2020

PROVINCIAL PROFILES

SUDURPASCHIM PROVINCE

Surveillance, Point of Entry and Rapid Response

Laboratory Capacity

Infection Prevention and Control & Clinical Management

Risk Communication and Community Engagement

Operations Support and Logistics

Partner Coordination

Government of Nepal
Ministry of Health and Population

World Health Organization
Nepal

Contents

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SURVEILLANCE, POINT OF ENTRY AND RAPID RESPONSE

SURVEILLANCE, POINT OF ENTRY AND RAPID RESPONSE

COVID-19: How things stand in Nepal's provinces and the epidemiological significance of the coronavirus disease

1.1 BACKGROUND

The provincial epidemiological profile is meant to provide a snapshot of the COVID-19 situation in Nepal. The major parameters in this profile narrative are depicted in accompanying graphics, which consist of panels of posters that highlight the case burden, trend, geographic distribution and person-related risk factors.

Information was supplemented by active CICT teams and call centres engaged in following up on cases and contacts. These data are uploaded or endorsed by the Province-level Health Emergency Operations Centre (PHEOC).

1.2 METHODOLOGY

The major data sets for the COVID-19 situation updates have been obtained from laboratories that conduct PCR tests. The information covers individuals who approached the laboratories for tests, those recommended through medical advice, and those referred by ward and municipality public health personnel as part of the Case Investigation and Contact Tracing (CICT) or active case search. Information was supplemented by active CICT teams and call centres engaged in following up on cases and contacts. These data are uploaded or endorsed by the Province-level Health Emergency Operations Centre (PHEOC).

1.3 FINDINGS

The cases and deaths attributed to COVID-19 in the different provinces have been captured by time, place and person characteristics. They are comprised of cases and their time trends; geographic location and spatial movement; affected age groups; and incidence/prevalence of the cases, both as aggregate reported numbers and population denominations. In addition, some insights over evolving patterns—such as changes in age at risk and proportion of females in total cases—were also captured, as were the trends of Test Positivity Rates and distribution of symptom production, as well as cases with comorbidity.

1.4 MAJOR OBSERVATIONS AND TRENDS

Nepal had very few cases of laboratory-confirmed COVID-19 till about the middle of April, which is when the Nepali New Year is celebrated. Over a period of four months—ending in the middle of July—cases increased, peaked and went down to make up the first wave of the pandemic. These cases consisted of expats returning home by air or through land crossings; during this time, PCR tests were undertaken at less than 20 laboratories across the country.

The middle of July witnessed the next wave. This time, cases were much higher than projected; the health care infrastructure was overwhelmed, with a huge burden being placed on the public health system. The total number of laboratories in the country had reached 70 by then, a large chunk of it in the private sector, mostly located in and around Kathmandu. There were more symptomatic cases in the second

wave. Hospital case load increased; distinctions between normal and designated COVID hospitals were removed, and there was major dependency on intensive care infrastructure and ventilator support.

1.5 SITUATION SUMMARY

The number of COVID-19 cases in Nepal by PCR positivity stood at 2,22,287 as of 23 November 2020. A total of 25421 cases, or 11.4 percent, came from Province 1; 19715 or 8.8 percent from Province 2; 121861 or 54.8 percent from Bagmati; 13306 or 5.9 percent from Gandaki; 24559 or

11 percent from Karnali, and 11427 or 5.1 percent from Sudurpaschim. The following pages have a detailed analysis of these cases.

1.6 WAY FORWARD

This epidemiological extract has been prepared to help understand the COVID-19 situation better and in a contextual manner for each of the provinces. It can be used by public health personnel and decision-makers as a ready reference to support public health and social measures at the municipality, district and provincial levels.

Map 1: PCR Positive Case and Deaths
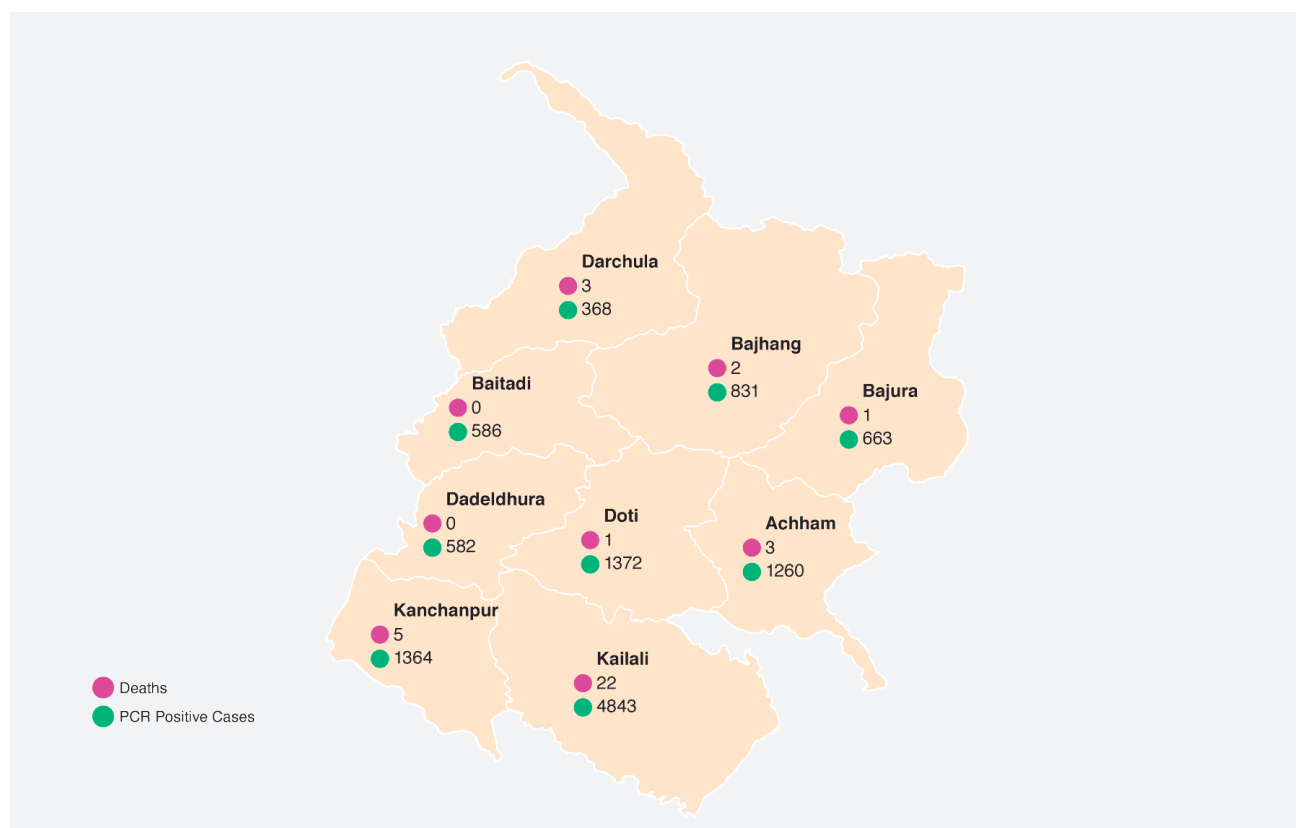
Figure 1: Changing Age-Sex pattern of cases – (April – November)
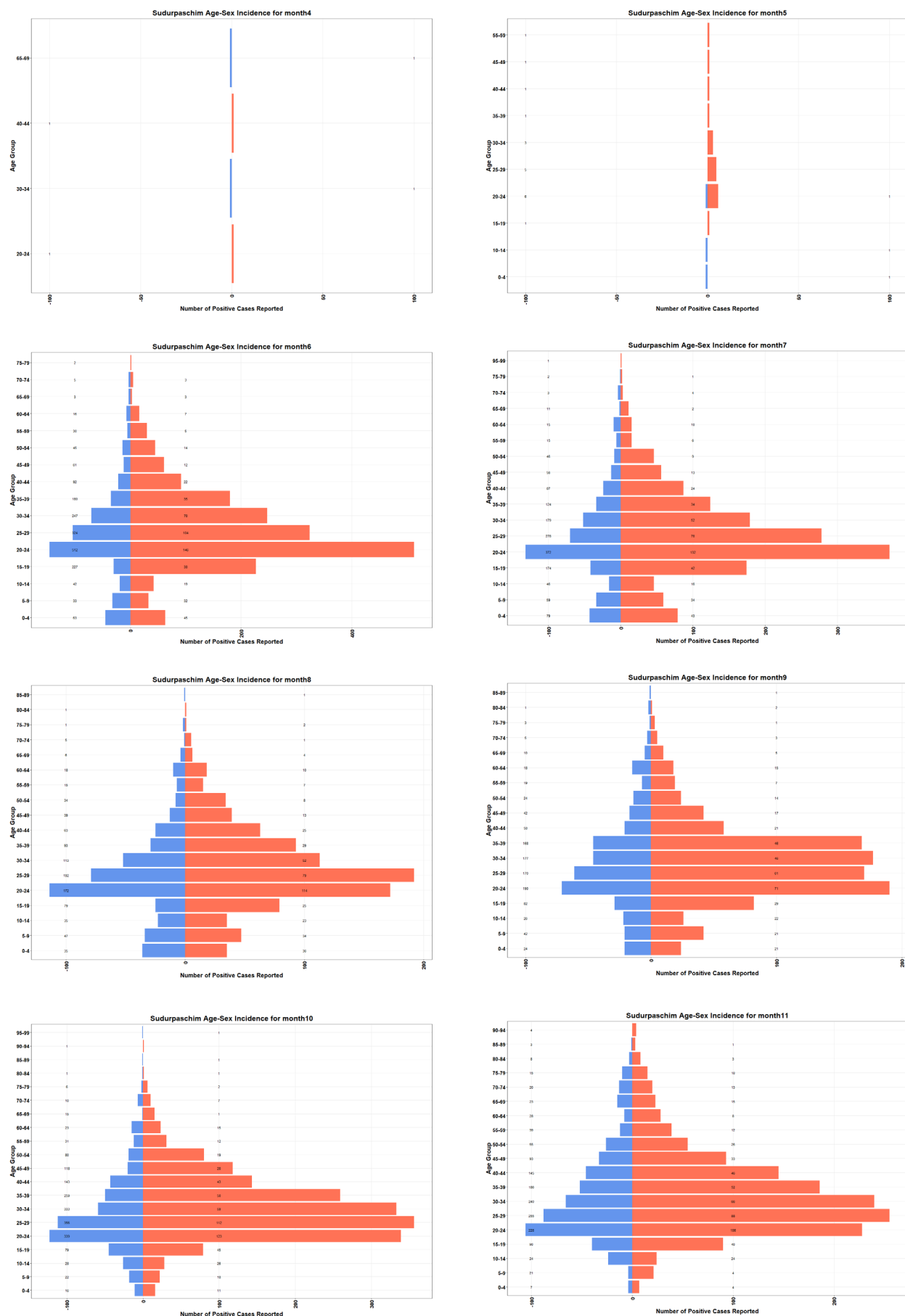
Map 2: Cumulative Case Incidence by Month – April 2020
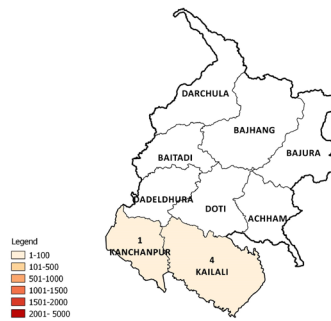
Map 3: Cumulative Case Incidence by Month – May 2020
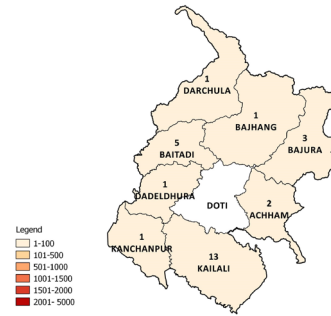
Map 4: Cumulative Case Incidence by Month – June 2020

Map 5: Cumulative Case Incidence by Month – July 2020

Map 6: Cumulative Case Incidence by Month – August 2020

Map 7: Cumulative Case Incidence by Month – September 2020
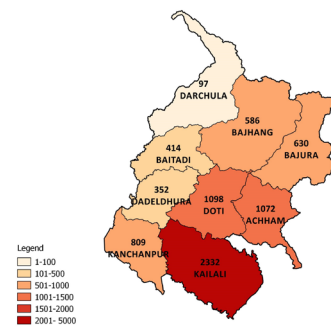
Map 8: Cumulative Case Incidence by Month – October 2020
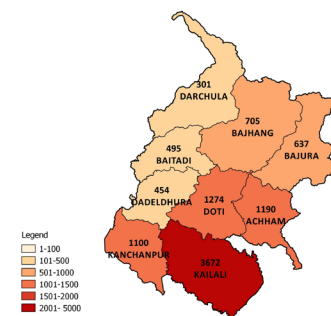
Map 9: Cumulative Case Incidence by Month – November 2020
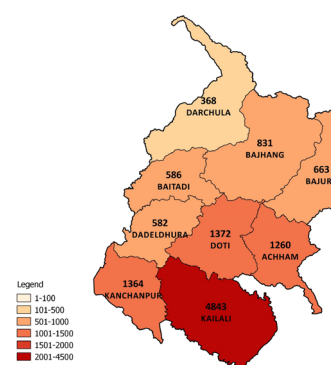
Figure 2: **Weekly Test Positivity Rate – (12 weeks)**
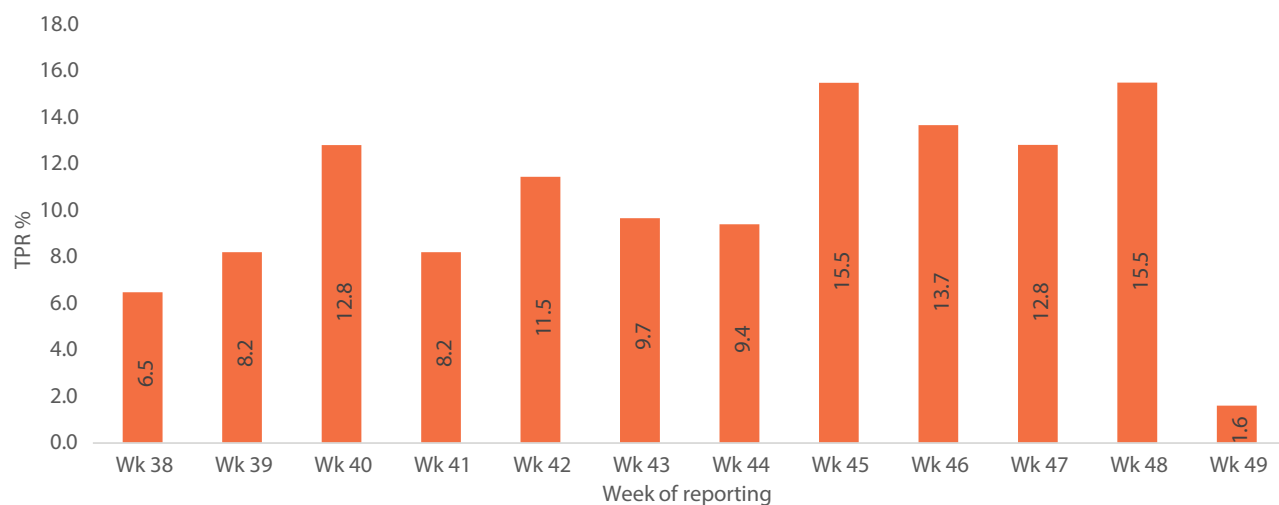
Figure 3: **District Deaths Weekly (12 weeks)**
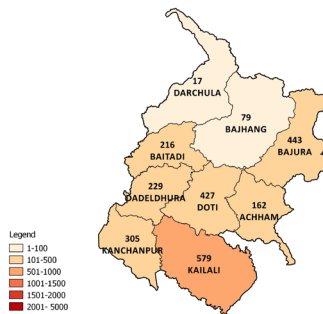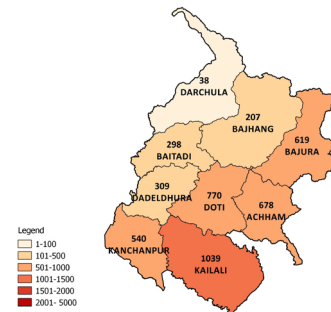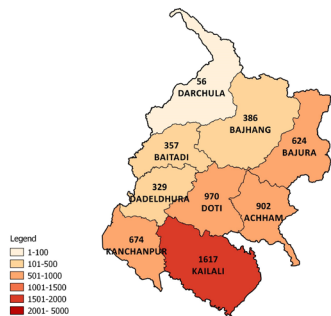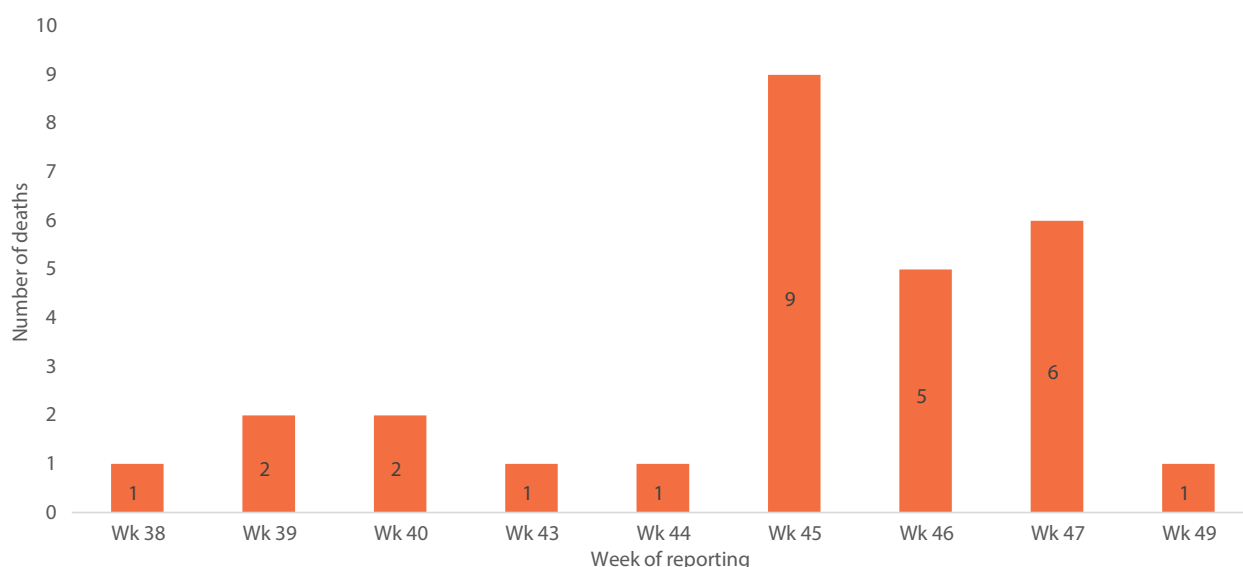

1.7 SUMMARY

In Sudurpaschim province, Covid-19 cases started being detected in March. By May, there were 27 cases detected and distributed across 8 out of 9 districts in the province. The number of cases jumped to 2457 in the next month of June affecting all 9 districts. The cases came down the following months with 1417 cases in August and rose in October with 2438 cases. The number of cases took a dip in November with 2041 cases. The total number of cases in the province is 11869.

- Sudurpaschim now has an incidence of 414 per lakh population and the range of district level incidence varied between the lows of 13 per lakh in Darchula to the highs of 48 per lakh in Doti and Kanchanpur and 169 per lakh in Kailali districts. There was an upswing in the monthly case incidence per lakh population in the province. The incidence of cases fell in all the districts in July more likely due to unavailability of tests. Since August, it had been

constantly rising in all the districts except for Bajhang. November witnessed a fall in incidence in most districts.

- The age-sex pattern of the case detected most of the cases June onwards and the age-sex pattern was overwhelmingly male and in the productive age group of 20 to 54 years. This began changing from the month of July itself and grew up to represent more female cases detected as well as representation of all major age groups in the pyramid. The cumulative age pattern gives a roughly 1:3 female to male ratio, little lower than other provinces.

- The province had 5 cases reported in the month of April. By June, when almost all the districts started reporting cases, the spread was through the length and breadth of the province. Most of the cases are concentrated in the districts of Kailali, Doti and Kanchanpur. Together these 3 districts accounted for 64% of all cases in the province. Kailali alone reported 41% of the cases with 4843 cases.

- Sudurpaschim province has it's districts distributed across all the ecological zones. There are 2 Terai districts of Kailali and Kanchanpur; 4 hill districts of Baitadi, Dadeldhura, Doti and Achham and 3 mountainous districts of Darchula, Bajhang and Bajura. The province has its international border connected to the Indian state of Uttarakhand in a long land border and major points of entry for goods and passengers. Kailali and Kanchanpur being the major thoroughfare and trade hub also attracted most of the case burden. Doti and Achham being closely road linked to Kailali had a sizeable case load. Darchula though on the India border attracted much lesser cases mainly because of it's civilian population being low.

- Sudurpaschim province has 6 laboratories located in the districts of Kailali, Dadeldhura, Doti, Acham, Baitadi and Bajhang. The last 3 being new additions. The test positivity rates calculated as overall rate of test positives by PCR from amongst the total samples tested were between a low of 6.5% in week 38 and a high of 15.5% in week 45 in the province. The test positivity rates and adjusted test positivity rates indicate that the efficiency of testing strategy had been consistent and predictive, but this consonance was lost in September to return to usual in October-November. This is probably an indicator of supply side challenges in providing laboratory consumables.

- The total number of deaths in the province is 37 with an overall case fatality of 0.3% and has huge differentials. Kailali had a fatality rate of 0.5% with 22 deaths of 4843 cases and Kanchanpur had 0.4% with 5 deaths of 1364 cases.

Table 1: WHO Transmission Classification

Category	Definition : Countries/territories/areas with
No (active) cases	No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system (where COVID-19 surveillance is not robust, a lack of identified cases should not be interpreted as an absence of transmission). This implies a near-zero risk of infection for the general population.
Imported / Sporadic cases	Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of locally acquired transmission. This implies minimal risk of infection for the general population.
Clusters of cases	Cases detected in the past 14 days are predominantly limited to well- defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
Community transmission – level 1 (CT1)	Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
Community transmission – level 2 (CT2)	Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub- groups. Moderate risk of infection for the general population.
Community transmission – level 3 (CT3)	High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
Community transmission – level 4 (CT4)	Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
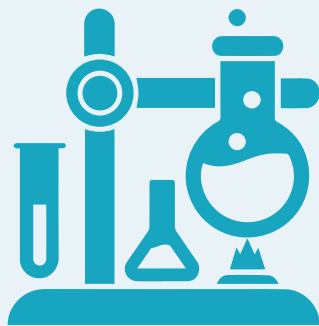
LABORATORY CAPACITY

2 LABORATORY CAPACITY

2.1 INTRODUCTION

Here is a detailed description of the laboratory facilities established in the province in response to the COVID-19 pandemic. It is a compilation of the current testing capacity, facilities, equipment, consumables used, manpower, training, laboratory biosafety and bio-security, quality assurance and data management. It also provides salient observations and recommendations for the quality improvement and sustenance of the services.

The data was collected from the laboratories using standardized data collection tool followed by telephonic data collection and review of reports of onsite laboratory visit by experts.

Laboratory services for COVID-19 were established in Sudurpaschim Province on 11 April 2020. As of 4th Nov 2020, a total of 90,794 samples were tested across 6 different laboratories in Sudurpaschim Province.

2.2 COVID-19 LABORATORIES

A total of six laboratories were established by either repurposing existing laboratories or building new facilities in makeshift facilities. All these laboratories are run under government sector as given below.

Table 2: Name, location and contact details of the COVID19 laboratories in Sudurpaschim Province

S.No.	Name of Laboratory	Address	Govt / Private
1	Baitadi Hospital Laboratory	Baitadi	Govt
2	Bajhang Hospital Laboratory	Bajhang	Govt
3	Dadeldhura Hospital Laboratory	Dadeldhura	Govt
4	Doti Hospital	Doti	Govt
5	Kamalbazar Municipality PCR Lab	Achham	Govt
6	Seti Provincial Hospital / Avian Disease Investigation Laboratory	Dhangadi	Govt

2.3 TESTING CAPACITY OF THE LABORATORIES

Table 3: Testing capacity of in COVID-19 laboratories in Sudurpaschim Province

Name of Laboratory	Date of establishment (DD/MM/YYYY)	Estimated Testing Capacity/day	Maximum PCR tests/run
Baitadi Hospital Laboratory	16/09/2020 (31/05/2077)	250	96
Bajhang Hospital Laboratory	17/09/2020 (01/06/2077)	300	96
Dadeldhura Hospital Laboratory	04/07/2020 (20/03/2077)	500	96
Doti Hospital	18/08/2020 (02/05/2077)	250	96
Kamalbazar Municipality PCR Lab	04/10/2020 (18/06/2077)	250	96
Seti Provincial Hospital	11/04/2020 (29/12/2076)	500	96

Map 10: Geographic Distribution of the COVID-19 Laboratories in Sudurpaschim Province

2.4 EQUIPMENT AVAILABILITY

Table 4: Distribution of Equipment available in COVID-19 laboratories in Sudurpaschim Province

Name of Laboratory	PCR Machine		RNA automated extraction machine		Biosafety Cabinet		Freezer (Qty)	
	Brand (Capacity)	Qty	Brand (capacity)	Qty	Brand	Qty	-80°C	-20°C
Baitadi Hospital Laboratory	DLAB Accurate (96)	1	Biotech	1	BSL level II A-2 (Brand not specified)	1	1	2
Bajhang Hospital Laboratory	DLAB Accurate (96)	1	Biotech	1	BSL level II A-2 (Brand not specified)	1	1	2
Dadeldhura Hospital Laboratory	DLAB Accurate (96)	1	Zhongke Biomed	1	ESCO	2	1	3
Doti Hospital	DLAB Accurate (96)	1	Biotech	1	Airtech	1	1	3
Kamalbazar Municipality PCR lab	DLAB Accurate (96)	1	Biotech	1	BSL level II A-2 (Brand not specified)	1	1	2
Seti Provincial Hospital	DLAB Accurate (96)	1	Biotech	1	Biobase /Airtech	2/1	1	3

Figure 4: Types of PCR Machines and Automated RNA Extraction Machines in COVID-19 laboratories in Sudurpaschim Province
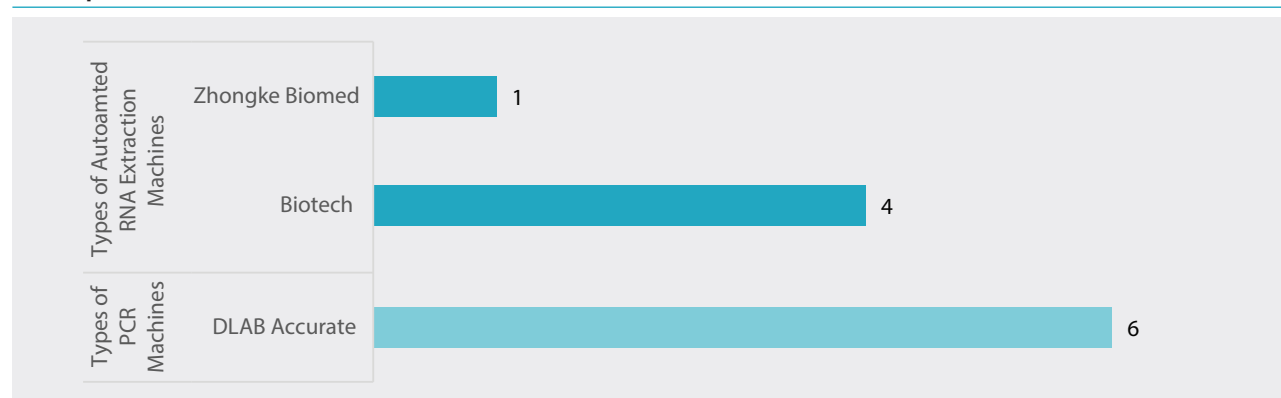
Figure 5: Types of Biosafety Cabinet in COVID-19 laboratories in Sudurpaschim Province
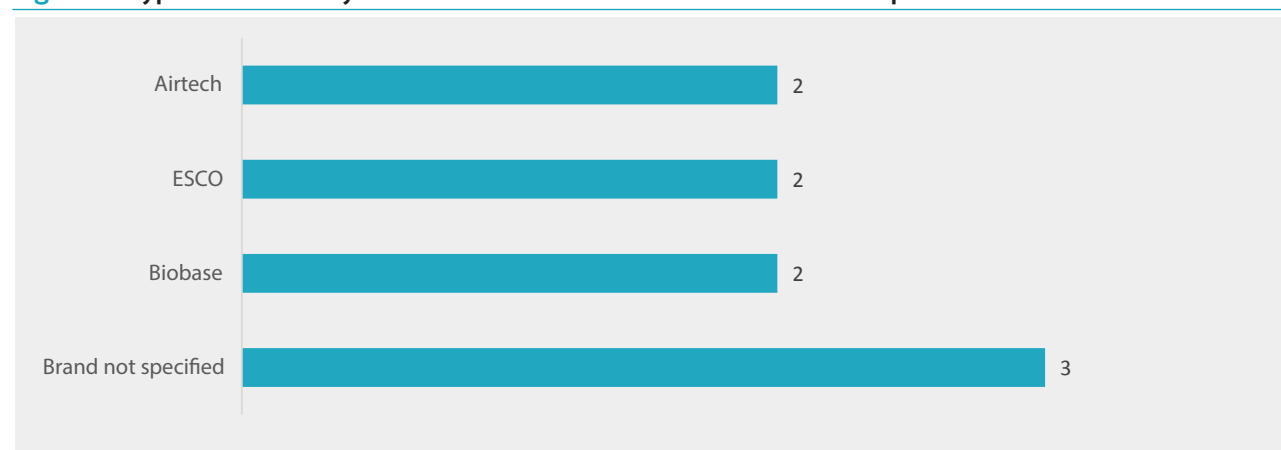
Table 5: Types and Capacity of Autoclave Machines in COVID-19 laboratories in Sudurpaschim Province

Name of Laboratory	Number of Autoclave machine	Capacity (litres)	Company (Brand)
Baitadi Hospital Laboratory	2	1=200 l 2=200 l	Brand not specified
Bajhang Hospital Laboratory	1	>100 l	APS Lab Instruments
Dadeldhura Hospital Laboratory	1	200 l	Equitron
Doti Hospital	2	1= 20 l 2= 400 l	Both Brand not specified
Kamalbazar Municipality PCR lab	2	Both <100 l	Both Brand not specified
Seti Provincial Hospital	2	Both <100 l	1=Dynamic 2=Local brand (Brand Not Specified)

Figure 6: Types and Capacity of Autoclave Machines in COVID-19 laboratories in Sudurpaschim Province
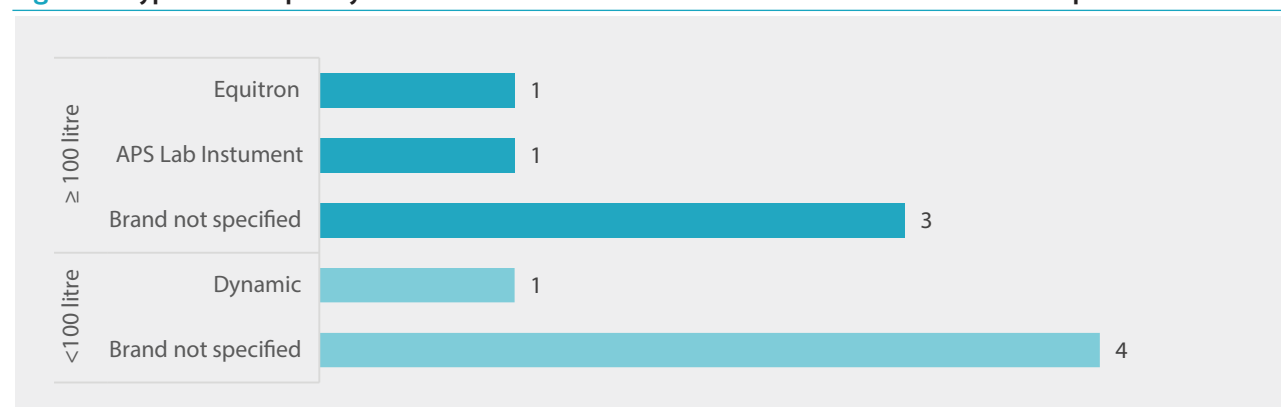
2.5 CONSUMABLES/ LABORATORY REAGENTS

Table 6: Brands of Viral Transport Media (VTM), PCR Test Kits and RNA extraction kits used in COVID-19 laboratories Sudurpaschim Province

Name of Laboratory	VTM in use	PCR test kits	RNA Extraction kits
Baitadi Hospital Laboratory	Jun Nuo Noble Biosciences	GB	Biotech
Bajhang Hospital Laboratory	Jun Nuo /Noble Biosciences	GB	Biotech
Dadeldhura Hospital Laboratory	Jun Nuo /Noble Biosciences	SD Biosensor	Nanjing
Doti Hospital	Jun Nuo /Noble Biosciences	Unimedica/ GB	Biotech
Kamalbazar Municipality PCR Lab	Jun Nuo /Noble Biosciences	GB	Biotech
Seti Provincial Hospital	Jun Nuo /Noble Biosciences	XABT / SD Biosensor	Nanjing

Figure 7: Types of VTM used in COVID-19 laboratories in Sudurpaschim Province

Noble Biosciences	6
Jun Nuo	6
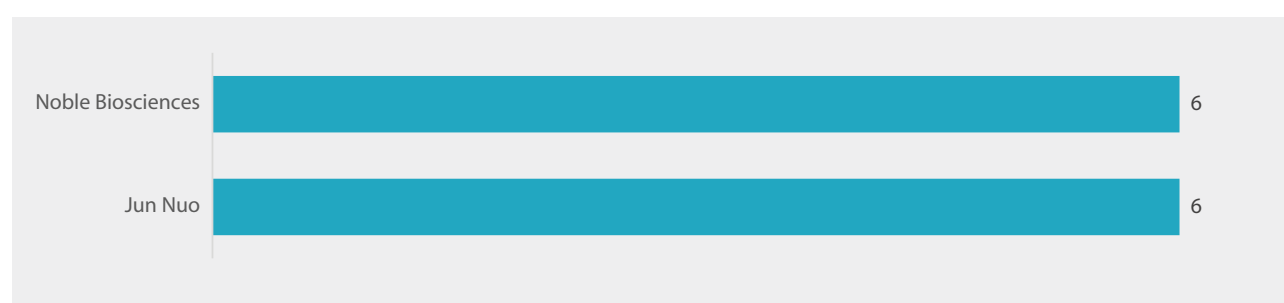
Figure 8: Types of PCR Test Kits used in COVID-19 laboratories in Sudurpaschim Province

XABT	1
Unimedica	1
SD Biosensor	2
GB	4
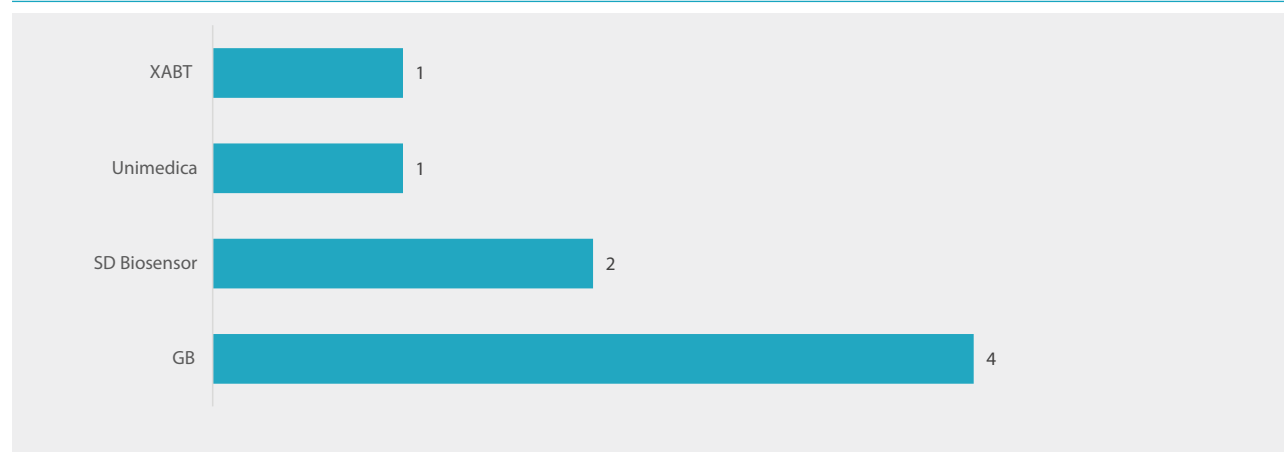
Figure 9: Types of RNA Extraction Kits used in COVID-19 laboratories in Sudurpaschim Province

Nanjing	2
Biotech	4
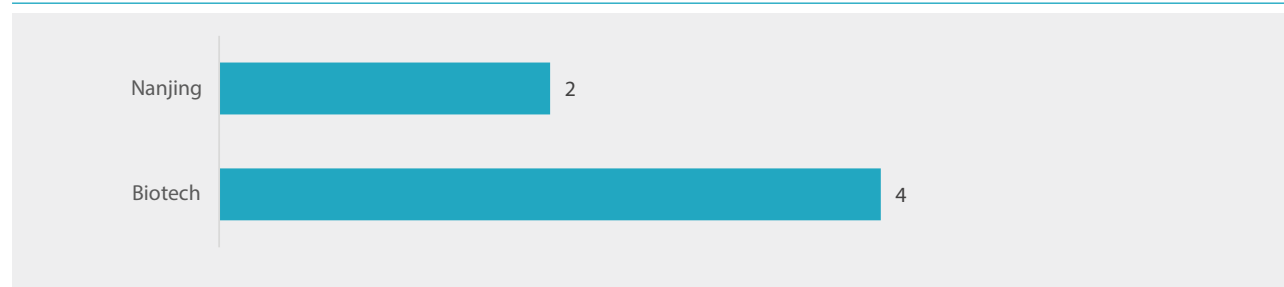
2.6 HUMAN RESOURCES

Table 7: Distribution of Human Resources in COVID-19 laboratories in Sudurpaschim Province

Name of laboratory	Number of scientific staff with higher degrees (MSc/MD/PhD)	Number of technical staff (bachelors and technicians)	Number of supporting staff	Number of data entry person	Number of bio-safety Officer
Baitadi Hospital Laboratory	-	5	1	-	-
Bajhang Hospital Laboratory	-	5	1	-	-
Dadeldhura Hospital Laboratory	-	4	2	1	-
Doti Hospital	1	3	1	-	-
Kamalbazar Municipality PCR lab	-	4	1	1	-
Seti Provincial Hospital	2	8	2	-	-

Figure 10: Distribution of Human Resources in COVID-19 laboratories in Sudurpaschim Province
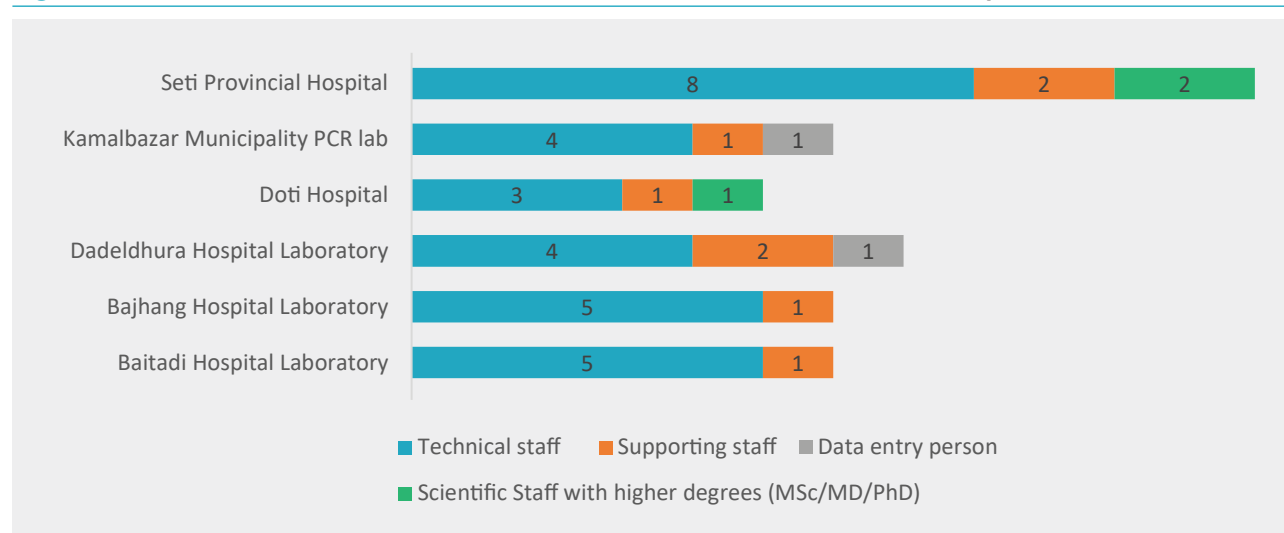
2.7 LABORATORY QUALITY INDICATORS

Table 8: Laboratory Quality Indicators of COVID-19 laboratories in Sudurpaschim Province

Name of Laboratories	Result of EQAS (Retesting done at NPHL and Proficiency Testing in %)				PT Panel
	Asadh (June-July)	Shrawan (July-Aug)	Bhadra (Aug-Sept)	Asoj (Sept-Oct)	
Baitadi Hospital Laboratory	NE	NE	NE	NE	NE
Bajhang Hospital Laboratory	NE	NE	NE	NE	NE
Kamalbazar Municipality PCR lab	NE	NE	NE	NE	NE
Dadeldhura Hospital Laboratory	NE	100	NP	NP	<90
Doti Hospital	NE	NE	VC	NP	<90
Seti Provincial Hospital	100	NP	100	NP	100

NE: Not Established, NP: Not Participated, VC: Validation Completed

Figure 11: Performance of SARS-CoV-2 real time RT-PCR Proficiency test panel in functional laboratories in Sudurpaschim Province

33%

67%

■ 100% Concordance   ■ Below 90%
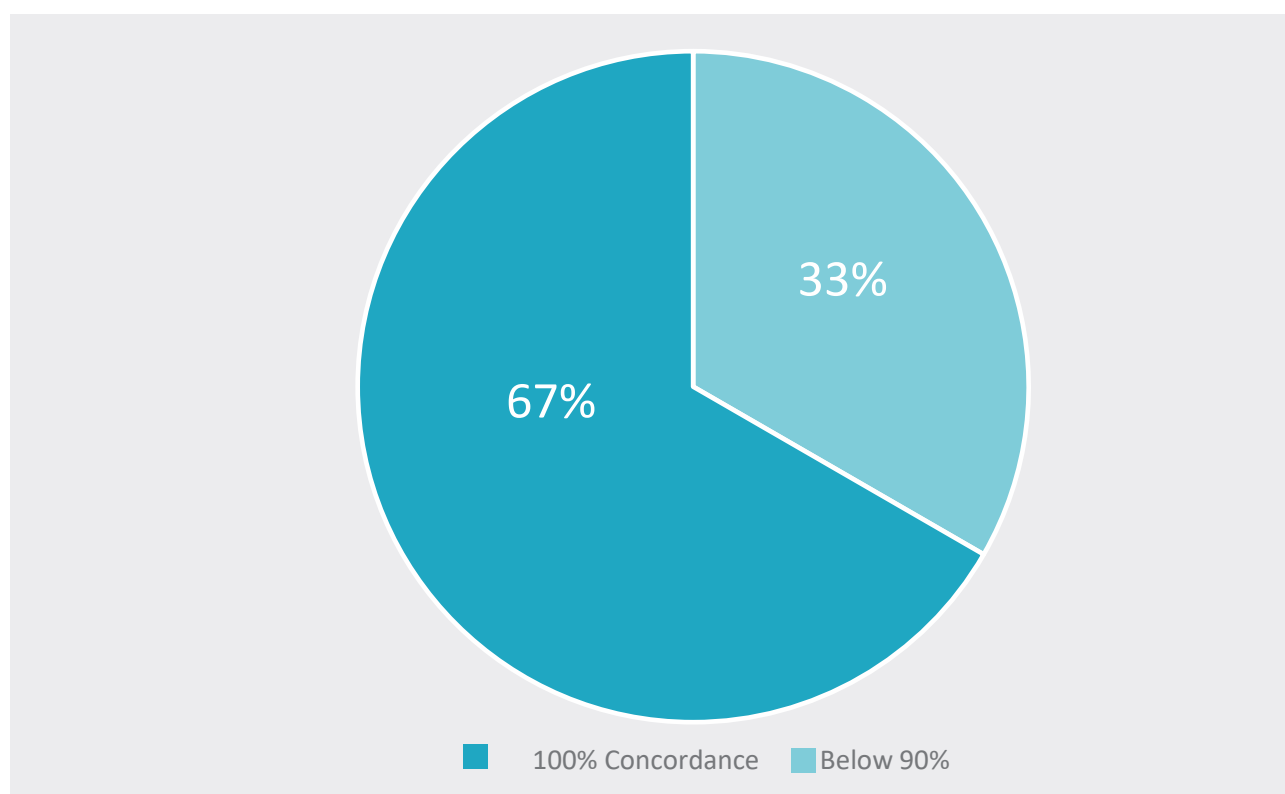
2.8 LABORATORY BIOSAFETY AND BIOSECURITY PRACTICES

Biosafety

All laboratories are following basic laboratory biosafety practices including using PPE and processing all clinical samples in a biosafety cabinet. However, there is no biosafety manual available. Though many laboratories have designated biosafety officers, adequate training and supervision is absent in almost all laboratories. Mostly biosafety training is limited to donning and doffing of PPE. The laboratory staff are not trained in the appropriate and safe use of biosafety cabinets. None of the biosafety cabinets are certified or have any plan in place for their annual maintenance. As most of the samples are collected in virus inactivating virus transport medium (VTM) the risk is reduced and low while handling these samples. However, a variety of VTMs are in use. There is a need to ensure the laboratories and field personal only use VTM which inactivates the virus.

Biosecurity

Though few laboratories have access control and surveillance camera in place, there is no regular supervision. There is no biosecurity manual or policy available in these laboratories. Most of the laboratories are storing positive samples as far as their storage space allows. The freezers are not secured with lock and key. As most of the samples are collected in virus inactivating virus transport medium (VTM) the risk of handling live virus is reduced.

2.9 LABORATORY INFORMATION MANAGEMENT

Table 9: Distribution of Information Management of COVID-19 laboratories in Sudurpaschim Province

Name of Laboratory	Availability of computer for data entry (Number)	Type of Database
Baitadi Hospital Laboratory	Yes	Information Management Unit (IMU) MS-Excel
Bajhang Hospital Laboratory	Yes	MS-Excel
Kamalbazar Municipality PCR lab	Yes	MS-Excel
Dadeldhura Hospital	2	MS-Excel
Doti Hospital	1	MS-Excel, Dolphin
Seti Provincial Hospital	2	MS-Excel

Figure 12: Types of Database Software used in COVID-19 laboratories in Sudurpaschim Province
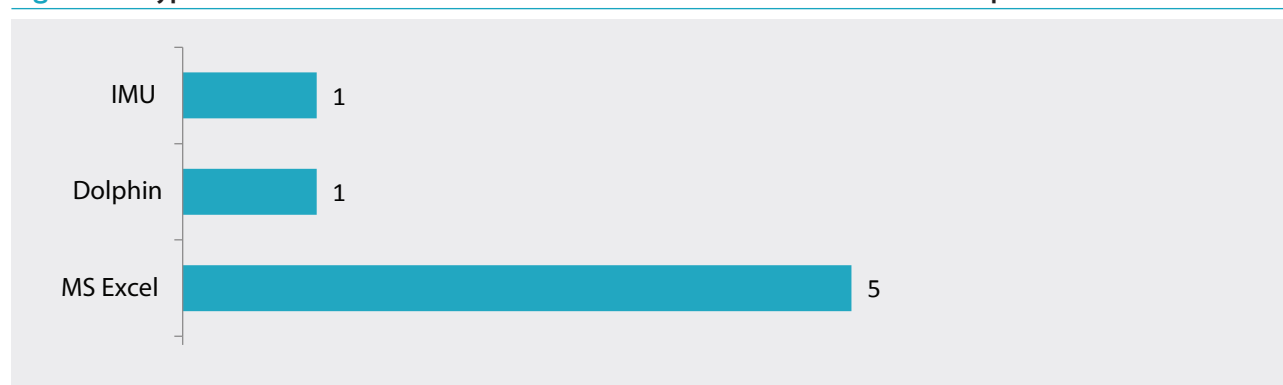
COVID-19 data is shared daily from all laboratories with HEOC, EDCD, NPHL, respective municipalities and MoSD.

2.10 OBSERVATIONS

- Laboratories are disproportionately distributed and mostly clustered in one area / district resulting in inequity of access to testing across districts
- Facilities are well designed for molecular diagnostics of COVID-19
- Local leadership and ownership are there but it is limited to COVID-19 response only
- No clear plan for sustaining the laboratory and extending the services for other infectious diseases
- Equipment and consumables are procured by local government or supplied by central government.
- A variety of equipment and reagents used in the province. Equipment calibration and maintenance plan is missing in almost all laboratories.
- While all laboratories have at least one trained / partially trained staff, majority of the staff did not possess any experience in molecular diagnostics which includes the supervisors.
- There is commendable commitment of laboratory staff. They are doing extra hours of work to reduce turnaround time.

- There is very poor documentation. Though they follow manufacturers instruction for RNA extraction and real time SARS-CoV-2 PCR, no SOPs available for any laboratory process despite access to national laboratory guidelines from NPHL with templates. They cite the lack of manpower for poor documentation.

- Laboratory information management system is not adequate. Many laboratories enter data to generate a test report and enter data into the NPHL management information system. However, there are often delays in data entry and report generation and this adversely affects the turnaround time. In addition, they also provide cumulative data and data on positive cases to MoHP (EDCD and HEOC respectively).

- Many laboratories find it difficult to interpret borderline results. As the current national guidelines allow reporting a result as positive or negative only. Therefore, borderline results are interpreted subjectively and often reported as positive. This has resulted in false positive reports.

- Most of the laboratories have inadequate biomedical management system. There is no sufficiently sized autoclave to match the workload for decontaminating the biomedical waste. It appears biomedical waste is burned with or without adequately autoclaving. Most of the laboratories lack documentation on biomedical waste management.

- Frequent change of PCR reagents and compatibility of reagents with PCR machine is a concern for laboratory quality.

- It appears most of these laboratories / facilities will discontinue if COVID-19 testing reduces or the pandemic is over.

2.11 RECOMMENDATIONS

- NPHL should revise the national laboratory guidelines to allow reporting of borderline results as indeterminate or inconclusive rather than leaving it to subjective interpretation of individual laboratories.

- There is a need for hands on training. Though WHO is supporting NPHL for online weekly training of COVID-19 laboratories, the attendance is poor. The staff of hub laboratories could be trained at NPHL to provide hands on training to other laboratories.

- There is a need to encourage laboratory networking by creating a structure of hub and spoke model with NPHL as apex laboratory and Provincial Public Health laboratory / Medical college or another well-functioning laboratory in the province as hub laboratory. Pairing of Provincial public health laboratories with medical colleges will be useful.

- It is advised to convert- at least one laboratory per province and selected medical college laboratories into Influenza – SARS-CoV-2 sentinel surveillance laboratories. The new WHO multiplex Influenza- SARS-CoV-2 kits may be useful. Inclusion of Medical colleges may improve SARI surveillance.

- There is a need to issue clear guidelines for biomedical waste management in the laboratories.

The laboratories may require support in terms of load appropriate autoclaves. Other partner agencies may be approached for this support.

- Selected laboratories - need to be supported for equipment maintenance and calibration to ensure quality. In country training may be organised to create a cadre of biomedical engineers / laboratory technologists for calibration of equipment. Alternatively, one or more agencies may be contracted to provide support

- As a long-term strategy these selected laboratories may be supported for providing laboratory surveillance and diagnostic services for common epidemic prone , endemic diseases such as Dengue, Leptospirosis and Scrub Typhus and, AMR surveillance.

INFECTION PREVENTION AND CONTROL AND CLINICAL MANAGEMENT

3

INFECTION PREVENTION AND CONTROL AND CLINICAL MANAGEMENT

3.1 BACKGROUND

Sudurpashchim Province is one of the seven provinces established by the new constitution of Nepal which was adopted on 20 September 2015. It borders the Tibet Autonomous Region of China to the north, Karnali Pradesh and Lumbini Pradesh to the east, and the Indian states of Uttarakhand to the west and Uttar Pradesh to the south.

Sudurpaschim province is divided into 9 districts, which is further divided into one sub-metropolitan city, 33 municipalities and 54 rural municipalities.

3.2 HEALTH BACKGROUND

According to the National Demographic Health Survey (NDHS) 2016, the Province's Neonatal Mortality Rate (per 1000 births) stands at 41 and Infant Mortality Rate (per 1000 births) stands at 58, both of which are higher than the national average 21 and 32, respectively.

3.3 HEALTH FACILITIES BY TYPE

According to the Annual report of the Department of Health Services (DoHS) 2018/19, Sudurpaschim Province has 13 public hospitals, 16 Primary Health Care Centres (PHCCs), 377 Health posts and 49 Non- public facilities.

Map 11: Health facilities by type
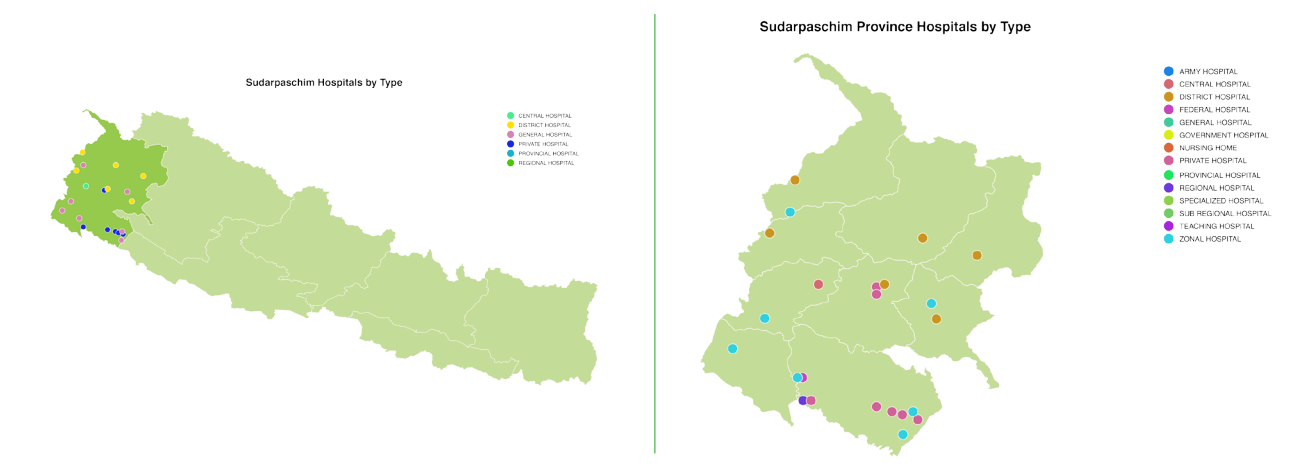
3.4 FINDINGS OF A RAPID ASSESSMENT(RA) FOR COVID-19 READINESS 2020

In April 2020 the Curative Services Division (CSD) of the Ministry of Health and Population (MoHP) led a multi sectoral team to design and develop a rapid assessment tool to assess what was then designated 12 COVID-19 Level II Hospitals. In Sudurpaschim Province, Seti hospital was designated and took part in rapid assessment.

Map 12: Level 2 Hospital in Nepal
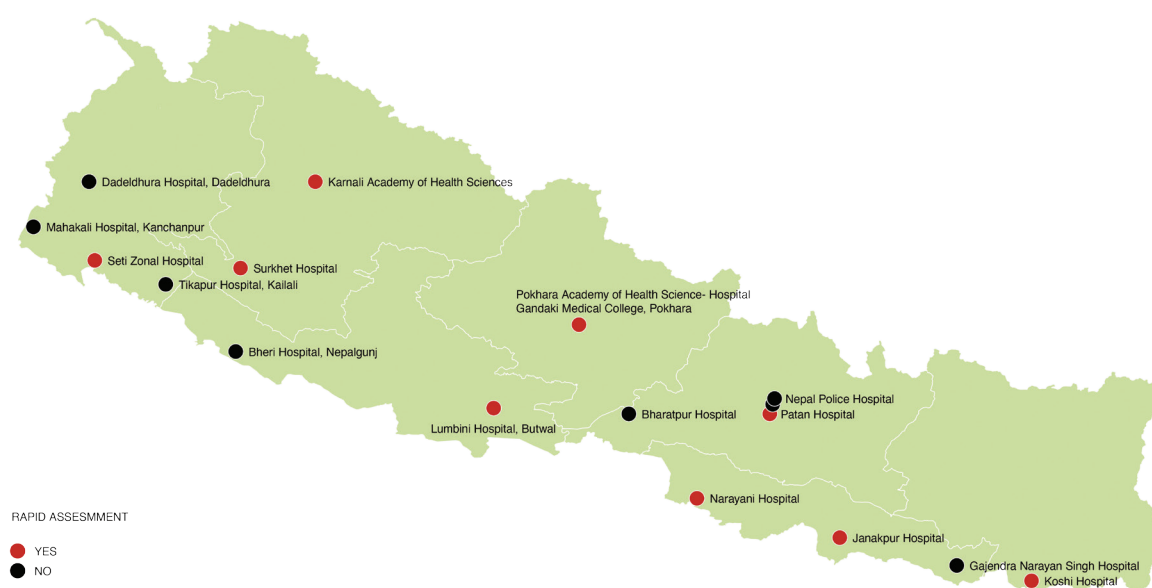
The key findings of the rapid assessment as recorded during self-assessment of Seti hospital includes the following:

Table 10: Key Findings from RA- Seti Hospital

ICU beds Adult	ICU beds children	Functioning ventilators	Oxygen Supply	COVID-19 designated Nurses	COVID-19 designated MD	IPC Focal Person	IPC program / activities	IPC dedicated budget
10	8	1	Cylinder	31	4	Yes	Yes	No

Key Guidance documents in place	Training on COVID-19	Autoclave of alternative treatment technology present	Specific plan in place for patients or family members to mitigate COVID-19 infection
Yes, 11/16 present	No	Yes	No

3.5 CURRENT STATUS OF COVID-19 AND NON-COVID-19 HEALTH SERVICE PROVISION

The table below shows the government health facilities and medical colleges in Sudurpaschim Province providing various health services in context of COVID-19.

Table 11: **Health services provided by various government hospitals and medical colleges**

Name of Facility	District	Non COVID-19 services		
		Outpatient	MNCH	Surgery
Seti Provincial Hospital	Kailali	✔	✔	✔
Mahakali Hospital	Kanchanpur	✔	✔	✔
Tikapur Hospital	Kailali	✔	✔	✔
Bajhang Hospital	Bajhang	✔	✔	✔
Bayalpata Hospital	Acham	✔	✔	✔
Darchula Hospital	Darchula	✔	✔	✔
Bajura Hospital	Bajura	✔	✔	✔
Baitadi Hospital	Baitadi	✔	✔	✔
Acham Hospital	Acham	✔	✔	✔ (only cesarean section)
Doti Hospital	Doti	✔	✔	✔
Dadeldhura Hospital	Dadeldhura	✔	✔	✔

Table 12: **COVID -19 Designated Hospitals – HUB Hospital Details**

S No.	Hub Hospitals	COVID-19 Designated Hospitals (Yes/No)	Formation of EMDT
1	Mahakali Hospital	No	No
2	Seti Provincial Hospital	Yes	Yes
3	Provincial Hospital Sudurpaschim	Yes	Yes

3.6 CURRENT STATUS OF BED CAPACITY AND ESSENTIAL HUMAN RESOURCES FOR HEALTH (HRH)

Table 13: **Bed capacity and Human Resources in Seti Hospital**

S.N.	Categories	COVID-19 Designated	Non-COVID-19 Designated	Total
Bed capacity				
1.	Bed capacity IPD	50	240	290
2.	Bed capacity HDU		2	2
3.	Bed capacity ICU	5	10	15
Human Resources				
4.	Total number of MD (Consultants)		17	17
5.	Number of anesthesiologists/intensivists		1	1
6.	Total nurses		104	104
7.	Total nurses trained in Critical Care		12	12

Table 14: Establishment of Emergency Medical Deployment Team (EMDT) for COVID-19 Response

EMDT Establishment		
Hospital Name	**Number of Team members**	**Team Composition**
Mahakali Hospital	-	-
Seti Provincial Hospital	11	▪ 1 Consultant ▪ 1 Medical Officer ▪ 6 staff Nurse ▪ 3 Attendants
Provincial hospital Sudurpaschim	-	

Training of healthcare workers and support staff

▪ No Critical care training has been conducted in Sudurpaschim province

Table 15: Clinical Management COVID-19

Current number of COVID-19 cases in Sudur Paschim Province						
Province 7 Sudur paschim: COVID -19 Cases (Source: MoHP 30 November 2020)						
Date	**Active**	**ICU**	**Recovered**	**Death**	**Total cases**	**Recovered & Death**	**CFR**
30 Nov 2020	638	5	11191	38	11867	11229	0.32

The following information is for the then level II hospital, Seti Hospital:

Table 16: Treatment Modalities available

Remdesivir	**Hydrocortisone**	**Convalescent Plasma**	**Clinical trials**	**Secondary infections**	**Others**
Yes	Yes	Yes	-	-	-

3.7 DISABILITY INCLUSION, REHAB & POST COVID-19 CARE

Table 17: Availability of services for disability inclusion

Accessible facilities (low level beds, transfer board, wheelchair accessible toilet with commode, drinking water within reach, etc.)	Some present
Assistive devices available and functional (wheelchair, crutches, etc.)	Yes
Nurses and paramedics trained in basic disabilities inclusion and rehabilitation	Yes
Facility linked to tele/virtual help-desk for disabled people and virtual expert pool – Rehab nurse, physiotherapist, psychologist, speech therapist	?

3.8 CAPACITY TO PROVIDE OXYGEN IN SUDUR PASCHIM

Information gathered from 11 hospitals

▪ Seti Provincial Hospital
▪ Mahakali Hospital
▪ Achham Hospital
▪ Bajura Hospital
▪ Darchula Hospital
▪ Bayalpata
▪ Dadeldhura Hospital
▪ Tikapur Hospital
▪ Bajhang Hospital
▪ Baitadi Hospital
▪ Doti Hospital

Table 18: Capacity to provide oxygen by bed

Type of beds across 11 Hospitals	Number of beds
Total COVID-19 designated beds	224
COVID-19 beds capable of delivering low flow O2 (5L/min)	Unknown
COVID-19 beds capable of delivering high flow O2 not on ICU or HDU (10L/min)	Unknown
No. of HDU beds (10L/min)	7
No. of ICU beds for Covid-19 (10L/min)	5
No. of ventilators for COVID-19 patients	19

Table 19: Oxygen Availability

Oxygen supply	Number
Oxygen Plant	2
Oxygen plant under construction	0
Oxygen plant output expressed as number of cylinders per day	unknown
Number of oxygen cylinders available	213
Number of oxygen concentrators	55
Minimum number of large cylinders available* (plant output added to cylinders available)	>213
Number of hospitals with piped oxygen at least for some beds	1

*at least 213 cylinders as no plant gave output figures

OXYGEN SUPPLY AND DEMAND

- Demand based on ICU/HDU capacity plus total COVID-19 designated beds delivering 1.5 cylinders on average (some by concentrator- broken down at hospital level availability).
- Each ICU/HDU bed delivers oxygen at 10L/min which is equivalent to 2.2 cylinders per day.

Oxygen supply and demand	Number of cylinders
Total oxygen requirement per day	280 cylinders
Number of cylinders available	213 cylinders
Gap (-)/Excess (+)	-67 cylinders

RISK COMMUNICATION AND COMMUNITY ENGAGEMENT

4

4 RISK COMMUNICATION AND COMMUNITY ENGAGEMENT

4.1 DEMOGRAPHIC INFORMATION OF SUDURPASCHIM PROVINCE[1]

4.1.1. Ratio
In Sudurpaschim Province, the ratio of women is more than that of men. There are 52% women and 48% men.

4.1.2. Religion
Religion encompasses three major groups and beliefs in Sudurpaschim Province. Its major religion is Hinduism, which accounts for 97%, followed by Christianity (1%), Buddhism (1%) and other relegions (1%).

> Religion encompasses three major groups and beliefs in Sudurpaschim Province. Its major religion is Hinduism, which accounts for 97%, followed by Christianity (1%), Buddhism (1%) and others (1%).

4.1.3. Caste
Chhetri is the largest caste in Sudurpaschim Province having 41% of the total population followed by Tharu (17%), Brahman-Hill (13%), Thakuri (4%), Dalit (17%), Magar (2%), and others (6%).

4.1.4. Language Spoken
30% of the population speak the Doteli language and another 30% speak the Nepali language making them the main spoken languages in Sudurpaschim Province. They are followed by Tharu (17%), Baitadeli (11%), Achhami (6%), Bajhangi (3%), Magar (1%) and others (2%).

4.1.5. Literacy Rate
The literacy rate in Sudurpaschim Province is 63% which means that 37% of the population are unable to read or write.

4.1.6. Education Level[2]
There are different education levels in Sudurpaschim Province. They are: Primary Level (45%), Lower Secondary Level (21%), Secondary Level (11%), SLC (7%), Intermediate Level (5%), Beginner (6%), Non-formal (4%) and Graduate (1%).

4.2 INFILTRATION OF MASS MEDIA COMMUNICATION

4.2.1. Community Radio
There are a total of 34 community radio stations in Sudurpaschim Province. Some of the radio stations are Bajura FM, Saugat FM and Radio Achham. Full detailed information of these radio stations are mentioned in Annex 1.

4.2.2. Source of communication (Access to Radio, TV, Internet and telephone)
In Sudurpaschim Province, 48.3% have access to radio and followed by 20.1% have access to TV and only 0.7% have access to internet. Similarly, 4.0% have access to landline telephone while 49.3% have access to mobile phone.

4.2.3. Popular Newspaper Channels
There are a total of 46 newspaper channels in Sudurpaschim Province with provicial and local outreach. As per the classification, some of the top ranking newspapers are Guguldi Mashik, Anumodhan Dainik and Pachim Today Dainik. Full details of the newspapers available in Sudurpaschim Province are mentioned in Annex 2.

4.2.4. Cell Phone Providers

There are two major cell phone providers in Sudurpaschim Province. They are Nepal Doorsanchar Company Limited (NTC) and Ncell Axiata Limited (NCELL).

4.3 PROVINCIAL LEVEL SPOKESPERSON

- Name of spokesperson: Dr. Guna Raj Awasthi
- Designation: Health Directorate
- Contact number:
- Email ID: guna.awasthi@gmail.com
- Language spoken: Nepali and English

4.4 SPOKESPERSON FOR COVID-19 DESIGNATED HOSPITALS

There are a total of 13 hospitals in Sudurpaschim Province. All these hospitals are COVID-19 designated hospitals. For each hospital there are different focal/spokespersons. A list with detailed information about COVID-19 designated hospitals are mentioned in Annex 3.

4.5 COMMUNITY ENGAGEMENT

4.5.1. Provincial or District Call Centre

The COVID-19 Emergency Operation Centre's number is 1148. It is for Hello CM and is related to rescue regarding COVID-19. This service was initiated by the office of CM with the team from Security personnel (Nepal Police, Nepal Army) and member from the Health wing (MOSD).

4.5.2. Social Service Operation Organization

Among many social service operation organizations operating in Sudurpaschim Province, the major strong social service operation organizations involved for risk communication are:

- Rotary International
- Lions Club
- Jaycees Nepal- 9 districts
- Nepal Red Cross- 9 districts
- Youth Peace Council, Kailali
- Surprise Dhangadhi Club, Kailali
- Sun Set Youth organisation, Kanchanpur
- Sweet Nepal, Kanchanpur
- Sudurpaschim Foundation
- Humanity Foundation
- FAYA Nepal
- SEWAC Nepal-Kailali
- NEEDS Nepal- Kanchanpur

4.5.3. Major Business Groups (Industrial)

Kailali Chamber of Commerce and Industries and other district chambers are operating in Sudurpaschim Province. These groups have been supporting the government by disseminating messages related to COVID-19.

4.5.4. Rumour & Misinformation Monitoring Mechanism

The District Police Office is the Monitoring Mechanism for rumours and misinformation in Sudurpaschim Province.

4.5.5. Media Monitoring

There is no media monitoring in Sudurpaschim Province.

4.6 PRESS BRIEFINGS

There are regular press briefings held in Sudurpaschim Province. The MOSD initially started a live briefing on Facebook on April 06 2020. Currently, they upload recorded videos rather than broadcasting it live. The daily briefing has stopped due to the Dashain festival. The Province has planned to make the briefing more informative by connecting to different media outlets.

4.7 REPORTING

In Sudurpaschim Province, after the regular press briefing from the MOSD, daily situation reports are shared from the PHEOC and uploaded in the PHEOC of Doti Facebook site.

The WHE team has been an active supporter since the very beginning. It supports data management for daily situation reports and media briefing related to COVID-19.

4.8 OTHER ACTIVITIES

Risk Communication material such as posters, radio messages, pamphlets, training and sensitization are being conducted in Sudurpaschim Province. Different media personnel are interviewing government officers. These officers are helping create awareness and provide useful information.

The Province has also developed an android based app called Sudurpaschim COVID-19 Tracker. It is a COVID-19 tracker that serves three purposes. The first purpose is for Self-assessment. It is based on answering different questions. Its second purpose is to provide a platform where to ask different questions related to COVID-19. The third purpose is to provide information following COVID-19 related events.

4.9 CHALLENGES

- Need for a media monitoring mechanism to be in place.

4.10 OVERARCHING CHALLENGES

- More relying on MOHP regarding RCCE and other COVID-19 related activities.
- There is lack of materials in multiple local languages and accessible materials for persons with disabilities.
- There is lack of budget and human resources for the RCCE activities.
- There is lack of clear channel for the reporting and communication and there is lack of coordination between different agencies.
- There is absence of clear mechanism for the media mobilization and monitoring.
- There is lack of mechanism of rumour tracking and rumour management.
- There is no provision of regular media briefing and call center.
- Frequent change in the policies regarding COVID0-19 (specially about treatment).
- There is limited access to internet and phone.

OPERATIONS SUPPORT AND LOGISTICS

5 OPERATIONS SUPPORT AND LOGISTICS

The provincial profile for the Operations Support and Logistics Pillar has been subdivided into the following categories:

- Health Emergency Operations Center
- Provincial Health Emergency Operations Center
- Electronic-Logistic Information Management System
- Points of Entry
- Repurposing of Health Facilities for Isolation beds

Health Emergency and Operations Center

The Health Emergency Operations Center (HEOC) acts as the secretariat of the Ministry of Health and Population during health emergencies, including the COVID-19 pandemic. It is the central communication body for the provincial and local levels, and it also coordinates with affiliated international bodies, NGOs, and other organizations.

The HEOC's operations are currently supported by four WHO staff, and six personnel from the government (medical superintendent, section officer, staff nurse, officer, helper).

Provincial Health Emergency Operations Centers

Provincial Health Emergency Operations Centers (PHEOCs) play an integral part in different areas of health sector preparedness and response readiness, such as hub and satellite hospital network coordination, prepositioning and replenishing emergency medical logistics, risk assessment, and human resources management, among others.

WHO has deployed a team in all seven province to support the provincial governments in health emergency/disaster preparedness, recovery and response. Each team consists of Field Medical Officers (FMOs), a COVID Surveillance Associate (CSA), an Information Management Assistant (IMA) and a driver.

The major roles of an FMO includes assisting federal and provincial health authorities in the core capacity enhancement of national health security, as well as supporting health emergency/disaster preparedness, recovery and response. An FMO's responsibilities consist of:

- Implementing, monitoring, and assessing existing and planned epidemiologic and laboratory surveillance (event- and indicator-based) mechanisms.
- Establishing and ensuring the efficient functioning of the Public Health Emergency Management Sub-Committees (PHEM-SC) and HEOCs, and their effective coordination, communication and information management functions throughout the disaster/emergency management cycle.
- Maintaining a regular mechanism for the HEOC to coordinate with hub and satellite hospitals, health sector partners, and other stakeholders so as to collaborate on health sector emergency preparedness and response readiness interventions.
- Establishing, capacitating, maintaining readiness, and efficiently positioning emergency medical deployment teams from hub and satellite hospital networks.

The COVID Surveillance Associate (CSA) is responsible for:

- Maintaining daily communication with key hospitals, ground crossings, and tourist hotels identified by the federal and provincial health authorities to collect information on certain diseases, including COVID-19.
- Following up, maintaining records, and reporting the status of admission, investigation, sample collection and shipment, lab confirmation, clinical status and outcome, and referral or discharge details of identified cases.
- Monitoring, reporting, verifying, and investigating events/incidents associated with COVID-19 and other public health issues in coordination with WHE Field Medical Officers.

- Assisting provincial health authorities in identifying population groups and vulnerable areas that are at high risk of COVID-19 transmission.

The Information Management Assistant (IMA) is responsible for:

- Communicating and coordinating with districts/local bodies/health facilities and other stakeholder partners to collect information and follow-up on potential public health emergencies for the preparation of situation reports.

- Generating first information reports on public health events/emergencies and reporting them to the WHE FMO and the supervising health authority.

- Updating databases on human as well as logistic and financial resources in close coordination with hub and satellite hospital networks and national/provincial/district/local health authorities. This is done for utilization during the different phases of the health security emergency risk management cycle.

The driver is responsible for:

- Transporting authorized personnel, visitors, and delegates to identified locations within the duty station.

- Translating basic conversations from/to the local language.

- Performing messenger functions, such as delivering various items/commodities, including diplomatic pouches following authorized routing.

Depending on the province, some of the PHEOCs also have government staff working closely with WHO personnel. This has been described in the individual province profile.

Logistic Management Section and Electronic-Logistics Management Information System (eLMIS)

The Logistics Management Section is one of the four units of the Management Division. It is responsible for collecting and analyzing quarterly logistics management information system (LMIS) reports from all the health facilities across the country. The Logistics Management Section prepares reports and disseminates information in order to:

- Forecast the annual requirements for public health programs, including family planning,

maternal, neonatal and child health, HIV and AIDS commodities; vaccines; and essential drugs.

- Help ensure demand and supply of drugs, vaccines, contraceptives, and essential medical and cold chain supplies at all levels.

- Quarterly monitor the national pipeline and stock levels of key health commodities.

The LMIS combines forms and procedures required for collecting and organizing logistic information. It gathers data on the quantities of products dispensed to users, stock levels, stock losses, batch, and expiry, among others. Additionally, it circulates this information, which is required for supply chain management, through the system. The LMIS is an effective tool for inventory control and waste reduction; it also helps in rational as well as decentralized decision-making at federal, provincial, and local levels.

In addition, the LMIS helps to determine order quantities at the facility level; supervise and monitor stocks at the district/provincial level; and forecast, procure, monitor as well as distribute supplies at the federal level.

As for the e-Logistics Management Information System, it was found that all 55 COVID-designated health facilities had received eLMIS training. However, it came to light that only 33 percent of the hospitals/labs had been providing weekly COVID supply updates. Procurement of commodities is done at different levels: provincial, rural/municipality as well as that of the health facility. Therefore, it is essential for the health facilities, which receive the supplies, to track the data on the availability of commodities. A lack of timely updates on the eLMIS makes forecasting and quantification of supplies difficult. Moreover, the supply of required commodities cannot be ensured in the absence of eLMIS data.

Establishment of health desks at Points of Entry

Nepal is surrounded by India on three sides, and the two countries share a 1,751 km long open border. However, due to the COVID-19 crisis, the borders have been sealed, and thousands of out-of-work Nepali migrants are still stuck in India. The Government of Nepal recently announced that 20 border entry points would be opened for them to return home. The mass movement

that the government decision might lead to will require an effective COVID-19 response preparation and management for returnees, including registration and screening at health desks at points of entry, and proper organization of transportation and quarantine.

The key tasks of the health desks are:

a. Screening
b. Registering
c. Triaging, and
d. Transferring to appropriate settings

The health desk-screening flowchart is given below:
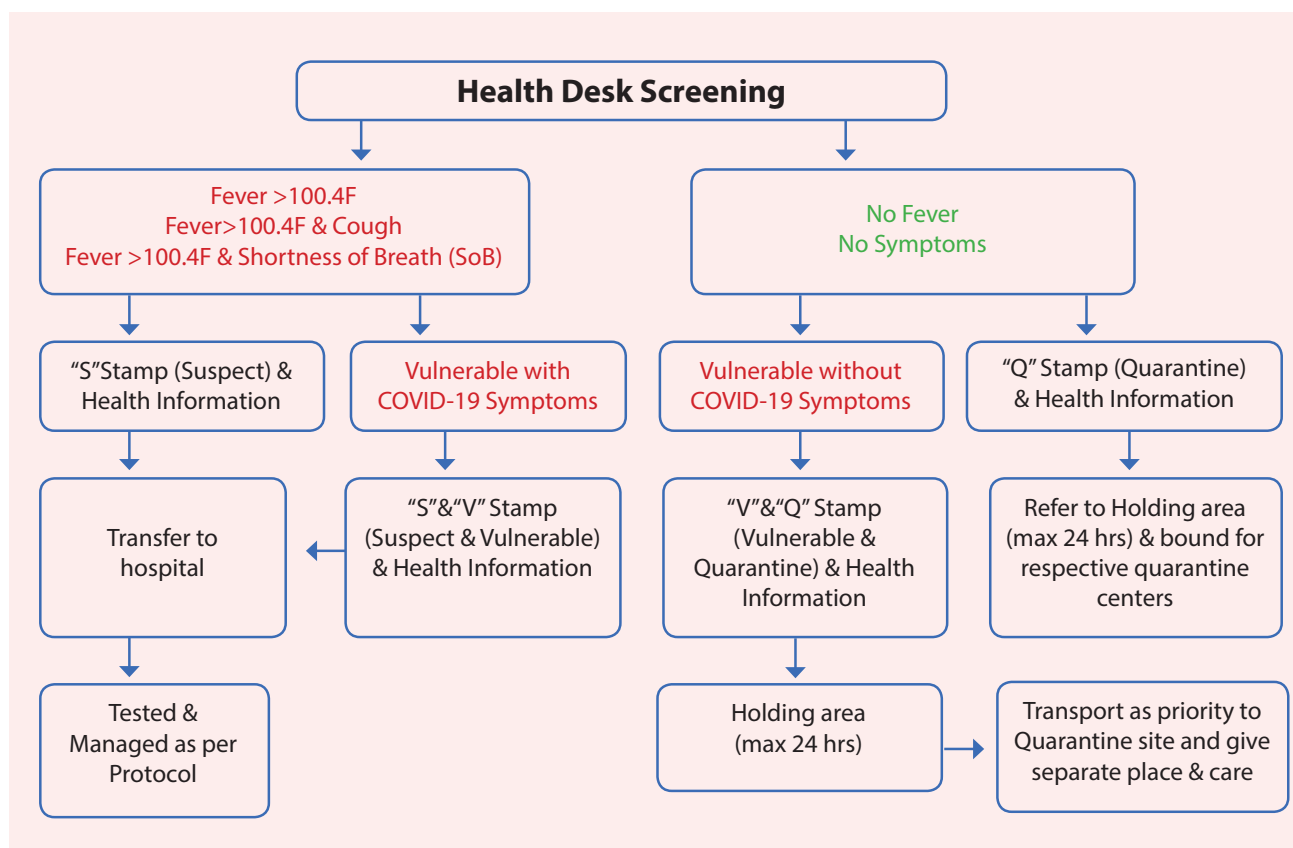
The first step in the process will be temperature screening. Next, the returnees will be observed and asked if they have been showing COVID-19 symptoms. Suspected cases will be given an 'S' (Suspect) stamp; their basic information will be captured through a screening form, after which they will be ushered to a waiting area for transfer to a hospital for testing and management, as per protocol. Similarly, suspect cases with co-morbidities or vulnerable conditions will be given 'S' and 'V' (Vulnerable) stamps. Their basic information will be captured through a screening form, and they will be ushered to the waiting area for transfer to a hospital, where

they will be tested as priority and managed as per protocol. Those with normal temperatures and no symptoms will be given a 'Q' (Quarantine) stamp for transportation to a holding center for normal quarantine. Travelers with normal temperature and no symptoms but with co-morbidities or vulnerable conditions will be given 'Q' and 'V' stamps. They will be sent to a holding center for vulnerable quarantine where they will be provided with enhanced care and support. Each person will be given a colored card/sticker identification card, which they will have to present at their respective facilities.

SUDURPASCHIM PROVINCE

Sudurpaschim Province is comprised of 9 districts namely Kailali, Kanchanpur, Achham, Doti, Dadeldhura, Baitadi, Bajura, Bajhang, Darchula, 1 sub metropolitan city, 33 urban municipalities and 54 rural municipalities. It has 471 public health facilities including 3 hub hospitals, 14 hospitals, 1 regional medical store, 16 primary health centers, 377 health posts, 34 urban health centers, 27 community health units and 3 other health facilities.

5.1 HR AND OTHER RESOURCES AVAILABLE AT PHEOC

The workforce at Sudurpaschim Province has one Field Medical Officer (FMO), two COVID Surveillance Assistant (CSA) and one Information Management Assistant (IMA) and one Driver. There is a single workstation, which has a separate meeting room, archival room, internet facility and power back up which is managed through a

generator and solar panels. However, it does lack storage facility.

5.2 REPURPOSING OF INSTITUTIONS FOR COVID-19 TREATMENT

Amidst the COVID-19 pandemic, 27 institutions of Sudurpaschim Province that includes 4 training centers and 23 health facilities, are presumed to be converted to COVID-19 wards, for isolation and treatment of cases.

Number of training centers developed	4
Number of potential health facilities	23
Total Number of institutions that can be converted to COVID-19 wards	27

The name of health facilities, their level, year of construction and bed capacity that are presumed on being repurposed for COVID-19 pandemic in this province are given in the table below:

Table 20: Health facilities, their level, year of construction and bed capacity repurposed for COVID-19

Health Facility Name	Year of Construction	No. of Beds	After repurposing	Categorised level
Achham District				
Chaurmandu PHCC / PH	Birthing Center in HP - 2063/064, PHCC -2067	12	29	Primary Hospital Type B 3
Baitadi District				
Bajhang District				
Deulekh PHCC / PH	2070/071, PHC 2055			Primary Hospital Type B 3
Rayal PHCC / PH	2061/062			Primary Hospital Type B 3
Bajura District				
Kolti PHCC / PH	HP 2061/062, BEOC 2066/067			Primary Hospital Type B 3
Dadeldhura District				
Jogbuda Hospital		15	38	Primary Hospital Type B 3
Darchula District				
Doti District				
Kedarakhada PHCC / PH	2064/065	12	29	Primary Hospital Type B 3
Kailali District				
Bhajanee PHCC / PH	2067/068	12	29	Primary Hospital Type B 3
Chaumala PHCC / PH	2063/064			Primary Hospital Type B 2
Malakheti Hospital		15	38	Primary Hospital A 2
Kanchanpur District				
Beldandi PHCC / PH	2061/062			Primary Hospital Type B 3
Total		**66**	**163**	

5.3 eLMIS REPORTING STATUS

Regarding eLMIS reporting status of Sudurpaschim Province, 70% of the COVID-19 designated hospitals/labs with access to eLMIS have updated it weekly. eLMIS reporting status of COVID-19 designated hospitals/labs in this province is summarized in the table below:

Sudurpaschim Province eLMIS update data	
No. of COVID-19 designated labs/hospitals updating eLMIS weekly	9
No. of COVID-19 designated labs/hospitals not updating eLMIS weekly	2
No. of COVID-19 designated labs/hospitals without eLMIS access	1

The last login details of COVID-19 designated labs/hospitals in this province are as follows:

S. No.	Hospitals/Labs	Last log in details	Last transaction date
1	Seti Hospital	Real time	Real Time
2	Tikapur Hospital	Last Week(23-Nov-2020)	Last week(23-Nov-2020)
3	Dadeldhura Hospital	Real time	Real time
4	Doti Hospital	03-Nov-2020	03-Nov-2020
5	Achaam Hospital	Real time	Real time
6	Baitadi Hospital, Baitadi	Real time	Real time
7	Bajhang Hospital	Real time	Real time
8	Bajura Hsopital	Real time	Real time
9	Darchula Hospital	Real time	Real time
10	Mahakali Hospital	Real time	Real time
11	Jogbudha Hospital, Dadeldhura	No eLMIS access	
12	Gokuleshar Hsopital, Gokuleshwar	No eLMIS access	

5.4 ESTABLISHMENT OF HEALTH DESK AT POINT OF ENTRY (POE)

EDCD has allocated budget to establish permanent health desk for the current fiscal year in the following sites as mentioned below:

SN	Health Desk	District
1	Gadda Chauki Health Desk	Kanchanpur
2	Gauri Fanta Health Desk	Kailali

International Organization of Migration (IOM) plans to build the structure in these two places in Gaurifanta and Gaddachowki.

PARTNER COORDINATION

6

6 PARTNER COORDINATION

RISK COMMUNICATION & COMMUNITY ENGAGEMENT

Distribution of IEC/BCC materials at the health facility level and public institutions, including posters, leaflets, brochures and reprinting of materials by NHEICC.

Audio-Visual Communication including public service announcements on FM stations, establishment of a hotline to provide service to municipalities on COVID-19 relief/response services.

Web portal and mobile application with Ministry of Health for epidemic surveillance and response.

Partners: ACF,AIN, FAIRMED, FHI 360, HI, KOSHISH, Plan International, VSO, World Vision International, UNICEF, UNFPA, WHO, Ncell/NTC, IOM, GF/SF, Water Aid, IFRC/NRCS, ILO, DFAT, WB, USAID

NATIONAL LABORATORIES

Capacity building including Training of trainers on PPE use/IPC and sample collection, packaging and transport for COVID19 to lab staff from COVID-19 diagnostic sites.

Procurement and handover of over 100,000+ RT-PCR test kits to MoHP.

Partners: GIZ, UNICEF, USAID, WHO, DFID, Gates Foundation

POINTS OF ENTRY, INTERNATIONAL TRAVEL AND TRANSPORT

Capacity Strengthening and Establishing health desks located at multiple POEs for screening of returning migrants. The measures taken will contain, improve and propose a model for better management of the WASH facilities, making PPE items and noncontact thermometers available for screening at the POEs.

Participatory mobility mapping along the border area includes volunteers and public health professionals mobilized to understand the flow of people and identify vulnerability. Partners plan to produce a map which can be used for targeted response.

Partners: IOM, Nepal Redcross Society, Plan International, UNICEF, USAID, World Vision International, WHO

INFECTION PREVENTION AND CONTROL

Distribution of PPE and commodities including alcohol based hand rub, IR thermometer, liquid hand washing soap, soap dispensers, disposable gowns, head protectors, sterile and non-sterile gloves and surgical gloves, disinfectants, testing kits (including RT PCR), KN95 Masks, surgical masks, and eye goggles.

Support to caregivers and healthcare workers including training of trainers on PPE use/IPC and sample collection, packaging, and transport for COVID19 to lab staff from COVID10 diagnostic sites.

Risk assessment and preventative education in support of caregivers and communities on COVID-19.

Partners: AIN, Caritas, FHI 360, GIZ, HI, JHPIEGO, NAP+N, IFRC/Nepal Redcross Society, Plan International, UNICEF, USAID, World Vision International, WHO, GIZ, CMDN, UNFPA, DFAT, Oxfam, Water Aid, GAVI, WB, DFID, Water Aid

Map 13: Provincial UN Focal Point – United Nations Development Programme (UNDP)

Darchula
1, 5, 7

Bajhang
1, 7, 13, 32

Bajura
1, 4, 7
26, 31, 33

Baitadi
1, 7, 16, 26

Dadeldhura
1, 7, 10
14, 31

Doti
1, 5, 7
14, 21, 25

Achham
1, 7, 13, 14
26, 31

Kanchanpur
1, 4, 7
10, 12, 16

Kailali
1, 4, 7, 9, 10, 11
16, 22, 24, 25

(1) NRCS (2) CARE (3) BNMT (4) CARITAS (5) AIN (6) WATER AID (7) NAP +N (8) TDH FOUNDATION (9) VSO (10) FHI360
(11) GIZ (12) HI (13) UNFPA (14) IPAS (15) FAIRMED (16) IOM (17) ACF (18) KOSHIS (19) Plan Int (20) NSI
(21)KOICA (22)WVIN (24) CMC (25) DFAT (26) JHPIEGD (31) USAID (32) WFN (33) UNDP

CASE MANAGEMENT

Orientation for caregivers/health workers of COVID patients with disabilities on how to provide personal assistance during the treatment period.

> **Partners:** AIN, GIZ, HI, World Vision International, WHO, USAID, UNICEF, IOM, DFID, WB

EPIDEMIOLOGY CASE INVESTIGATION AND CONTACT TRACING (CICT)

Assessment of Quarantine sites via real time data collection using KOBO. Partner support in Sudurpaschim Province also includes Case Investigation and Contact Tracing (CICT) training package developed with the support of master trainers from NHTC and EDCD.

Capacity strengthening support including a mobile based training for health workers and female Community Health Volunteers (FCHVs).

Population mobility mapping in Sudurpaschim along selected POEs and border areas. Volunteers and public health professionals are mobilized to understand the flow of people and identify vulnerability. This PMM intervention is a part of Health Border Mobility Mapping which will identify mobility patterns, vulnerable hotspots and at-risk communities. IOM plans to produce a map which then can be used for targeted response.

> **Partners:** GIZ, IOM, UNICEF, USAID, World Vision International, IFRC/NRCS

OPERATIONAL SUPPORT AND LOGISTICS

Establishment of structures including temporary health desks and physically accessible Quarantine Centres and Isolation wards.

Quarantine facility support, establishment washing stations and other key structures at health facilities.

> **Partners:** AIN, FHI 360, GIZ, HI, IPAS, Nepal Redcross Society, Plan International, UNFPA, UNICEF, USAID, World Vision International, ADB, IOM, DFAT

MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT

Communications and Telehealth including dissemination of psychosocial information through media, individual tele-counseling and mental health services from mental health experts, including assigned experts and experienced psychosocial counsellors, via a toll-free number.

Psychological First Aid (at quarantine and isolation centres) through telehealth and through socially distanced support.

Capacity building and stress management to the frontline workers, health workers, security forces and I/NGO staff which includes providing a Training of Trainers (ToT) on stress management. This includes supervision and coaching to medical officers in project implemented districts.

Radio programs broadcast on psychosocial and mental health related topics, which includes 2 episodes per week of Jiwan Rakchya airing on CIN, and 3 episodes (2 on children's and 1 in GBV issues) produced and broadcasted.

Supply of psychotropic medicines in support of psychiatric service and in coordination with concerned municipalities and health facilities.

> **Partners:** CMC, Nepal Redcross Society

CONTINUITY OF ESSENTIAL MEDICAL SERVICES

Human resource support for HIV programming for COVID19.

Financial support providing essential medical items for spinal cord injury.

> **Partners:** FHI 360, HI, UNICEF, USAID, ADB, UNFPA, FAIRMED, DFAT, WVIN, IPAS, GIZ

WATER AND SANITATION HYGIENE (WASH)

Technical assistance to MoHP management division in support of Water, Sanitation and Hygiene standards for Healthcare facilities.

Construction of handwashing stations placed in strategic positions throughout Sudurpaschim Province's health facilities.

> **Partners:** UNICEF, KIRDARC, ENPHO, RVWRMP, NEEDS, RDC, SAC, BEE, BWSN, Campaign, JJYC, CDS, Everest Club, FOHRen, HRDC, IDS, JIDS, Kopila valley, KVS, Lumanti, MCDC, NBS, PACE, PRAG, PTYSM, RDC, Relief Nepal, RRPK, RYC, Sabal, SAC, SAHAS, SUYUK, WEL, GWT, UN-Habitat, UNDP, WFP, IOM, WHO, Nepal Red Cross Society, British Red Cross, ACF, AAN, Blinknow, Care, CRS, CAWST, DCA, DFAT, Felm, GiZ, GNI, Helvatas, LWF, Mercy Corps, NCV, Oxfam, Phase, Plan Int., Practical Action, Save the Children, USAID, Water Aid, WHH, WVI, WTW, ME, SNV

COORDINATION PLANNING AND MONITORING

Coordination and planning between federal, provincial and local government support for the provision of female-friendly COVID-19 quarantine facilities.

Policy and planning strengthening through technical support to the Nepal Law Society, resulting in the hosting of discussions with the Legislation Management Committee of the National Assembly on the amendment of the Contagious Diseases Act. Partners seek to support amendment of the law, which will provide federal, provincial and municipal governments with greater clarity on their roles and functions in response to managing epidemics such as COVID-19.

> **Partners:** DFAT, GIZ, HI, UNICEF, USAID, DFID, UNFPA, WHO, FAIRMED, IFRC/NRCS, CG, EU

PROVINCEWIDE SUPPORT

> **Partners:** IOM, WHO, GIZ, GF/SCI

NATIONWIDE SUPPORT

> **Partners:** ADB, ADRA Nepal, Chaudhary Group, CMDN, DFAT, DFID, EU, FHI 360, Gates Foundation, GAVI, GIZ, ILO, IOM, Ncell, Nick Simmons Foundation Institute, The Global Fund/ Save the Children, UNICEF, WHO, World Bank, German Dev. Cooperation / KfW, KOICA, SDC, USAID, UNFPA, UNDP, WFP

ANNEXES

Annex 1: Radio Station available in Sudurpaschim Province

S.N	Station Name	Freauency	Watt	District	Contact Person	Number
1	Bajura FM	104 MHz	100	Bajura	Lal Bahadur Oli	9741055759
2	Radio Paurakhi	90.4 MHz	500	Bajura	Bir Bdr. Katuwal	9848437208
3	Saipal FM	100.6 MHz	250	Bajhang	Min Bahadur Singh	9841545365
4	Seti FM	93.6 MHz	250	Bajhang	Kalak Khatri	9848628109
5	Radio Bajhang	91.0 Mhz	250	Bajhang	Suresh Suman Dangi	9847835336
6	Radio Ramaroshan	92.0 MHz	500	Achham	Bed Prakash Timalsina	9848435003
7	Radio Janpariya	102.4 MHz	100	Achham	Prakash Shah	9848586320
8	Radio Society	89 MHz	100	Achham	Dhurba B.C	9848030965
9	Radio Achham	94.8MHz	100	Achham	Bed Prashad Timilsena	9858422230
10	Radio Panchjadewal	100.5 MHz	100	Achham	Janak Bdr. Dhami	9858040441
11	Radio Shaileswori	105.9 MHz	100	Doti	Shankar Thapa	9749003300
12	Radio Tribeni	94.4 MHz	500	Doti	Karna Chand	9848473593
13	Radio Tikapur	101.0 MHz	250	Kailali	Yakindra Timalsina	9759001795
14	Paschim Today	88.8 MHz	100	Kailali	Dirgha Upadhya	9848422222
15	Sudoor Sandesh	104 MHz	100	Kailali	Hemanta K.Poudel	9858420730
16	Radio Sakhi	95.8 MHz	100	Kailali	Lalita Kusmi	9848492160
17	Paschim Aawaz	104.7 MHz	500	Kailali	Navraj Neupane	9848445615
18	Radio Ghodaghodi	88.3 MHz	100	Kailali	Jaj Raj Shahi	9848301156
19	Shuklaphanta FM	94.4MHz	1000	Kanchanpur	Rishi Raj Lumsali	9851048698
20	Radio Mahakali	96.2MHz	500	Kanchanpur	Khem Bhandari	9851033067
21	Radio Kanchanpur	90.2 MHz	500	Kanchanpur	Kesab Saud	9848758000
22	Radio Baarasinga	102.2 MHz	100	Kanchanpur	Chuda Mani	9848723648
23	Radio Pahichan	105.3 MHz	100	Kanchanpur	Ram Chandra chaudhary	9858750258
24	Radio Jhilimila	107.8 MHz	100	Kanchanpur	Bimala Bhatta	9809427613
25	Afno FM	104.8 MHZ	100	Dadeldhura	Vijaya Manandhar	9851101677
26	Amargadhi FM	97.4 MHz	500	Dadeldhura	Padam Pal	9759502000
27	Radio SudurAwaz	95 MHz	500	Dadeldhura	Ramesh Joshi	9851130877
28	Radio Unity	92.2 MHz	500	Dadeldhura	Ramesh Saud	9848805450
29	Saugat FM	103.6 MHZ	100	Baitadi	Jayaraj Bhatta	9741113856
30	Radio Sansher	106.6 MHz	100	Baitadi	Narendra Prasad Bhatta	9848772289
31	Radio Kalapani	102.2 MHz	100	Darchula	KeshabBhatta	9749516963
32	Radio Naya Nepal	104.5 MHz	100	Darchula	Shankar Dhami	9759500740
33	Radio Malikarjun	107.2 MHz	100	Darchula	Rajendra singh Dhami	9749510462
34	Radio Sarathi	92.6 MHz	500	Darchula	Binod Singh Rawat	9849566071

Annex 2: Newspaper available in Sudurpaschim Province

S.N	Name of the newspaper	District	Province	Type	Outreach	Grade
1	Khaptad Newz Dainik	Aacham	Sudur Paschim	Daily	Local	Kha
2	Aajaki Naya Bikalpa Dainik	Kanchanpur	Sudur Paschim	Daily	Province	Ga
3	Aapi Today Dainik	Kanchanpur	Sudur Paschim	Daily	Province	Ga
4	Pachim Nepal Dainik	Kanchanpur	Sudur Paschim	Daily	Province	Kha
5	Suklafhat Dainik	Kanchanpur	Sudur Paschim	Daily	Province	Ga
6	Avhiyan Nepali Dainik	Kanchanpur	Sudur Paschim	Daily	Province	Withheld
7	Far West Times Dainik	Kanchanpur	Sudur Paschim	Daily	Local	Withheld
8	Sudurpaschim Post	Kanchanpur	Sudur Paschim	Weekly	Local	Kha
9	Dishanirdesh Kanchan	Kanchanpur	Sudur Paschim	Weekly	Province	Gha
10	Shree Sarthak Saptahik	Kanchanpur	Sudur Paschim	Weekly	Local	Kha
11	Guguldi Mashik	Kanchanpur	Sudur Paschim	Bhasabasi	Province	Ka
12	Jansarokar Post Dainik	Baitadi	Sudur Paschim	Daily	Province	Kha
13	Anumodhan Dainik	Kailali	Sudur Paschim	Daily	Province	Ka
14	Sudur Sandesh Dainik	Kailali	Sudur Paschim	Daily	Province	Kha
15	Sudurranchal Dainik	Kailali	Sudur Paschim	Daily	Province	Ga
16	Kailali Dainik	Kailali	Sudur Paschim	Daily	Province	Kha
17	Dhangadi Post Dainik	Kailali	Sudur Paschim	Daily	Province	Withheld
18	Pachim Today Dainik	Kailali	Sudur Paschim	Daily	Local	Ka
19	Kalantar Dainik	Kailali	Sudur Paschim	Daily	Local	Kha
20	Malawara Dainik	Kailali	Sudur Paschim	Daily	Local	Ga
21	Kailali Hotline Dainik	Kailali	Sudur Paschim	Daily	Local	Gha
22	Samadhan news Dainik	Kailali	Sudur Paschim	Daily	Local	Similar
23	Tikapur Dainik	Kailali	Sudur Paschim	Daily	Local	Ga
24	Highway Times Dainik	Kailali	Sudur Paschim	Daily	Local	Ga
25	Pahura Dainik	Kailali	Sudur Paschim	Daily	Local	Ka
26	Agni Post Dainik'	Kailali	Sudur Paschim	Daily	Local	Kha
27	Ghodaghodi Sandesh	Kailali	Sudur Paschim	Weekly	Province	Similar
28	Yug Sarokar Saptahik	Kailali	Sudur Paschim	Weekly	Province	Withheld
29	Sudursandarbha Saptahik	Kailali	Sudur Paschim	Weekly	Local	Gha
30	Santi Karnali Saptahik	Kailali	Sudur Paschim	Weekly	Local	Withheld
31	Hamro Yugdarpan Saptahik	Kailali	Sudur Paschim	Weekly	Local	Ga
32	Sudurpaschim Prayas	Kailali	Sudur Paschim	Weekly	Local	Ga
33	Hamro Seto Saptahik	Kailali	Sudur Paschim	Weekly	Local	Kha
34	Tikapur Express Saptahik	Kailali	Sudur Paschim	Weekly	Local	Withheld
35	Adharpatra Saptahik	Kailali	Sudur Paschim	Weekly	Local	Gha
36	Sudur Chinari Dubaimashik	Kailali	Sudur Paschim	Weekly	Province	Kha
37	Harchali Saptahik Traimasik	Kailali	Sudur Paschim	Weekly	Local	Kha
38	Dadeldhura Post Dainik	Dadeldhura	Sudur Paschim	Daily	Local	Withheld
39	Hil Times Rastriya Dainik	Dadeldhura	Sudur Paschim	Daily	Province	Ga
40	Rangun Darpan Saptahik	Dadeldhura	Sudur Paschim	Weekly	Province	Ga
41	Hindkus Saptahik	Dadeldhura	Sudur Paschim	Weekly	Local	Kha
42	Bimba Saptahik	Doti	Sudur Paschim	Weekly	Province	Kha
43	Dharchula Sandesh Dainik	Darchula	Sudur Paschim	Daily	Local	Kha
44	Mansarowar Dainik	Darchula	Sudur Paschim	Daily	Local	Ga
45	Kalapani Post Saptahik	Darchula	Sudur Paschim	Weekly	Local	Ga
46	Bajura Update Saptahik	Bajura	Sudur Paschim	Weekly	Local	Ga

Annex 3: Spokespersons for COVID-19 designated hospitals in Sudurpaschim Province

SN	Name of the Hospital	Address	District	Contact Person	Contact no	Email ID
1	Seti Provincial Hospital	Dhangadi Sub metropolitan City-1	Kailali	Dr Jagdish Joshi		seti.hospital@gmail.com
2	Mahakali Hospital	Bhimdutta 18	Kanchanpur	Dr Hari Kumar Shrestha		mzh.hospital@gmail.com
3	Dadeldhura Hospital	Amargadhi-5	Dadeldhura	Dr Jagdish Chandra Bista		ddlhospitalddl@gmail.com
4	Tikapur Hospital	Tiakpur Municipality	Kailali	Dr Jitendra Kandel		tikapurhospital@gmail.com
5	Achham Hospital	Mangelsen	Achham	Dr Manoj Bista		bistamanojrachana@gmail.com
6	Bajhang Hospital	Jayprithivi Municipality, 9	Bajhang	Dr. Sandeep Okheda		sandipokheda02@gmail.com
7	Bajura Hospital	Badimalika Municipality, 8	Bajura	Dr. Rup Chandra B.K		drcb.mkh.072@gmail.com
8	Baitadi Hospital	Dashrathchand	Baitadi	Dr. Basanta Raj Joshi		baitadidistricthospital@gmail.com
9	Doti Hospital	Dipyal Silgai	Doti	Dr Prakash Thakulla/Dr Jyoti Pandey	9843106434/ 9863453218	dhdoti.hospital01@gmail.com
10	Malakheti Hospital	Godawari	Kailali	Dr. Padam Sharma/Dr Srijana Adhikari	9848195412/ 9848698085	adhikarisrijana02@gmail.com
11	Jogbuda Hospital	Jogbuda	Dadeldhura	Dr Jitendra Chaudhary/ Prakash Ghimire	9865558205/ 9848810150	jogabudahospital@gmail.com
12	Gokuleshwor Hospital	Saileshikhar	Darchula	Dr Neyaz Ansari		gokuleshworhospital@gmail.com
13	Darchula Hospital	Mahakali Municipality	Darchula	Dr. Gajendra Duwal		darchulahospital@gmail.com