 percent of the population in the province has diabetes mellitus, 6.8 percent has chronic kidney disease, 3.6 percent has artery disease.

A study conducted by the province government found that 73.7 percent of the households have toilets in their home. Among households that have a handwashing place, 91.5 percent of households have a fixed handwashing place and 8.4 percent have a mobile handwashing place. Piped tap water which is available for 50.4 percent of the households is the major source of water in the province. Sprout water, uncovered well, and covered well are other sources of water.

According to the Nepal Labour Migration Report 2020[12], 13.8 percent of the total population of the province are migrant workers. 80 percent of the migrant workers from the province are in Qatar, UAE, Saudi Arabia, Malaysia, and Kuwait with UAE being the most popular destination. While the exact number of migrants to India is not available, the open border the province shares with Uttar Pradesh means that there is constant flow of migrants between the two countries. During the lockdown, the border checkpoint was closed to ensure that no one could travel between the two countries which resulted in a number of Nepali migrants being stranded in India.

After two cases in late March[13] and early April[14], there was a period of time when the province did not see any cases of COVID-19. While the government worked to prepare quarantine facilities and isolation wards during this time, it became apparent once the number of cases began rising that the preparation was not enough. The lack of enough quarantine facilities, especially isolation wards, caused people to stay in crowded spaces even though they had tested positive for the virus. There were also cases where despite testing positive for the virus, patients were not immediately put in isolation wards. There have been some instances when some patients were reported to have been sent in isolation wards four days after their results came positive[15]. This gave rise to the possibility of quarantine space itself turning into a virus transmission hotspot. Hospitals were also in danger of turning into a hotspot as health workers treating the patients tested positive for the virus.

Part 3: Urgency and preparation

Key Findings

- *A task force was created by the Province government with Dr. Binod Bindu Sharma, the director of Province Health Directorate as the president. Representatives from major hospitals, Ministry of Social Development, Provincial Public Health Laboratory Pokhara, and hotel associations were part of the task force.*
- *There were ten different committees formed to respond to the COVID-19 pandemic.*
- *The Province government allocated financial assistance- NPR 2 million to metropolitan city, NPR 1 million to each municipality, and NPR, 500,000 to each rural municipality.*
- *The border point at Tribeni was closed and health desks were established at various places throughout the province.*
- *The information about the COVID-19 was disseminated through print, radio, and television. The province government has also been updating the public through its social media, weekly newsletter, mobile app and website. Dr Sharma and Dr Ram Bahadur K.C were appointed the focal person for the information dissemination regarding the pandemic.*

Formation of committees: A task force[16] was created on January 26 with Dr. Binod Bindu Sharma, the director of the Province Health Directorate as the president with representatives from major hospitals, Ministry of Social Development, Provincial Public Health Laboratory Pokhara, and hotel association. A meeting held by the Task Force on January 29 decided to request 5 sets of PPE from the WHO and to buy 1000 pieces of masks and aprons through the Province Health Directorate. The meeting also decided that WARUN would help in collecting and transporting the samples of the tests. Another meeting held on February 3 presided by Dr. Sharma and attended by all concerned authorities took a decision to direct the Province Health Logistics Management Center to buy PPE worth NPR 500,000. After a meeting held on March 12, a decision was made to request 500 sets of PPE, 500 infrared thermometers, 20 thousand masks, 100 litres of sanitisers and disinfectants, and other required PPE materials from the federal government[17].

Furthermore, the meeting[18] held by the Province government officials and the Council of Ministers in the province on March 5 took decisions to request the province population to not organize and participate in events such as marriages, public forums, and conferences, to make provisions regarding essential goods

such as medicine, food, and other goods used in daily life, and to request the federal government to construct a separate hospital and quarantine facility for treating COVID 19 and any other communicable diseases[19]. On April 7, the meeting was held by concerned authority for forming ten different committees[20] to combat the COVID 19 pandemic. The response teams formed were as follows:

- Hospital Management Committee
- Healthworkers Management Committee
- Information and Communications Management Committee
- Ambulance Management Committee
- Quarantine Management Committee
- Rapid Response Team Surveillance Committee
- Health Desk Management Committee
- Laboratory and Sample Collection Management Committee
- Market Inspection and Regulation Committee
- Import Management Committee

Formulation of action plan: The response team were also responsible for preparing a report and action plan for combating the pandemic within three days of formation of the team. The government officials followed the protocols of staying six feet away from each other and wearing masks when attending their meetings and while conducting other work-related activities.

The province government allocated NPR 2 million to metropolitan city, NPR. 1million to each municipality, and NPR. 500,000 to each rural municipality to fight the pandemic. The budget for all district hospitals to buy PPE was increased by NPR. 500,000. The Ministry of Social Development was given the responsibility of opening and maintaining a bank account in Rastriya Banijya Bank where the provincial government would donate NPR. 150 million, the provincial ministers would all donate their one month's salary, and any other interested party could donate according to their wish. The decision was also made to redirect funds of the programs that had yet to be implemented and any leftover funds from the program that had been implemented to the fund created to fight the pandemic[21].

Support of NGOs/CBOs: Development agencies and other organizations such as INF Nepal, WHO, Save the Children, IPAS Nepal, Gurkha Welfare Trust, KAAA, Nepal Medical Association, MELAN, Pokhara News, and Laxmi Cares provided medical, technical, and logistical support to tackle the pandemic[22].

The first case of COVID-19 in Gandaki province was found on March 28 2020 when a 19-year-old girl tested positive. She had travelled from Belgium via Qatar and had travelled to Baglung. The second case in the province was seen on a 65-year-old woman from Baglung who was a relative of the 19-year-old. They both had travelled in the same flight. Both patients were treated in Dhaulagiri hospital. On April 9, CM Gurung had a telephone conversation[23] with the 19-year-old patient during which he inquired about her health.

Supply chain for basic goods: The province shares a border with India at Tribeni which was closed down to comply with the lockdown regulations. Despite the closure of the border point, the import of essential goods[24] into the province was not affected as most essential goods transported to the province came from other Terai districts of the country. The vehicles bringing these goods were sprayed with disinfectant and all the people travelling had their body temperature measured. With the nationwide lockdown and the ban on inter-district travel imposed by the federal government, people were found using these vehicles which transport essential goods to come into the province.

Record of people coming from outside: The records of people who travelled to the province were kept by the police personnel and the healthcare workers. The provincial level meeting on March 12 made a decision to request the local level officials to establish health desks in checkpoints at Tribeni, Daunne, Gaidakot, Mugling/ Abukhaireni, Tanahun, Arughat, Gorkha, and Burtibang. The health desks situated in Mugling/ Abukhaireni, Tanahun, and Galyang in Syangja were instructed to rigorously check any vehicles coming from India and to inform the authorities about any concerns[25]. The local level administration, the police officers and the villagers themselves were active in keeping records of the people coming in from abroad and in sending people to quarantine and isolation.

Information dissemination: Health Director Dr. Sharma and the Head of Medical Services Dr. Ram Bahadur K.C were appointed as the focal persons to disseminate information about the pandemic. Dr. Sharma has been going live every day and the Health Directorate has been posting press releases on its website and social media to update the situation of the disease to the public. The province government also created a helpline called Hello Doctor at 1092 to give information to the public. The official website of the province government, its ministries, and its health directorate all have information about the disease, the update on the current situation in the province, and the decisions made by the government authorities. The province government has also created a mobile app titled Gandaki Swasthya where

people can access press releases, daily COVID 19 briefings, and the weekly newsletter the province government has been releasing[26].

The information about the disease has been created and disseminated through online, print, and visual media. The language used for the creation and dissemination of the information has primarily been in Nepali with English translations available. The information and update about it has not been available in any local languages. Despite the government's efforts, there has also been a spread of misinformation and a lack of proper dissemination of information[27]. This has mostly affected the poor and vulnerable population as due to the lack of availability of information and the lack of clarity of information available they have not been able to access the relief packages offered by the government.

Part 4: Activities and effectiveness

Key Findings

- *The province government instructed local governments to construct quarantine facilities and isolation wards. The province government also worked out the transportation route to transfer swab samples from all the districts to Pokhara.*
- *Initially, both RDT tests and PCR tests were done in the province, however due to the question of reliability of results obtained from RDT tests, the government elected to only perform PCR tests.*
- *The number of cases in the province increased as the migrants returned home from India. The police force coordinated with the local level government to ensure that the returnee migrants got tested and were in quarantine facilities.*
- *While the government prepared quarantine facilities and isolation wards, the large number of people using these facilities overwhelmed the available resources. As a result, local governments had to increase the number of quarantine facilities in a short period of time. There were also complaints from the people staying in the quarantine facilities about the lack of proper facilities in buildings.*

Implementation of lockdown: The lockdown in the province was implemented according to the national lockdown and it was found to be largely effective in the province. The province government did not make any separate decisions about the start and end of the lockdown in the province and followed the federal government's lead in the matter. The border point at Tribeni (the only land border point between Nepal

and India in the province) was also closed in accordance with the decision made by the federal government[28]. The people in the province were allowed to travel to buy essential goods but aside from that travel was prohibited. Lockdown and social distancing measures seemed to have been effective in the beginning as two people tested positive in Baglung but the virus did not spread. The third case in the province was more than a month after the second case on May 14 and the person who was infected was a migrant worker from India.

While a representative from the Province Police Department stated that the lockdown had been implemented effectively and no problems had arisen during the lockdown period, telephone conversations with few local people painted a different picture. The local people mentioned that there were incidents where they faced harassment from the police officers even when they were outside to buy essential goods.

There were calls from the private sector in the community to revise lockdown restrictions as the prolonged lockdown started to have an adverse economic effect in the business community. Furthermore, the media houses were also adversely affected during the lockdown as advertisements dried up. The province government did not take any separate measures to support the private sector. While the federal government and the Nepal Rastra Bank provided some relief measures for industries and businesses, the lack of support from the province government put the sector in a difficult position. While the construction works in various projects such as Pokhara Airport and Kali Gandaki hydropower plant initially was affected due to the lockdown, the work on these projects started even when the lockdown had not been completely eased. The workers working in these projects had to follow protocols such as staying in separate facilities, maintaining distance with co-workers while working, and wearing protective gears while at work.

In a call with a representative from the Pokhara Chamber of Commerce, the lack of support provided by the province government was highlighted. After the pressure from the private sector the government decided to allow few businesses to open but there was lack of support from the local administrations and the police force. The businesses also face a liquidity problem as they may not have much cash in hand due to rent, loans, and due interests. Tourism industry and public transportation industry have been two industries that have been adversely affected due to the lockdown. Also, the tourism industry's future is still bleak as the COVID-19 crisis has affected both national as well as international travel.

While the province government decided to end the lockdown, it did not look to have prepared for opening of the province in a thorough way. Even though the government requested everyone in the province to practice preventive measures against the virus, it did not announce any mandatory measures that people would have to follow. In the telephone conversations, local people voiced their concern about people being outside without masks, contributing to the spread of the virus among the community.

Border closure: A health desk was established on March 8 in Binayee Tribeni rural municipality border point[29]. Once the lockdown was implemented nationally, the border was effectively closed which left scores of Nepali migrants stranded in India. The province shares a 5 km border with India and Narayani river forms the border between the two countries with a bridge across the river at Tribeni, which is the only land border point. When the bridge was closed, there was an incident where two migrant workers swam in the Narayani river to get into the province. However, once the federal government decided to allow Nepali people stuck in the borders to come back, returnee migrants were allowed to come into the province.

In a telephone conversation, a representative from the District Police Force in Nawalpur stated that more than 2500 people had come into the province from India. The returnee migrants mostly travelled into the province through Sunauli Naka and the Nawalpur district police coordinated with local level governments and police forces across the province to transport the people from the border point to their respective destinations. All the returnee migrants were immediately taken to quarantine facilities once they reached their hometowns. The police personnel made sure to keep a record of all the people who had travelled into the province through different border points. Checkpoints were established in Baunne and Gaidakot and all the vehicles passing through these points were inspected and any person whose destination was within the province were requested to board down from the bus in designated places where police personnel would be present to take them to the quarantine facilities.

The rising number of cases in Gandaki is mainly due to the continued inflow of migrant workers from India and abroad. The increase in inflow of migrants coupled with the increase in the number of tests done every day has meant that the daily number of cases in the province has increased in large numbers. The local governments have tried to work in coordination with the returning workers to ensure that they could promptly go to quarantine facilities and get tested for the virus. The patients who tested positive were sent to receive treatments and the ones who tested negative were sent home and were requested to further quarantine themselves in their own homes for a week[30].

Despite the local governments working to implement a prompt contact tracing process, there have been cases of delay, especially during the initial stage. It has been affected by the lack of prompt mobilization of healthcare workers and volunteers. The province also declared some specific locations as the hot-spots of the virus. The local government made decisions regarding sealing off the places that were declared the hot spots. Kathekhola rural municipality was one such places that was declared a hot-spot[31]. The government officials in the rural municipality decided to seal off the place from June 28 to July 4 as a local transmission of the virus was found on three people who worked at the quarantine facilities. Parbat district hospital[32] also had to be sealed off as five healthcare workers tested positive for the virus. All the services provided by the hospital were suspended as the majority of healthcare workers in the hospital had to get their samples tested for the virus.

While quarantine facilities and isolation wards have been set up all over the province, there has been mismanagement due to lack of proper coordination between the province government, local government, and healthcare sector. There has also been hesitancy from the people in trusting the resources offered by the government. There was a big gap in the timeframe between the first two cases in the province and the third case in the province. While there was a steady flow of migrant workers returning home during this time, no new cases were seen. During this period, quarantine facilities prepared by the local government often went empty as the people who had to stay in quarantine preferred to self-quarantine themselves at their own home.

Management of surge of cases: However, as the cases began to surge and the quarantine space prepared by the government and the hospitals began to be used, the lack of adequate infrastructure to support the patients began to be seen[33]. This led to instances where patients who had tested positive for COVID-19 had to wait for days to be transferred to an isolation ward. Furthermore, even the healthcare sector workers who had to stay in quarantine facilities and isolation wards had difficulty getting access to proper facilities. The healthcare workers from Parbat district hospital who tested positive had to use the hospital building as the isolation facility as the designated building for the health workers use was found to be inadequately prepared. Other healthcare workers from the hospital also had to use the building as a quarantine facility due to lack of separate space for quarantine.

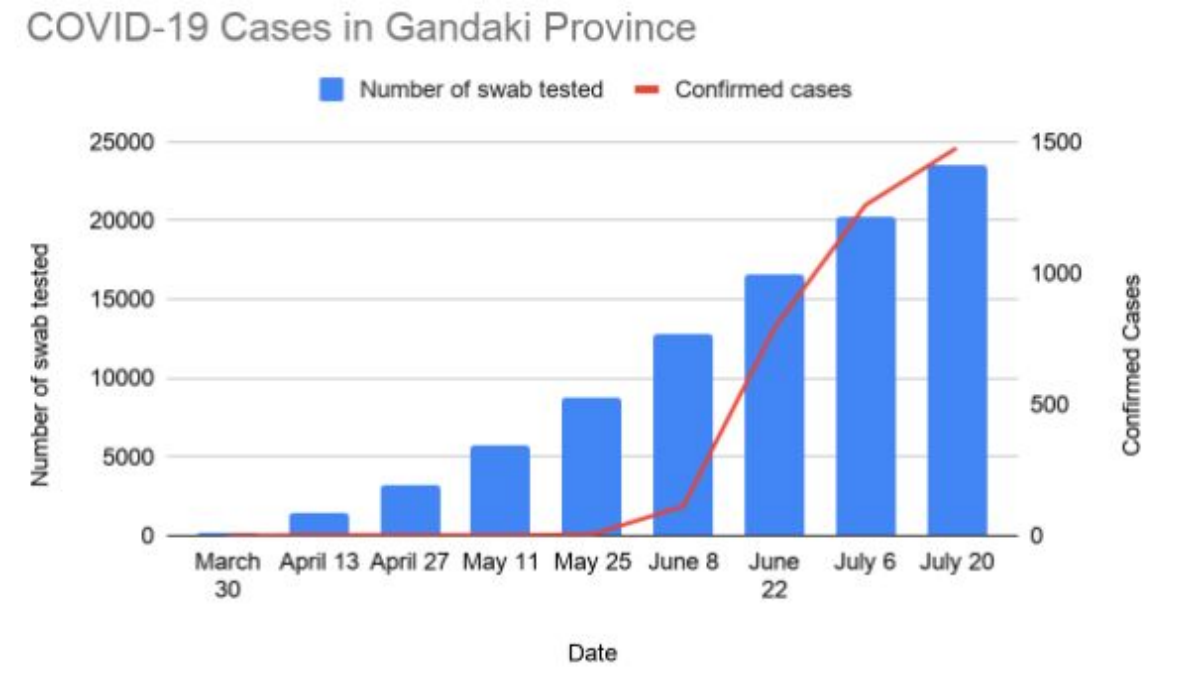
Information obtained through several local government officials also verified the news that due to the lack of sufficient quarantine facilities, the local government had to add quarantine facilities once the number of

returnee migrants increased. In Chapakot municipality, the local government had to increase the number of quarantine facilities from two buildings to five buildings as the number of returnee migrants kept increasing. Similarly, Beni municipality also had to increase the number of quarantine facilities as the migrant workers from the Gulf countries started to return. However, as the number of returnee migrants in Manang was low, there has not been a surge in cases in the district in comparison to the rest of the province. A local government official from Chapakot municipality in Syangja also mentioned that the lack of proper roads posed a problem for the local government. Due to the rainy season, the condition of the roads deteriorated, and thus the government had to face more problems when bringing back the returnee migrants to the municipality.

While the province government made decisions to procure PPE and other medical equipment, there have been cases of mismanagement of resources which has caused problems for all frontline workers. Initially, there was a delay in supplying these materials to the local governments which prompted the local governments to procure these materials themselves[34]. Later, the province government managed to procure and distribute the required materials to the concerned parties.

Testing: According to the data from the National Disaster Risk Reduction and Management Authority (NDRRMA), as of July 20, 2020, Gandaki province had reported 1476 cases out of which 922 people were discharged and 5 people had died[35].

Figure 6: Number of cases against number of tests conducted in Gandaki province



Source: NDRRMA, compiled by FDM/NIPoRe

Pokhara Academy of Health Sciences was the first laboratory in the province to start PCR testing COVID 19 in patients. The laboratory started its testing services from 31 March 2020. Provincial Public Health Laboratory and Provincial Tuberculosis Control Center in Pokhara have also been used for testing[36]. Due to close proximity to the province, Bharatpur Hospital has also been used to test samples of the people in the province. Initially, both RDT and PCR were used by the province. As shown by the data provided by the province government[37], RDTs were done in greater numbers than PCR tests; PCR tests were only conducted for the people if their RDT test result was positive. On April 17, Kaski had conducted 442 RDT tests and 2 PCR tests and 453 RDT tests and 101 PCR tests had been conducted in Syangja. The data from other districts showed similar reliance on RDT tests. In Manang, PCR tests were only conducted on people who had come into the district from a COVID 19 hotspot, other people were sent to quarantine and had to undergo RDT tests. The province health directorate published a notice on April 14 regarding the RDT tests authorization[38] for the private and community hospitals that wanted to start conducting RDT tests. The guidelines provided the list of approved companies and tests kits that would have to be used by the hospitals. Growing concern about the validity of RDT tests made the province government focus the testing on PCR tests on later dates.

The province government also worked to figure out the method to transport the swab samples from different districts to the laboratories in Pokhara[39]. The decision to bring swab samples to Pokhara from Mustang, Myagdi, Baglung, and Parbat through Parbat; Manang, Gorkha, Lamjung, and Tanahun through Tanahun and directly from Syangja to Pokhara was made in a meeting held by the provincial government authorities on 2 April. The large number of samples to be tested and the need for multiple tests on some samples led to delays in the result. A backlog[40] of swab samples (of 1600 samples at June 19) piled up in the laboratories as the number of people who had to get tested increased. As a result of this this delay in getting test results, various local level governments decided to buy PCR machines for their own use. There has been lack of coordination among the province and local governments in this matter as the local governments felt compelled to procure PCR machines themselves as the province government was unable to adequately support them[41].

Initially, the number of samples collected and the number of tests done in the province was low. The province also only did tests in one laboratory. With an increasing number of migrant workers and other people returning to the province, the government increased the number of samples collected and number of tests done. Till March 25, only 47 samples had been collected for testing whereas by June 30 more than 18000 samples had been collected for testing.

Management of COVID related deaths: There has been a lack of coordination among the provincial government and the local government regarding the handling of the deceased patients. The provincial government released a protocol[42] about the steps to be followed while cremating the body of the dead COVID 19 patients. However, these protocols have not been followed and have created problems at the local level. Till June 30 two people have died in the province due to COVID-19 and their last rites have been performed in Pokhara. Both patients who have died so far were from Syangjya and they were being treated in Pokhara. Citing the risks associated with taking their body back to Syangja, their last rites were performed in Pokhara. In both cases of death, there has been controversy surrounding the process of retrieval and burial of the dead. When the second person's body was decided to be buried in Pokhara, the local people of Ward number 32 protested and clashed against the police as they were concerned that the virus would spread in their locality due to the dead body[43].

Information dissemination: The province prioritized establishing health desks in different areas relatively early. In addition to health desks being established in land border points between Nepal-India border and in between districts of the province, health desks were also set up in Pokhara airport and

Jomsom airport. However, there has been criticisms of the health desks being manned by police officers and volunteers instead of health workers[44]. Some health desks being manned by cadres of political parties has given rise to concerns about the lack of proper health protocols being followed and also of corruption. The healthcare sector workers were also trained in the process of the collection of the swab samples and transportation of the samples. Fever clinics were started in all the districts of the province. In Manang, the local unit organized an information session on the disease and preventive measures for the disease in prisons[45]. In addition to the information about COVID-19 that was broadcast through the radio program 'Bhanincha Aama Karyakram', information about nutritional requirements specially for pregnant women were also broadcast through the program. In Syangja, 'Aama Samuha' (mothers' groups) were used to widely disseminate the information about COVID-19. Raising awareness about the virus through microphone announcement was done in various districts of the province. The province government also created policies to support the healthcare sector working in the frontlines[46]. The healthcare workers have been offered increased wages and bonuses depending on the type of work they have doing, for instance, healthcare workers working in isolation wards are being offered higher pay than other workers in the healthcare sector.

Relief activities: The province government was proactive about issuing the notice regarding relief materials to be provided to the vulnerable people. The focus of the province government was on daily wage earners. The local government also made efforts to provide support and relief materials to the vulnerable people. The local police force and the healthcare facilities also assisted in the relief distribution program.

However, there were difficulties with the implementation of the relief program. In the phone conversations with local residents, they mentioned that they felt there was a gap in dissemination of information about the relief packages which meant that the targeted demographics were often unaware about the help offered by the government. In addition, the requirement to provide documentation papers to be eligible to get relief materials lessened the impact of the relief distribution efforts of the government. Due to this, various NGOs and individuals themselves stepped up to provide support for the vulnerable people in their locality. The donations sent from people living abroad also helped ensure that the relief materials reached people who had not been able to get relief materials through government agencies. In Beni municipality, volunteers and local organizations had been feeding the people who had not received relief materials. After a few weeks, the government started providing free meals to the vulnerable population who did not have the required identification papers.

Part 5: Collaboration with federal/provincial/local government/ private sector

The federal government provided financial support and logistical support such as sending a portable PCR machine to the provincial government to handle the pandemic[47]. The Ministry of Health and Population provided medical supplies including PPE, masks, InfraRed Thermometers, N-95 masks, and portable ventilators to the province. The decisions regarding the way to handle the pandemic have been mostly made by the federal government with the provincial government providing the bulk of financial support to the local governments. The province government has been working with the local government to implement measures to combat the pandemic. The local governments also have been working with the district level CCMC and with the police forces.

While the provincial government has tried to work with the federal government and the local governments to ensure a smooth operation, there have been cases of mismanagement that have occurred. Main concerns have been raised about the delay in budget release from the province government to the local governments, the confusion created due to contradicting rulings made about the ways to handle the pandemic, the lack of attention paid to issues such as mental health and domestic violence, and vulnerable population such as person with disabilities falling through the crack[48].

While the province government has been quick to form different committees and make decisions through meetings, the implementation aspect has been lagging behind. The local government had to face trouble while purchasing medical supplies and building quarantine facilities and isolation wards due to the delay in budget release by the province government. Also, while the healthcare workers have been offered increased remuneration for their services, the payment provided to them has not been on time. Furthermore, there have been discrepancies in the decisions made by the federal government and the province government which has caused a lot of confusion. Confusion has also been created due to decisions made by the provincial government which were not implemented by the local governments.

Advocates and public health experts have also been critical of the attention paid to the issues of mental health and domestic violence. With the lockdown in place, mental health of many people was affected- students had to worry about their classes and exams, people in quarantine and isolation had to face negative pressure from the society, many people in economically vulnerable situation faced additional pressure, and the government in these cases did not work fast enough to combat the challenges presented

by these situations. Similarly, an increase in the number of domestic violence cases was seen but the government did not work in a proactive way to find a solution. This lapse in coordination between the different level of the governments has created problems for the people of the province.

Part 6: Recommendation

- As the number of cases in the province has been steadily increasing, and the number may continue increasing as migrant workers start returning from the Gulf countries, the government must be vigilant about the continuing increase in the number of cases. The government must also be aware of the increasing danger of community transmission. Thus, the government should focus on building and mobilizing the required number of quarantine facilities and isolation wards.
- There have been cases where people have complained about the poor state of quarantine facilities and have preferred to self-quarantine. The government should work to ensure that the quarantine facilities are up to the required standard; the facilities should be monitored in a regular manner so that the state of quarantine over time can be seen and recourse should be available to people who feel dissatisfied with the services provided in such facilities.
- Since issues such as mental health and domestic violence have not been prioritized by the government, it is imperative that the government starts working with individuals and organizations working in these issues to develop plans for tackling these issues. With the news of COVID-19 patients having to face stigma in the society after coming out of quarantine, it is important to address the mental health challenge that such stigmatization may cause among people.
- As the province has been affected by natural disasters such as landslide, many people have been displaced due to the destruction to their homes. Other people will be moving from their homes to a safer space to try to escape the negative effects of these disasters. The province government must work to ensure that these places do not become a virus hot spot. The government can add masks, sanitizers, and handwash to the relief materials it provides to the people affected by natural disasters in order to limit the spread of virus.

Province 5 (Proposed name: Lumbini)

Executive Summary

Province 5 was one of the worst affected provinces by the COVID-19 pandemic. Active cases in the province were first reported on 1 May 2020. Initially, most of the infected were returnees from India or had been transferred by those who returned from India. However, the number of cases started to increase rapidly along the border with Terai, and spread to inner districts. Initially, Banke district saw significant growth in positive cases, but by 20 July, Kapilbastu had the highest number of cases. By June, the total number of active cases was close to 11,000 and nine patients have died with COVID infection.

Overall, the province showed urgency and was largely able to develop health infrastructure at a rapid pace. However, not all local units showed the same level of urgency. Some local units were slow to prepare for the effects of pandemic. Province and local units did a good job in terms of providing relief materials, constructing hospitals, isolation centers, quarantine rooms, and raising awareness among the public. However, there were also several limitations that they faced, primarily with the supply of medical equipment and safety for health professionals and security personnel.

The number of cases is likely to increase significantly after the end of June too. Therefore, the province has to be cautious and continue to focus. The budget passed is in the right direction, however, the implementation of the budget would be a challenge. The economy has collapsed so the recovery of the economy and jobs should be a major priority. The province should keep a balance between immediate relief needs and long term recovery plans.

Part 1: Background

Province 5 (proposed name: Lumbini) lies between Palpa in the East, Bardiya in the West, East Rukum in the North and India in the South. It covers a total area of 22,288 square kilometers. It encompasses 12 districts (1 mountain, 5 hills and 6 terai districts that share border with India). There are 109 local units, including 4 sub-metropolitan cities (Butwal, Ghorahi, Tulsipur and Nepalgunj), 32 municipalities, and 73 rural municipalities as shown in Table 9 below. This province boasts of some of the major cultural heritages of Nepal, including Lumbini, the birthplace of Gautam Buddha. The province shares a long and open border with India. Many people have socio-economic ties to India and go to India in search of jobs and education. There are two major passes between the two countries, namely Sunauli (Rupandehi) and Nepalgunj (Banke).

Table 10: Number of local units per district in Province 5

District	Sub-metropolitan city	Municipality	Rural municipality	Ward
Kapilbastu		6	4	96
Dang	2	1	7	100
Palpa		2	8	81
Banke	1	1	6	81
Gulmi		2	10	93
Rupandehi	1	5	10	155
Pyuthan		2	7	64
Argakhanchi		3	3	61
Bardiya		6	2	75
Nawalparasi		3	4	74
Rolpa		1	9	72
Rukum (East)			3	31
Total	4	32	73	983

Source: OCMCM, Province 5

According to the last census (in 2011), the population of the province is 4.5 million living in around 900,000 households. Around 54 percent of the residents are clustered in four districts: Rupandehi (19.6 percent); Kapilbastu (12.8 percent); Dang (12.3 percent); and Banke (10.9 percent). Population density is 258 per square kilometer, significantly higher than the national average. The urban (municipality) and rural (rural municipalities) population is almost equal. Almost 92 percent of the population is below the age of 59 (36 percent under the age of 15, and 55.8 percent between 16-59 years). Tharu and Magar were the largest ethnic communities (15 percent each), and the Arya-khas community had plurality. Table 2 below shows the population in five major population centers in the province.

Table 11: Top 5 population centres in Province 5

S.N.	Local unit	Population
1	Ghorahi	156,164
2	Tulsipur	141,528
3	Nepalgunj	138,951
4	Butwal	138,742
5	Tillottama	100,149

Source: CBS, 2011

Table 10 above indicates that the top five population centers are located in three districts, Dang, Banke and Rupandehi. Besides that, Kapilbastu too has a huge population. Kapilbastu's population is divided into six municipalities; therefore, Kapilbastu is not reflected in the top 5 population centers. Around 12.6 percent of the population has migrated to India for work and education opportunities. Overall, 17 percent have migrated abroad, including India.

The GDP per capita[1] of the province is USD 950 (in 2014), comparable to the national average. Absolute poverty stands at 18.2 percent (in 2019), multidimensional poverty[2] at close to 30 percent The Human Development Index (HDI)[3] of the province is 0.461 (in 2014), with the lowest in Rolpa at 0.395 Province 5 received 14.8 percent of the national revenue. 107 of 109 local units had access to banks[4]. Around

two-thirds of the population above the age of 5 is literate, though the rate of male literacy is higher (75 percent for male vs 58 percent for female). This shows significant disparity based on gender[5].

The province contributes 13 percent to the national GDP (Nepal Economic Survey 2018/9). It has the fastest growing economy among the provinces in Nepal, with 7.37 percent growth in 2019. There are two industrial areas in Butwal and Nepalgunj and further two areas are being constructed in the same districts. According to the Central Bureau of Statistics[6], there are 150,000 business establishments in the province which employs close to 500,000 people. In terms of the sector, industrial production, retail/wholesale/vehicle repair, hotel and restaurants, education, human and social activities, and finance have 16,170, 83,672, 18,715, 6,111, 2,944 and 2,382 respectively. There are 882 large industries and 24,000 cottage and small industries.

36 percent of the working age population in the province is employed[7] formally. A significant portion (34.4 percent) of the formally employed is in non-agriculture. Meanwhile, another 39.1 percent of people are informally engaged in the non-agriculture sector. Overall, only 26 percent of the labor force is employed in the agriculture sector (formally and informally).

Tourism is an important part of Province 5. The province boasts some natural and cultural heritages. In 2018, 1.5 million tourists (domestic and foreign included) visited Lumbini. By 2018, there were more than 120 tourist-standard hotels with more than 6,000 bed capacity.

In province 5[8], 5.4 percent of the population was exposed to mass media, i.e. who read newspaper/magazine, listened to radio or watched television at least once a week. In the province, 20 percent and 55.4 percent of the household owned radio, and television respectively. 96.1 percent of household owned telephone (fixed or mobile). 46.9 percent of households had access to the internet, and 83.7 percent of population owned mobile phones. It indicates that information via mobile (such as SMS) reaches to most of the population. Despite access, only a minority of the people access the internet on a regular basis.

The current budget for the Fiscal Year 2077/78 for Province 5 is NPR 36.35 billion, which is marginally less than last year's NPR 36.61 billion. Around half of the budget is capital expenditure, whereas 34.6 percent was earmarked for recurrent expenditure. The budget focuses on three major areas: physical infrastructure (NPR 15.2 billion), COVID-19 (Rs 1 billion for emergency fund), and job creation (NPR

165 million to enhance the skills of youth and create 10,000 jobs). An additional NPR 750 million will be spent in creating jobs in agriculture and self-employment. The social development ministry of the province was allocated 15.4 percent of the provincial budget. It is important to note that the first sentence in the Budget speech[9] by Chief Minister Shankar Sharma was 'In the adverse situation created by the COVID-19…' [unofficial translation]. The budget speech made 101 references to 'COVID-19'.

Part 2: Health background/risk factors

Province 5 has average health indicators compared to other provinces, and is closer to national averages in most cases. The life expectancy[10] at birth stands at 67.5 years (marginally below national average). Infant and child mortality rate is 43 and 45 per 1000 live births respectively. On average, a health facility[11] is within an hour's distance for 90 percent of the population. Among them, more than half have access to health facilities within half an hour's distance. Around half the household in Province 5 has access to hand washing with water and soap or other cleansing agent. However, almost 1 in 5 households has no availability to any hand-washing (with or without soap)[12]. Only 4.2 percent of women smoke any kind of tobacco whereas 22 percent of men do so. Only 48 percent of the sexually active population is using some form of contraception, with 39 percent using modern contraceptive methods, which is the second lowest among all provinces. 80 percent of the women had at least one of the problems (getting permission, money, distance to health facility, not wanting to go alone, and no female health service worker) in Province 5. 39 percent of the children under the age of 5 are stunted and 53 percent have anemia, which are the second highest among all provinces[13]. 90 percent of the households have access to clean drinking water. All the districts are declared to be free of 'open defecation'[14].

The gender disparity is high in Province 5. Almost twice as many females have no formal education compared to men (37 percent vs. 20 percent). The average age of women when they first get married is 18.1 years whereas the corresponding age for men is 21 years. Only 52 percent of women can spend their own earnings. The percentage of women who have suffered physical and sexual violence is 22.6 percent and 8.3 percent respectively. 7 in 10 women who suffered such violence did not talk about it to others or seek any help[15].

Table 12: No of public health facilities in Province 5

Medical Facility	Number	National number	percent of national total
Hospital	20	123	16 percent
Primary Health Center	30	200	15 percent
Health Post	570	3808	15 percent
Urban health center	97	246	39 percent
Community Health Facility	66	204	32 percent
Private health facility	192	1715	11 percent

Source: Health Directorate, Province 5

Table 11 shows that the government health facilities are proportionate with the Province's population. However, the number of private health facilities is low. It is primarily because most of the private health facilities are located in province 3. Within the province, most of the major health facilities are located in Rupandehi, Dang and Nepalgunj.

The Health Directorate is responsible for health policy development and implementation. However, the Province had no prior pandemic guidelines/policy in place though there were disaster management guidelines. Therefore, the preparations for the response to the pandemic started after the advent of COVID-19. As mentioned earlier, a significant part of the population has temporarily migrated to India and the Middle East from the Province. The long and porous land border with India means that should the pandemic spread in India (particularly in Uttar Pradesh), it would create major problems in the province.

Part 3: Urgency and Preparation

Key findings:

- *Province 5 made rapid progress in terms of construction of quarantine and isolation wards, however some of those facilities were sub-standard.*
- *Attempts were made to regulate the border, but lack of personnel, equipment and illegal crossing made it an impossible task.*
- *Lockdown was enforced strictly in the earlier phases (especially in urban areas) but people got tired before cases began to be seen in the Province.*

COVID-19 was seen in China in November 2019. However, the first reported case in Nepal was on 13 January 2020. In context of province 5, the first case (two cases) was confirmed on 1 May 2020. Therefore, the time period between 13 January and 1 May 2020 was available to the administrators of Province 5 to prepare for possible infections, containment, treatment, and devise policies to help the affected population. National lockdown started from 24 March 2020, hence, some aspects of implementation of the proposed plans could also be seen during this period.

Province Ministerial Meeting decisions: Decision on Province ministerial level on tackling COVID-19 was first made on 2 March 2020. The Province ministerial meeting decided to postpone/cancel all gatherings, events or festivals where large numbers of people participate to lessen the risk of COVID-19 infection. The meeting on 23 March decided to build a hospital primarily for Isolation of COVID-19 infected patients and that the Social Development Ministry could buy medicines and PPE directly.

The meeting on 31 March made crucial guidelines for the activities to be followed during the quarantine. The meeting decided to support the 'laborers' to be sent back to their home. The logistics of such would be managed by coordination among Chief District Officers (CDO) of relevant districts and private transporters to facilitate the movement of such laborers. The supply of basic necessities will be eased by providing passes to those engaged in the sector. The details of ambulances were tabulated. Emergency food to be the daily wage earners was to be provided by respective (rural) municipalities through respective ward offices. It also published guidelines for the safe cremation of infected dead bodies. On 15 April, the province government decided to provide financial support to local units to control the spread of

COVID-19 and provide relief to affected people and communities. A provincial public health laboratory was to be constructed as per the decision of the meeting on 29 April.

Border control: Given that the virus was spreading fast in India, controlling the cross-border flow of people, that too after appropriate health check up was a priority for the province government. That is why all the border crossings except for major ones were closed (13 March). The health checking at Sunauli border was strengthened by both Nepal and India (17 March). This was important especially because a large number of Nepali migrant workers were repatriating from India once the infections started to surge in India. Health desk was established along the border.By mid-March, around 2,000 people were coming into Nepal from India on a daily basis. That is why the provincial and local units had difficulty managing the health check-up of the returnees. All the people (Nepali and Indians) who had returned from India were kept under strict quarantine and supervision under the local coordination committees. Some local units identified houses where migrant returnees stayed, and marked those houses with red in order to identify and manage the risks (1 April). Six people were suspected to have attended the Nijamuddin mosque in New Delhi, which was largely credited with community spread in India in initial phases, were kept under strict quarantine in Bardia (2 April). The number of border forces was increased significantly to stop the illegal border crossing. Despite those efforts from local, provincial governments, police and the Armed Police Force, a large number of people were able to cross the border because of the long and porous nature of the border.

Resources: There was a tremendous increase in the demand for PPE and masks. The High Court in Tulsipur ruled that the province had a responsibility to provide free medicine and mask to control the spread of virus (16 March). Many small private enterprises started producing masks; however, there was a significant shortage of masks for local people and for officials who were enforcing COVID-19 control guidelines.

Many local units, private organizations, non-governmental organizations and youth groups also helped place water taps and detergent for people to wash their hands. Some municipalities such as Butwal sprayed chlorine and bleaching powder along major routes for disinfection.

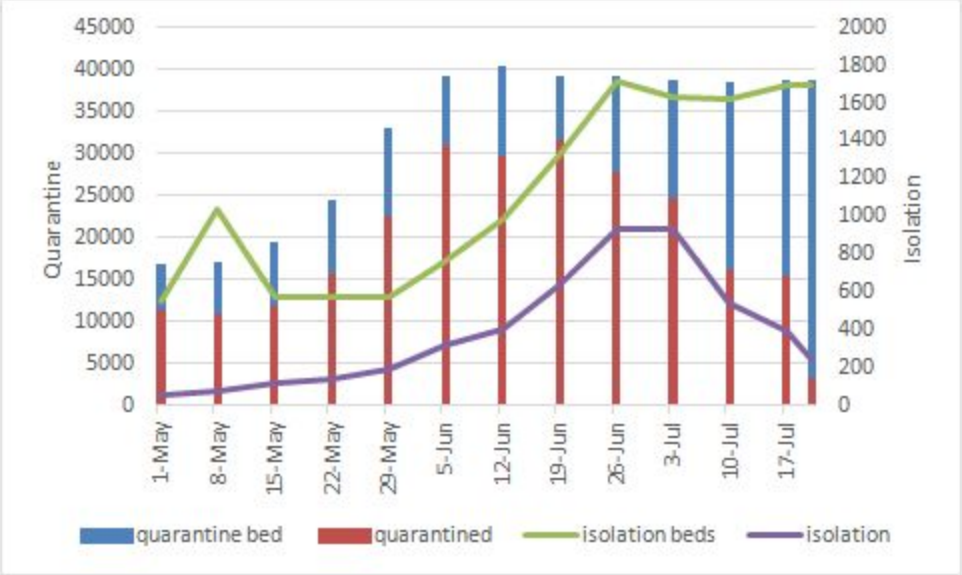
Hospitals: The province and local governments collaborated to construct quarantine facilities, isolation centers, testing centers, and specialized hospitals. Butwal sub-metropolitan constructed a 48 bed hospital after refurbishing the closed yarn factory in Ramnagar, Rupandehi (20 March). The provincial

government constructed six hospitals in Rupandehi (3), Dang (1) and Banke (2), the major population centers and districts with sub-metropolitans (20 March). The hospitals were to be constructed in a discarded yarn factory, Bhim Hospital, and Devdaha Campus (Rupandehi), Nepal Sanskrit University campus in Beljhundi (Dang), and Arbud Hospital and Nepal Police's Hospital (Banke). Additional Corona-specific hospital with a laboratory was established in Dang in Rapti health and Science academy. Testing laboratory was created in Wheat Investigation Center (Gahu Bali Anusandhan Kendra) in Bhairahawa (1 April). The Province also operated Ayurveda Hospital to lessen the stress and fear of the virus among public, health officials and security forces. However, as the pressure kept increasing for more testing, many hospitals lacked enough testing kits. Some doctors and nurses worked with bare minimum safety and lacked enough protective gears. In some cases, the construction of hospitals was very slow. For instance, the Cancer Hospital in Khajura took longer than planned.

Institutional structure: Rapid Response Team was formed under the leadership of Sudarshan Baral, Minister of Social Development (20 March). The District level Disaster Management Committee was activated under the leadership of Chief District Officer (CDO). Ward level committees were formed in every ward of (rural) municipalities, which have created health desks. They have used information sharing via mikes, pamphlets, FCHVs etc. Some local governments formed rapid response teams consisting of doctors and others. It would help in dissemination of information and control of the spread of COVID-19. Others formed 'supervision teams' to help enforce quarantine.

Quarantine: The provincial government worked with the local government and the security forces (police, armed police force and army) to construct quarantine facilities. By 1 May, around 17,000 quarantine beds were created with varying facilities in total. As Figure 7 below indicates, the number of quarantine beds were higher at all times than the number of people in quarantine. Similarly, the number of isolation wards was also higher. It meant that Province 5 was prepared to handle the cases in terms of quantity. Initially, quarantine was strictly enforced to those who returned from India. In some cases, some returnees did not stay in the quarantine facility, and went home directly. Local units made an effort to identify those and had them stay in 'home quarantine'. Some local units enforced lockdown before the national lockdown started. Some local youths created groups to monitor the entry of outsiders in their locality especially during night.

Figure 7: Quarantine and Isolation Beds and person



Source: NDRRMA, Compiled by FDM/NIPoRe

However, some of the quarantine facilities were not up to the standard. Some people in Sammarimai quarantine left the facility complaining of lack of proper facility for food and bed. The testing of those in quarantine was also very slow; therefore, increasing the likelihood that some could catch and spread the virus in quarantine facilities. The record-keeping was very poor too. It was difficult to get the total number of people in quarantine, where the people came from and so on. Additionally, quarantine facilities in some areas had people beyond capacity.

Enforcement of lockdown: The federal government announced nationwide lockdown effective from 24 March 2020. Initially, the lockdown was strictly enforced by the province and appeared to be well accepted by the public as well. Police brought into control several people who defied lockdown. Some Tole Bikas Sanstha prevented people from outside the community to enter into the locality. Essential businesses were allowed to open for a short period. Some municipalities even limited the essential businesses. Ghorahi sub-metropolitan city decided to close the food stores as well (briefly). The province decided to ban any travel (including by foot) along the East-West highway and put those travelling in quarantine (17 April).

However, by late April, local businesses and the public had grown tired of the national lockdown. Also, the necessity to access basic stuff led many to ignore the national lockdown. Stores started to open more frequently. This was seen in all major population centers including Rupandehi, Banke and Dang. The local market began to be crowded. The local hat market was run in West Nawalparasi by early April. Also, lockdown was enforced more strictly in the urban areas than in rural areas.

Information dissemination: Provincial and local units sought to disseminate information to raise awareness about the pandemic and measures to be taken to prevent the spread of the virus. The Province government created a mobile application which could be downloaded by the public. The government could track the returnees better using the application. Also, local people could alert the authorities if foreign returnees or those showing symptoms were not following quarantine anonymously. The application also helped in contact tracing. Many units created groups in social media (such as Viber) to keep their people regularly updated and share information. NIPoRe did not get details on the number of users or the efficiency of the application in the contact tracing program when asked by the relevant authority.

Immediate Relief: Because of the national lockdown, many people, especially of lower economic status, were disproportionately affected. Many daily wage laborers had no work and no way to return back home. Therefore, many local governments were actively involved in proving basic relief materials. They were provided with food and basic necessities. In the early phases, some were also provided with transportation to take them back to their home. Tulsipur sub-metropolitan city created a food bank, and started distributing food to the poor.

Others sought to help the farmers. Province 5 ran a 'farm ambulance' to ensure that farmers can have a market for their products. Tillottama started delivering vegetables at home. In Tulsipur, sick people could ask for medicine to be delivered to their homes by calling the local government's tool free number. However, these were not uniformly applied to all the units within the province.

Funding: The provincial government provided financial support directly and via the local governments. The Province started a COVID relief fund. By the end of the year, the fund had NPR 120 million. However, the dissemination of the fund was slow. Butwal's elected officials donated money equivalent to six-months of meeting allowance. The province also provided grants of NPR 130 million to the local units

and NPR 6 million to DMC on (15 April). The amount was increased to NPR 7.8 million a week later. Other local units such as Tilottama also started their COVID relief funds.

Collaboration with the private sector: The private sector also participated in some relief activities while working to collaborate with the local and provincial government on policy issues. Some businesses were major contributors of the relief fund. Siddhartha Bank and Nepal Bank Limited supported NPR 1 million and NPR 500,000 respectively. National Path Lab provided a real time PCR machine. Transporters helped to transport some daily wage earners to their home district during the early phase. Some donated masks and PPE including thermal guns and hand sanitizer.

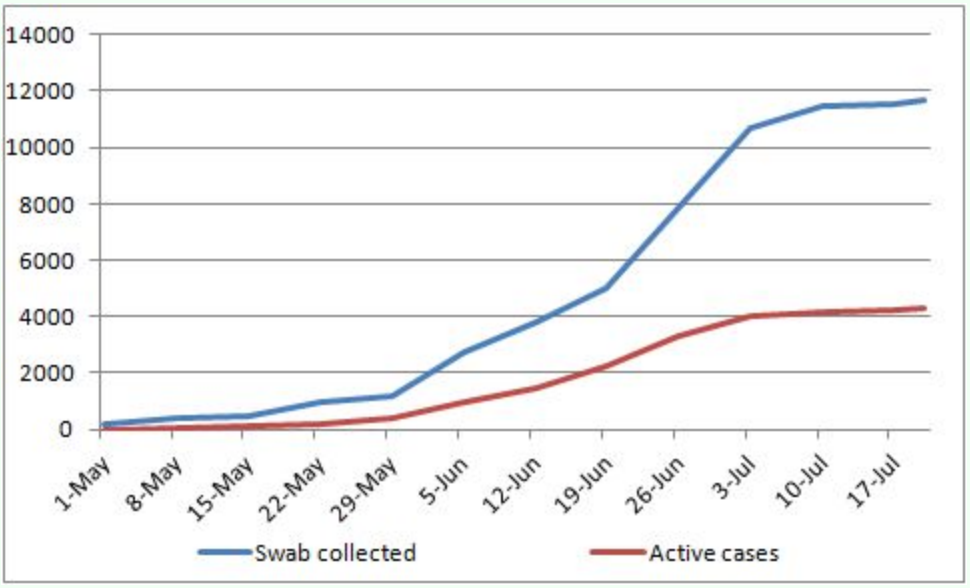
Part 4: Activities and Effectiveness

Key findings:

- *Most of the early infections could be traced to migrant worker returnees (and some Indians) from India, directly and through their contact.*
- *Number of tests increased rapidly, but so did the infection. However, lockdown was loosed in parts of the province under pressure from the business community.*
- *Provincial government provided some funds for local governments to carry out relief works. In many cases, the local governments took the initiative and reacted faster than the provincial government.*
- *The budget for the FY 2077/78 focuses primarily on health and creating jobs for returnee migrant workers in the agricultural sector.*

The first confirmed case in Province 5 was seen on 1 May 2020. Since then, the infection increased continuously, and jumped significantly in June. The following Figure 8 shows the number of tests and active cases from 1 May to 20 July.

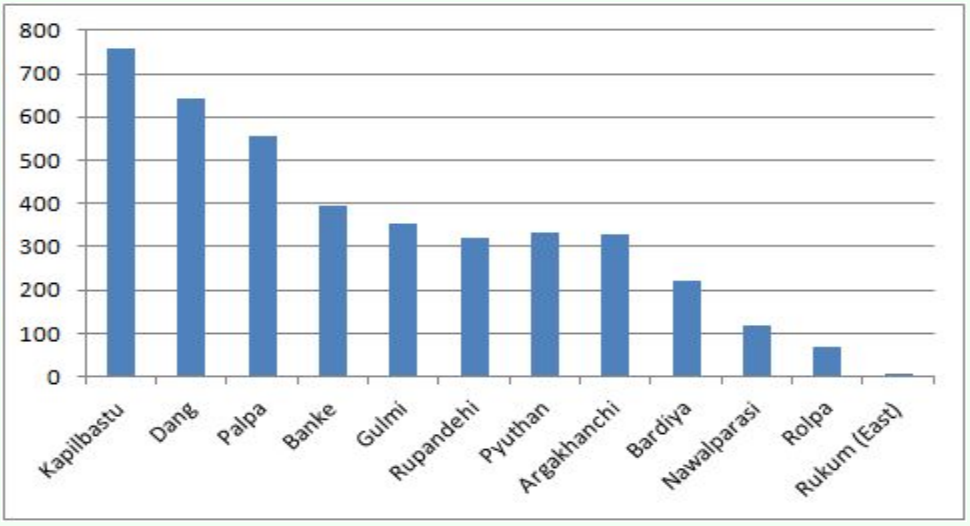
Figure 8: Swab test and cumulative active cases (as of 20 July 2020)



Source: NDRRMA, Compiled by FDM/NIPoRe

The first cases (two) were reported in Rupandehi and Banke on people who had returned from India. In early may, a cluster was formed in Banke. By the end of May, the districts bordering India had experienced a significant surge in numbers. Banke and Kapilbastu had more than 150 active cases each. It spread to inner districts as well in June. By the end of June, Kapilbastu had the highest number of active cases and Rolpa had the least. The following Figure 9 shows the number of cases (as of 20 July) by district. By 20 July, the number of fatalities from the virus stood at 10.

Figure 9: Active infection by district (as of 20 July)



Source: Province 5 Health Directorate, compiled by NIPoRe

Lockdown: The implementation of lockdown was intensified when the first cases in the province (Banke and Rupandehi) were reported. Market in Nepalgunj opened for four hours earlier was allowed to be open only three days a week. The District Administration Office sealed the border areas of Banke as number in Banke started to rise.

Other municipalities also enforced lockdown more rigorously. In Tulsipur, 21 businessmen were brought under control for opening their stores defying lockdown. As numbers started to rise in Banke and Kapilbastu, neighboring districts such as Argakhanchi and Palpa sealed their borders. Localities where cases were found were sealed as well. As the number started to rise, local residents were also active in blocking movement of people.

Despite the gigantic efforts from the government and security forces, many people defied lockdown. By 3 June, Butwal had decided to ease lockdown because of intense pressure from private businessmen. In other parts such as Banke, curfew was imposed for a brief period and lockdown intensified.

In a telephone conversation with the police officer, they notified that the police mobilized all the resources to effectively implement the lockdown. However, it was not possible to monitor all the places,

all the time. Therefore, there might have been some cases of people violating their quarantine or lockdown.

Quarantine: Anybody who came from outside the province were required to quarantine. Those returning back from India were to be quarantined in quarantine facilities whereas others could self-quarantine. Because of the significant number of Nepali workers returning from India, many quarantine facilities along the border ran over capacity. It was complicated by the lower number of tests conducted per day, which meant that many in quarantine were never tested and allowed to go back to communities if they showed no symptoms. At its peak, there were close to 32,000 people in various quarantine centers across the province.

The guideline of the quarantine and isolation facility was developed by the provincial government only in June. Therefore, many of the facilities lacked enough resources for safety. There were reported cases of people who escaped quarantine. In Yashodhara rural municipality, 44 people escaped quarantine. Some escapees did so out of ignorance and in defiance of the lockdown. Others alleged that the facilities had no proper beds, availability of food, safe social distancing, toilet, mosquito nets etc. One person committed suicide by hanging in Shitganga municipality quarantine. Local people protested in Tilottma because the quarantine facility was not up to the standards. In the same cases, even some infected people were kept in quarantine along with others because of lack of isolation facilities. Later, some local units championed the idea of 'home quarantine', whereby the local authorities would monitor but not manage the facility.

The pressure on the quarantine facilities began to ease towards the end of June as the number of returnees from India started to decline.

Border crossing: There were three major issues in terms of managing the pandemic. Firstly, the volume of migrant worker returnees from India was so large that it put significant pressure on management and quarantine facilities. Secondly, many Nepali who had already stayed in quarantine across the border could not return. Thirdly, some Indians also came to Nepal for safety when the cases started to pile up in India.

As stated earlier as well, it was a major challenge to manage the border crossing. The province decided that all people returning from India will be kept in quarantine/isolation. More than 2,000 people are reported to have crossed the border daily. Despite the best efforts from the security forces from both India and Nepal, it was difficult to control the cross-border movement. In some cases, the Indian security forces

would drop off Nepali in the 'no man's land'. By mid-May, the province made arrangements to repatriate Nepali from across the border and send them to their respective homes. In order to ease that, the province made arrangements in which the district or local units could coordinate directly to take the workers back home.

In a telephone interview, security officials from the Armed Police Force mentioned that they did their best even without modest safety gears.

Testing: Table 5 indicates that the Province 5 significantly increased its testing capacities as the pandemic continued. Initially, swab was collected and sent to Kathmandu for testing. Later, multiple testing facilities were established within the province. The testing centers included Provincial health laboratory (Rupandehi), Bheri hospital (Banke), Lumbini provincial hospital (Rupandehi), Nepal path lab and research center (Rupandehi, private), and Rapti Health Science Academy (Dang).

Despite the efforts, the demand for testing was higher than the testing abilities. Several of the testing centers faced critical shortage of testing equipment. Some testing facilities had to be suspended temporarily in Kapilbastu, Bhairahawa, Palpa, Gulmi and Nepalgunj among others at various times.

Figure 10: Total recovered cases and fatality (cumulative) by 20 July

Source: NDRRMA, compiled by NIPoRe

Rapid Diagnostic Testing (RDT) was conducted more frequently than Polymerase Chain Reaction (PCR). By 20 July, more than 100,000 RDTs were conducted compared to 70,000 PCR tests. While no discernible policy could be found when RDT and PCR were conducted, the ease and promptness of RDT could explain the higher number of RDT tests.

In a telephone call with NIPoRe, provincial officers claimed that extensive testing has been carried out and is available where needed. There could have been some delay in a few cases, but there is no significant lack of testing equipment. The facts on the ground suggested otherwise. Also, contract tracing was conducted in early May in Banke however it was not sustained in long term.

Figure 10 indicates that there have been a total of 10 fatalities. The recovery rate is very high, which is a testament to the availability and success of medical infrastructure.

Hospital/Isolation wards: Province 5 intensified the construction/refurbishment of corona specific hospitals. The police and army hospital in Nepalgunj was decided to be used for treating COVID patients. The hospital in Butwal with 48 beds was expanded to 200 beds. As the numbers started to pile up, the isolation wards were filled to their maximum. By 30 June, the number of isolation wards in the province was 93. Palpa, Banke, Rupandehi, Bardiya, and Pyuthan had more than 10 isolation wards.

In places like Kohalpur, the local residents opposed the construction of isolation facilities. In other cases, patients were transported to other districts such as in Beljhundi, Dang or Rupandehi because of lack of isolation wards in other districts bordering India.

Provincial government's policies/relief: The provinces and local units continued the distribution of relief materials to the needy. Some municipalities such as Nepalgunj arranged jobs for some of those who lost employment during the crisis. The province decided to provide NPR 100,000 to the family of the deceased. The Province disaster management center provided the Terai districts with NPR 2 million and Hilly districts with NPR 1 million to manage isolation wards.

The provincial budget for the FY 2077/78 focused on health and agriculture. It was targeted at the youths who have lost jobs or returned from abroad to create jobs for them in the agriculture sector. Meanwhile, Tulsipur high court heard a case virtually. Finally, the province government developed guidelines for

district, local and home quarantine on 12th June. Many local provinces had developed such standards before the provincial government.

In some local units, the local ngovernment was accused of embezzling the funds earmarked for COVID, which led to public protests. Many municipalities have released their COVID expenses, which is a good practice of transparency.

Health and security personnel: The health workers and security personnel worked under significant risks with minimal protective measures in place. Therefore, a number of nurses and security officers were also infected. Two health workers were infected in Dang, one in Banke, one security official in Banke among others.

Part 5: Collaboration between federal, provincial and local government

COVID-19 caused pandemic at national level. Therefore, all three levels of government and non-governmental sectors were heavily involved in the attempt to control the spread of the virus. The federal government provided significant support in proving testing materials, testing machines and guidelines. The local government was at the forefront of implementation and hence had a crucial role. Several committees were formed where members came from provincial, district or local units (details are in earlier sections).

During NIPoRe's phone interview with experts and local officials, the local government had some problems. At times, there were conflicting guidelines from the federal and provincial government. Not all local units were consulted by the federal government while developing plans and policies. Even the federal government seems to have made decisions on an ad hoc basis, making it difficult for collaborations.

The private sector was invested directly and indirectly in the process. Some members of private sectors helped in the fight and are mentioned in earlier sections. The private sector also lobbied, individually or through federation, for friendly policies. Some of those policies are reflected in the budget and federal policies.

Part 6: Recommendation

Based on the research, the following are the recommendations to various levels of government and other stakeholders:

- Province 5 seemed to lag behind in some basic preparations. The guidelines for quarantine facilities were developed in June. The province should make other guidelines (such as for disaster management of floods) in advance.
- Even within provinces, localization of policies would be required. For instance, not all local units suffered at the same rate at the same time. Therefore, resources could have been made more mobile.
- The major portion of resources was spent on providing immediate relief. While it is of urgent need, a better balance between short/medium/long term plans is recommended.
- The pandemic has provided all three levels of governments to go 'digital'. Some municipalities had already started the process. Others should follow the trend, and offer as many services online while training the local staff.
- The infrastructure (such as mobile application) can be used for future disasters of other forms. That will help the province communicate effectively with the people. It should be maintained after the pandemic as well.
- Some local units took great initiatives even before the national and provincial governments. While the local government needs support from others, local governments should not necessarily wait for other governments to take action.
- Many local elected officials have developed a closer connection with the public during the pandemic. That should be used to develop further trust in the functioning of the local government.

Karnali Province

Executive Summary

FDM/NIPoRe's study showed that Karnali Province handled COVID-19 pandemic decently until the influx of large number of migrants from India. In comparison to the other six provinces of Nepal, handling of COVID-19 crisis in Karnali province was found to be mediocre. The province maintained the status of COVID-19 free zone for almost four months initially. However, the situation started to deteriorate after third week of May 2020, with the large influx of migrant workers from India.

Many stakeholders FDM/NIPoRe spoke to praised the efforts of Karnali provincial government to contain the crisis. The provincial government delegated power and assigned institutional responsibility to key government stakeholders for the response, control and prevention of COVID-19. The government imposed a curfew as the COVID-19 cases rapidly increased in the neighboring provinces. Karnali province actively carried out awareness campaign, set up quarantine facilities and isolation rooms in almost all the districts with special focus on Surkhet. Surkhet is known to be the gateway for almost all the districts of Karnali Province. In that account, establishment of quarantine and isolation rooms in Surkhet was prioritized.

The Karnali Province provided treatment to COVID-19 patients in three stages: accounting for asymptomatic and symptomatic people and those at high risk. Karnali Province had designated two level hospitals as corona-specific hospitals: Level 1 hospital i.e. Provincial Hospital in Surkhet handled mild cases, Level 2 hospital i.e. Karnali Academy of Health Sciences handled moderate/severe cases. Besides these, each hospital at district level also played important role to treat COVID-19 patients.

After the identification of first COVID-19 cases in third week of May 2020, cases saw a whopping increase to 1,833 by 2nd week of July 2020. Despite such an alarming increase in the number of COVID-19 cases, the testing also increased by 13 times from 2,782 to 36,545 within the span of 70 days. In a day, a maximum of 300 tests for viral disease have been conducted in the Karnali Province. Moreover, PCR machines were expanded to Narayan Municipality in Dailkeh and Chaurjahari Municipality in Rukum (West) which helped in increasing testing. However, the remoteness of the

villages made it challenging to conduct mass testing. Nevertheless, COVID-19 awareness campaigns led by elected leaders were instrumental in spreading the informative message in the community.

The striking reason for the rapid increase in COVID-19 cases is due to the influx of large number of migrants from India. Around 47,000 migrant workers from India and other countries came to Karnali Province. The provincial government delayed to bring the migrant workers from the border area due to poor coordination with the federal government. The COVID-19 pandemic exposed the vulnerable state of health infrastructure of Karnali province. The local governments encountered a hard time in managing both the quarantine facility for migrant workers and distributing relief materials to the downtrodden families respectively. In this respect, provincial and local governments failed to forecast the incoming migrants and prepare quarantine facilities for the incoming migrants. Provincial and local government officials reiterated to FDM/NIPoRe that they have put efforts to the best of their ability in managing quarantine facilities with the available local resources. Karnali Province set up COVID-19 Provincial Disaster Management Fund. The private sector and different non-government organizations actively contributed to the fund based on their capacity.

The study found that to solve the problems faced by the increasing number of migrant workers, the provincial government should not only delegate power and funds but also supply resources and expertise to the local government in maintaining quarantine facility. A quick response team must be very effective and efficient to combat the crisis. The method of using locally made cloth masks and PPE should be encouraged. Self-employment can be created from local products. The local leadership should be leveraged to increase citizen participation and public accountability by mobilizing the community members. Karnali province has allocated NPR 1.5 billion stressing programs on health, education and food sector to combat COVID-19 pandemic. The Karnali province can wisely utilize the available budget considering recommendations identified by this research in tackling forth coming wave of the COVID-19.

Part 1: Background

Karnali province is one of the largest provinces in terms of area among 7 seven provinces of Nepal. The total area of this province is 24,453 square kilometers. It is bordered by the Tibet Autonomous Region of China to the north, Gandaki Province to the east, Sudurpashchim Province to the west, and Province No. 5 to the south. The province is home to 10 districts - Dailekh, Dolpa, Humla, Jajarkot, Jumla, Kalikot, Mugu, Salyan, Surkhet and Western Rukum. The headquarter of the province is Birendranagar, located in Surkhet District.

According to Nepal Census 2011, the population of the Karnali province is 1,570,418[1]. Three districts with the highest population in Karnali Province are Surkhet, Dailekh and Salyan. Dolpa, Humla and Mugu are the three districts that fall under the list of districts with lowest population not only in Karnali province but also in Nepal. The population disaggregation on the basis of age shows that 52.5 percent are children, 41.4 percent are economically active population and only 3.5 percent are above 60 years of age. Segregating in terms of ethnic groups, 42 percent are Chhetri, 16 percent are Kami, 11 percent are Tamang, and 10 percent are Thakuri.

Table 13: Number of local units per district in Karnali province

District	Rural municipality	Municipality
Rukum (West)	3	3
Salyan	7	3
Surkhet	4	5
Dailekh	7	4
Jajarkot	4	3
Dolpa	6	2
Jumla	7	1
Kalikot	6	3
Mugu	3	1
Humla	7	0
Total	54	25

Source: Central Bureau of Statistics, 2011

The most populated district in Karnali province is Surkhet, followed by Dailekh, Salyan, Jajarkot and Rukum. As per Central Bureau of Statistics, the province's GDP is USD 1078 million for the year 2018/19. Karnali Province contributes only 4 percent to country's GDP, lowest among seven provinces of Nepal. GDP per capita of Karnali Province is USD 686. Agriculture sector tops the list of sectors contributing to the GDP of Karnali Province, i.e. 33 percent. Besides agriculture, education (14 percent) and construction (11.1 percent) sector hold the highest shares contributing to Karnali Province GDP.

Table 14: Top 5 population centres in Karnali province

District	Population
Surkhet	350804
Dailekh	261770
Salyan	242,444
Jajarkot	171304
Rukum	155383

Source: Central Bureau of Statistics, 2011

According to Nepal Human Development Report 2014, Karnali province had the lowest HDI value compared to other six provinces of Nepal[2]. The HDI value for the province is 0.426, far behind Nepal's HDI of 0.49. MPI released by the National Planning Commission and the Oxford Poverty and Human Development Initiative, one in every two citizens in Karnali province lives in an MPI poverty trap[3]. Overall, 28.6 percent of Nepal's population is multidimensionally poor. The life expectancy of the Karnali province is 66.8 years. The literacy rate stands at 53.21 percent which is below the national average literacy rate 65.74 percent.

Formal and informal employments in the Karnali Province are 45.5 percent and 54.5 percent respectively. The formal nonagricultural sector employment accounted for the largest share of total employment in Province 3 and Karnali Province. The informal nonagricultural sector employment is 39.4 percent, less than the formal non-agriculture sector i.e. 43.4 percent in Karnali Province. The informal agriculture sector employment is 14.5 percent, way more than formal agriculture employment. The unemployment rate of the province is 9.7 percent, lower than the national average of 11.4 percent.

According to census 2011, out of total 298,174 households in Karnali Province, 155,009 households possess radio, 127,504 households possess mobile phone, 25,251 households possess TV and only 1,306 households have an access to internet facility. All the mentioned household facilities are lower when compared to other seven provinces of Nepal. Specifically, Karnali province has the lowest mobile and internet penetration rate compared to other provinces.

Minister for Economic Affairs and Planning of Karnali Province passed a budget of NPR 34.35 billion (around 13 percent of total budget) for the FY 2075/76. The capital expenditure and recurrent expenditure allocated was NPR 21.29 billion and NPR 13 billion respectively. NPR 280 million were allocated to health sector for the fiscal year 2019/20. The Karnali provincial government collected Rs 130 million revenues in the first 10 months of the FY 2975/76 fiscal year. It is around 26 per cent of the annual target of Rs 500 million[4].

Part 2: Health background/ risk factors

Karnali province fares poorly in regards to health indicators and infrastructure. The IMR is 47 per thousand which is higher than national IMR i.e. 32 per thousand. Similarly, the under 5 Mortality Rate is 58 per thousand compared to national under 5 Mortality Rate i.e. 39 per thousand. The National Demographic Health Survey indicates stunting as the major form of malnutrition in Karnali Province[5]. The prevalence of stunting stands at 55 percent. As per National Health Facility Survey 2015, the availability of tracer medicine is 0.6, while the national average stands at 0.8. In terms of number of health facilities in Karnali province, there are 12 public hospitals, 13 PHCCs, 336 HPs and 46 non-public facilities. According to National Health Facility Survey, only 14 percent of health facilities in Karnali Province have all equipment items considered basic to providing quality client services. Looking at the overall health status, Karnali Province lacks sufficient human resource and hospitals are often ill-equipped[6]. It is mainly due to difficult geography.

One of the biggest risk factors with regards to the spread of infection in the province is the inflow of the migrant population. Following the newspaper articles, many migrant workers took proxy routes to come to Nepal because of complete lockdown. According to Nepal Labor Migration Report 2020, Karnali province constitutes around 3 percent of the total volume of migrant workers. Qatar is one of the most popular destinations amongst the migrant workers from Karnali Province. The low share of workers from Karnali Province does not depict a true picture of the labor mobility because migration from this province

is concentrated to India is unrecorded. According to Labor Force Survey 2017/18, the employment status of returnee workers in Karnali are; 9.2 percent are unemployed, 31.4 percent are employed and remaining 59.4 percent are outside labor force[7]. As per the provincial government data, nearly 80,000 Nepali citizens are in India for foreign employment and around 30,000 are expected to return to Nepal[8].

Part 3: Urgency and Preparation

Key findings:

- *In the wake of growing number of COVID-19 cases in Province five and Sudurpachim province, Crisis Management Council headed by the chief minister of Karnali Province, sealed off Karnali Province for a week starting from 4th May 2020.*
- *Following the directives of the federal government, Karnali Province had designated two level hospitals as corona-specific hospitals: Level 1 hospital i.e. Provincial Hospital in Surkhet handled mild cases and Level 2 hospital i.e. Karnali Academy of Health Sciences handled moderate/severe cases.*
- *The funds allocated by the provincial government was not enough to set up a quarantine and isolation rooms.*
- *Karnali province sought local solutions which helped to create local employment and promote local products. Karnali Academy of Health Sciences made local tailored PPE.*
- *Besides facilitating transportation of migrant workers, the consultation and coordination between provincial government and private sector were found to be limited to contribution to COVID-19 disaster fund. Private sector was not consulted while making decisions related to lockdown, quarantine management and so forth.*

Karnali Province held the first meeting for the response, control and prevention of COVID-19 on 6 March 2020. Karnali Province Council of Ministers assigned the institutional responsibility to Chief Minister and the office of Council of Ministers, Ministry of Social Development, Ministry of Internal Affairs and Law, District Administration Office, Local Government and security bodies. Different committees were formed for establishing isolation facilities in Province Hospital (Surkhet), Chaurjahari Hosptial (Rukum West) and Karnali Health and Science Institute (Jumla). Ministry of Social Development was assigned to disburse budget to these hospitals based on their needs.

Formation of Provincial Crisis Management Committee: On 4 May 2020, Karnali Province Crisis Management Center Executive Committee was formed soon after the formation of Crisis Management Centre at the federal level. The committee was formed under the leadership of Chief Minister whereas the coordinator of the center was Karnali Province Chief Secretary. The provincial government has formed various implementation and monitoring committees from province to ward level to make the COVID-19 prevention and response effective. The Integrated Operation Team was responsible for collecting information pertaining to quarantine, isolation, health service related to COVID-19 from security agencies, districts, local governments, and other relevant organizations. The provincial level meeting also formulated the Health Action Team. The main responsibilities of Health Action Team were to provide technical support to province and local level for the effective implementation of guidelines prepared by Ministry of Health and Population and World Health Organization to prevent, control and treat COVID-19.

Observing the photos posted in the official social media account of Karnali Province, the leaders duly followed social distancing measures and wore masks during the meeting. The Karnali Province Assembly also adhered to the safety measures during the assembly meeting. The chief minister also held several virtual meetings with the District Coordination Committee. The video conferencing meeting was held to facilitate the smooth coordination between provincial and local governments in Karnali Province.

Resources: FDM/NIPoRe found that Karnali province sought local solutions which helped to create local employment and promote local products. As with all other provinces, Karnali also faced severe shortage of resources. A journalist based in Jumla said that Karnali Academy of Health Sciences started making local tailored PPE from the 2nd week of April for the safety of health workers. Following the shortage of PPE and other resources, Surkhet based factories in coordination with the Ministry of Social Development initiated manufacturing local tailored PPE in mid of March which were cheap, effective and easily availed[9].

Food Supply: As informed by the businessmen in Surkhet, The Food and Management and Trading Company Limited in Nepalgunj and Surkhet regulated the supply of essential goods to almost all the districts of Karnali Province during the lockdown period. Most of the districts of Karnali Province falls in the hilly or mountain region of Nepal. The traders, shopkeepers and transporters FDM/NIPoRe spoke to, used mask and hand sanitizer to keep themselves safe from COVID-19. Hence, the supply of essential goods was done via both roadways and airways.

Hospitals: After interviewing numerous stakeholders and following newspaper articles, FDM/NIPoRe found that Karnali province was struggling with resources constraint in terms of quarantine rooms and isolation wards. Province minister for land management, agriculture and cooperatives led the committee formed by the provincial government to set up and manage quarantine and isolation wards for COVID-19 patients. Following the directives of the federal government, Karnali Province had designated two level hospitals as corona-specific hospitals: Level 1 hospital i.e. Provincial Hospital in Surkhet handled mild cases and Level 2 hospital i.e. Karnali Academy of Health Sciences handled moderate/severe cases. However, there were no Level 3 hospital that handled multispecialty services in the Karnali province. As informed by PCMC, the provincial government decided to treat the infected in three phases, accounting for asymptomatic and symptomatic people and those at high risk. Besides these, each hospital at district level also played important role in treating COVID-19 patients.

Quarantine Facility: According to the security official that FDM/NIPoRe spoke with, Nepal Army constructed the 1,000-bed quarantine facility in Surkhet when the lockdown was enforced in March. Surkhet is known to be the gateway to most of the districts of the Karnali Province. Hence, it was important to immediately construct quarantine facility in Surkhet. Quarantine facilities were also set up in almost all districts and private hospitals. The responsibility of establishing quarantine and isolation facilities was of local governments. The provincial government had allocated Rs 10 million under various headings. The local level office bearers said that allocated budget caused confusion on which heading entire funds for the preparation of quarantine, isolation or distribution of relief materials should be utilized. The COVID-19 Hospital Chief that FDM/NIPoRe spoke to said that the funds allocated by the provincial government was not enough to set up a quarantine and isolation rooms.

Border Control: A journalist informed FDM/NIPoRe that APF handled the migrant workers at the border points but the record was maintained by the Nepal Police. As informed by a security official of the Karnali Province, there were no quarantine facilities managed at the border points for the migrant workers coming from India. Security personnel had a tough time coordinating with local governments to safely transport them to their municipalities. The record of people who came from outside were first collected by the local government and then reported to the District Administration Office (DAO). All the DAOs then sent the collected data to Ministry of Internal Affairs and Law in the provincial level. Around 47,000 migrant workers from India and other countries came to Karnali Province. As many as 39,000 migrant workers have returned to the Karnali province after losing their jobs in India[10].

Awareness and Safety Measures: One of the members from PCMC said that Karnali provincial government made a COVID-19 awareness action plan to fight the spread of COVID-19. The official websites of the Karnali governments have published COVID-19 related information. The infographics and digital materials were in the local language. According to a journalist FDM/NIPoRe interacted with, in Jumla, the elected representatives personally participated in the awareness campaign to aware people about hand washing, social distancing, drinking hot water among others. Hospital officials were also involved in awareness raising. Director of Karnali Academy of Health Sciences Director Dr Mangal Rawal said that they had been organizing public awareness campaigns since March itself. Volunteers were also mobilized in the local level to spread the public awareness campaigns.

Collaboration with Private Sector: Meanwhile, speaking to locals and private sector, FDM/NIPoRe saw a largely limited collaboration between government and the private sector in Karnali province. The trend of ignoring role of private sector in dealing public health crisis trickled down from federal government to the provincial government. Rather strict lockdown was enforced by restricting the movement of people and overall economic activities (excluding essential goods and services) in the country. The Karnali Provincial government collaborated with transportation business owners in bringing larger number of migrant workers and then handed over to the local government. Besides facilitating transportation of migrant workers, a member of the FNCCI chapter at the Karnali province informed FDM/NIPoRe that the consultation and coordination were found to be limited to private sector contribution to COVID-19 disaster fund. Hence, private sector was not consulted while making decisions related to lockdown, quarantine management and so forth.

Part 4: Activities and effectiveness

Key findings:

- *At first, there were only two RT-PCR testing centers i.e. Surkhet and Jumla. Two more RT-PCR testing centers were expanded in Dailekh and Rukum (West).*
- *Around 1500 police have been mobilized across the province to strictly implement the lockdown. Chief Minister of Karnali Province sent back eight police personnel deployed in his security to combat the COVID-19 outbreak in the Surkhet District Police Office.*

- *As many as 39,000 migrant workers have returned to the Karnali province after losing their jobs in India. This huge number has been one of the main reasons behind the increase of COVID-19 cases in the province.*
- *Contact tracing and mass testing was not possible because of limited resources and geographical difficulties of the province.*
- *The federal and provincial government declared incentives for the front-line workers. However, the declared incentives were yet to be implemented.*

The government of Nepal announced a one-week nationwide lockdown on 24 March to control the spread of COVID-19. Despite the outbreak in six provinces, the Karnali province survived COVID-19 until 56 days of lockdown enforcement. The strict enforcement of lockdown helped to keep COVID-19 away from Karnali Province. In the wake of growing number of COVID-19 cases in Province five and Sudurpachim province, Crisis Management Council headed by the chief minister of Karnali Province, sealed off Karnali Province for a week starting from 4th May 2020. By this time, Karnali Province had not reported any COVID-19 cases. The movement of people and goods were completely stopped for a week due to increasing number of COVID-19 cases in neighboring provinces. Nepal Police and Armed Police Force looked after security related jobs. The provincial government stated that 1,500 police have been mobilized across the province to strictly implement the lockdown. Chief Minister of Karnali Province sent back eight police personnel deployed in his security to combat the COVID-19 outbreak in the Surkhet District Police Office.

Strict Enforcement of Lockdown: The rising frustration due to prolonged lockdown forced private sector to defy the federal government's lockdown orders. On the 70th day of lockdown, Surkhet Chamber of Commerce and Industry protested against the lockdown as their businesses had been badly affected[11]. In this backdrop, Karnali Province Crisis Management Centre, led by Chief Minister Mahendra Bahadur Shahi requested federal government to open school and to allow collection of Yarchagumba (Cordyceps sinensis) in the mountain districts where the risk was very low. The member of PCMC said that federal government's strict centralized decision-making ignored the request made by the Karnali provincial government.

Rising number of COVID-19 cases: As many as 39,000 migrant workers have returned to the Karnali province after losing their jobs in India[12]. The number is expected to reach 100,000. This huge number

has been one of the main reasons behind the increase of COVID-19 cases in the province. As informed by the security official, the central government in coordination with provincial government (Sudhurpachim province and Karnali province) should have taken responsibility to handle migrant workers entering from the southern border with India. During the lockdown, the migrant workers were stranded in the border and many survived without food. The central government did not facilitate or help provincial government in bringing those citizens to the concerned provinces. Karnali province coordinated with local government and Nepal Police to bring stranded migrant workers back home. As the lockdown was still intact, the unnecessary internal movement of people was strictly prohibited.

Isolation and Quarantine Management: The federal government had distributed a total of NPR 130 million to nearly 176 local governments across various provinces for quarantine management. Yet, one of the pressing challenges of Karnali Province is the effective management of quarantine facilities. A quarantine of 400 capacity, which was constructed in the state Capital Birendranagar with the help of Nepal Army, faced a number of challenges in managing the quarantine stay for the migrant workers. The Narayan Municipality of Dailekh district also faced major issues. At one hand, it had to manage citizens of its own 11 wards. On the other hand, it had hard time managing people of other municipalities such as Naumule, Bhagawatimai, Bhairabi, Dullu. Likewise, Narayan Municipality converted a local campus into quarantine facility. In Mugu, returnees from India had to shelter in tents set up in the meadows in high altitude. On this backdrop, many people were forced to go homes without quarantining for at least 14 days because quarantine facility was full to its capacity and lacked decent basic amenities such as safe drinking water and healthy food. The quarantine facilities managed by the local governments did not meet the standards prepared by the federal government quarantine guideline. The risk of spreading infection from quarantine and isolation was also very high.

Isolation and Quarantine in Numbers: At the end of March, the numbers of people staying in isolation and quarantine rooms were 2 and 20 respectively. By the 2nd week of July 2020, the numbers of people staying in isolation and quarantine rooms increased to 254 and 3114 respectively. Among people staying in isolation and quarantine rooms, 1416 people were cured and the number of deaths was below 5. According to the Office of Chief Minister, quarantine facilities in Karnali have a cumulative capacity of around 30,000. The province has 52 ventilators in total. Before COVID-19 pandemic hit Dailekh district, it had only 40 isolation beds. The district was not able to handle COVID-19 patients in large number. Hence, the Karnali Provincial Government decided to set up 200 isolation beds—50 each in Narayan Campus, Lakandra Primary Health Centre, Rakam Karnali Health Post and Dullu Hospital— in Dailekh

to accommodate the infected COVID-19 patients. The number of migrant workers entering the Karnali province exceeded the expectation of both provincial and local governments. Hence, the quarantine facility was crowded and it was hard to manage those workers adhering to the national quarantine guidelines prepared by the federal government.

Comparing quarantine facilities with other six provinces, Karnali province was found to be the worse. Despite the gloomy situation, the efforts put by the provincial and local government in managing quarantine and isolation facilities should not be undermined. FDM/NIPoRe found that key stakeholders i.e. provincial and local government, security personnel, hospital chiefs, did manage to utilize the available resources to the best of their ability. The efforts of the key stakeholders were lauded by the civil society organizations, health experts and journalists.

The sample testing in Karnali Province was initiated on 10 April. Karnali Province purchased two real time PCR machine from the laboratory of Tribhuvan University. The shortage of supplementary equipment affected the COVID-19 testing in Karnali. Even during normal times, Karnali faces challenges in terms of human resource and health equipment. The resource constraints in terms of testing at the time of COVID-19 pandemic made it even more difficult to conduct testing in Karnali province. According to the Provincial Health Directorate in Surkhet, "the short supply of VTM and PCR processing kits to support in conduction of RCT-PCR test slowed the testing process." As of 17 July 2020, as many as 1,833 people had been infected, with only 317 active cases and 1492 discharged.

Rising number of COVID-19 cases: The first COVID-19 case in Nepal was confirmed on 23 January. The identification of first COVID-19 cases in Karnali province was in the third week of May 2020, after almost four months of COVID-19 case identified in Nepal. The number saw a whopping increase to 1833 as of 17 July 2020. Similarly, the testing also increased by 13 times from 2782 to 36,545 within the span of 70 days. The remoteness of the villages also made it challenging to conduct mass testing. It takes five-six days to reach some villages from the district headquarters in Humla, Mugu and Dolpa districts and many households are without the reach of mobile network. In such conditions, the rapid testing is quite a challenge. In a day, a maximum of 300 tests for viral disease have been conducted in the Karnali Province.

Figure 11: Number of cases against testing done in Karnali province

Source: Situation Report, Ministry of Health and Population (MoHP) and National Disaster Risk Reduction and Management Authority (NDRRMA), compiled by FDM/NIPoRe

Testing Centers: As informed by the member of PCMC, there are two main RT-PCR testing Centers in Karnali Province i.e. Surkhet Provincial Hospital/Avian Disease Investigation Laboratory Surkhet and Karnali Academy of Health Sciences. Both PCR machines can process 96 samples at once, but are yet to be used to its full capacity. Narayan Municipality in Dailkeh and Chaurjahari Municipality in Rukum (West) purchased a PCR machine in coordination with District Coordination Committee of both districts, making it 4 PCR machines in total in Karnali Province. Before the purchase of the machine, the COVID-19 had already reached a community transmission phase so the testing equipment were expanded to Dailekh and Rukum (West). The PCR testing in Dailekh and Rukum (West) did not gain momentum because the samples were sent to Nepalgunj-based lab for cross verification. At the end of June, the COVID-19 testing was halted in Surkhet because the PCR machine stopped working[13]. The PCR machine used earlier in the provincial hospital has not been repaired yet. Around 800 swab samples from various districts of Karnali province were awaiting test. In account of this unprecedented challenge, Karnali provincial hospital bought a new PCR machine to continue testing. As per a journalist, "the highest

number of sample testing has been conducted in Karnali Academy of Health Sciences among all the testing centers in Karnali Province."

Medical march to contain the virus: FDM/NIPoRe found that contact tracing was not effective in the Karnali Province. An official at the Ministry of Social Development said that a contact-tracing team was formed under the leadership of a public health officer. Similarly, medical march was carried out for 2-3 months which was led by District Health Office in Jumla. The local government also supported this campaign which would indirectly help in contact tracing. One of the doctors in the provincial hospital disclosed that lack of contact tracing and delay in PCR test slowed the contact-tracing process. The provincial government was supposed to coordinate with local units to collect swab collections from all the communities. Unfortunately, the mass testing was not possible because of limited resources and geographical difficulties of the province. The situation got worse when people staying in quarantine facilities were sent home without PCR test.

When FDM/NIPoRe analyzed the COVID-19 cases and quarantining facilities in Karnali province, Dailekh, Surkhet and Salyan were found to be the worst-affected districts. After a 35-year-old youth of Dullu Municipality, Dailekh, died from COVID-19, two municipalities in Dailekh (Narayan and Dullu municipalities) declared a curfew to mitigate the unforeseen dreadful situation realized with a steep increase in COVID-19 cases.

According to an official from Narayan Municipality of Dailkeh, the DCMC initially did not listen to the municipality's suggestion to enforce a complete lockdown. When the action was finally taken, influx of migrant workers was already in a chaotic situation and the authorities could not contain the spread of virus. Municipality officials from both Narayan and Dullu municipalities of Dailekh claimed that the curfew should have been imposed a little earlier when the influx of migrant workers had not gotten worse.

Efficacy of RDT and RT-PCR Testing: Nevertheless, one of the commendable works of Karnali province is that the provincial government directed every ward to conduct at least 10 swab collection for testing COVID-19 status of the community. Karnali province prioritized testing from PCR machine. As per a journalist based in Jumla, "In Jumla, when 5000 migrant workers arrived from India, the sample testing was primarily done in PCR machine." Due to the limited coverage of PCR tests, RDT was used as an alternative. Narayan Municipality and Dullu Municipality of Dailekh carried out RDTs at a time when they lacked access to PCR tests. The reliability of RDTs testing has been questioned globally. The need of

the hour was to expand the coverage of PCR tests and slowly the PCR were administered from the four testing centers in Karnali Province. When the team had a conversation with local government officials from remote districts of Karnali Province, they said that they preferred PCR test but at times they were forced to rely on RDT test because of lack of testing kits. When the RDT was administered, negative result would again go through PCR machine testing for confirming if the person is infected from COVID-19 or not. People showing COVID-19 symptoms were prioritized for undergoing PCR.

Safety Measures: The Home Ministry had instructed all 77 district administration offices to immediately arrest those who do not wear masks and do not maintain social distance when leaving the house. Following Infectious Diseases Act, 2020, Home Ministry issued such instructions in a circular to the district administration and police office. Mobility of transport vehicles on an alternate basis depending on odd and even registration numbers was also in place to limit the movement of people. Crowds in markets and public places have increased as the lockdown has been eased. Government offices, industries, banks and financial institutions and shops were open. Especially in Birendranagar municipality, the capital of Karnali province, the risk of COVID-19 infection is very high. Physical distance and health precautions were not taken to avoid COVID-19 infection. As a result of this, risk of infection has been increasing day by day. Doctors have pointed out that the province capital is at high risk of infection as there is no physical distance between the people as the infection has spread to the community level. According to Surkhet District official, action was taken against those who do not wear masks and do not maintain physical distance.

One of the business men from the Surkhet FDM/NIPoRe spoke to said that there was no proper planning to life the lockdown. FNCCI representative also complained that the government eased the lockdown when the COVID-19 cases are rising. The private sector is waiting for government decision to lift the lockdown and carry on their business activity adhering to the safety measures.

Incentives for front-line workers: In order to motivate the health professionals, the Council of Ministers of Karnali Province had declared to provide encouragement allowances to government employees working in Karnali Province. The special encouragement allowance ranged from Rs 4,000 to Rs 10,000 depending on postings based on geographical locations. Moreover, the Ministry of Health and Population announced that frontline health workers were to receive allowances equivalent to their salaries at the time of COVID-19[14]. The federal government declared to provide life insurance of NPR. 2.5 million for security and health officials. This was also valid for the health professionals working in the Karnali

province. The Karnali province budget unveiled that the province will provide 100 percent allowances to health workers and doctors involved in controlling the COVID-19 pandemic. According to the health official from Surkhet FDM/NIPoRe spoke to, the announced allowances were yet to be provided to the front-line workers. However, the journalist based in Jumla said that incentivizing measures such as per diem were provided to doctors and health staffs from Karnali Academy of Health Sciences when they were deployed for contact tracing.

Mental Health Status: Apart from the physical risks of COVID-19, mental health was also found to be a major but largely overlooked issue the Karnali Province. During lockdown, a 26-year-old was brought from Surkhet to the capital city for psychiatric treatment[15]. The patient, who also suffered COVID-19 infection died because he suffered from extreme mental pressure and had a heart attack. Similarly, the migrant workers were reported to have anxiety, depression and social discrimination when they were quarantined. The government made the decision that migrant workers arriving from India shall mandatorily quarantine themselves for 14 days. According to the official record of Nepal Police, a total of 58 people from Karnali Province have committed suicide in 100 days, since March[16]. On top of that, medical and security professionals were also infected from COVID-19. This increased more fear among the general public in the Karnali province.

Budget Allocation for COVID-19: On 7 April 2020, the cabinet meeting of Karnali provincial government allocated a budget of NPR 3 million to Birendranagr Municipality, NPR 2 million to municipalities and NPR 1.5 million to the rural municipalities for COVID-19 prevention, control, treatment, relief and other necessary management. Office of the Chief Minister and Council of Ministers of Karnali have been given NPR 60 million. The Karnali province has allocated NPR 1.5 billion stressing programs on health, education and food sector to combat COVID-19 pandemic. The provincial government has announced to provide Rs 100,000 to a family of those who get killed by the COVID-19.

The locals said that the Karnali Province introduced one-door system to regulate the relief distribution. The local government was the main responsible body for distributing relief materials to the downtrodden families. The local level prepared the list of people working in the unorganized sector. However, families wanting to avail the relief materials should register their names in the ward offices. Officials from Narayan Municipality, Dailekh informed FDM/NIPoRe that the main purpose of providing relief materials was to meet the daily essential needs of the daily wage workers. The Rural/Municipalities disbursed money to ward offices and ward offices distributed relief materials such as rice, lentils, etc. One

of the civil society organization based in Karnali province said that non-governmental organizations or independent individuals had to take permission from local government before distributing the relief materials. The official from provincial government said that the strict move was enforced in order to minimize the spreading of COVID-19.

Employment Opportunity for Returnees: The Office of the Chief Minister informed that the Karnali Province is planning to enroll them in Chief Minister Employment program and Chief Minister Dalit Income Generating Program. Since large number of migrant people have returned to their homes, they are currently unemployed. One of the migrant workers FDM/NIPoRe spoke with, said that the unemployed are excited to participate in the Chief Minister Employment Program. As per the Karnali provincial government, the returnees will be employed in the development works such as road construction, irrigation, drinking water, building construction of the province. These two programs will be of great economic relief for the workers returning from other countries. The budget had allocated NPR 300 million for Chief Minister Employment Program and NPR 100 million for Chief Minister Dalit Income Generating Program.

Modality of Lockdown: Locals and businessmen said that the federal government should have revised the lockdown modality after a month or two of lockdown as their province had been successful in handling the pandemic. When it comes to getting used to with new normal via easing of lockdown, the Chairman of the Agricultural Market Management Committee said that first of all, the lockdown should be made systematic; drivers should be checked if they are using sanitizer while transporting goods, the opening time of the shops should be made open throughout the day without limiting it which reduces congestion, limited opening time will make the market more crowded"[17].

Part 5: Collaboration with federal/provincial/local government/private sector

The coordination among federal, provincial and local is pivotal at the time of the pandemic. The highly centralized decision making influenced the COVID-19 policy response and cramped up both powers and resources to the federal government. During pandemic, decision making based on public health were undermined providing more room for decision making based on political interest. This drawback was highly prevalent and trickled down to the provincial government too. The provincial government also formed committee based on their existing structure.

The bright side of coordination between provincial and local government is that the provincial government disbursed COVID-19 fund to the local government. However, they were overburdened with lots of responsibilities directed by multiple layers of government i.e. central, provincial and districts. Although the local government enjoyed full autonomy to utilize the fund as they fit, they faced huge challenges in terms of resources.

FDM/NIPoRe came across various instances of poor coordination among federal, provincial and local government. In the context of Karnali Province, central government had informed Karnali Provincial Government to send the PCR machine for Karnali Academy of Health Sciences. Instead of providing promised PCR machine, central government sent testing kits. In turn, provincial government had to buy PCR themselves. Had central government informed that they were incapable of providing PCR machines, the provincial government would have bought PCR machine earlier and saved precious time during pandemic. A member of PCMC said that Karnali Provincial Disaster Management Center meeting held on 11 May requested the central government to set up quarantine facilities at the Nepal-India borders and send the migrant workers to their homes only after a PCR test. However, the federal government ignored the suggestion of the Karnali Government. The migrant workers were stranded in the western Nepal's border with India because the country had been completely locked down. The migrant workers had to search for clandestine ways (river, forest) to come to Nepal. Moreover, the ambitious or impractical guidelines/protocols enacted by the central government failed to implement activities at the local level. The prime example of ambitious guidelines is quarantine. Practically, zero coordination among three tiers of government could be observed while enacting quarantine related guidelines.

On a hierarchical basis, elected representatives i.e. mayors are deemed to be in higher position compared to CDO. The district level committees formed for COVID-19 response, of which municipalities are also a part, are all headed by CDO. Some of the mayors seemed to boycott the meeting headed by the CDO. There has been conflict of interest between district level committees and mayors which shows lack of coordination between the two government entities. However, there was good coordination among District Health Office and local government. The local government supported "Medical March" campaign that helped in contact tracing and spreading message on the prevention of COVID-19.

The private sectors were neglected while making crucial provincial level COVID-19 response decisions. Despite being neglected, private sector was generous enough to contribute to the provincial COVID-19

fund. The members of the CSO and party cadres helped local government in distributing relief packages and management of quarantine facilities.

Part 6: Recommendation

The recommendations for the federal, provincial and local government are as follows:

- The central government failed to take expert and non-government sector opinion while making COVID-19 decision. It is important to incorporate expert and private sector opinion which will help to contain the virus in an effective manner. Moreover, proper coordination between provincial and local government is required to manage the inflow of migrant workers. The provincial government should facilitate in bringing the migrant workers safely and hand them over to the respective local governments. Therefore, provincial government should not only delegate power and funds but also supply resources and expertise to the local government in maintaining quarantine facility.
- The first and foremost recommendation for Karnali province is that the Karnali province must have updated data regarding the available resources. Whenever the next disaster or pandemic strikes, the province can prepare itself by managing the scarce resources. Increasing the number of human resources and capacity of health institutions and hospitals is the long-term investment which will help to tackle future pandemics.
- Karnali Provincial Government and Local Government quick response team must be very effective and efficient. A team should be comprised of police, army, health workers, private sector, community representatives, local organizations, and teachers. Therefore, provincial government can frame policies where major stakeholders of the society can be involved to combat the crisis. They can also prepare a 'roster' so that the local people can use ambulances and helicopters when needed.
- The provincial government should train frontline workers such as medical professionals, security officials, journalists, among others, before they work on ground. The basic protection amenities like masks, Personal Protective Equipment (PPE) and health insurance should be provided to keep them safe and sound. This will help to boost their confidence and get rid of mental stress in the course of dealing with the pandemic.
- Since the supply of masks imported from foreign countries is expensive, use of locally made cloth masks and PPE should be encouraged. Self-employment can be created from local products. Although the local tailored PPE and masks would not cater the needs of the health professionals,

it can at least protect low-risk groups. Countries like China and Vietnam have adopted a similar strategy in rural areas.

- The local leadership comprised of local youth, social workers, and influential leaders can change social behavior by adhering to preventive measures, providing civic education related to COVID-19. In this digital age, rumors and misinformation spreads very rapidly. The local leadership can provide accurate and correct information in the local language, dialect and style to the residents of the rural areas. The provincial government and local governments should realize the importance of local leadership.

Sudurpaschim province

Executive summary

Migrant workers returning across the open southern and western border in Sudurpaschim Province has been a key driving force for current COVID-19 transmission in Sudurpaschim province. An increasing pattern of clustered cases was seen in Sudurpaschim. The total count of cases was found to be increasing rapidly with increase in the number of returnees. There were some cases without a clear travel history or contact with persons with a travel history. Some evidence of community transmission was also emerging. Sudurpaschim province has witnessed a three-fold increase in the number of COVID-19 cases over the last week of June 2020. Aggressive testing albeit with significant scope for strategic improvement, had helped identify and confine the transmission among returnees but testing capacity as well as isolation and quarantine facilities and contact tracing mechanisms are being stretched to the limit in Sudurpaschim province. Maintaining infection prevention and control protocols in all quarantine and isolation centers and at home would be of paramount importance in the weeks ahead.

Sudurpaschim provincial government had already set up health desks in twelve different areas of the state for screening possible symptoms of corona virus before the nation-wide lockdown commenced as an approach to contain the corona virus. Effective border closure and plans for health screening in government and non-government hospitals in the province was already in place. Various committees were also formed under the chairmanship of provincial chief minister and the district officers which had set up isolation wards in all state and district hospitals, targeting COVID-19 suspects and had prepared and implemented health desk operation guidelines for surveillance and prevention of the outbreak. Although heath desks were set up, lapses at border transit points posed high risk of COVID-19 outbreak in Sudurpaschim province. The health posts were short of resources to screen all the people entering Nepal. The desks let go people free without any interrogation as they could not handle the influx of people. Local governments have tried their best to procure necessary medicines, PPE, masks, gloves, etc., as part of their preventative effort to combat the spread of COVID-19. Sudurpaschim province government decided to set up a fund of NPR 400 million and asked for support from local people, businesses and other NGOs and CBOs to prevent and contain the novel COVID-19 across the province.

When the number of migrants entering Nepal from Kanchanpur was still low, they were swabbed and tested in the district itself sent to their respective destination districts after ensuring that they did not carry virus. However, massive influx of returnees, which started in the 3rd week of May, overwhelmed the testing centers as they did not have test kits in sufficient quantity. As a result of this, scores of migrant returnees were sent to their respective local units without being tested at all. Even though these migrants had been staying at quarantine facilities established by their respective local governments, the fact that inadequate caution was exercised while letting them into the country suggested that there was a higher risk of the spread of the infection. Many local governments had stopped the use of RDT considering the fact that the tests were not trustworthy as they produced too many false results. It was also evident that the coverage of PCR tests was limited, hence, RDT was still being used as an alternative.

Quarantine facilities everywhere had been proven inadequate because migrants had been returning in numbers defying the expectations of local governments. To accommodate the rapid influx of Nepali migrants, many quarantine facilities which were built in a rush did not match the required standards. However, as the influx of migrant returnees from India slowed down gradually, the pressure on the provincial and local governments dwindled. Along with the decline in the number of returnees, another factor that led to the decrease in pressure upon quarantine facilities is the federal government's decision to send home those who did not show any visible symptoms after they had spent 14 days in quarantine. Prior to that decision, an extreme shortage of testing material had forced people to stay under quarantine for far longer than necessary, which exacerbated the challenges in managing quarantine facilities at the initial phase.

The absence of technical knowledge at the local level also made it difficult for them to purchase testing material on their own. Most local units lacked public health officers or specialist physicians, and their health departments were being led by senior assistant health workers. The lack of knowledge regarding standards and quality of medical equipment created complications in the procurement process. Many local governments reported difficulties in functioning because they lacked adequate employees and the technical expertise to deal with the COVID-19 crisis. In some municipal units, even though the province had released funds, the absence of the chief administrative officer delayed effective and efficient utilization of funds.

Elected representatives of the Sudurpaschim province and local levels alleged that the federal government made policy decisions without considering their fiscal and technical capabilities which made their

implementation difficult. Elected local representatives were increasingly upset at the federal and provincial governments for shifting all of the responsibilities of establishing and operating quarantine facilities for migrants to the local level while failing to extend any assistance.

Part 1: Province background

Sudurpaschim province borders the Tibet Autonomous Region of China to the north, Karnali Pradesh and Province 5 to the east, and the Indian states of Uttarakhand to the west and Uttar Pradesh to the south. Godawari is the capital of the province. The province consists of nine districts that are among the remotest and poorest in Nepal. A district is administered by the head of the District Coordination Committee and the District Administration Officer. The districts are further divided into municipalities and rural municipalities. The municipalities include one sub-metropolitan city with 19 wards and 33 municipalities with 352 wards. There are 54 rural municipalities with 358 wards in the province. The number of local bodies totals to 88 with a total of 729 wards.

Table 15: Number of local units per districts in Sudurpaschim province

District	Sub-metropolitan city	Municipality	Rural municipalities
Achham	0	4	6
Baitadi	0	4	6
Bajhang	0	2	10
Bajura	0	4	5
Dadeldhura	0	2	5
Darchula	0	2	7
Doti	0	2	7
Kailali	1	6	6
Kanchanpur	0	7	2
Total	1	33	54

Source: Central Bureau of Statistics, 2011

The province has a population of 2,552,517 which is 9.63 percent of the total population of Nepal. The population density is about 130 persons per square kilometer. Segregating the total population age wise, majority of the population (25.5percent of total population) falls under the age bracket of 10 – 19. The second most populated age bracket is 20 – 29 years. Approximately 16 percent of the total population of the province fall under 20 – 29 years of age, 2.8 percent of the population are 70 years and above. Categorizing the total population under the castes or ethnic groups, the statistics show that 41.4 percent of

the total population of the province is Chhetri followed by Tharu constituting 17.3 percent of the total population.

Considering the district wise population segregated into their respective local bodies, top five major population clusters are tabulated below where major population cluster among all the local bodies is Dhangadhi Sub-Metropolitan City in Kailali district with a population of 147,741 followed by Bhimdatta municipality in Kanchanpur district with a population of 104,599. Kailali is the most populated district in this province, hence, larger population clusters are seen in this district as shown in the table below.

Table 16: Top 5 population clusters in Sudurpaschim province

Major Population clusters	Population
Dhangadhi Sub-Metropolitan City	147,741
Bhimdatta Municipality	104,599
Godawari Municipality	78,018
Tikapur Municipality	76,084
Ghodaghodi Municipality	75,586

Source: Central Bureau of Statistics

The HDI of the province is 0.475[1], reflecting a low level of development. The province consists of 33.9 percent of the total population under absolute poverty and the multidimensional poverty rate for Sudurpaschim province stands at 33.6 percent. The literacy rate for Sudurpaschim province is 63.48 percent. Taking into account the gender wise perspectives as per the data from CBS, the literacy rate for male and female stand at 76.37 percent and 51.93 percent respectively. Among the total population aged 5 years and above, 1,432,031 can read and write under which 814,156 are males and 617,875 are females. 760,736 of the total population above five years of age cannot read and write.

Nepal Labor Force Survey Report 2017/18 data confirms that the total working-age population of Sudurpaschim province is 1,884,000[2] amongst which 514,000 are in the labor force and the remaining 1,370,000 are unemployed. Among those in the labor force, 455,000 are employed and the remaining 59,000 are unemployed. The unemployment rate of the province, hence, stands at 11.5 percent. Delving deeper into the employment sectors and its statistics, among those employed, a total of 151,000 are employed into formal sector where 5000 are associated with agriculture and the remaining 147,000 are

into non-agriculture professions. 303,000 of the employed population are into informal sector where 83,000 are associated with agriculture, 218,000 are into non-agriculture and the rest 2000 are into private households. Informal non-agricultural sector employment accounts for the largest share of total employment in all the other provinces, with the largest share (47.9 percent) recorded in Sudurpaschim province.

Among the total 469,703 households in Sudurpaschim province, 49.3 percent have the facility of mobile phones and 48.3 percent have radio at their households. Likewise, 20.1 percent of the households possess TV and only 2 percent of the households have computer facility. Around 4 percent of the households have telephones while only 0.7 percent of the households have access to internet in the province.

For the FY 2075/76, Sudurpaschim province had announced a budget of NPR 28.16 billion including a contribution of NPR 12.57 billion as recurrent expenditure and NPR 13.06 billion as capital expenditure. The province government had prioritized the agriculture sector. Building a model agricultural village in each local unit was the target of the provincial government. The province allocated NPR 24 million was allocated for the health centers in the city areas and NPR 50 million for reforms of existing health facilities (Maeti, Jobudha, Gokuleshwor, Shreepur and Belauri, among others) of local units. In addition, NPR 41 million was allocated for Mahakali zonal hospital and NPR 52.7 million were for Seti, Mahakali and Tikapur hospitals. For the district hospitals in the province, a total of NPR 120 million of budget was allocated[3].

Part 2: Health background/risk factors

Sudurpaschim province has a total of 556 health facilities, both public and non-public. Amongst them, 14 are hospitals, 16 primary health care centers, 378 health posts, 57 urban health centers, 43 community health units and 45 non-public health facilities. There 5910 female community health volunteers. Other health indicators pertaining to the province are tabulated below under subheadings such as prevalence of diseases, good health and well-being, availability of basic client facilities, medicines and diagnostic capacity of the existing health facilities[4].

National Annual Review 2073/74 of the Sudurpaschim province reported that sanctioned number of doctors was 142 and only 56 positions were filled in the year 2073/74. The sanctioned number of nursing staffs was 851, amongst which 840 positions were filled. 1463 paramedics and 721 other medical staffs

were sanctioned where 1213 paramedics and 436 other medical staffs filed up the positions. The total sanctioned number of the medical staffs was 3177 amongst which only 2545 positions were filled and the remaining 632 positions remained vacant in the health sectors.

Looking into sanitation behavior at the provincial level, statistics from CBS suggests that 52.7 percent of the total households do not have toilet facility at their households. 30 percent of the households have flush (septic) toilets while 1 percent have flush (sewerage) toilets and 15.7 percent have ordinary toilets. The major sources of drinking water for Sudurpaschim province are piped tap and tube well. 40.3 percent of the total households depend upon piped tap as their source of drinking water while 39.8 percent are dependent upon tube wells. There are 10.3 percent of the total households which depend on sprout water. Households dependent on uncovered well, river/stream and covered well for drinking water are 3.4 percent, 2.8 percent and 1.6 percent respectively while 1.2 percent of the households depend on sources for drinking water other than those stated above. Nepal Demographic and Health Survey 2016 reported that 99.5 percent of the total households had place for hand washing amongst which 46.9 percent used soap and water for hand washing, 12.7 percent used water and other cleansing agent other than soap, 18.1 percent used water only for hand washing and 20.4 percent did not use water, soap or any other cleansing agent[5].

In addition, among the sample households in the survey for Sudurpaschim province, 28.7 percent reported that the distance to the nearest government health facility was less than 30 minutes. For 50.8 percent of the households the distance to the nearest government health facility was 30-60 minutes while it was more than 60 minutes for 20.3 percent of the households.

Various committees had been formed at the provincial, district and local level as a measure to contain and control the COVID-19 pandemic in the province. There are no concrete policies to handle the pandemic in place but the provincial crisis management committee and the provincial COVID-19 control and management directive committee had formulated directives on March 20, 2020 following the nation-wide lockdown and had also come up with strategic action plan to facilitate coordination during and after the lockdown. The provincial government, ministries, committees under the supervision of Social Development Ministry, other implementing committees at the district and local level as well as the police and army personnel had been following the decisions and directives. A 28-point decision was made by the directive committee with an aim to contain and control the COVID-19 pandemic. Likewise, in coordination with various ministries and departments such as provincial government, ministry of internal

affairs and law, district coordination committees, local governments, district health offices, social development ministry, custom offices, FNCCI provincial chapter, district and local level police and army, an action plan was issued effective from 27 April 2020.

Sudurpaschim Province was identified as a high-risk area for the transmission of the virus due to the large influx of migrants. Nepal Labor Migration Report 2020 suggests that out of the total migrant population by major destination countries (Malaysia, Qatar, UAE, Saudi Arabia, Kuwait, Others), 9 percent are from Sudurpaschim province. There were a total of 6024 migrants from the province in the year 2018/19 amongst which 200 were females and 5824 males. Kailali district had the largest number of migrants totaling to 1731 and Bajura had the lowest figure of a total of 214. Total number of people, who had been employed in India, is estimated at around 300,000[6].

The high influx of migrants started to emerge as a risk as soon as infections started surging in India. The returning migrant population posed the biggest risk in the province. Although heath desks were set up, lapses at border transit points posed high risk of COVID-19 outbreak in Sudurpaschim province. The health posts were short of resources to screen all the people entering Nepal. The desks let go people free without any interrogation as they could not handle the influx. An estimated 20,000 people entered Nepal from Gaddachowki transit point of Mahendranagar on 21 March 2020. During normal days, around 10,000 people enter Nepal through this border point. The inflow of returnee migrant workers was uncontrollable. The return of Nepali migrant workers from India actually began since one week ago after a surge in the cases of COVID-19 in India. The number increased dramatically following a semi lock-down announced both in Nepal and India amid the threat of COVID-19. According to the COVID-19 focal person, the directives and the action plan were based on the assumption that the lockdown would not extend for too long and that the spread of the virus would be limited.

Moreover, low awareness and poor sanitation practices further exacerbated the risks. Sudurpaschim provincial government had already set up health desks in twelve different areas of the state for screening possible symptoms of corona virus before the nation-wide lockdown commenced. The government mobilized health workers' teams equipped with necessary technology in Darchula, Baitadi, Kailali and Kanchanpur, as per the provincial ministry of social development. Health screening was already being initiated along Nepal-India border in Darchula, Baitadi and Kanchanpur and also in Dhangadhi and Khangrol checkpoints in Kailali and Geta airport. Considering the open uninterrupted border with India,

the provincial government decided to stop the movement from the open border and intensify the preparations to prevent the spread of the disease.

Part 3: Urgency and preparation

Key findings

- *Various committees were formed in order to control the spread of the virus, make necessary directives and guidelines and coordinate with relevant stakeholders.*
- *Sudurpaschim province saw satisfactory establishment and management of quarantine and isolation facilities prior to the massive influx of returnees.*
- *There was proper management of data by provincial health directorate on COVID-19 suspects, testing, active cases and deaths, quarantine and isolation facilities and people staying under quarantine and isolation.*
- *Shortage of medical supplies and resources constraints was however witnessed at local level with the huge influx of migrants.*

Formation of committees: COVID – 19 Control and Coordination Directive Committee was formed on 2 March under the chairmanship of chief minister of Sudurpaschim province which was working on COVID -19 risk reduction, treatment and management, taking decisions and providing directives to the districts and the local levels. Provincial Crisis Management Committee had also been formed at the provincial level on 7 April under supervision of Central Crisis Management Committee from the central level. COVID-19 control, treatment and management fund was also established where a total of NPR 400 million was contributed by Sudurpaschim provincial government and other NGOs, CBOs, business owners and the general public were asked to contribute on a voluntary module. Fund mobilizing committee was also formed under the supervision of Ministry of Internal Affairs and Law, Sudurpaschim province. Provincial Risk Management Committee had also been established under which an Emergency Operation Centre was formed on 15 April which worked in coordinating and managing emergency/urgent needs in the province in the context of COVID-19. The Under Secretary at the Office of the Chief Minister and Council of Ministers and at the Ministry of Internal Affairs and Law functioned as the coordinator of the emergency operation center on a rotation basis. Representatives of the Nepal Army, the Armed Police Force, Nepal Police and the National Investigation Department were also included as members of the emergency operation center. The emergency operations center had also been assigned the responsibility of facilitating in the response and relief coordination, reporting to the PCMC and to prepare

the upcoming strategy and work plan for prevention of COVID-19. In addition, Strategic Action Plan Committee was formed on 2 June 2020 which had been working on coping up with strategic plan amidst the pandemic and the way forward.

Likewise, under the supervision of Social Development Ministry of the province, a provincial medical team was also formed under the leadership of medical superintendent of Seti provincial hospital which provided technical assistance and support to the medical teams at the district hospitals in all the nine districts of the province. Alongside, under the coordination of district health officers, a Case Investigation and Contact Tracing team was formed which was solely involved in investigating COVID-19 suspects, tracking them and carrying out contact tracing in the respective suspect locations in the province. Besides, various other committees had been formed at the district and local level including the local bodies, police and army personnel, NGOs, CBOs and other private sectors which had been working on quarantine establishment and management, providing and distributing relief packages, constructing isolation facilities, managing basic supply of foods and medicines in the quarantines, ensuring safety of people at the public places, etc. Provincial health directorate had been maintaining the data on COVID-19 in coordination with all the district health offices which was being disseminated every day to the general public.

Initial response: Qualitative consultation with the provincial ministry for social development found that the wards were equipped with necessary arrangement of health workers and the supply section was already approached for necessary medicines and equipment. Arrangements were also made to collect cough, swab and blood samples of suspects and send the samples to laboratories at state and district hospitals as well as national lab. Ambulance service had also been kept standby nearby health desk in the border area. Health desks had been set up where patients, especially those coming from India, have been kept under surveillance along the border area. Public awareness had also been intensified to keep general people informed and sensitized about COVID-19. The returnees from virus affected zone had also been targeted in order to sensitize them about measures to be adopted during 14 days of quarantine following return to their homes. Health workers at the different health desks were also responsible for disseminating information about the virus that causes COVID-19, the ways to prevent it, and what measures to take if someone has symptoms akin to that of COVID-19 patients. As of 22 March, two days before the nation-wide lockdown, the provincial government had already established health desks at border check points and had prepared and implemented health desk operation guidelines for surveillance and prevention of the outbreak. The ministry of social development at the provincial level had already made

policy decisions for the prevention, response and management of COVID-19. Alongside, the provincial government had already managed 47 isolation beds in 18 hospitals[7].

Resources: As with all other provinces, Sudurpaschim province also faced shortage of resources. Local governments had tried their best to procure necessary medicines, PPE, masks, gloves, etc., as part of their preventive effort to combat the spread of COVID-19. As a result of the proactive initiatives taken by elected representatives and health section employees, some local governments took preemptive measures to manage materials and purchase medicines even before the lockdown was announced by leveraging their access to healthcare material suppliers. But many other local governments failed to arrange and procure necessary materials and medicines for a long time even after the lockdown. Mahakali Municipality of Darchula district purchased essential medicines to suffice for another six months. Although, Mahakali Municipality of Darchula district had an inadequate number of healthcare workers, it was sending nurses to the homes of chronic patients and expecting mothers to provide necessary services during the lockdown.

Every local unit consulted as a part of qualitative exercise reported a lack of PPEs, infrared thermometers, N-95 masks and other materials. Some district and local level stakeholders reported receiving a few PPEs from the federal and provincial governments. Health personnel faced difficulties in carrying out their duties without adequate PPEs, and expressed concern for their own safety. Although provincial governments had initiated the process for procuring health material, challenges persisted due to unavailability of such material nationwide. Also, local governments showed concerns over the role of provincial government in supporting them with the resources and other necessary health and safety equipment. They were not satisfied with the initiatives taken by the provincial government as they said that all the responsibilities about establishment and management of quarantine and isolation facilities, testing of the people returning from India, provision of basic health and safety equipment, among others were upon the local governments.

Funding: Sudurpaschim province government had decided to set up a fund of NPR 400 million to prevent and contain the novel COVID-19 across the province[8]. A cabinet meeting of the province government made the decision to establish the fund on March 28, 2020. The minister urged everyone including organizations based in this province to contribute to the fund. Different banks and financial institutions and individuals have contributed to the fund. The decision was made after a 34-year-old man from Dhangadhi tested positive for COVID-19. This was the fourth confirmed COVID-19 case in the

country. The meeting decided to designate Seti Provincial Hospital as a dedicated hospital for treatment of COVID-19 infected patients.

Relief: Sudurpaschim province had disbursed emergency cash from the fund to District Coordination Committees, public hospitals, and to local governments. Most local units had established emergency funds through reallocation of budgets from different headings received through fiscal transfers as per the instructions by the federal government. Additional funds were being generated from internal revenue sources, funds received from province, and monetary contributions received from elected representatives and local government employees. Local levels had been utilizing such funds on distributing relief material, managing quarantine facilities and purchasing necessary medical items. With the surge in the number of returnees in the province, officials complained about resources constraint at the local level and the provincial government had directed them with all the responsibilities to manage the massive influx of returnees.

Part 4: Activities and effectiveness

Key findings

- *Sudurpaschim province received a massive influx of migrants from India which caused a huge surge in cases since late May.*
- *There was a huge burden on local levels to establish and manage quarantine and isolation facilities and carry out adequate tests.*
- *Quarantine facilities were proven inadequate because migrants returning in numbers defied the expectations of local governments.*
- *Moreover, poor standard of the quarantine and isolation facilities were also observed.*

Influx of returnees: In the third week of March 2020, both Nepal and India went into lockdown in order to control and prevent the spread of the COVID-19. However, travel restrictions were eased in India and Nepali migrants had started returning home. As a result, the number of migrants entering Nepal was high in Sudurpaschim Province. The flow was significantly higher through check-posts at Gaddachauki in Kanchanpur and Gauriphanta in Kailali. Although Nepali migrants were already arriving by 25 May, district administration office in Kanchanpur formally opened the Gaddachauki check-post on May 27. Every citizen entering through the check-post was mandatorily required to fill in a form disclosing personal details. Around the second week of June, between 3000 and 4000 individuals were reportedly

entering Nepal through Gaddachauki check post in Kanchanpur and Gauriphanta check post in Dhangadhi. Around 66,000 people had already entered the country through the Sudurpaschim province by mid-June 2020 and as per the estimate of the provincial government, over 150,000 people were likely to return home in the days to come. Total number of people, who had been employed in India, is estimated at around 300,000[9].

When the number of migrants entering Nepal was low, migrants were being given RDT or PCR tests in border districts, and then sent on to their destination district after ensuring that they did not carry the virus. Migrants entering through Kanchanpur district were swabbed and tested in the district itself. The number of migrants entering the country had overwhelmed the number of test kits available, therefore migrants were being sent to their respective local units without being tested. Even though these migrants had been staying at quarantine facilities established by their local governments, the fact that inadequate caution was exercised while letting them into the country suggested that there was a higher risk of the infection spreading. One of the officials from district office of Kanchanpur said that every Nepali was given a mask and a bottle of water upon entering Nepal and a packet of food upon boarding a bus. Additionally, various organizations in Dhangadhi and local traders had also been arranging food for migrants entering Nepal.

Implementation of lockdown: Qualitative consultation with the mayor of Budhiganga municipality, Bajura found out that the sudden lockdown had affected the remote areas especially in the hilly and mountainous region of the province. It was difficult for the local government to supply basic goods for the community and the general public. Also, the local governments did not have stock of the supplies and the regions were hard hit financially. Nationwide lockdown and pandemic had disrupted supply chains, shut or threatened the survival of small and informal enterprises, and made people highly vulnerable to falling back into poverty through widespread loss of income and jobs in the province. Mayor also feared that mistrust between the municipality and its people would widen in the coming days if no swift and extreme measures are taken to contain and control the pandemic.

Management of quarantines: Quarantine facilities everywhere had been proven inadequate because migrants had been returning in numbers defying the expectations of local governments. To accommodate the rapid influx of Nepali migrants, many quarantine facilities which were built in a rush did not match the required standards. Local governments had prepared data about migrants from their local units living in India and other countries by mobilizing the ward and local government offices, employees, settlement

committees, and women volunteers. Local governments had established quarantine facilities with only a few beds, anticipating that their residents would not all return at once in such large numbers. However, when transportation services resumed in India, migrants began forming large groups to return home. Following this, local governments were under pressure to add new quarantine facilities overnight.

According to statistics from MoHP published on 12 June, a total of 158,050 individuals were in quarantine facilities across the country. Sudurpaschim Province had the biggest number of them, at 63,921. Local governments in the province had been facing various challenges in management of quarantine centers because of large number of citizens returning from India. Around the second week of June, between 3,000 and 4,000 individuals were entering Nepal through the Gaddachauki Check Post in Kanchanpur and the Gauriphanta Check Post of Dhangadhi, which are the two main entry-points into Nepal in Sudurpaschim Province. That daily number had decreased to between 400 and 500 only by the end of June. When the decrease in the number of migrants was witnessed over time, by the end of June 2020, the province had 72,600 quarantine beds where only 12,174 were occupied by COVID 19 suspects amongst which 9633 were males and the remaining 2541 were females. Likewise, there were a total of 91 people staying in isolation wards in various hospitals across the province.

Testing: Considering the data of 20 July, the day when nation-wide lockdown was eased, the total number of tests (both RDT and PCR) carried out was 151,080 amongst which the total number of COVID-19 positive cases was 3966 (female 928, male 3038). A total of 2129 COVID-19 patients had been discharged by 20 July. Total eight deaths due to COVID – 19 have been reported in the province. Sudurpaschim province had a total of 60,106 quarantine beds where only 6,630 were occupied by COVID-19 suspects by July 20, amongst which 4,839 were males and the remaining 1,791 were females. Likewise, there were a total of 55 people staying in isolation wards in various hospitals across the province. Apart from these, there were others who were staying in isolation facilities at the local level in various districts of the province by 20 July.

Along with the decline in the number of returnees, another factor that decreased the pressure upon quarantine facilities is the federal government's decision to send home those who did not show any visible symptoms after they had spent 14 days in a quarantine facility. Before this, some people had already spent more than 14 days in quarantine facilities because their PCR test results took longer. After the decision of federal government, some local governments started sending individuals home without tests if they had already spent 14 days in quarantine. Some of the local governments, however, waited for

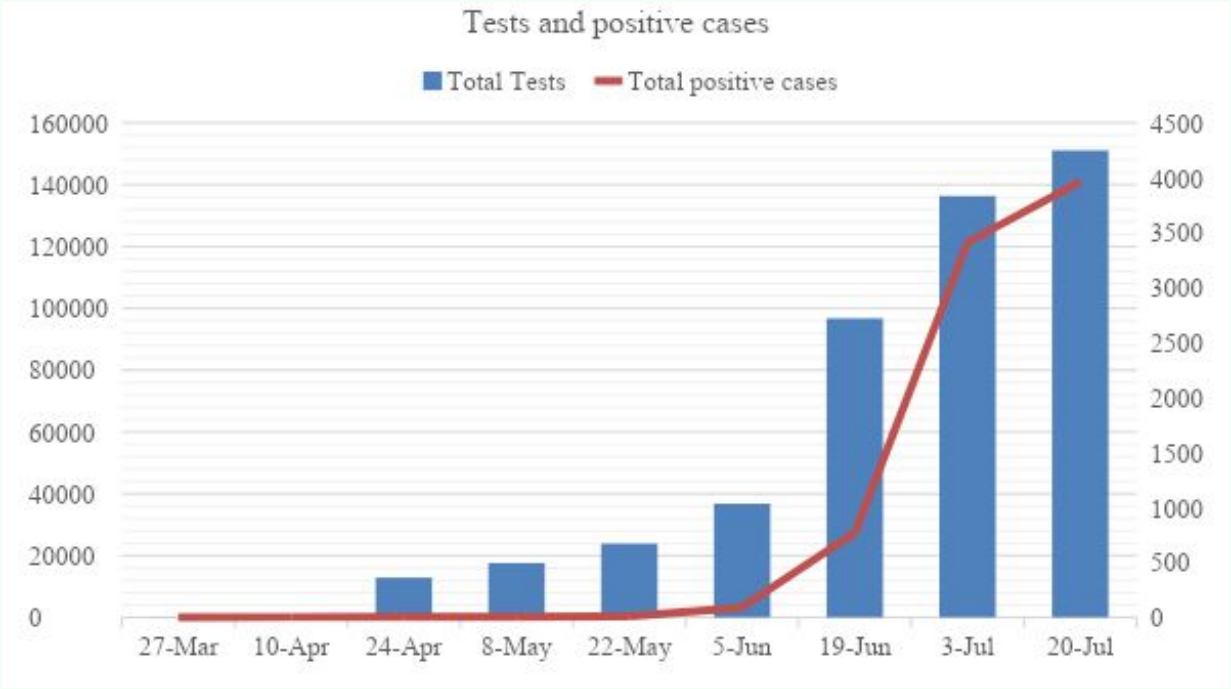
the test results to come before they sent any suspects home. Budhiganga municipality in Bajura had kept some individuals under quarantine for as long as 30 days, until their test results were assessed. The decision by the federal government to send individuals home from quarantine facilities even if they had not been tested had made elected representatives at the local level very uncomfortable, and the decision had also increased the chance of the infection spreading widely.

With the influx of a large number of people from India to Sudurpaschim Province, pressure for PCR test for COVID-19 had increased. In the wake of lab running out of its capacity to test swab samples, the government had issued a new directive for COVID-19 test. The new policy stated that not everyone staying at quarantine facility had to undergo test for COVID-19. As per the new policy, PCR test would be conducted on people staying in isolation, frontline health workers and people from infection-hit areas, among others, on the basis of importance and need. The federal government also decided to dispatch three RT-PCR machines to the province with an objective to make COVID-19 testing and treatment more effective.

Local governments did not have easy access to laboratory that could identify COVID-19 infections. It was necessary for all individuals staying under quarantine to be given PCR tests in order to decrease the risks of transmission. In Sudurpaschim Province, there was only one PCR testing machine in Dhangadhi, which was carrying out tests at a very slow pace. Therefore, many people staying under quarantine had been sent home without any tests. According to the data based on 10 June and 17 June updates by MoHP, the average daily tests in the laboratory in Dhangadhi was 154. The average number of infections identified daily stood at 25 and the average number of tests done to identify 1 infection was 6 in Sudurpaschim. The number of swabs being brought in for testing exceeded the testing-capacity of laboratories everywhere. Elected representatives from some local units in Kanchanpur and Darchula, said that it took between 7 and 15 days for the results of swab-tests to be obtained.

Individuals in Sudurpaschim Province were being sent home after 14 days of quarantine regardless of whether or not the results of their tests were received. Around mid-June, the Provincial Health Directorate issued directives to release more than 35,000 individuals from quarantine facilities. Some of them were released without any testing, while others were released before their PCR test results were received. On the one hand, local governments had to bear the unnecessary financial burden of keeping individuals under quarantine for excessively long periods, while on the other hand, the decision to send home the asymptomatic individuals after 14 days of quarantine increased the risk of further spreading the infection.

Figure 12: Number of cases against tests performed in Sudurpaschim province



Source: Social Development Ministry, Sudurpaschim Pradesh, compiled by FDM

The lack of access to federal and provincial laboratories and delays in receiving results led local governments to purchase PCR machines, PCR kits and VTMs. Local governments had also been coordinating with each other in their respective districts for this. Local governments in Darchula decided to purchase PCR machines in coordination with their District Coordination Committee, District Hospital and Health Office and every local governments had arranged for necessary budgets to purchase PCR machines. Local governments had already spent a lot of money on establishing, operating and managing quarantine facilities for more than three months, distributing relief material, and stipends for their health workers. That created difficulties in putting together the funds needed to purchase and operate PCR machines.

Many local governments reported difficulties in functioning because they lacked adequate employees and technical expertise during this current crisis. In some municipal units, even though the province had released funds, the absence of the chief administrative officer delayed effective and efficient utilization of funds. In some municipalities, ward secretaries had been forced to oversee more than one ward. Some employees felt that the increased workload made it difficult to hold daily meetings and plan and prepare to contain the community spread of the virus. Many municipal units lacked plans or the confidence to

address the possibility of a more widely-spread epidemic. Many municipal units expressed that the pandemic was spreading at a faster rate and it was be very difficult to contain it.

Part 5: Collaboration between federal, local and provincial governments

Roles of and coordination between all three levels of governments is extremely necessary for the prevention and control of COVID-19. However, local elected representatives complained that the policy decisions taken by the federal government lacked coordination with local governments. The federal government's decision to send asymptomatic individuals home without further testing after 14 days in quarantine had put local elected representatives in a state of confusion. Whereas many local governments implemented this decision, some other local governments hesitated to implement it. District administration offices of border districts have been facilitating the return of Nepali migrants stuck at the Indo-Nepal border since the lockdown was enforced. Various civil society organizations have also taken on a diverse set of roles to facilitate the return of migrants to their homes. While district administration offices of border districts have overseen the entry and safe transport of migrants to their local units, local governments have undertaken the responsibility of keeping them under quarantine. The failure on the part of the federal, provincial and local governments to imagine that Nepali migrants would be returning home in such large numbers resulted in complications in safely managing them. In coordination with district administration offices on border areas, local governments have been sequestering migrants in their own quarantine facilities and administering COVID-19 tests.

Elected representatives of the Sudurpaschim province and local levels alleged that the federal government made policy decisions without considering their fiscal and technical capabilities which made their implementation difficult. Elected local representatives were increasingly upset at the federal and provincial governments for shifting all of the responsibilities of establishing and operating quarantine facilities for migrants to the local level while failing to extend any assistance.

As the number of people under quarantine continued to increase, the physical safety and health risk for people also appeared to be increasing. The security of women and children at quarantine facilities had become increasingly challenging. Most quarantine was not woman-friendly. In order to solve this problem, Dhangadhi Sub-Metropolitan City had established a woman-friendly quarantine. Even though woman security personnel were arranged for during the day, male security personnel had to be assigned during the night, which made women in quarantine uncomfortable. There was also a lack of nutritious

food for infants and mothers with infants. In this regard, local governments were found to have taken the help of local clubs, various organizations and security units to establish quarantine facilities.

Therefore, effective coordination among the three levels of governments is necessary in order to ensure that COVID-19 patients have access to better treatment and quarantine facilities. Since infections are being confirmed in all the districts, local units have been quarantining suspected individuals and isolating infected individuals on their own. As most of the identified cases remained asymptomatic or without severe health consequences, they are being managed one way or another. But there were indications that the lack of coordination would result in some difficult situations in the near future. In order to create easier access to laboratory for testing and hospitals for treatment, an effective coordination and cooperation between local governments, province and the federal government is essential. As the number of infections continue to rise, it is important to focus on access to hospitals. Test samples have been accumulating in greater numbers and it is becoming increasingly difficult for the local governments to handle them, as a result of which human and laboratory resources are unable to handle such huge pressure. It is therefore imperative for the federal and provincial governments to increase human and material resources in the laboratory in order to increase the scope of testing.

Part 6: Recommendation

- A lockdown would have been helpful when a combination of interventions were put in place, but lockdown alone seemed unlikely to reduce the pandemic. In that regard, contact tracing is still a key control measure for preventing further spread of COVID-19.
- There is a need to scale up and train a large number of volunteers who work collaboratively across public and private agencies.
- There is an urgent need to increase the rate of testing in local units where large numbers of infections have been found. However, there is also a dire shortage of testing kits and equipment in those local units.
- Although contact tracing with the assistance of local governments has led to the identification of individuals who have been exposed to infected individuals, their testing has been sluggish. Difficulties have arisen in controlling the spread of infection because of the absence of regular testing due to a shortage of adequate healthcare material, and because of a failure to expand testing. It is necessary for the provincial government to increase testing coverage. The provincial

government must make immediate arrangements for additional beds and necessary facilities for the treatment of new patients.

- Most of the existing quarantine facilities do not meet the required standards for hygiene, food and available healthcare workers. This raises the possibility of quarantines facilities transforming into infection hotspots. It is therefore necessary to conduct regular monitoring of quarantine facilities, and for the federal and provincial governments to provide additional assistance and facilities to local governments to meet established standards.
- It is necessary for the provincial and local governments to immediately expand the scope of PCR tests, develop and expand hospital infrastructure required to isolate and treat individuals with infection, and establish effective coordination between all the tiers of governments.

Conclusion and Recommendations

While studying the efforts of provincial government in managing the pandemic, the study concluded the study concluded that centralized decision-making process did not turn out to be effective in dealing with the pandemic, as evidenced by the rising number of cases, even after 17 weeks of nation-wide lockdown. Experts have maintained that the nation-wide lockdown was largely unwarranted. According to them, focus should have been directed towards controlling the influx of migrant workers from India and abroad. Despite initial preparation and the enforcement of lockdown to prevent the spread of COVID-19, the GoN has thus been unable to contain the pandemic, owing to poor decision making, lapses in border control, shortage of medical supplies and limited capacity of local government.

The study highlights a reasonable initial preparation and response, on the part of provincial governments. During the initial phase, when the number of COVID-19 infections were not too high, all provincial and local governments prepared policies and guidelines for the prevention of the impending crisis. However, as majority of the policies were guided by the direction of the federal government, this resulted in challenges in implementation. As highlighted by provincial and local government authorities interacted with in the course of this study, a number of policy guidelines rolled out from federal level were not pragmatic in the local context. For instance, the WHO guideline for quarantine management, which was endorsed by the federal government, was largely impractical in the local context.

In addition to policy guidelines, provincial and local governments also provisioned for different institutional structures to support the fight against the pandemic. Several committees were instituted at provincial level to provide direction to the local government. Likewise, district-level structures were also created and local government also established several mechanisms to handle the pandemic. However, the work of these committees was not found to be all-effective, especially as the roles and responsibilities of these institutional mechanisms at province, district and local level, were not clearly defined. This created confusion and duplication in terms of actions envisaged. For instance, DCMC, which was created by the federal government, was found to be directly reporting to the federal government, by-passing the mechanisms at local and provincial level.

The study noted fair commitment of all provincial and local government in handling COVID-19. In all provinces, the budget rolled out for this fiscal year has allocated significant resource dedicated for the fight against the pandemic. To some extent, this was also influenced by the national budget issued by the federal government, which placed high importance to the ongoing COVID-19 crisis. Moreover, provincial and local governments' effort in setting up quarantine and isolation wards is also commendable. However, with limited resources to handle the pandemic, many of the provinces, especially Province 2, Karnali and Sudurpaschim faced a humungous task of managing the pandemic, as the report shows. However, the study noted proactive role of local government in raising awareness at the community level, especially during the initial phase of COVID-19 outbreak. It is fair to say that this has been a useful initiative in dealing with the pandemic, as public awareness regarding COVID-19 and its prevention was found to be high in most of the areas.

There has been an impressive participation of different stakeholders in dealing with COVID-19. Private sector, INGOs, NGOs, civil society including media and CBOs, all joined hands with the provincial and local government to deal with the pandemic. These stakeholders are not in the formal structure, however, they participated and contributed by helping the local government in dealing with the crisis. Local governments highly acknowledged the roles played by private and NGOs sector in the fight against pandemic and underscored the need for their support until crisis is fully contained.

Despite having proper policies in place at several levels, the policy implementation is far from satisfactory. Among others, one of the major challenges in that regard is a sheer underestimation of the gravity of the problem. Two major unanticipated issues were need for continuation of lockdown for long time and huge influx of migrant workers from India and other countries. At the initial phase, the policy guidelines and resources were mobilized for short-term, anticipating that lockdown will remain for a couple of weeks. Similarly, no one had thought about large number of returnees from India, which created massive problems in the later stage.

The quarantine facilities made during the initial period of lockdown were grossly inadequate to accommodate large number of returnees, especially from India. There were shortages of accommodation, basic amenities and health materials for quarantine. No effective monitoring was possible because of large number of returnees. In all provinces, isolation beds also lacked proper facilities including medical supplies, oxygen, ventilators as well as adequate number of medical staff. At the initial phase, federal government instructed the local governments to divert some of its budget earmarked for development to

COVID-19. However, this budget was grossly inadequate in many local governments and they sought help from non-government sector to deal with this deficiency.

Meanwhile, motivation to deal with the crisis was found to be quite low among health professionals. A number of health professionals interacted with in the course of this study expressed frustration over inadequacy of even the most basic protective equipment. Realizing the hardship and risks faced by the frontline health workers, government announced incentive packages for health professionals. However, the committed incentive packages have not yet been provided, further exasperating the level of frustration among health workers.

Owing to the absence of designated public health officers and specialist physicians, senior assistant health workers were found to be leading their health departments in a number of local units. Therefore, a lack of knowledge regarding standards and quality of medical equipment created complications in the procurement process. Many local governments reported difficulties in functioning because they lacked adequate employees and technical expertise to deal with the COVID-19 crisis.

There has been resentment among local government on the centralized mindset of the federal government. Elected representatives of the province and local level alleged that the federal government made policy decisions without considering their fiscal and technical capabilities, which made their implementation difficult. Elected local representatives were increasingly upset at the federal and provincial governments for shifting all of the responsibilities of establishing and operating quarantine facilities for migrants to the local level while failing to extend any assistance.

The current analysis based on available evidences presented in this study report shows uncertainty of future as COVID-19 cases are on constant rise in different parts of the country. Learning from the past, the government should prepare its strategy to deal with the pandemic in coming days. The recommendation section provides some guidelines in this regard.

Recommendations

Federal Government

- There is a need to localize the policy, shifting the authority from federal to provincial and local governments. Each province and local governments should be given free hand to devise their own

policy, resource mobilization plan and institutional structures. Federal government should facilitate, not dictate, the whole process, with a view to ensure effective actions against the pandemic.

- The federal government should demarcate the role of all three levels of the government so that duplication and uncertainty can be avoided. Since the province and local government have a poor resource base, federal government should also allocate resources to each provinces, based on the needs felt. €An evidence-based allocation of resources should be practiced, instead of hunch-driven ad hoc budget disbursement.
- The federal government should lead the procurement of major medical supplies for the provinces. Once the medical supplies are procured, it should be distributed on a need-basis. The federal government should also support province for emergency medical care.
- The federal government should approve and disburse funds for incentive packages for the health officials who are critical in dealing with COVID-19.
- Institutionalization of existing mechanisms to ensure an effective flow of information, and a proper database for evidence-based planning and decision making is a must.
- The federal government should take lead on maintaining law and order and border security as this is a critical component in dealing with the pandemic.

Provincial government

- The provincial government should take lead in providing policy guidance and support to the local governments. Since the provincial government may lack capacity to deal with policy issues, it should seek support from the federal government for technical guidance.
- The provincial government should prepare a long-term strategy to deal with disasters, including the pandemic, based on the learning from COVID-19 crisis. Strategy formulation process should be participatory including involvement of local governments, district administration officer, non-state actors and private sectors.
- The provincial government should establish revolving fund for managing future disasters including pandemics of similar scale. In this regard, the provincial authorities can seek support from the federal government, local government, development partners, private sectors and NGOs.
- It is critical to create a database and proper information management system at the provincial level, so that resource can be mobilized during the emergency in an evidence-based approach.

- The provincial government should invest on infrastructure capable of handling pandemics and disasters of similar scale in the future.

Local government

- The local government should formulate Disaster Management Plan in consultation with the provincial government. It would be better to align the local government's plans with the strategic plans of the province for the better coordination and implementation. The plan formulation process should be highly participatory, seeking active involvement of non state actors including private sector, development partners, NGOs, CBOs and citizens.
- The local government should establish a revolving fund for managing disaster and pandemic in the future. In addition to its own contribution, local government should seek financial support from other stakeholders for revolving fund. To ensure the trust of other stakeholders, the fund management committee should also comprise of the representatives from private sector and development partners.
- Prepare a database of the people, institutions and resources relevant for the disaster. This will be extremely useful during the pandemic as it facilitates evidence-driven planning and decision-making.
- Launch civic education on how to deal with the disaster including the pandemic. This initiative should not be limited during the pandemic. However, civic education on the matter should be a regular intervention of the local government for citizen empowerment. School children and teachers are best conveyors of the message for people awareness. Local government can take assistance from development partners in raising the awareness through development interventions.
- The local government is advised to scale-up and train a large number of volunteers who work collaboratively across public and private agencies.
- The local government should seek support from the provincial government to establish effective monitoring system at the local level during disaster.

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