ANNUAL HEALTH REPORT

Fiscal Year 2078/079

Government of Province
Lumbini Province
Ministry of Health

Health Directorate

Deukhuri (Rapti Valley), Dang, Nepal

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Message from Hon'ble Minister of Ministry of Health

The Government of Province, Ministry of Health, is committed to ensure that every citizen of the province recognizes health as a fundamental right as guaranteed by the constitution. In order to attain universal health coverage, the ministry is committed to implement the core principles of federal, provincial, and local levels health policies, as well as the national health sector strategy, periodic plans, and other policy documents. The MoH has initiated and implemented a number of programs to ensure the quality of basic and emergency healthcare services to citizen and achieved tremendous outcome as reflected in this progress report.

The institutions have a crucial duty to regularly review their programs in order to assess their effectiveness, look into relevant concerns, and decide on evidence-based actions for the upcoming years. It makes me happy to know that the Health Directorate has been publishing a comprehensive Annual Health Report for FY 2078/79, the fifth report in its series, by compiling the reviews and reflections from a series of annual health review workshops held at various levels throughout the province.

The statistics presented in this report reflects the annual performance of all the parts of the health care delivery system, including achievements and innovations, bottlenecks, and potential future action points. By addressing the gaps and priorities identified in this report, I can guarantee on behalf of the ministry that a significant investment will be made to reinforce the province's high-quality healthcare system. For the purpose of coordinating actions in the health sector, the Ministry is also committed to working with all parties involved, including development partners and civil society. By offering high-quality, fair-access healthcare, the ministry is making progress toward turning the catchphrase "Prosperous Province, Healthy and Happy People" into reality. I am convinced that this Annual Health Report will give health managers, planners, researchers, and providers of health care services a bird's-eye view of how to plan and make decisions in the province's health sector using the best available evidence.

The Ministry appreciates all the health administrators and medical professionals who have worked to maintain service delivery throughout the year. Last but not least, I extend my congratulations to the Director, his entire team, and everyone else who helped in the preparation of this report.

……..
Mr. Indrajit Tharu
Minister
Ministry of Health

Message from Health Secretary of Ministry of Health

This is my great pleasure to present the fifth Annual Health Report of the Health Directorate for the Fiscal Year 2078/79. This report is one of the outcome of the performance reviews conducted at local levels, district and province and summarizes the annual performance of all the components of health care delivery system. This progress report also attempts to direct robust and evidence-based planning at all levels. In my opinion, the evidence generated in this report are instrumental for developing and implementing evidence-based programs in the coming years.

The Ministry of Health is committed to achieve the goal of universal health coverage through implementing the National Health Policy 2076, National Health Sector Strategy, Provincial health policy 2077, First five-year plan (2076/77 – 2080/81) and other national and provincial policies. I am pleased to share that the Lumbini Province has made a number of remarkable accomplishments in health sector that helped to meet the goals outlined in federal and provincial policy papers. This report will provide the status of the priority indicators listed in the periodic plans, NHSS-IP, and Sustainable Development Goals to comprehend the achievements made so far.

This annual report is a comprehensive document that includes all of the initiatives of the Ministry of Health as well as those of its institutions, local governments, international development partners and non-governmental organizations. Each section of the report outlines background, status of the major indicators, new initiatives, issues and constraints and suggests way forwards for the effective delivery of health services in coming years.

I appreciate the efforts made by the Health Directorate, other provincial institutions, and all types of health care providers at the local and provincial levels, including the FCHVs working in the communities. I also want to express my gratitude to all the EDPs, INGOs, NGOs, and private sector organizations that have made significant contributions to enhancing the health of the population in Lumbini Province. They deserve our sincere gratitude and congratulations since without their efforts, we would not have been able to accomplish and sustain the success that we did. While we should be happy with our achievements, we also need to focus on speeding our efforts to attain the milestones that are still in reach and maintaining the progress that has already been reached.

Finally, I would like to express my appreciation and congratulations to the Director of the Health Directorate and his team, particularly the Annual Report Preparation Committee and for their contributions to bring out this annual report.

Dr. Bikash Devkota
Secretary
Ministry of Health

Acknowledgement from Director of Health Directorate

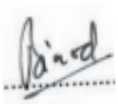
It gives me great pleasure to present the fifth annual report of the Health Directorate, Lumbini Province for the FY 2078/079. lth. The report covers the brief background of the program, all the major activities and results, innovative and best practices as well as issues and recommendations to improve the delivery of health service at province and local levels. The report also covers the progress of the activities performed by private health institutions and External Development Partners.

In order to achieve universal health coverage, the Health Directorate of the MoH is dedicated to translating the aspiration of the Constitution of Nepal, National Health Policy 2076, Nepal Health Sector Strategy, Provincial Health Policy 2077, and five-year plan. The NHSS-RF and SDG indicators are progressing positively in the province, and we have to sustain and made further progress to cross the target in coming years. The information presented in this report are yielded from a variety of sources, including the annual reviews held at various levels, the disease surveillance system, LMIS, HMIS, EWARS, MPDSR, Hospital/HP MSS, monitoring reports and other sources. The information generated in this report give us a clear picture of the status of our health system and provides opportunity to identify new areas or shift our attention to already-existing ones. I firmly recommend all the policy makers and program managers to use the information generated in this report to guide our planning and decisions at all levels.

I sincerely appreciate the Hon'ble Minister, Indrajit Tharu, Ministry of Health, for his inspiring leadership and guidance. I also want to express my gratitude to Dr. Bikash Devkota, Secretary of the Ministry of Health, for his leadership and support in advancing the healthcare delivery system of the province. I am grateful to our health workers across all the districts and municipalities within the province that have been working day and night, all year round to provide quality health services at our facilities. My appreciation also goes to Female Community Health Volunteers for their efforts in promoting of health activities and raising public awareness in community levels. Furthermore, I take this opportunity to thank various external development partners, non-governmental organizations and the private sector for their important contributions in advancing the health sector performance of this province.

I would like to extend my gratitude to Mr. Roshan Lal Chaudhary, Senior Public Health Administrator, Statistical Officers, and the entire Health Directorate family for joining hands as a team to deliver best result throughout the year. I would also like to express my gratitude to all the external development partners who are working closely with Health Directorate; WHO, UNICEF, UNFPA, USAID's Strengthening Systems for Better Health Activity, Save the Children, Nick Simons Institute, Suaahara, ASCEND, NHSSP, IPAS and other support partners for their important contributions to enhance the performance of the health sector in Lumbini Province.

Finally, I appreciate the annual report development team of the MoH, Health Directorate, PHLMC, PHTC, PPHL and EDPs for their meticulous effort to bring out this report. I hope, this report will be a useful document for all the institutions involved in developing, implementing, and evaluating evidence-based programs and strengthening health services to improve the health status of all citizens in this province.



Dr. Binod Kumar Giri
Director

Abbreviations and Acronyms

AHIMS:	Ayurveda Information Management System
APP:	Annual Procurement Plan
ART:	Antiretroviral Therapy
ASRH:	Adolescent Sexual and Reproductive Health
AWPB:	Annual Workplan and Budget
CAPP:	Consolidated Procurement Plan
CCE:	Cold chain equipment
CCEOP:	Immunization Supply Chain/ Cold Chain Equipment Optimization Plan
CHX:	Chlorhexidine
CLT:	Community led testing
cMYP:	Comprehensive Multi Year Plan
CNSI:	Comprehensive Nutrition Specific Intervention
DHF:	Dengue Hemorrhagic Fever
DHIS2:	District Health Information System 2
DoHS:	Department of Health Services
DSS:	Dengue Shock Syndrome
DTS:	Dried Tube Specimen
EDP:	External Development Partners
EHS:	Extended Health Service
eLMIS:	Electronic Logistic Management Information System
EoNC:	Emergency Obstetric and Newborn Care
EPI:	Expanded Program on Immunization
EQA:	External Quality Assessment
EWARS:	Early Warning and Reporting System
FAST:	Find cases Actively, Separate safely and Treat effectively
FCHV:	Female Community Health Volunteer
FSW:	Female Sex Workers
FWD:	Family Welfare Division
GBV:	Gender Based Violence
HD:	Health Directorate
HDC:	Hospital Development Committee
HER:	Electronic Health Record
HMIS:	Health Management Information System
HMISP:	Hospital Management Strengthening Program
ICU:	Intensive Care Unit
IMAM:	Integrated Management of Acute Malnutrition
IMNMP:	Intensification of Maternal and Neonatal Micronutrient Program
IVM:	Integrated Vector Management
LARC:	Long-acting Reversible Contraceptives
LLG:	Local Level Government
LMIS:	Management Information System
LPEP:	Leprosy Post-Exposure Prophylaxis
MAM:	Moderate Acute Malnutrition
MDG:	Millennium Development Goals
MICS:	Multiple Indicator Cluster Survey
MHM:	Menstrual Hygiene Management
MIYCN:	Maternal Infant and Young Child Nutrition
MoHP:	Ministry of Health and Population
MoHPFW:	Ministry of the Health, Population and Family Welfare
MNP:	Multiple Micronutrient Powder
MoSD:	Ministry of Social Development
MPDSR:	Maternal Perinatal Death Surveillance and Response
MSM:	Men Who have Sex with Men
MSNP:	Multi-sector Nutrition Plan
MSS:	Minimum Service Standard
NCDR:	New Case Detection Rate
NDHS:	Nepal Demographic and Health Survey
NEQAS:	National External Quality Assurance Scheme
NHSS:	Nepal Health Sector Strategy
NIP:	National Immunization Program
NMICS:	Nepal Multiple Indicator Cluster Survey
NRH:	Nutrition Rehabilitation Home
OST:	Opioid Substitution Therapy
PHC/ORC:	Primary Health Care Outreach Clinic
PHLMC:	Province Health Logistic Management Centre
PMTCT:	Prevention of Mothers to Child Transmission of HIV
PNC:	Postnatal Care
PPHL:	Provincial Public Health Laboratory
PWID:	People who Inject Drugs
RDQA:	Routine Data Quality Assessment
RM:	Rural Municipality
SUN:	Scaling-up Nutrition
SBA:	Skilled Birth Attendance
SNCU:	Special New-born Care Unit
STD:	Sexually Transmitted Diseases
SDG:	Sustainable Development Goals
SSU:	Social Service Unit
TIMS:	Training information Management System
VPD:	Vaccine Preventable Diseases

Health Service Coverage Fact Sheet

Program Indicators	Province Level			FY 2078/079 by District												National Target 2030
	FY 2076/077	FY 2077/078	FY 2078/0789	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	
Reporting Status																
HMIS reporting status of basic health facilities*	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
HMIS on-time reporting status of basic health facilities*	49	83	98	92	100	100	97	99	94	94	100	97	96	97	99	100
HMIS annual reporting status of province-level hospitals**	100	99	99	100	100	100	100	100	98	94	92	100	96	99	100	100
HMIS on-time reporting status of province- level hospitals**	28	52	78	67	100	100	100	82	94	79	71	90	58	74	100	100
HMIS self-reporting (reporting by HFs themselves) status- as of Ashad	23	34	68	89	72	91	55	54	48	74	72	44	65	84	92	
Immunization Program																
BCG coverage	92	94	103	86	78	90	89	91	111	83	135	89	100	119	90	
DPT-HepB-Hib3 coverage	81	94	97	92	86	90	108	104	85	91	103	92	101	100	96	>95%
MR2 coverage (12-23 months)	80	94	99	90	92	90	107	101	92	101	107	94	103	95	100	
Dropout rate DPT-Hep B-Hib 1 vs MR2	15	6	0.18	6	-9	1	-0.27	6	-2	-6	-2	2	-4	12	-5	
Percentage of pregnant women who received TD2 and TD2+	64	68	74	61	59	65	70	66	62	74	83	77	68	84	72	
Nutrition Program																
Percentage of children aged 0-23 months registered for Growth Monitoring (GM)	69	77	92	87	91	87	124	112	80	97	110	76	99	81	74	100
Average number of visits among children aged 0-23 months registered for GM	3	4	4	3	6	6	5	5	8	5	3	4	3	4	6	
Percentage of pregnant women who received 180 tablets of Iron	53	55	76	56	59	55	80	72	94	77	105	60	63	78	69	

Program Indicators	Province Level			FY 2078/079 by District												National Target 2030
	FY 2076/077	FY 2077/078	FY 2078/0789	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	
Percentage of postpartum mothers who received vitamin A supplements	59	64	98	81	63	76	80	80	88	63	157	77	79	113	103	
Integrated Management of neonatal and Childhood Illness																
Incidence of pneumonia (per 1000)	43	22	29	160	115	71	29	34	48	11	10	6	28	26	25	
Percentage of pneumonia cases treated with antibiotics	138	122	100	107	100	100	102	100	95	101	100	101	100	100	100	100
Incidence of diarrhea (per 1,000)	350	357	347	699	590	368	315	361	219	287	275	294	388	427	328	
Percentage of children under 5 with diarrhea treated with ORS and zinc	96	97	99	94	100	100	99	99	99	98	101	92	100	101	99	100
Safe Motherhood (%)																
Percentage of pregnant women who attended first ANC visit (any time)	100	98	120	90	85	79	95	92	103	111	185	110	103	127	98	
Percentage of pregnant women who attended four ANC visits as per protocol✦	61	61	80	58	59	55	79	71	94	79	118	61	66	84	69	90
Percentage of institutional deliveries✦	81	80	94	61	60	69	62	47	103	49	154	59	67	177	58	90
Percentage of deliveries conducted by skilled birth attendant✦	79	77	90	57	33	63	59	47	101	44	152	59	65	170	51	90
Percentage of mothers who had three PNC check-ups as per protocol✦	22	29	54	59	61	50	69	60	58	47	66	30	50	66	48	90
Family Planning (%)																
Contraceptive Prevalence Rate (unadjusted) among WRA	28	31	32	20	28	41	27	31	53	37	46	30	25	27	42	60
FP method new acceptor as % of MWRA	13	15	12	22	20	19	13	14	13	10	9	12	13	13	14	
FCHV Program																
Mothers' group meeting held (%)	86	86	95	95	97	97	98	100	95	97	96	92	95	93	91	100
Malaria and Kala-azar Program																
Malaria annual parasite incidence (per 1000 population in high-risk districts)	0.04	0.04	0.08	0	0	0.03	0	0	0.01	0.08	0.27	0.09	0.01	0.26	0.03	

Program Indicators	Province Level			FY 2078/079 by District												National Target 2030
	FY 2076/077	FY 2077/078	FY 2078/0789	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	
Total Malaria indigenous cases	16	7	7	0	0	0	0	0	0	1	1	2	0	3	0	
Percentage of Plasmodium Falciparum (PF) cases in high-risk districts	6	29	36	0	0	0	0	0	0	0	10	25	33	42	39	
Number of Kala-azar cases in risk district	54	41	69	0	0	1	0	0	16	0	6	0	0	46	0	
Tuberculosis																
Case notification rate/100,000 population	112	114	157	96	141	173	117	140	142	122	152	131	214	180	172	
Treatment success rate	93	90	91	91	94	92	85	92	89	86	91	89	93	91	94	
TB mortality rate	4	4	5	2	4	5	5	4	6	9	4	6	5	4	4	
Leprosy																
New case detection rate (NCDR) per 100,000 population	14	10	11	2	4	2	0.79	0	4	14	15	19	3	20	12	
Prevalence of Leprosy per 10,000 population	0.95	1.1	1.1	0.34	0.3	0.3	0.45	0.34	0.74	2	1.5	1.8	0.32	1.4	1.4	
HIV/AIDS and STI																
Number of new positive cases	485	473	659	0	1	29	29	18	51	51	167	65	58	157	33	
Currently on ART	3316	3850	4325	0	49	114	192	119	324	304	1633	532	361	537	160	
Curative Services																
% of OPD new visit among total popn	87	82	95	92	91	119	147	121	164	74	97	64	81	96	88	
Percentage of population utilizing emergency services at hospitals	7	6	7	1	4	3	5	6	19	5	10	3	6	13	2	
Percentage of population utilizing inpatients services at hospitals	5	4	5	0.33	0.67	1	0.84	0.86	13	0.7	9	0.67	3	13	0.81	
Bed occupancy rate	52	46	54	7	33	70	48	27	65	4	53	37	26	66	38	
Average length of stay in hospital	4.8	4.2	4.2	2.3	1.1	2.6	2	2.6	5.7	0.33	3.9	1.7	2.2	5.8	2.7	
Hospital deaths	2608	4172	3401	0	4	13	6	6	326	11	1614	39	127	1238	17	

*Note: *based on reporting status dataset **based of hospital summary dataset*

Summary of Nepal Health Facility Survey Findings

NHSS RF Indicators		Lumbini province		National 2021
		2015	2021	
Percentage of health facilities with no stock-out of tracer drugs		1.0	0.4	1.3
Percentage of sanctioned posts filled	Consultants	75.9	48.8	53.9
	Physicians/general practitioners	50.0	33.3	37.9
	Medical officers	48.2	32.4	53.2
	Nurses	70.5	53.2	74.3
	Paramedics	77.8	73.6	75.7
Percentage of health facilities receiving tracer commodities within less than 2 weeks of placing the order		75.0	95.2	86.4
Percentage of health facilities complying with good storage practices for medicines		69.0	37.0	32.2
Percentage of health facilities meeting minimum standards of quality of care at point of delivery		0.3	0.0	0.6
Percentage of clients provided with quality services as per national standards	IMNCI services	26.1	35.1	
	Antenatal care	10.5	10.2	6.3
	Family Planning	12.3	32.6	20.5
Percentage of providers observed complying with service delivery standard protocols/guidelines for tracer services	IMNCI services	1.9	0.1	0.7
	Antenatal care	0.0	2.1	1.0
	Family Planning	1.1	1.9	1.2
Percentage of health facilities with capacity to provide selected laboratory services as per standards		13.3	11.9	17.9
Percentage of health facilities segregating health care waste at the time of collection		87.9	89.3	86.5
Percentage of health facilities safely disposing of health care waste		80.6	54.5	52.4
Percentage of clients who received basic health services free of cost	Child treatment	92.3	92.6	86.6
	Antenatal care	83.2	77.0	82.2
	Family Planning	98.1	98.4	96.6
Percentage of health facilities providing all basic health services by level		63.1	83.9	74.6
Percentage of public hospitals with their own pharmacy services			66.5	86.6
Percentage of health posts with laboratory services		11.3	90.6	66.1

Executive Summary

This annual report highlights the major progress of health programs, particularly over the Fiscal Year 2078/079, summarizes best practices and new initiatives, issues/challenges and set out the recommendations for the next year.

Family Welfare:

Immunization: In the province, MR2 coverage increased from 94% in FY 2077/78 to 99% in FY 2078/79 and dropout rate of Penta1 Vs MR2 is 0.2% in FY 2078/79, with no district in Cat IV (low coverage, high dropout). All 12 districts are declared as fully immunized districts for routine immunization. Based on VPD surveillance, 21 Measles positive cases and 5 Rubella cases identified in the Province in FY 2078/079.

Nutrition: Proportion of children aged 0-23 months who were enrolled for growth monitoring increased to 92% (FY 2087/79) from 77% (FY 2077/78). Among the children registered for growth monitoring, 3.5% were classified as underweight. Percentage of newborns with low birth weight (2.5 kg) has stagnated at 12% since previous year. Overall, 63 new OTC centers were established in FY 2078/79 and admitted MAM cases increased from 1,323 (FY 2077/78) to 3,624 (FY 2078/79)**.** Almost 65% of children aged 0-6 months were exclusively breastfed, and 63% of children aged 6-8 months received complementary foods. At the provincial level, compliance of taking 180 tablets throughout the pregnancy is 76%, while 70% of postpartum women received a 45-day supply of IFA. Coverage of children aged 6-23 months who received at least one cycle (60 Sachets) of Baal Vita is 22%, while compliance (number of children who received three cycles-180 Sachets) is 4%. In 11 local levels, 43 schools have school nurses who help with the school health and nutrition program.

IMNCI: Incidence of Diarrhoea (among under 5 children) in the province was 357 in fiscal year 2078-79, being highest in Rolpa (811) and lowest in Rupandehi (243). Overwhelming majority of these cases (99%) were treated with ORS and Zinc. The incidence of Pneumonia was 38.1 per 1000 children under the age of five, which has fallen dramatically (from 61.1 per 1000 in FY 2077-78). Health workers identified no falciparum malaria cases, 39 non-falciparum malaria cases; 12 very severe febrile disease cases; 25 measles cases; 14516 ear infection cases; 2030 severe malnutrition cases and 372 anemia cases among children under five years of age in FY 2078-79.

Safe Motherhood: Overall, four ANC visits as per protocol increased from 71% to 80%, institutional delivery from 80% to 94%, SBA delivery from 77% to 90% and PNC visit as pre protocol increased from 29% to 54% over the past two years. In total, 13 out of 109 local levels had reported zero home delivery in FY 2078/079, in contrast to 7 local levels in FY 2077/078. The province initiated free USG service to poor and destitute pregnant women in Provincial and district level hospitals and 4166 pregnant women benefitted through this service.

Family Planning: Implant (31%) occupies the largest proportion of contraceptive method mix among all current users followed by Depo and Sterilization (19% in each). Almost 2% of women

who have given birth have accepted FP methods in the post-partum period. Arghakhanchi had the highest proportion of PP-FP users (8.42%), while there were no post-partum FP users for IUCD, Implant or Tubectomy in Bardiya.

Safe Abortion: In total, 174 health facilities in Lumbini provided safe abortion services. By local levels, 20 out of 109 local levels (18%) have zero abortion services in fiscal year 2078-79. In the province, almost 78% of the women who underwent abortion utilized a post-abortion contraception in FY 2078/079.

Disease Control:

Tuberculosis: TB Case Notification Rate increased from 114/lakh in FY 2077/78 to157/lakh in FY 2078/79 (increased by 43) and success rate increased to 91% in FY 2078/79 (90% in FY 2077/78). The province maintained the Treatment success rate (TSR) as per National Strategic targets of TSR of at least 90%. This year, TB mortality rate increased slightly to 4.8% than previous fiscal year (4.1% in FY 2077-78). In total, 169 DR-TB cases were holding by Lumbini province and overall DR TB treatment success rate is 76 %.

Malaria: Confirmed malaria cases increased from 85 to 153 in last two years. The proportion of P. Falciparum infection increased sharply and accounted for 35.9%. The annual parasite incidence (API) increased to 0.08 in this fiscal year (against 0.04 in FY 2077/78) in risk districts. No cases of indigenous P. Falciparum cases were reported in this fiscal year, whereas number of indigenous P. vivax cases remains the same in both FYs 2077-78 and 2078-79.

HIV/AIDS and STI: In total, 133,184 cases were tested with HIV in FY 2078-79, which is in increasing trend as compared with previous year-2077-78. The number of HIV positive cases also increased from 473 (in FY 2077/78) to 659 (in FY 2078-79). Nevertheless, the number of HIV positive pregnant women decreased from 61 to 16 in last two fiscal years. In the province, a total of 4,325 People Living with HIV (PLHIV) are currently on Anti-retroviral Treatment (ART) in FY 2078/079, which is slightly increased compared to last fiscal year (3850 in FY 2077/78).

Kalaazar: In the province, a total of 69 Kala-azar cases were reported in FY 2078/79, which is an increase in status compared with the previous year. Most of the cases were reported from Banke (46) and Palpa (16) districts. The number of new cases decreased in Rupandehi district this year and the remaining districts reported no cases.

Lymphatic Filariasis: A total of 42 new cases of Lymphatic Filariasis were identified in Lumbini in FY 2078-79. Among these, highest number (12) of cases were found from Dang districts based on the HMIS OPD morbidity reporting.

Leprosy: Leprosy prevalence rate is in decreasing trend while analyzing from FY 2073/74 to FY2078/79 (i.e., decreased from 1.5 to 1.1 per 10,000 population). However, this rate is above the cut-off point of 1 case per 10,000 set by WHO to indicate the elimination of Leprosy as a public health problem. In total, 584 new Leprosy cases were detected this year in the province, with

highest case detection in Rupandehi district (165 new cases). The proportion of grade-2 disability among new cases of the province increased from 3.4 in FY 2077/78 to 7.7 in FY 2078/79.

Social Security and Other Public Health Program:

OCMC: Overall, 2477 persons were served by OCMCs across the province, a trend that has been expanding for the past three years. In FY 2078-79, the OCMC at Lumbini Provincial Hospital offered the most services, while Palpa Hospital provided the least.

Social Service Unit: In fiscal year 2078-79, SSU provided free health care services to 24,709 ultra-poor, poor, senior citizens, disabled, victims of GBV, FCHVs, and others. It is distinctly higher than in the preceding fiscal year in most hospitals. Lumbini Provincial Hospital has offered free services to the highest number of beneficiaries (10,257) from the SSU, whereas Bhim Hospital catered the least (40).

Home Based Treatment to Citizens Above 70 Years of Age: A total of 39,957 citizen used the services in FY 2078-79. By district, Rupandehi has the highest utilization (17380), while Rukum East account the lowest (787).

Medical Treatment of Deprived Citizens: total of 1499 benefited with the financial relief. Majority of them belonged to having disease related to head injury (706) followed by cancer and heart. Majority of them were from Rupandehi (914) and least from Nawalparasi (13).

Hospital Service Strengthening:

All the province-level hospitals are upgraded to 50 bedded hospitals (with HR) providing eye, dental, ENT, physiotherapy, and 24 hours laboratory, pharmacy and USG services. Lumbini Provincial Hospital is the second largest hospital providing maternity services (12,930 cases in FY 2078/79) in the country and first hospital outside the valley. Out of 10 province-level hospitals with highest MSS score in Nepal, four hospitals are from Lumbini province with Bardiya hospital standing at topmost position with the overall score of 95%. As a part of Hospital service strengthening, procurement of MRI machine, operation of burn ward and Cath lab (Lumbini provincial), procurement of CT Scan machine (Bhim hospital), endoscopy service (Pyuthan hospital), dialysis service (Rapti Provincial, Lumbini Provincial) were done this year. Further, Sickle cell and thalassemia disease diagnosis and counselling centers were established in 8 government hospitals of six Terai districts. Overall, number of patients who received OPD, Indoor and emergency services increased drastically as compared to previous fiscal years owing to the increased quality of hospital services and improvement in reporting status.

Ayurveda and Alternative Medicine:

In FY 2078/79, a total of 2,93,573 new patients received Ayurveda services, which is a significant increment as compared with previous fiscal years. In FY 2078/79, the Lumbini province has established Ayurved Health Centre in Nawalparasi and Rukum East. The province has also expanded surgical service in Provincial Ayurveda Hospital Bijauri where 2,143 patients received services.

Support Program:

Health Budget: The allocation of budget in health sector is being increased with advancement of fiscal years. While comparing health budget from FY 075/76 to 079/80, the budget is increased by two folds (final budget in health sector- 12% of total budget in FY 2078/79). By provincial authorities, Ayurveda Chikitsalaya has highest financial progress (85%) and PHTC has at least progress (17%) among nine provincial entities.

Formulation of Policy Documents: In FY 2078/79, the province has developed operation and management guideline on province health partnership (2078), provincial health special remedial financial support guideline (2078), operation procedure on specialist doctor mobilization of provincial hospital and medical college ,2078 and provincial antimicrobial resistance action plan, 2078.

Health Information Management: Lumbini Province achieved 100% reporting rate in Fiscal Year 2078/79 and achieved the national target of 100% reporting by 2030. The province achieved 97.6% timely reporting in the last fiscal year, which is a significant improvement as compared with previous fiscal years. Also, there is a significant improvement in the online reporting of HMIS reports from health facilities in all 12 districts.

Health Training: The PHTC organized 25 different training and trained 835 health works in FY 2078/79. As a part of training site strengthening, the Training Centre, in this fiscal year, approved Rapti Provincial Hospital for SBA and Implant training as well as Lumbini Provincial Hospital for Implant training. The Biomedical Management Unit in Devdaha is designed for capacity building of human resources well as maintenance service for biomedical equipment. At least one training was conducted in each training site for sustainability and strengthening the site.

Laboratory: In FY 2078/079, the key activities performed by Provincial Public Health laboratory included laboratory-based surveillance of Influenza, outbreak investigation of Cholera, diagnosis of SARS CoV2RT-PCR, assessment survey of Kala-azar, RT-PCR integrated test for influenza (A & B) and Quality control of microscopic TB and also implemented the HIV Dried Tube Specimen (DTS) in External Quality Assessment System. The PPHL conducted various capacity building activities (TB microscopy, GeneXpert operation and maintenance, Malaria RDT testing, biosafety and biosecurity, laboratory quality management system) and supplied laboratory reagents (TB, Malaria) and equipment to health facilities. As a best practice, PPHL also installed microscopic examination center in hard-to-reach rural municipalities of Rukum East and Rolpa.

Health Logistic Management: More than twenty-five procurements have been placed by PHLMC in FY 2078/079. Specifically, PHLMC procured medicine and essential commodities, machinery, and equipment (e.g., portable USG machine, digital x-ray, patient monitor, SNCU/NICU equipment, Minilap /Vasectomy set, NCD equipment), strengthened storage practice (e.g., warehouse building and walking cooler installation in vaccine store, ensured good storage practices and ensured effective vaccine management) and also ensured the effective procurement and assurance of availability of the medicine in the province.

Summary of Provincial Policies

Province Health Policy 2077

The province government has endorsed a Provincial Health Policy 2077 (cabinet decision: 2077/02/02 BS) to ensure the fundamental right to health as stipulated in the constitution of Nepal. The health policy envisions to achieve "Healthy and Happy Citizens for a Prosperous Province". The provincial health policy consists of six guiding principles, 24 policy statements and 126 strategies.

Guiding principles:

- Universal access to quality healthcare
- Intergovernmental and multi-sectoral participation, coordination, and cooperation
- Equitable health service based on social justice
- Ensure sufficient investment and adequate utilization
- Commitment to good governance, accountability, and professional conduct
- Innovation and creativity in health service

Vision:

- Healthy and happy citizens for a prosperous province

Mission:

- Ensure the fundamental right of the citizens to stay healthy

Goal:

- Improve the health status of citizen by increasing access to quality health service through strengthened health system

Objectives of the provincial health policy:

- Ensure an efficient and effective health care system
- Enhance access to services to all citizens of the province, who can get easy, accessible, simple, and quality health services from all levels
- Create an enabling environment to promote healthy lifestyles, change behavior and upset the factors that adversely affect health
- Provide effective and uninterrupted health service delivery in case of emergencies and disasters
- Inter-governmental, community and multilateral coordination, partnership, and cooperation in health service management, as well as cooperation with the private and non-governmental sector as needed
- Make health services responsive to the people by promoting good governance, accountability, and responsibility.
- Increase investment in the health sector and reduce the proportion of personal expenses due to health problems

Policy statements:

1. Ensure basic and emergency health services, free of cost from all levels of health institutions in the province (6 strategies)
2. Increase equitable access through strengthening specialists and specialized health services (10 strategies)
3. Provide necessary infrastructure, medicines, medicinal materials, tools, equipment and diagnostic services for the quality health service delivery (10 strategies)
4. Produce, distribute, mobilize and manage the skilled health manpower to strengthen health service delivery (9 strategies)
5. Effectively provide basic, specialist and specialized health services relating to the Ayurveda and other traditional, natural medicine, yoga, and other alternative medicine existing in the province (6 strategies)
6. Develop provincial standard based on minimum service standards and national medical standards to deliver the delivery of quality health services (3 strategies)
7. Increase the access and utilization of quality health services for socially, economically, geographically, gender, religiously and culturally backward community (6 strategies)
8. Ensure the safe maternal and reproductive health rights of adolescents and women (8 strategies)
9. Provide promotive, preventive, curative, rehabilitative and palliative health services for the prevention and management of non-communicable diseases (5 strategies)
10. Ensure the favorable environment by providing health education and information for healthy positive behavior change (6 strategies)
11. Formulate and implement urban health promotion plan to manage health problems arising from increasing urbanization (3 strategies)
12. Promotion and consumption of healthy foods to improve nutritional status and perform necessary coordination to increase production and access (6 strategies)
13. Perform multilateral cooperation to minimize and respond to possible health effects and epidemics during disasters or disasters (5 strategies)
14. Minimize and manage the adverse effects of environment on health (6 strategies)
15. Institutionalizing the progress and achievements made in health sector, emphasize on necessary coordination and cooperation to achieve more achievements (2 strategies)
16. Ensure the occupational health and safety of workers working in various workplaces (4 strategies)
17. Collaborate with public, community and private sectors to increase access and utilization of health services (4 strategies)
18. Promote study and research works and use the acquired findings to develop and implement the health programs and strategies (3 strategies)
19. Develop the more robust and technology-friendly integrated health information system for developing fact-based plans and effective management of health services (5 strategies)

20. Made health sector a people-oriented and result-oriented through maintaining good governance (6 strategies)
21. Effective prevention, control and management of communicable diseases, insect-borne diseases, animal-borne diseases and sickle cell anemia, thalassemia in selected places and communities and diseases that can enter through open borders (4 strategies)
22. Strengthen the social security scheme and reduce the personal expenditure in health care through increasing investment in the health sector (4 strategies)
23. Promote health tourism within the province by emphasizing the health protection of people coming to and from the province (2 strategies)
24. Formulate and implement health service program based on demographic situation and analysis (4 strategies)

First Five-Year Plan (2076/77 – 2080/81)

The First Five-Year Plan of Provincial Planning Commission is developed based on the Constitution of Nepal, National Long-term Vision 2100, 15th Plan, Sustainable Development Goals and policies and program of province government and set to achieve "prosperous province: Happy citizen". In the health sector, the plan envisions to develop healthy and strong citizen by providing access to quality healthcare for all. The goal, objectives, strategies and expected outcomes set by the plan in health sector mentioned hereunder:

Goal:

- Provide quality health services to all citizens easily

Objectives:

- Ensure equitable access to basic health services
- Make easy access of people to quality promotive, preventive and curative services
- Minimize risk factors in the field of public health promotion

Strategies:

- Expand access to basic health services and improve qualitatively
- Increase the capacity of hospitals, including quality curative services, and provide specialized health services at province
- Adopt and promote alternative methods of health treatment
- Conduct public awareness campaign related to health
- Arrange for the availability of quality and nutritious food in the market

Expected outcomes:

- Achieved health-related sustainable development goals through increasing easy access to health services
- Established Trauma center
- Provided specialized health services through provincial hospitals

Chapter 1: Introduction

1.1 Background

Every year, the provincial annual health review meeting is being organized to analyze results and develop strategic action points to be prioritized in the coming year. Because the review meeting is a joint event to review the progress of the overall health sector, support from the EDPs, as well as contributions from non-governmental sectors, are also reviewed. To review the annual progress of the fiscal year (FY) 2078/079 and to harmonize support in health sector, the Health Directorate of the Lumbini Province organized the provincial annual health review meeting in Ghorahi, Dang from Ashoj 12-14, 2079. The following were the objectives of the provincial annual health review for the fiscal year 2078/079:

- Jointly review the annual health sector progress of Lumbini province
- Ensure that all the stakeholders have a common understanding of achievements, issues and bottlenecks in the health sector
- Identify the strategic priority areas based on existing issues and bottlenecks that need to be addressed
- Agree on the strategic actions to be included in the next year's work plan and budget.

The review was attended by 201 participants, including the Honorable Minister of Ministry of Health (MoH), Lumbini Province, the secretary of MoH, representatives from the federal MoHP and the Department of Health Services (DoHS), local levels, hospitals, EDPs, health professionals, media personnel, and other stakeholders in the health sector. Reflections from the federal MoHP, MoH, Health Directorate, Province Health Training Centre, Province Health Logistic Management Centre (PHLMC), medical colleges, Health Insurance Board, and EDPs were shared during the review. Province-level institutions in each district (Health Office, Hospital and Ayurved) presented their progress, issues/bottlenecks, and potential action areas for the current and coming fiscal years.

The preparation of this annual progress report covers the municipal, hospital and district- level annual performance reviews, as well as the provincial annual performance review. This annual report summarizes the annual progress and achievements of the province in fiscal year 2078-79 and report covers the following areas:

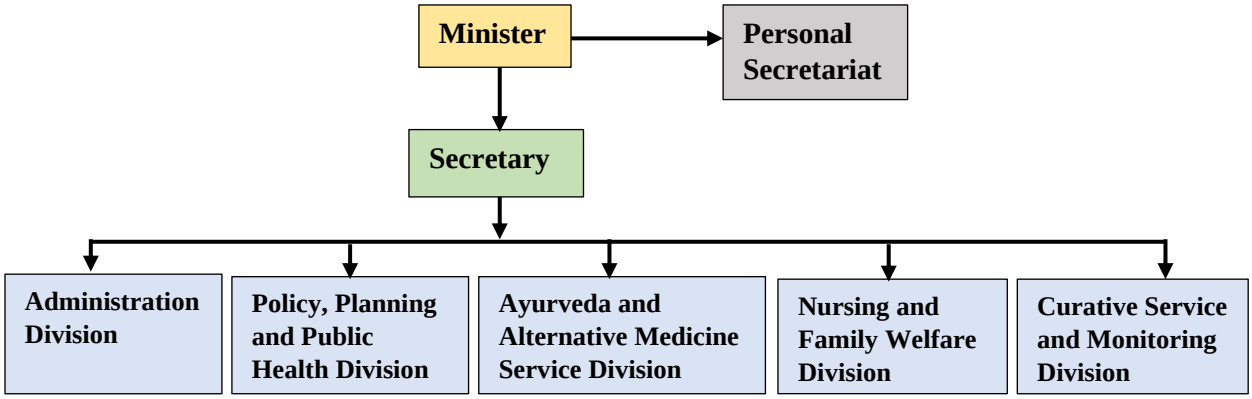
- Policy statements, including objectives, strategies, goals, major activities and achievements of the health programs
- Performance status of major indicators
- Problems, issues, constraints and recommendations on improving performance and achieving targets
- Information on the contribution of other provincial counterparts, as well as External Development Partners and stakeholders.
- New initiatives and best practices

1.2 Organizational Structure of Ministry of Health

Following the adoption of a new constitution in 2015, the country's transition to a federal structure proceeded the establishment of province ministries and other provincial entities under their jurisdiction. In this process, the responsibility of health in all seven provinces was entrusted to the Ministry of Social Development, which covered seven functional areas: education; health and population; water and sanitation; women, children, senior citizens, and social security; youth and sports; language, religion, and culture; and labor and employment. Later, in April 2021 (Baisakh 2078), the Ministry of Social Development in Lumbini Province was split to two ministries, one of which included the Ministry of Health and Population (MoHP). Further in October 2021 (Kartik 2078), the provincial regulations for division of responsibilities (*Karyabhibhajan Niyamawali, 2078*) was amended and the MoHP was renamed the Ministry of Health Population and Family Welfare. Later on, the council of ministers decided to rename the ministry to Ministry of Health on July 17 (Shrawan 1, 2079).

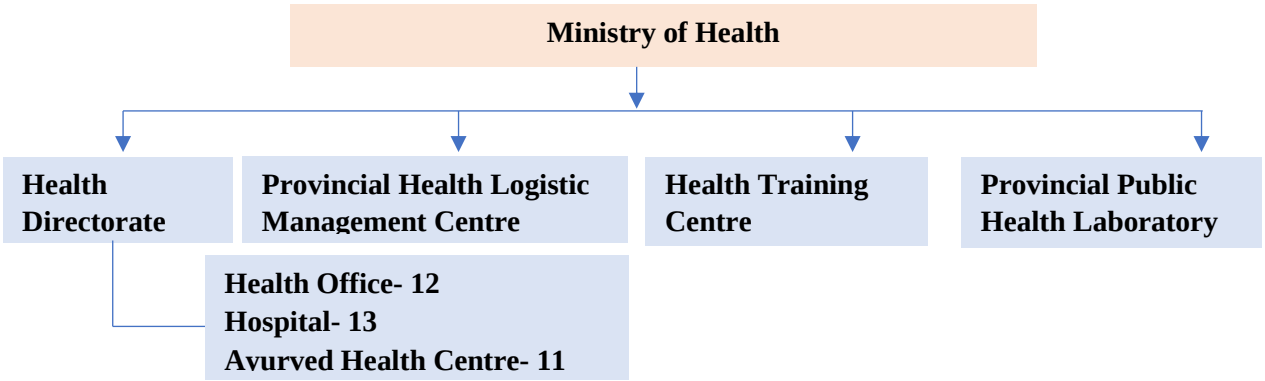
1.2.1 Organogram of Ministry of Health:

Figure 1: Organogram of Ministry of Health



1.2.2 Provincial Institutions under Ministry of Health

Figure 2: Provincial Institutions of Ministry of Health



1.3 Functions of Ministry of Health

This Ministry of Health is primarily responsible for making necessary arrangements and developing health and nutrition policies and laws to ensure the effective delivery of curative services, disease prevention, and health promotion activities, as well as the establishment and regulation of the province's overall health care system within the limits of the powers and responsibilities conferred by the constitution. The Ministry of Health is also responsible for the development and execution of numerous health programs within its jurisdiction.

The Province Government (Division of Responsibilities) Regulations *(Karyabhibhajan Niyamawali, 2078)* explain the primary functions of the Ministry of Health. The following are the ministry's primary functions:

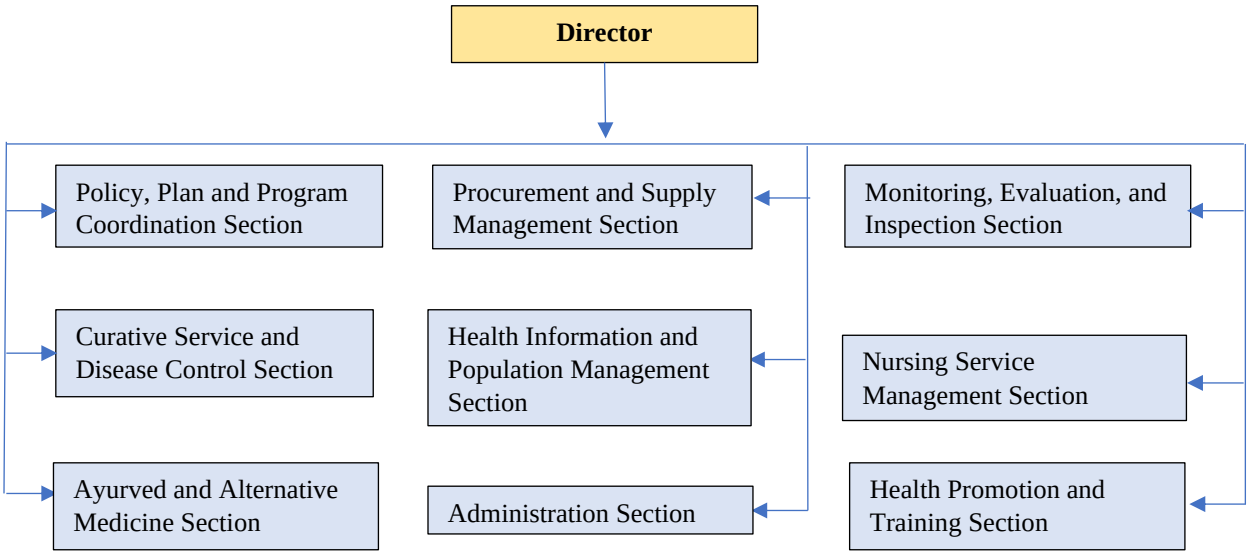
- Formulation, implementation and regulation of provincial policies, laws and standards related to health services and nutrition
- Management of preventive, promotive, curative and rehabilitative health services required at the provincial level
- Registration, operation permission and regulation of state level academic, professional, and professional associations related to health care
- Quality assurance, monitoring and regulating the quality of health services
- Production and storage of pharmaceutical and non- pharmaceutical technology related products in accordance with national standards, maximum retail pricing, final disposal, determination of quality and standards and registration, operation permission and regulation of industries producing such products
- Registration, operation permission and regulation of hospitals, nursing homes, diagnostic centers, treatment centers and other health institutions and laboratories as per national standards
- Management and regulation of social health security programs including health insurance in accordance with national standards
- Human resource development and management of the province level health sector
- Drug monitoring, rationale use of drugs and reduction of anti-microbial resistance
- Immunization and family planning services
- Procurement and supply of medicines and other health logistics
- Study and research on health care at the province level as well as institutional management of health information and health accounts
- Public health surveillance management at the provincial level
- Standards, control and regulation of drugs, tobacco and alcohol
- Management of health emergencies, disaster and epidemics
- Prevention and control of communicable and non- communicable diseases
- Health infrastructure development and management as per national standards
- Setting of standards, implementation and regulation of health care waste management

- Setting of provincial standards, implementation and regulation of ayurvedic, Unani, Amchi, Homeopathic, naturopathy and other traditional medicine

Health Directorate (HD) under Lumbini Province is the major technical and administrative unit for health sector. The Health Directorate ensures proper delivery of promotive, preventive and curative health services through different health institutions in the province.

1.4 Organogram of Health Directorate

Figure 3: Organogram of Health Directorate



Major functions of the Directorate are:

- Ensure effective implementation of public health programs in the province
- Determine the requirement of manpower for health institutions in the province
- Ensure supply of drugs, equipment, instruments, and other materials at different health institutions in the province
- Manage the immediate solution of problems arising from natural disasters and epidemics in the province at different levels
- Provide oversight to overall information management in the province
- Foster coordination with external development partners for effective delivery of resources and health services in the province.

1.5 Health Service Delivery Units

In the Lumbini Province, there are 3 federal hospitals, 13 province-level hospitals and 16 local level hospitals. In the Province, 29 primary Health Care Centers and 567 health posts provide basic health care services to the communities, 444 of which are birthing centers. To improve access and utilization of health care services, the province operates 120 urban health centers, 186 community health units, 253 basic health service centers, 1954 PHC/ORCs, and 2910 immunization clinics. Similarly, 8993 FCHVs are being mobilized to promote and prevent public health.

Table 1: Service Outlets within the Province

Organization Units	Banke	Bardiya	Dang	Kapilbastu	Rupandehi	Nawalparasi	Gulmi	Palpa	Arghakhanchi	Pyuthan	Rolpa	Rukum East	Lumbini province
Government hospital	6	4	4	6	2	2	1	2	1	1	2	1	32
Primary Health Centre	3	2	2	2	5	2	4	2	2	2	2	1	29
Health Post	43	30	35	72	64	36	76	62	39	46	49	15	567
Birthing centre	36	30	40	33	25	16	66	52	27	53	49	17	444
BEONC Site	3	3	2	4	5	4	4	5	2	2	2	1	37
CEONC Site	4	1	3	1	4	1	1	3	1	1	1	0	21
Basic Health Service Centre	26	42	35	16	45	1	11	7	17	16	22	15	253
Community Health Units	5	0	13	4	3	28	30	39	11	23	29	1	186
Urban Health Centre	7	3	33	7	18	3	3	8	25	8	5	0	120
PHC/ORC clinic	122	200	130	303	218	125	216	185	73	170	177	35	1954
EPI clinic	292	217	220	423	299	176	329	234	176	271	216	57	2910
FCHV	757	836	918	1108	1506	359	995	621	849	443	459	142	8993
Diagnostic Centre (Imaging)	9	0	2	0	4	0	0	0	0	5	0	2	22
Diagnostic Centre (Microscopy)	20	18	38	12	36	9	13	13	4	13	9	5	190
DOTS Centre	66	35	62	101	92	43	102	69	54	62	55	19	760
Safe Abortion Sites	18	34	13	19	22	10	15	29	12	9	14	1	196
IUCD sites	39	15	43	25	39	14	20	19	16	17	25	10	282
Implant sites	46	35	47	50	53	24	20	19	30	32	44	17	417
Vaccine sub-Centre	0	1	1	10	14	0		6	8	0	3	3	46
Nutrition Rehabilitation Home	1	0	0	0	1	0	0	0	0	0	0	0	2
ART sites	1	1	2	2	2	1	1	2	1	1	1	0	15
OST site	1	0	0	0	1	0	0	0	0	0	0	0	2
Gene-Xpert site	4	1	2	2	2	1	1	2	1	2	1	0	19

Source: FY 2078/79 annual review slides presented by respective Health Offices

1.6 Sources of Information in the Report

The main source of data for this progress report is the Health Management Information System (HMIS). Majority of the data used in this report is obtained from the DHIS2 platform. These data were retrieved from DHIS2, following the completion of the province annual health review meeting and were summarized to analyze progress of various health programs and activities. Other information systems used in the report include the Logistic Management Information System (eLMIS), disease surveillance systems, sentinel reporting, and the IMU. The report also included information obtained from the municipal and provincial counterparts during the annual health review meeting undertaken at various levels (local levels, district and province). The Annual Health Report Preparation Committee collated, compiled, and examined all relevant data and then organized them into various sections and chapters in the annual health report.

1.7 Structure of the Report

There are nine chapters in this annual progress report. The summary of provincial policies, background of annual report production, organizational structure, service delivery points and information sources are covered in Chapter 1. The chapter 2-7 discusses policy statements, progress and achievements, issues, bottlenecks and recommendations of various health programs and supportive programs in Lumbini Province. The chapter 8 summarizes the performance evaluation criteria and score of different provincial institutions. The chapter 9 summarizes the contributions and achievements of external development partners (EDPs, INGOs, and NGOs) in the health sector.

Chapter 2: Family Welfare

2.1 Immunization

2.1.1 Background

The National Immunization Program (NIP), formerly Expanded Program on Immunization (EPI), was started in 2034 and is a priority 1 program of the government. Immunization is important for reaching the Sustainable Development Goals (SDGs). Immunization reaches more people than any other health or social service, making it the cornerstone of primary care and a significant driver toward universal health coverage. This makes immunization critical to achieving SDG3 – ensuring healthy lives and promoting well-being for all people of all ages. Nepal's constitution has assured access to basic health care services as a fundamental right of the people. The immunization Act endorsed (BS 2072 Magh 12) has ensured the right to access quality of vaccines to every child.

National Immunization Program has included total twelve antigens-BCG, DPT-Hib (Penta), PCV, OPV (bOPV), fIPV, Measles Rubella (MR), Japanese Encephalitis, ROTA and TCV provided through over 16600 service delivery points in health facilities (fixed session), outreach sessions and mobilize clinic (sessions). Smallpox has now become history due to eradication in 2034 BS (1977 AD). Maternal and Neonatal Tetanus (MNT) was eliminated in 2005 and the elimination status has been sustained since then. The last case of polio in Nepal was in 2010, and along with other countries of the Southeast Asia Region, Nepal was certified polio free in 2014. This status has been maintained since then. The province has sustained the achievement since then and has a very good track record of meeting the targets for control, elimination and eradication of vaccine preventable diseases.

At the federal level, the Family Welfare Division (FWD) plans, implements, and monitors a variety of immunization activities, while the logistic management section procures, stores, and distributes vaccine across the country as directed by the FWD's Child Health and Immunization Section. The NHEICC is responsible for generating communication and social mobilization tools for routine and supplementary immunizations and works closely with the immunization section.

At the provincial level, Health Directorate plans, executes and monitors various immunization activities. The Provincial Health Logistic Management Centre (PHLMC) executes the logistic plan including storage and distribution of vaccine and vaccine related commodities including cold-chain management. In line with the national target to eliminate Measles and Rubella (MR) by 2023, province government is working intensively to prevent community transmission of MR and associated disabilities and deaths. The MR being one of the most infectious diseases and to achieve the target of elimination will require very high routine immunization coverage of more than 95% of both first and second routine immunization dose of MR vaccine from ward level to municipal level and district level.

2.1.2 Comprehensive Multi Year Plan of Action (cMYP 2017-21)

The Comprehensive Multi Year Plan cMYP 2017-21 is in place. The province level activities are being carried out in line with the national plan. The cMYP's (2017-2021) goal is to reduce the morbidity, mortality and disability associated with vaccine preventable diseases. The following are the strategic objectives of the cMYP:

1. Reach every child for full immunization
2. Accelerate, achieve and sustain vaccine preventable disease control, elimination and eradication
3. Strengthen immunization supply chain and vaccine management system for quality immunization services
4. Ensure financial sustainability for immunization program
5. Promote innovation, research and social mobilization activities to enhance best practices.

2.1.3 Target Population

- Under-1-year children for BCG, DPT-HepB-Hib, OPV, fIPV, PCV and Measles/ Rubella1 (MR1) vaccine.
- 12-23 months children for JE, Typhoid and MR2
- Expected pregnancy for Tetanus Toxoid containing (Td) vaccine.

2.1.4 Major Achievements

- All the districts within Lumbini province are declared as fully immunized as per the Full Immunization Declaration (FID) guideline.
- The coverage of Penta1 has increased and the dropout rate of Penta1 vs MR2 has decreased, and the province has succeeded to fall in category one.
- Based on FID microplanning, FID sustainability campaign has been successfully implemented in all districts
- Planned, secured all the vaccine and logistics requirement, and proper distribution, and stock management at all levels
- As per national plan, micro-planning activities were completed for the district level on time
- Updated cold-chain inventory for the immunization supply chain
- Successfully rollout the Typhoid vaccine

2.1.5 National Immunization Schedule

Table 2: National Immunization Schedule

SN	Type of vaccine	Number of doses	Recommended age
1	BCG	1	At birth or on first contact with health institution
2	OPV	3	6, 10, and 14 weeks of age
3	DPT-Hep B-Hib	3	6, 10, and 14 weeks of age
4	FIPV	2	14 weeks and 9 months
5	PCV	3	6,10 weeks and 9 months of age
6	Rota	2	6,10 weeks
7	Measles-Rubella	2	MR1 at 9 months and MR2 at 15 months of age
8	Td	2	Pregnant women: 2 doses of Td one month apart in first pregnancy, and 1 dose in each subsequent pregnancy
9	JE	1	12 months of age
10	Typhoid	1	15 months of age

2.1.6 Immunization Status of Lumbini Province

Currently there are 13 antigens-BCG, DPT-HepB-Hib (Penta), PCV, OPV (boPV), FIPV, Measles and Rubella (MR), JE and Typhoid vaccines provided through 3,051 sessions (EPI clinics-2,910). Government of Nepal procures BCG, OPV, Td, JE, MR first dose and co-finances to GAVI supported vaccines DPT-HepB-Hib (Penta), PCV, TCV and MR second dose. With the aim of reaching every child in this province, activities like full immunization declaration, improving micro-planning for immunization have also been carried out.

Immunization coverage

Table 3: Immunization coverage by antigens doses FY 2078-79

SN	Antigens	Target population	Target	Achievement	Percent achieved
1	BCG	under 1 year	94363	97549	103
2	Rota1	under 1 year	94363	92243	98
3	Rota2	under 1 year	94363	90936	96
4	DPT-Hep B HIB1	under 1 year	94363	92851	98
5	DPT-Hep B HIB2	under 1 year	94363	91742	97
6	DPT-Hep B HIB3	under 1 year	94363	91151	97
7	OPV 1	under 1 year	94363	92732	98
8	OPV 2	under 1 year	94363	91542	97
9	OPV 3	under 1 year	94363	90930	96
10	PCV1	under 1 year	94363	92818	98
11	PCV2	under 1 year	94363	91652	97
12	PCV3	under 1 year	94363	91126	97
13	fIPV1	under 1 year	94363	91512	97

SN	Antigens	Target population	Target	Achievement	Percent achieved
14	fIPV2	under 1 year	94363	89963	95
15	Measles/Rubella 1st Dose	under 1 year	94363	91221	97
16	Measles/Rubella 2nd Dose	12-23 months	93572	92683	99
17	Japanese Encephalitis	12-23 months	93572	92537	99
18	Td2 and 2+	Expected live birth	96058	90135	94

One of the strategies of the comprehensive multi-year plan of action under the first strategic objective is to increase immunization coverage to reach 100% children. Table 3 shows the progress made toward this strategy and objective of the cMYP.

Figure 4: District, provincial and national trends in BCG coverage

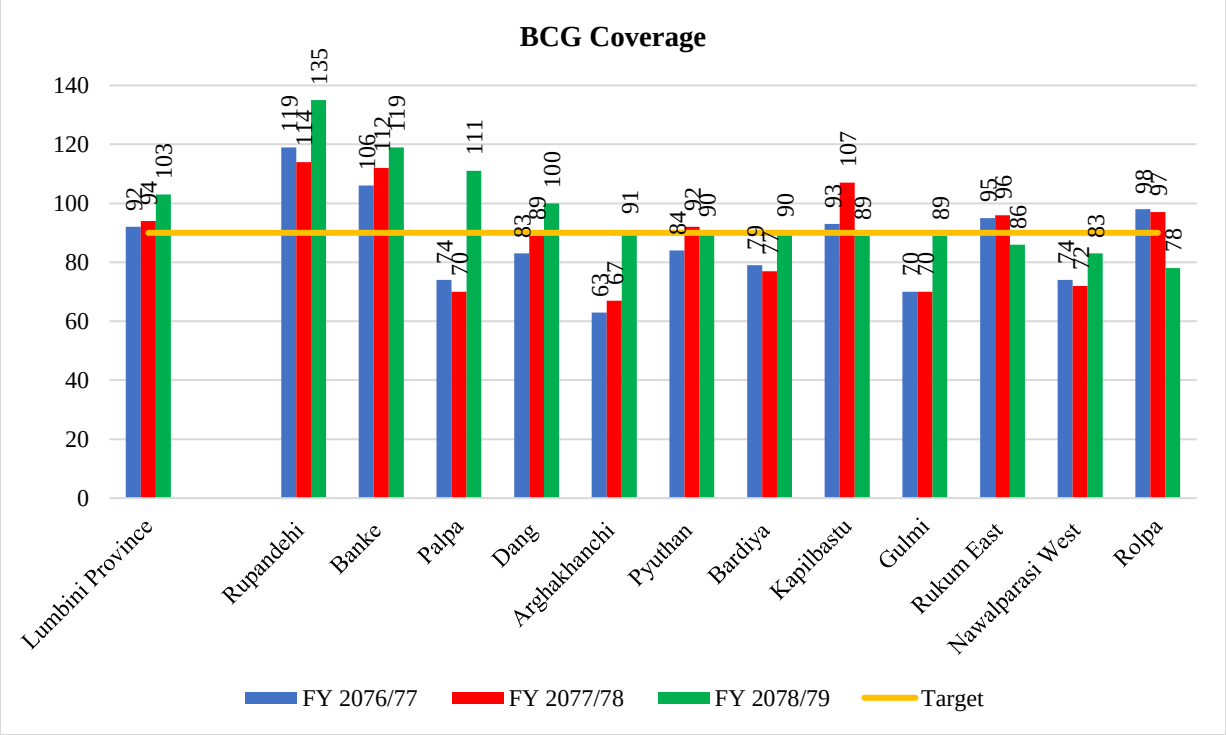


Figure 4 depicts BCG vaccination coverage by districts in comparison to provincial coverage and national target. Lumbini province has 103% coverage of BCG and crossed the national target of achieving >90% vaccination coverage. In comparison to previous fiscal years, BCG coverage increased in Rupandehi, Banke, Palpa, Dang, Arghakhanchi, Bardiya, Gulmi and Nawalparasi West. One of the reasons behind high BCG coverage in some district is the attendance of pregnant women from the neighbouring districts to the Hospitals for delivery purpose and receiving BCG vaccine by newborn after delivery. For instance, approximately 30,000 delivery cases are reported from the Lumbini Provincial Hospital where daily immunization sessions are operated to immunize new-born babies. In fiscal year 2078-79, Rupandehi district had the highest BCG

coverage (135%), whereas Rolpa district had the lowest (78%) coverage suggesting targeted interventions to increase the coverage.

Figure 5: District, provincial trends in MR2 coverage

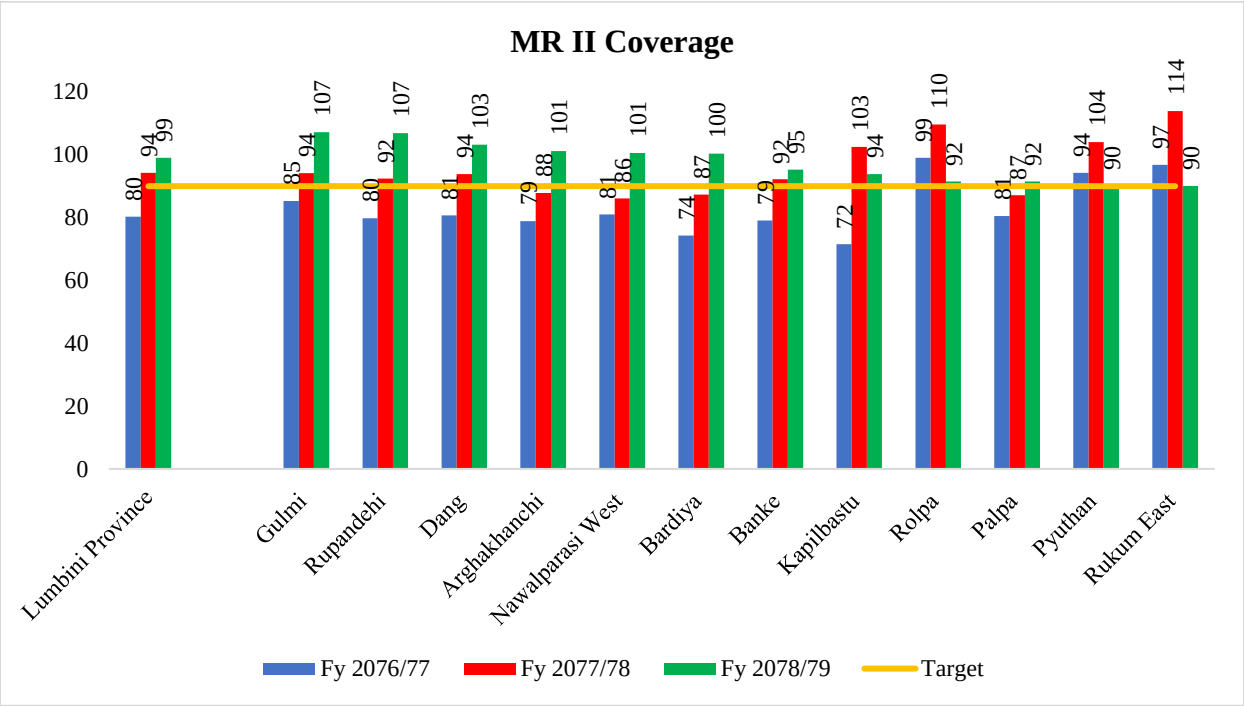
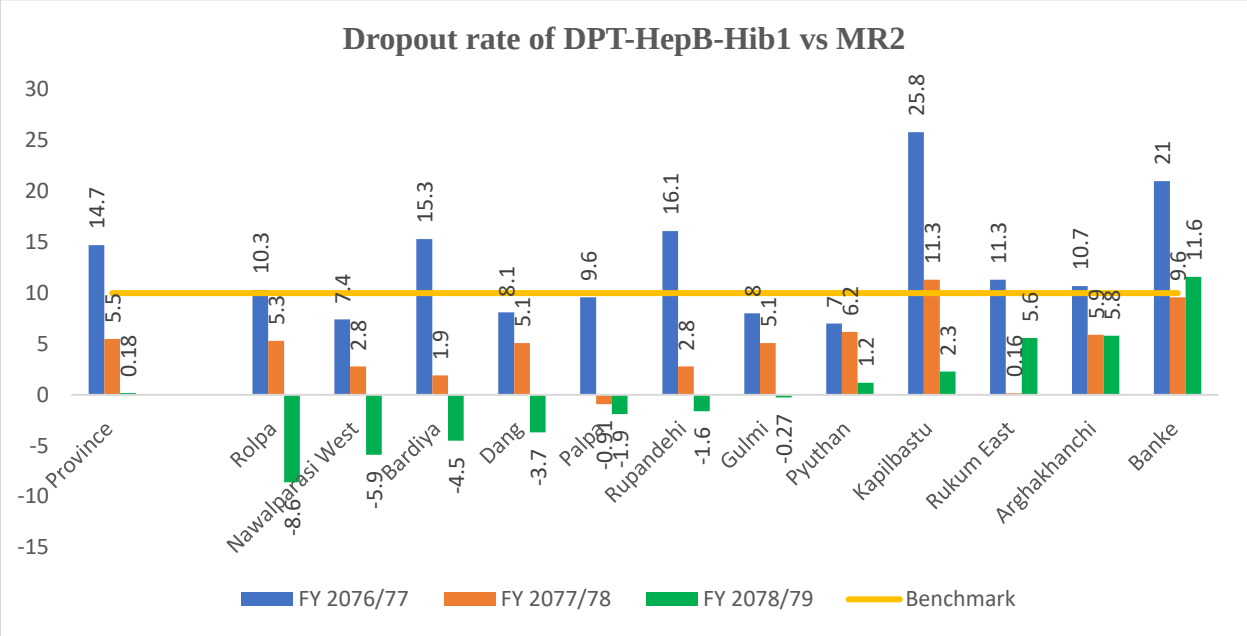


Figure 5 shows the MR2 coverage trend over the last three fiscal years. The MR2 coverage of the province is in increasing trend with 99% coverage in FY 2078/79 and achieved the national target of achieving >90% coverage. In comparison to the previous fiscal year, MR2 coverage in Gumi, Rupandehi, Dang, Arghakhnchi, Nawalparasi West, Bardiya, Banke and Palpa increased in FY 2078-79. Gulmi has the highest MR2 coverage (107%), while Rukum East has the lowest (90%) coverage in FY 2078-79.

Intensive 'search and immunize' policy applied in the districts may resulted in increasing in the MR2 coverage. Other reasons for increasing the MR2 coverage are the supply of regular vaccine and other cold chain accessories from PHLMC as well as regular and timely conduction of immunization sessions in all the districts.

Dropout rates of vaccination

Figure 6: District and provincial trends in dropout rate of DPT-HepB-Hib1 vs MR2



In comparison to the previous fiscal years, the dropout rate dropped in all districts in FY 2078/79. When looking at dropout rates by district, Banke has the highest dropout rates in FY 2078/79. Some of the reasons behind high drop-out rate might be the non-compliance with the order of arrival during vaccination in the health facilities, residence of Muslim community and their illiteracy in the importance of immunization and sporadic attendance of children from India for immunization and other socio-cultural factors.

Access and Utilization of Immunization Services

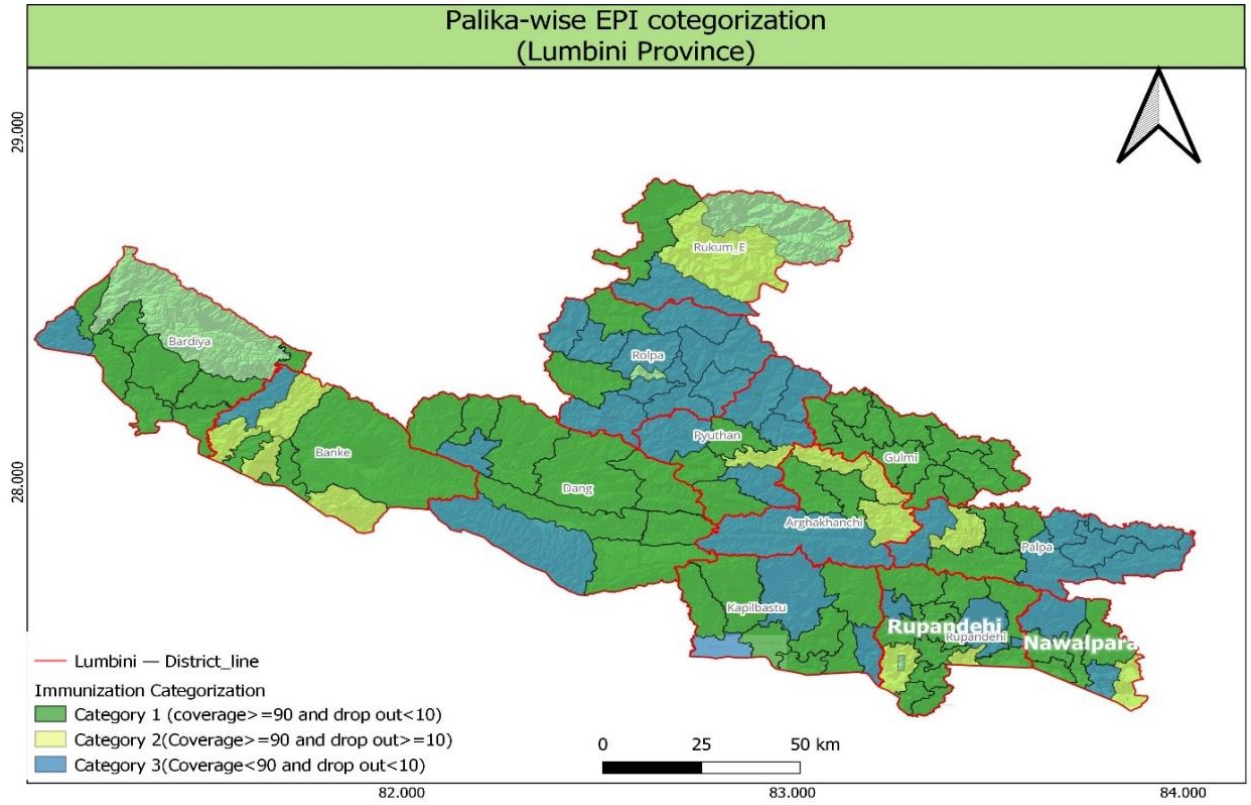
Immunization program evaluates status of districts by accessibility and utilization of immunization services. For this, districts are categorized in 1 to 4 categories; based on DPT-HepB-Hib1 coverage and dropout rate of DPT-HepB-Hib1 vs MR2 to know the accessibility and utilization of immunization services respectively.

Table 4: Immunization Categorization by district

Cat I Coverage ≥ 90% Dropout < 10%	Cat II Coverage ≥ 90% Dropout ≥10%	Cat III Coverage < 90% Dropout <10%	Cat IV Coverage <90% Dropout ≥10%
Rukum East, Gulmi, Arghakhanchi, Pyuthan,, Rupandehi, Nawalparasi West, Kapilbastu, Dang, Bardiya	Banke	Rolpa Palpa	

Table 4 clearly highlights that 9 out of 12 districts are in category-I (good access, good utilization), Banke district in Cat II, Rolpa and Palpa districts in Cat III (poor access and utilization), whereas there is no district in category-IV (poor access, poor utilization). Nevertheless, problem in both access and service utilization of immunization still exists within the province. The planning of immunization service should be strengthened based on the HHs level' line-listed information, and participatory approach at community level: identifying gap of target and coverage through DQSA which can help to reduce the equity gaps in terms of access to EPI service. Thus, awareness on importance of vaccine, effective communication for immunization, regular supervision of outreach session, track of missed children in hard-to-reach population are further needed to address the access and utilization gaps. The figure 7 presents the categorization of Municipalities according to immunization coverage and dropout.

Figure 7: Categorization of municipalities according to immunization coverage and drop out

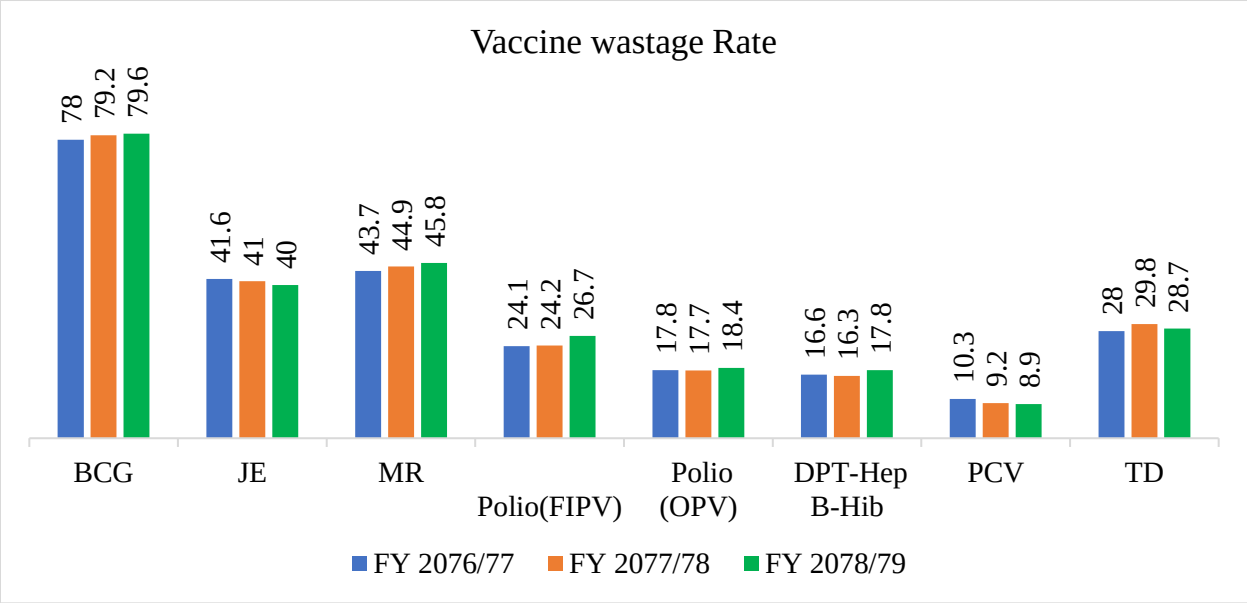


As presented in figure 7, no one of the LLG fall in Category IV (poor access, poor utilization), while 33 LLGs are in category III and 13 LLGs are in category II that clearly indicates the need of microplanning and focused interventions to increase the access and utilization of immunization services at local levels (Figure 7).

Vaccine Wastage Rate

Wastage rates are projected to be greater for all reconstituted vaccines (BCG, MR, and JE) that must be discarded within 6 hours (1 hour only for JE) or at the completion of the immunization session, whichever comes first. In Nepal, 'one vial per session' is utilized for BCG, MR, and JE vaccines, and because hills and mountain districts may have small session sizes due to spare population distribution, greater wastage rates are expected.

Figure 8: Trends in wastage rate at Lumbini Province by antigen type



The wastage rates for BCG and MR in Lumbini province are higher than the indicative wastage rates of 50% and 33%, respectively (Figure 8). The wastage rate for fIPV also continues to be higher than the expected wasting rate of 10%. The indicative vaccine wastage rate for Nepal has been presented in the Table 5. The provincial wastage rates for DPT-HepB-Hib and OPV are both above the indicative wastage rate of 15% and shows not much change compared to the previous year. In the case of PCV vaccinations, the provincial waste rate is 8.9 percent, which is less than indicative wastage rate of 10%.

Table 5: National Benchmark for Vaccine Wastage

Name of Antigen	BCG	JE	MR	DPT-HepB-Hib	PCV	fIPV	bOPV	Rota	Td
National standard	50%	40%	33%	15%	10%	10%	15%	5%	15%

Based on the observations, physical damage, label loss, incomplete use of the nominal number of doses in multi-dose vials, expiration before use, and not maintaining the temperature for both heat and freeze sensitive vaccines are all common reasons of higher vaccine wastage.

Typhoid Vaccine Campaign

The Typhoid vaccination campaign was operated through 6047 centres in all the districts of Lumbini province from 2078/12/22 to 2079/01/13 and after that Typhoid has been included in the

regular immunization schedule. The target population of TCV campaign was 15 months to 15 years children of the location.

Table 6: Typhoid vaccine coverage

SN	Districts	Vaccine centre	Total target	Total Achievement	Achievement %	Vaccine (In dose)			Wastage in %
						Received	Expended	Return	
1	Rukum East	149	16490	16489	100.0	22750	16515	6235	0.2
2	Rolpa	382	79662	72016	90.4	78385	71839	6546	-0.2
3	Pyuthan	446	66892	75152	112.3	83760	75545	8215	0.5
4	Gulmi	620	66856	67831	101.5	72130	69010	3120	1.7
5	Arghakhanchi	517	50822	48436	95.3	52865	48661	4204	0.5
6	Palpa	685	71087	60879	85.6	68100	61510	6590	1.0
7	Nawalparasi West	335	103989	101354	97.5	104720	101500	3220	0.1
8	Rupandehi	966	266518	297794	111.7	302575	299795	2780	0.7
9	Kapilbastu	696	189662	193190	101.9	214685	201120	13565	3.9
10	Dang	601	156656	186426	119.0	203720	188635	15085	1.2
11	Banke	264	148933	154670	103.9	159350	155400	3950	0.5
12	Bardiya	386	110385	116760	105.8	121830	119060	2770	1.9
Total		6047	1327952	1390997	105	1484870	1408590	76280	1.2

Table 6 shows the Typhoid vaccine coverage in the campaign. In total (province level), there was 105% coverage calculated while compiling the district data. In comparison to other districts, Dang has the highest coverage (119%) and Palpa has the lowest coverage (86%) of TCV. In total, 1.2 percentage TCV vaccine were found to be wasted during the campaign.

Declaration of Full Immunization District

One of the best initiatives in the immunization program is the declaration of Ward, LLG, District, and ultimately the country as fully immunized. This initiative began with the goal of reaching every child and securing ownership and commitments for immunization from the local government bodies. Technical support unit (UNICEF) has been providing the technical support to declare the fully immunized province from the beginning. By 2078/79, all districts of Lumbini province have been declared fully immunization. In FY 2078-79, 8 out of 12 districts of the province have ensured FID sustainability. Rupandehi, Nawalparasi, Banke and Gulmi have planned to FID sustained of the year 2078/79 on Shrawan 2079. However, the process like household survey and immunized to zero dose & dropout children has been completed. Lumbini province has planned to announce FID within Bhadra 2079.

Table 7: FID HHs Details

Districts	Total children (16-23 months)	Full immunized children	Children having fully Immunization card	Children without fully immunization card	Zero dose	Drop out
Rukum East	964	964	964	0	0	0
Rolpa	3482	3482	3460	12	0	41
Pyuthan	3089	3089	2981	108	0	10
Gulmi	3342	3342	3313	29	0	8
Arghakhanchi	2371	2371	2371	0	2	6
Palpa	2834	2834	2824	10	0	17
Nawalparasi W	4807	4807	4643	157	1	149
Rupandehi	14215	14215	12239	1976	0	701
Kapilbastu	9344	9344	9344	0	0	153
Dang	8314	8314	8005	299	2	56
Banke	8163	8163	7584	153	49	694
Bardiya	5539	5539	5186	235	7	139
Total	66464	66464	62914	2979	61	1974

Table 8: FID declared date by districts

District	**Fully Immunized District for the 1st time (F/Y in BS)**	**FID Sustained Status date (until)/F/Y in BS)**
Palpa	2070/11/13	Shrawan 2079
Nawalparasi	2070/11/14	2079/3//30
Arghakhanchi	2071/8/13	2079/3/32
Gulmi	2071/12/30	Shrawan 2079
Pyuthan	2073/09/15	2079/03/30
Rupandehi	2073/10/21	Shrawan 2079
Dang	2074/09/23	2079/03/30
Rolpa	2075/03/25	2079/03/29
Banke	2077/12/06	Shrawan 2079
Kapilvastu	2078/003/23	2079/03/22
Bardiya	2078/03/31	2079/03/31
RukumEast	2078/06/13	2079/03/32

Main Lessons from the FID Process:

To announce the FID sustainability every year, following factors should be considered:

- Committed political local representative, dedicated FCHVs and health workers
- Increasing the level of awareness of, and importance towards immunization service
- Strengthened community engagement, continued airing message on Immunization service from local FMs with the help of district and local levels, preferably in local language
- Joint planning, regular surveillance, monitoring/supervision for EPI program (i.e., series of meeting with religious groups, school families, local government, mother groups, FCHVS and political representative UNICEF, WHO and supporting partners
- Strengthened the local level Immunization planning and capacity building.

Major Challenges

- Covid-19 Pandemic which badly impacted on the routine immunization work of FCHVs and local vaccinators, and service utilization pattern of public at the community level
- Reach every household for HWs especially in the urban areas during line-listing
- Track immunized status of children in the areas of cross-border/border adjoining areas
- Still vaccine hesitancy tendency existing in certain communities

Vaccine Preventable Disease Surveillance

WHO-IPD provides technical assistance to provincial, district and municipality levels in all matters related to VPD surveillance and immunization. Surveillance Medical Officer facilitates in capacity building and sensitization of government and private sector staff in VPD surveillance and immunization by carrying out active case search, data analysis and reporting and other support as needed.

Table 9: Vaccine Preventable Disease Cases, FY 2078/079

S.N	District	AFP	Measles/Rubella			AES		NNT
			Suspected MR case	Measles Positive	Rubella Positive	AES	JE	
1	Arghakhanchi	1	9	0	0	0	0	0
2	Gulmi	1	19	1	0	1	0	0
3	Kalipvastu	6	30	2	1	5	1	0
4	Nawalparasi West	3	14	1	0	1	1	0
5	Palpa	1	13	1	0	1	0	0
6	Rupandehi	9	41	11	2	2	1	0
7	Banke	5	7	1	0	4	2	0
8	Dang	4	18	1	0	6	1	0
9	Pyuthan	3	13	2	0	2	0	0
10	Rolpa	1	14	0	1	2	0	0
11	Bardiya	6	46	1	1	8	2	0
12	Rukum East	0	2	0	0	0	0	0
Total Province		**40**	**226**	**21**	**5**	**32**	**8**	**0**

Table 9 shows that the highest measles positive case was found in Rupandehi during FY 2078/79 however, no outbreaks occurred in the province.

Immunization Supply Chain/ Cold Chain Equipment Optimization Plan (CCEOP)

The Province Health Logistic Management Center (PHLMC) is the In-charge of the overall management of immunization supply chain as well as cold chain equipment optimization at the provincial level. UNICEF provides technical assistance to PHLMC for the immunization supply chain and cold-chain system to strengthen the routine immunization in the province. The main purpose of CCEOP is to support Comprehensive Multi-Year Plan (cMYP) of 2017-21, objective #3 with improving supply chains to contribute efforts to strengthen the coverage and equity of immunization. Optimization platform aiming to the following objectives:

- Accelerate upgrading of existing equipment through the deployment of higher performing, innovative devices to health facilities.
- Extend appropriate cold chain devices into health facilities which have no equipment.
- Make supply chains more efficient and effective through the use of equipment better adapted to needs,
- Cold chain equipment (CCE) is an essential component of the supply chains that ensure lifesaving vaccines reach every child.

Table 10: Inventory of cold chain equipment supplied in FY 2078-79

District	Municipality	Health Facility	Model No.	Type of CCE	No. of Equipment
Arghakanchi	Panini RM	Pokharathok HP	HBD-116	Freezer	3
		Adghuri HP	HBC-80	Refrigerator	
			HBD-116	Freezer	
	Chhatradev RM	Balkot PHC	HBC-80	Refrigerator	2
			HBD-116	Freezer	
Banke	Raptisonari RM	Raptisonari Rural Municipality	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Narainapur RM	Laxmanpur PHC	HBC-80	Refrigerator	1
Bardiya	Rajapur M	Rajapur PHC	HBC-80	Refrigerator	1
	Thakurbaba M	Bagnaha HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
Dang	Dangisaran RM	Shreegaun PHC	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Tulsipur SMC	Tulsipur Hospital	HBC-80	Refrigerator	1
	Gadhawa RM	Gadhawa HP	HBD-116	Freezer	1
	Rapti RM	Sisaniya HP	HBD-116	Freezer	1
	Lamahi M	Lamahi NP	HBC-80	Refrigerator	1
Gulmi	Gulmi Durbar RM	Gaidakot HP	HBC-80	Refrigerator	
			HBD-116	Freezer	

District	Municipality	Health Facility	Model No.	Type of CCE	No. of Equipment
	Satyawati RM	Juhang HP	HBD-116	Freezer	1
	Ruru RM	Ridi (Ruru) PHC	HBD-116	Freezer	1
	Chhatrakot RM	Siringa PHC	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Malika RM	Arkabang HP	HTCD-90 SDD	Refrigerator	1
	Ishma RM	Ishma Rajasthal HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Dhurkot RM	Dhurkot PHC	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Madane RM	Purkot Daha HP	HTCD-90 SDD	Combo	1
	Kaligandaki RM	Purtighat HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Chandrakot RM	Turang HP	HBC-80	Refrigerator	1
	Chandrakot RM	Shantipur HP	HTCD-90 SDD	Combo	1
	Musikot M	Wami Taksar HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
Kapilvastu	Shivraj M	Shivraj Municipality	HBC-80	Refrigerator	1
	Kapilvastu M	Kapilvastu Municipality	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Bijayanagar RM	Gugauli HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Banganga M	Pipara Hospital	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Mayadevi RM	Labani HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
Palpa	Mathagadi RM	Jhadewa HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Rambha RM	Tahun PHC	HBC-80	Refrigerator	1
	Rainadevi RM	Chhahara HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
Pyuthan	Gaumukhi RM	Puja HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Mallarani RM	Khalanga PHC	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Swargadwari M	Bhingri PHC	HBD-116	Freezer	1
	Naubahini RM	Dahane CHU	HBC-80	Refrigerator	1
Rolpa	Sunil Smriti RM	Sulichaur PHC	HBC-80	Refrigerator	1
	Tribeni RM	Gairigaun HP	HTCD-90 SDD	Combo	1
	Madi RM	GhartiGaun HP	HBD-116	Freezer	1
	Rungtigadi RM	Holeri PHC	HBC-80	Refrigerator	1

District	Municipality	Health Facility	Model No.	Type of CCE	No. of Equipment
Rupandehi	Kotihimai RM	Majhgawa HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Rohini RM	Dhakadhai	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Samarimai RM	Farena HP	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Marchwari RM	Rayapur	HBC-80	Refrigerator	2
			HBD-116	Freezer	
	Siyari RM	Chhapiya	HBD-116	Freezer	1
	Kanchan RM	Rudrapur HP	HBC-80	Refrigerator	1
	Sainamaina M	Parroha HP	HBD-116	Freezer	1
	Butwal SMC	Lumbini Provincial Hospital	HBC-80	Refrigerator	1
Note: Total number of supplied cold chain equipment's for 49 CCEOP sites: 69					

Table 10 shows that, in the second round of CCEOP implementation, PHLMC, in collaboration with UNICEF, provided a total of 69 cold chain equipment to 8 districts in this province. Based on a gap analysis conducted during the Covid-19 context, PHLMC supported in the distribution of needed logistics for districts and municipalities.

Table 11: Inventory of cold chain equipment supplied in FY 2078-79

Districts	Total HFs	0.6 ltrs vaccine carrier	0.4/fridge free carrier	Cold box
Rukum	16	16	40	12
Rolpa	52	164	10	5
Pyuthan	49	153	24	14
Gulmi	81	217	28	5
Arghakhanchi	43	140	21	0
Palpa	66	188	25	0
Nawalparasi W	40	120	0	16
Rupandehi	74	231	0	9
Kapilbastu	78	274	60	10
Dang	40	175	30	4
Banke	49	179	25	13
Bardiya	35	104	25	5
Total	623	1961	288	93

In the second round of CCEOP implementation, PHLMC, in collaboration with UNICEF, provided a total of 1961 vaccine carriers (0.6ltrs), 288 fridge free carriers and 93 cold boxes to all districts. Furthermore, onsite mentoring for cold chain quality improvement and vaccination management, regular cold-chain equipment repair and maintenance of vaccine stores at districts and updating cold chain equipment and its capacity are the activities carried out in FY 2078-79

Table 12: Cold Chain Capacity GAP Analysis

Supply Chain Levels	WIC (+2 to +8° C)		WIF (-15 to -25° C)		ILR (+2 to +8° C)		DF (-15 to -25° C)		IPF (-15 to -25° C)		ILR (+2 to +8° C)	Volume consumed for RI (+2 to +8° C)
	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	CC Volume (Ltr)	
PHLMC Butwal	5	31250	0	0	8	980	3	666	1	145	32230	5850
Rukum East	0	0	0	0	3	244	1	258	1	148	244	40
Rolpa	0	0	0	0	6	828	2	458	1	145	828	156
Pyuthan	0	0	0	0	5	970	2	482	0	0	970	176
Gulmi	0	0	0	0	4	856	3	690	3	435	856	218
Arghakanchi	0	0	0	0	3	627	1	282	2	290	627	135
Palpa	0	0	0	0	5	950	2	564	0	0	950	197
Nawalparasi West	0	0	0	0	5	751	2	482	2	290	751	196
Rupandehi	1	3700	0	0	5	1067	4	808	2	290	4767	540
Kapilvastu	0	0	0	0	5	951	4	938	1	145	951	362
Dang	0	0	0	0	6	1227	3	588	2	293	1227	343
Banke	0	0	0	0	5	1092	3	682	1	145	1092	311
Bardiya	0	0	0	0	7	1477	2	425	2	296	1477	253
Total Capacity	**6**	**34950**	**0**	**0**	**67**	**12020**	**32**	**7323**	**18**	**2622**	**46970**	**8777**

Table 13: Cold Chain Capacity below District Level

Supply Chain Levels	Sub-Center	Supply Center	ILR (+2 to +8° C)		DF (-15 to -25° C)		IPF (-15 to -25° C)	
	Number of sites	Number of sites	Number	CC Volume (Ltr)	Number	CC volume (Ltr)	Number	CC volume (Ltr)
Rukum East	3	0	3	158	2	56		
Rolpa	5	4	6	689	1	97		
Pyuthan	0	9	6	360	6	682	1	145
Gulmi	0	6	17	1086	8	971		
Arghakanchi	4	3	9	559	6	654		
Palpa	6	3	10	878	4	573		
Nawalparasi West	0	4	6	433	2	297		
Rupandehi	3	4	16	1020	11	1096		
Kapilvastu	4	7	16	1057	10	1431		
Dang	2	5	6	360	5	527		
Banke	1	2	2	122	1	97		
Bardiya	1	6	8	532	3	476		
Total Capacity	**29**	**53**	**105**	**7254**	**59**	**6957**	**1**	**145**

WIC: Walk in Cooler DF: Deep Freezer
WIF: Walk in Freezer IPF: Ice Pack Freezer
ILR: Ice Lined Refrigerator

Integration of Hygiene Promotion through Routine Immunization Program

Hygiene Promotion through Routine Immunization is a collaborative program to improve the key hygiene behaviors of mothers/Guardians with young children and immunization coverage led by Family Welfare Division, Ministry of Health and Population, Nepal and technically supported by WaterAid. The program was piloted in four districts of Nepal (Myagdi, Nawalparasi, Bardiya, Jajarkot) from May 2014 to 2016 and retained in same districts till 2019 targeting 35,000 population each year. The independent assessment of the pilot program presented positive results on improving key hygiene behavior among mothers / guardians and also strengthened routine immunization coverage, based on the results and mutual benefits of this program both for improving key hygiene behaviors and immunization program, Government of Nepal made policy decision to scale up nationwide in 2018 and then scaled-up nationwide (in 77 districts) since July 2020 targeting 650,000 population each year.

In this program, the mother of children under fifteen months of age who attend routine immunization sessions participate in interactive hygiene promotion sessions for about 30 to 35min each time they attend vaccination clinic / immunization session. The hygiene sessions focus on promotion of five key hygiene behaviors and full immunization using an innovative hygiene promotion package implemented as proof-of-concept package using Behaviour Centred Design Approach (BCD). The hygiene sessions are conducted by trained health workers with or without

the support of female community health volunteers (as per routine vaccination program) during each immunization sessions (through all static, outreach, and mobile clinic).

This program has successfully utilized the missed opportunity in routine immunization to promote key hygiene behaviors of the mothers/guardians who visit the immunization clinic to vaccinate their children seven times during 15 months of age. This integration modality in such national scale is first of its kind globally and the experiences from this intervention can be a role model for integration of hygiene into routine public health programming. This program utilizing the best entry points to integrate hygiene into health and transforming the way immunization program are being implemented through the integrated modalities and strengthen health system. Hygiene promotion through routine immunization program is being implemented across the country through national immunization program, one of the government priority programs. Vaccination sessions are being conducted on monthly/ weekly/ daily basis in more than 16,000 vaccination centers across the country. Following are the key learnings of the program:

- The cost-effective hygiene promotion program integrated into routine immunization across the province continuously demonstrating the significant value in child health program.
- This is an innovative public health program offering mutual benefits for both immunization and behavior change through hygiene promotion and supporting to achieve the overall child health program outcomes.
- High level of acceptability of the program among health workers (service providers) and attendance (guardians of children under 15 years of age).
- Innovative hygiene promotion sessions and tools for behavior change includes rituals (such as back-drop banner with behavior illustration, group handwashing before session), games, storytelling, competitions, public reward, and take home away materials to reinforce and remind behaviors as cues / nudges.
- The program has more relevancy as Government of Nepal introducing new enteric vaccines (such as Rotavirus, Typhoid and Cholera) and also dealing with pandemic such as COVID19.

Status of the Hygiene Promotion Session

During monitoring of 45 sample clinics, it was found that about 93% of clinics conducted the hygiene promotion session. During the program implementation following challenges have emerged for the smooth implementation of the hygiene integration program in general and in urban settings:

- Difficulty in conducting few hygiene promotion sessions with mothers/guardians due to risk of Covid 19 infection.
- In urban areas number of mothers/guardians are quite high and over-crowded, and with limited space; health workers were not able to conduct the full hygiene promotion session with the existing hygiene promotion package.
- Stock out of the hygiene promotion materials at the Health Facility/immunization site.

- For the sustainability and continuity of the hygiene intervention; budget and activities have been allocated from the federal government level as a conditional grant and at local level as well. Though the basic health and sanitation belongs to the local level government responsibility; still there is lack of priority of the program by local level since more focused-on hardware activities.
- Irregularity in on-site coaching and field level monitoring of hygiene promotion sessions by local level and Health Facility
- Gap in periodic hygiene promotion package training for new health workers and refresher training for already trained health workers.

In order to address the above issues, Family Welfare Division has allocated hygiene integration activities in their Annual Work Plan and Budget (AWPB) programs of the federal, province, district and local level for upcoming Fiscal Year

2.1.7 Best Practices and New Initiatives

- Developed action plan to strengthen routine EPI service based on the bottleneck analysis of EPI service of Krishnanagar and Suddodhan LLGs of Kapilvastu district; jointly with Health office, UNICEF and WHO and Health Directorate (in Kapilvastu)
- Strengthen communication and community engagement with teachers of Madrasa/schools, mother groups, FCHVs, political leaders, religion leader and local stakeholders
- Intensive search and immunize the children in all wards, LLGs and districts of Lumbini province.
- Joint planning, regular surveillance, monitoring/supervision for EPI program (i.e., series of meeting with religious groups, school families, local government, mother groups, FCHVs and political representative UNICEF, WHO and supporting partners.
- Onsite coaching on site, and remotely followed up by HMIS reporting of EPI services.
- Maintained repairable cold chain equipment by doing regular follow-up.
- Sustained surveillance work for VPDs.

2.1.7 Issues and Recommendations

Table 14: Issues and recommendations from district and provincial review meetings

Problems/ Constraints	Actions to be taken	Responsibility
Irregular update the stock report of vaccine and other accessories	Effective management/operations of e-LMIS Regular update the stock report	District LLGs
Congested warehouse building for the storage at province level	Need to establish/build vaccine storage & warehouse at provincial level as per EVM standard.	Provincial Government (MoH), PHLMC Federal MoHP
Sustaining full Immunization in low coverage districts/Municipalities	Yearly verification and validation of fully immunized children and routine immunization Coverage monitoring system should be in place	Health Office, Health Section, LLG
No replacement of CC equipment of over 10 years	Replacing of ageing cold-chain equipment	PHLMC, MoHP/Management Division
No clear central level's policy to expand sub-centre and its management in this federal structure	Develop guidelines for the local level's cold chain strengthening and expansion in strategic location based on the EVM standard.	Provincial Government, Management Division/MoHP
Lack of dedicated human resources for cold chain /immunization supply chain at districts and local levels vaccine store	Provision for dedicated HR required for immunization section of district/vaccine sub-centre Provision of refrigerator technician at province (PHLMC)	Provincial Government (Health Directorate/MoHP) MoHP
No cold chain management training to cold chain dedicated staffs	Provide training to cold chain dedicated staffof districts and local levels	PHLMC, PHD
Problem in regular reporting on eLMIS and other real consumption	Timely reporting of vaccine stock should be implemented from district level Need to arrange information reporting of cold-chain equipment in eLMIS system	LLG Health Office

2.2 Integrated Management of Neonatal and Childhood Illnesses

2.2.1 Background

Community Based Integrated Management of Neonatal and Childhood Illness (CBIMNCI) is integrated program of Integrated Management of Childhood Illness (CBIMCI) and New-born Care Package (CBNCP). The goal of this program is to improve neonatal and child health as well as contribute in their health improvement and reduce illness and mortality among under five children. IMNCI Program is the integration package of child-survival addressing five major killer diseases namely diarrhea, pneumonia, malnutrition, measles, and malaria at community and health facility level focusing on under-five children throughout the country which is focused to reduce mortality and morbidity of newborn, addresses the main causes of neonatal mortality - infection, low birth weight, prematurity, hypothermia, and asphyxia.

2.2.2 Goals, objectives, strategies and major interventions of the IMNCI Program

Goal: Improved newborn and child survival and healthy growth and development.

Objectives:

- To reduce neonatal morbidity and mortality by promoting essential new-born services.
- To reduce neonatal morbidity and mortality by managing major causes of illness.
- To reduce morbidity and mortality by managing major causes of illness under 5 years children.

Strategies

- Quality of care through system strengthening and referral services for specialized care
- Ensure universal access to health care services for new-born and young infant
- Capacity building of frontline health workers and volunteers
- Increase service utilization demand generation activities
- Promote decentralized and evidence—based panning and programming

2.2.3 Major Interventions

- **New-born Specific Interventions**: Promotion of birth preparedness plan, promotion of essential new-born care practices and postnatal care to mothers and new-borns; identification and management of non-breathing babies at birth; identification and management of preterm and low birth weight babies); and management of sepsis among young infants (0-59 days) including diarrhoea.
- **Child Specific Interventions:** Case management of children aged between 2-59 months for 5 major childhood killer diseases (pneumonia, Diarrhoea, Malnutrition, Measles and Malaria).
- **Cross-cutting Interventions:** Behaviour change communication for healthy pregnancy, safe delivery and promotion of personal hygiene and sanitation; improve knowledge related to

immunization, nutrition, and care of sick children; and improve interpersonal communication skills of HWs and FCHVs**).**

2.2.4 Major Achievements

CB-IMNCI Program Monitoring Indicators

Table 15:CB-IMNCI program monitoring indicators by district (FY 2078-79)

District	% Of newborns applied chlorhexidine (CHX) gel	% Of PSBI cases received complete dose of Gentamicin	% Of pneumonia cases treated with antibiotics	% Of children under five years with diarrhea treated with zinc and ORS
Rukum East	96	0	100	98.8
Rolpa	96.7	18.9	100	100.8
Pyuthan	99.6	90	100	99.1
Gulmi	98.5	35.8	100	100
Arghakhanchi	97.9	11.1	101.5	99
Palpa	98.9	27.2	101	92.2
Nawalparasi	96.6	14.8	100.8	97.6
Rupandehi	99.2	4.6	95	99.1
Kapilbastu	86.7	25.9	100	100.1
Dang	97.1	64.4	100	100
Banke	86.1	21	107	93.9
Bardiya	95.2	33.2	100	100.7
Lumbini	**94.2**	**39.5**	**100.3**	**98.7**

In fiscal year 2078-79 among all expected live births, chlorhexidine was administered to 94 percent of newborn's umbilical cord (HF+FCHV). There was a substantial variance in CHX use among districts as Pyuthan having the highest use (99 percent) and Banke with the lowest (86 percent). The utilization of inj. Gentamicin for PSBI cases at province in children under the age of two months was 40 percent. Only two districts utilized the full dose of Gentamicin in more than 50% of PSBI cases, while two districts used it in less than 5% of cases.

Use of antibiotics for pneumonia treatment was over 95 percent in all 12 districts, with average of 100 percent, highest being observed in Banke (100 percent) and lowest in Rupandehi (95 percent). As per the CB-IMNCI treatment protocol, all diarrheal cases should be treatment with ORS and Zinc. Based on HMIS data, children suffering from diarrhea treated with ORS and Zinc at province was 99 percent, which was highest in Bardiya (101 percent) and lowest in Palpa (92 percent).

Key achievements for management of < 2month newborns

Table 16: Classification of treatment of <2month newborn cases by district (FY 2078-79)

Indicators	Year	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Ruapndehi	Kapilbastu	Dang	Banke	Bardiya	Lumbini
Possible severe bacterial infections (PSBI)	FY 2076-77	16	81	77	32	17	85	14	35	15	126	70	398	966
	FY 2077-78	4	65	52	23	6	212	17	27	19	169	36	311	941
	FY 2078-79	19	65	77	9	9	410	27	18	11	212	37	339	1233
Jaundice	FY 2076-77	0	13	31	11	3	81	3	18	16	54	32	30	292
	FY 2077-78	4	15	11	19	1	79	5	12	7	52	21	29	255
	FY 2078-79	8	12	7	26	4	65	12	16	3	78	13	0	244
Low Weight/Feeding Problem ≤28 days (HF only)	FY 2076-77	2	51	11	7	7	77	16	42	7	14	27	22	283
	FY 2077-78	4	16	21	13	2	47	8	44	33	58	12	13	271
	FY 2078-79	11	15	106	14	9	44	23	138	25	62	73	14	534
Referred	FY 2076-77	7	23	36	11	11	37	21	24	22	96	33	33	354
	FY 2077-78	2	29	44	26	7	37	28	37	38	70	27	34	379
	FY 2078-79	5	30	64	21	7	36	28	38	8	110	33	32	412
Deaths	FY 2076-77	0	0	0	0	0	12	0	0	0	2	1	0	15
	FY 2077-78		0	1	0	1	25	0	3	1	8	3	1	43
	FY 2078-79	0	0	0	1	1	20	0	0	0	5	0	0	27

In FY 2078-79, 1233 cases were classified as Possible Severe Bacterial Infection (PSBI) at the provincial level which is higher than that of previous year (941). In the FY 2078-79, the number of PSBI cases was highest in Palpa (410) and lowest in Arghakhanchi (9) and Gulmi (9). Similarly, the total cases of Jaundice at the provincial level declined from 255 in FY 2077-78 to 244 in FY 2078-79. Also, 534 cases were classified as low birth weight or breast-feeding problem (a increase from 271 to 534 between FY 2077-78 to FY 2078-79). In the FY 2078-79, 412 total cases were referred from both HF and PHC-ORC clinic, highest referral was done by Dang (110).

Key achievements for management of 2-59 months children

Diarrhoea

Classification of diarrhoeal cases by province

CB-IMNCI program has created enabling to health workers for better identification, classification and treatment of diarrhoeal diseases. As per CB-IMNCI national protocol, diarrhoea has been classified into three categories: 'No Dehydration', 'Some Dehydration', and 'Severe Dehydration'. The reported number and classification of total new diarrhoeal cases has been presented in Table 14 below.

Table 17: Classification of diarrhoeal cases by district (FY 2078-79) (2-59 months children)

Indicator (Service unit)	Year	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparas West	Ruapndehi	Kapilbastu	Dang	Banke	Bardiya	Lumbini
Total (HF+ORC+ FCHV)*	**FY 2076-77**	3191	17170	11988	8790	6348	7211	10909	26344	18633	21948	25916	15305	**173753**
		2%	10%	7%	5%	4%	4%	6%	15%	11%	13%	15%	9%	**100%**
	FY 2077-78	3907	18734	12616	8537	6434	6089	10624	25547	22405	23119	25869	15080	**178961**
		2%	10%	7%	5%	4%	3%	6%	14%	13%	13%	14%	8%	**100%**
	FY 2078-79	4013	15530	9795	6567	5469	4544	9011	24823	21391	22623	24326	12951	**161043**
		2%	10%	6%	4%	3%	3%	6%	15%	13%	14%	15%	8%	**100%**
Total (HF+ORC)	**FY 2076-77**	1753	5344	4473	3472	1302	3083	3342	6697	10164	4815	6476	4231	**55152**
	FY 2077-78	1723	5868	5309	3674	1728	2607	3199	6289	11374	4869	6161	5007	**57808**
	FY 2078-79	1842	4961	3753	2644	1438	2155	2598	5935	8558	4250	5675	3866	**47675**
No dehydration (HF+ORC)**	**FY 2076-77**	1417	4889	3818	3244	1231	2445	3205	6135	9484	4436	5699	3749	**49752**
		81%	91%	85%	93%	95%	79%	96%	92%	93%	92%	88%	89%	**90%**
	FY 2077-78	1308	5316	4683	3427	1578	2336	3020	5926	10774	4471	5668	4667	**53174**
		76%	91%	88%	93%	91%	90%	94%	94%	95%	92%	92%	93%	**92%**
	FY 2078-79	1389	4620	3505	2440	1305	1996	2508	5609	7937	3985	5382	3642	**44318**
		3%	10%	8%	6%	3%	5%	6%	13%	18%	9%	12%	8%	**92.92%**
Some Dehydration (HF+ORC)**	**FY 2076-77**	333	443	655	228	71	533	129	558	675	378	763	480	**5246**
		19%	8%	15%	7%	5%	17%	4%	8%	7%	8%	12%	11%	**10%**
	FY 2077-78	407	549	620	236	150	258	174	355	598	385	493	339	**4564**
		24%	9%	12%	6%	9%	10%	5%	6%	5%	8%	8%	7%	**8%**
	FY 2078-79	449	341	247	204	133	155	90	325	523	261	293	223	**3244**
		14%	11%	8%	6%	4%	5%	3%	10%	16%	8%	9%	7%	**6.8%**
Severe Dehydration (HF+ORC)**	**FY 2076-77**	3	12	0	0	0	105	8	4	5	1	14	2	**154**
		0.20%	0.20%	0%	0%	0%	3.40%	0.20%	0.10%	<1%	<1%	0.20%	<1%	**0.30%**
	FY 2077-78	8	3	6	11	0	13	5	8	2	13	0	1	**70**
		1%	<1%	<1%	<1%	0%	1%	<1%	<1%	<1%	<1%	0%	<1%	**<1%**
	FY 2078-79	4	0	1	0	0	4	0	1	98	4	0	1	**113**
		4%	0%	1%	0%	0%	4%	0%	1%	87%	4%	0%	1%	**0.2%**
Total Diarrhoea Cases (FCHV)***	**FY 2076-77**	1438	11826	7515	5318	5046	4128	7567	19647	8469	17133	19440	11074	**118601**
		45%	69%	63%	61%	79%	57%	69%	75%	45%	78%	75%	72%	**68%**
	FY 2077-78	2184	12866	7307	4863	4706	3482	7425	19258	11031	18250	19708	10073	**121153**
		56%	69%	58%	57%	73%	57%	70%	75%	49%	79%	76%	67%	**68%**
	FY 2078-79	2171	10569	6042	3923	4031	2389	6413	18888	12833	18373	18651	9085	**113368**
		2%	9%	5%	3%	4%	2%	6%	17%	11%	16%	16%	8%	**70%**

*Note: *Percentage calculated against province total; **Percentage calculated against total diarrhoeal cases (HF+ORC); ***Percentage calculated against total diarrhoeal cases (HF+ORC+FCHV)*

A total of 161,043 diarrheal cases were reported in FY 2078-79, with nearly a third (27%) coming from health facilities and PHC-ORC and the remaining two-thirds (73%) coming from FCHVs. While diarrheal cases decreased in all eleven districts, the number slightly increased in Rukum east. More than nine out of ten (92%) of the cases are registered in health facilities and PHC/ORC were classed as having no dehydration, with only one-tenth (6.8%) having some dehydration. Across all districts and at the provincial level, severe dehydration remained below 1%.

Classification of diarrhoeal disease incidence

Table 18: Incidence of diarrhoea among children under 5 years of age

Indicator	Estimated <5 years population that are prone to diarrhoea			Incidence of diarrhoes/1000 <5 years population		
	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79
Rukum East	511668	514162	6090	662.5	761.9	699
Rolpa	23877	23805	27175	735.1	810.6	589.7
Pyuthan	5488	5490	27330	506.6	540.1	368.3
Gulmi	24263	24198	21154	348.4	346.8	314.8
Arghakhanchi	60951	61832	15460	318.5	326.4	361
Palpa	65005	65572	21149	291.4	251.8	218.9
Nawalparasi West	25815	25283	32079	289.3	280.5	286.8
Rupandehi	67346	67920	92725	256.9	242.8	275.4
Kapilbastu	20292	20150	75912	306.5	344.7	293.5
Dang	48227	48418	58507	339.5	353.8	388.3
Banke	38275	38436	57735	431.7	426.4	427.1
Bardiya	25003	24605	39703	318.6	312.8	327.8
Lumbini	**107126**	**108453**	**475019**	**350**	**357**	**347**

As shown in the Table 18, the incidence of diarrhoea per thousand under 5 years children in Lumbini province was 357 in fiscal year 2078-79, being highest in Rolpa (811) followed by Rukum-East (762). Similar trend was also seen in the previous two fiscal years. The lowest incidence was observed in Rupandehi (243).

Table 19: Treatment of diarrhoea cases by district

Indicator	Percentage of children under five years with diarrhea treated with zinc and ORS			Percentage of children under five years with diarrhoea treated with IV fluid		
	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79
Rukum East	100.2	93.4	93.9	0.42	0	0.05
Rolpa	102.6	97	100	0.2	0.09	0.09
Pyuthan	100	101.1	100.1	0.2	0.73	0.02
Gulmi	95.7	96.8	99	0.41	0.53	0.05
Arghakhanchi	89.9	95.8	98.8	0.2	0	0.05
Palpa	100.7	97.3	99.1	3.8	0.72	4
Nawalparasi West	94.6	94.7	97.6	0.04	0.03	0.06
Rupandehi	90.1	95	100.7	0.09	0.12	0
Kapilbastu	84.9	94	92.2	1.4	0.73	0.93
Dang	101.5	97.8	100	0.02	0.24	0.05
Banke	97.2	99	100.8	0.07	0	0.01
Bardiya	99.1	97	99.1	0.1	0.06	0
Lumbini	**96**	**96.8**	**98.7**	**0.34**	**0.22**	**0.22**

The percentage of diarrheal cases treated with zinc and ORS as per IMNCI protocol at the provincial level was 96 percent in fiscal year 2078-79, a decrease of one percent over the previous year. There was a variation between districts treated with zinc and ORS with highest of Dang (102)

to lowest Kapilvastu (84.9). In all districts, less than 1% of severe diarrhoea cases were treated with intravenous (IV) fluid at the health facility level except Palpa (4) (Table 19).

Acute Respiratory Infections

Every ARI case should be correctly examined and classified as no pneumonia, pneumonia, or severe pneumonia, and given home therapy, antibiotics, or referred to a higher center as indicated by the CB-IMNCI protocol.

Table 20: Acute Respiratory Infection (ARI) and Pneumonia cases by district

Indicators	Fiscal Year	Lumbini	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya
Target population (children under 5 years)	076-77	**511668**	5488	23877	24263	25815	20292	25003	38275	107126	67346	65005	60951	48227
	077-78	**514162**	5490	23805	24198	25283	20150	24605	38436	108453	67920	65572	61832	48418
	078-79	475019	6090	27175	27330	21154	15460	21149	32079	92725	75912	58507	57735	39703
Total ARI cases (HF+ORC)	076-77	**129872**	2842	11350	11850	12495	5838	9206	6295	14422	12495	16412	13477	13190
	077-78	**139923**	3354	12561	13318	13536	5719	9410	7547	13609	12835	16788	13907	17339
	078-79	**107492**	2364	9750	10377	10679	5524	6138	5759	10051	12435	10255	10103	14057
ARI incidence per 1,000 <5 children	076-77	**579.1**	706.6	1065.4	985.2	1048.1	878.9	633.3	353.4	362.8	347.2	542.9	584.6	721.9
	077-78	**577.7**	910.3	1041.3	1006.3	1119.9	853.6	647.8	399.5	339.4	323	541.2	541.4	773.2
	078-79	**515**	760.7	921.2	866.9	972.9	871.4	490.5	361.1	309.9	349.5	463.1	477.6	668.8
Total Pneumonia cases (HF+ORC)	076-77	**23634**	876	3524	2720	1243	981	2147	828	1763	1222	3361	3126	1843
	077-78	**22033**	853	3647	2776	1226	826	1690	704	1465	1286	3162	2740	1658
	078-79	**11332**	558	2264	1573	654	499	629	380	804	628	1040	1264	1039
Pneumonia incidence (per 1000)	076-77	**76.4**	188.7	246.7	183.1	75.7	90.1	89.8	35.3	27.6	30.5	79.9	109.5	69.7
	077-78	**64.4**	202.8	222.4	159.8	80.3	59.8	74.2	31.4	26.9	27.1	68.5	68.7	61.1
	078-79	**38.1**	125.7	161.6	102.9	50.9	43.8	26.5	20.4	13.9	23	29.6	34.2	37.9
% of pneumonia among ARI cases	076-77	**18.2**	30.8	31	23	9.9	16.8	23.3	13.2	12.2	9.8	20.5	23.2	14
	077-78	**15.7**	25.4	29	20.8	9.1	14.4	18	9.3	10.8	10	18.8	19.7	9.6
	078-79	**10.5**	23.6	23.2	15.2	6.1	9	10.2	6.6	8	5.1	10.1	12.5	7.4
% of severe pneumonia among new cases	076-77	**0.19**	0.98	0.18	0.17	0.1	0.15	0.53	0.07	0.16	0.28	0.11	0.25	0.13
	077-78	**0.18**	0.6	0.24	0.25	0.08	0.08	0.22	0.14	0.09	0.74	0.15	0.08	0.03
	078-79	**0.12**	0.36	0.11	0.17	0.12	0.03	0.2	0.12	0.1	0.27	0.04	0.16	0.03
Pneumonia treated with antibiotics (%)	076-77	**162.4**	126.7	105.2	104.4	295.3	172.3	126.9	222.2	216.3	350.3	157.9	174.8	105.1
	077-78	**138.1**	156.4	108.4	100	252.1	196.1	89.2	152	197.1	253.7	143.7	99.2	99.6
	078-79	**121.7**	133.3	105.7	99.9	249.7	113	100.2	155	118	216.6	101.7	100	100
Total ARI (FCHV)	076-77	**164822**	1031	14151	12104	15116	12110	6875	7167	23949	10673	18553	21626	21467
	077-78	**155649**	1642	12302	11097	15375	11602	6786	7745	22746	8921	18391	19093	19949
	078-79	**157326**	1812	12179	10600	13919	12034	5931	8122	23557	11306	20114	19429	18323

In FY 2078-79, 107492 ARI cases were recorded in HF and ORC, with 10.5 % of pneumonia cases and less than 1% of severe pneumonia cases. At the provincial level, the incidence of pneumonia (both pneumonia and severe pneumonia at HF and PHC-ORC) was 38.1 per 1000 children under the age of five. When compared to the previous fiscal year, the incidence of pneumonia among children under the age of five has fallen dramatically (from 61.1 per 1000 in FY 2077-78). Gulmi had the highest ARI incidence (973/1000 U5 children), Rolpa had the second highest (921/1000 U5 children), and Rupandehi had the lowest incidence (310/1000). Similarly, the largest percentage of pneumonia cases among ARI cases was found in Rukum-East and Rolpa (23.6% and 23.2%, respectively), while the lowest was found in Kapilbastu (14.6%). Table 20 shows the data disaggregated by district.

Other common childhood illnesses

The IMNCI program also focuses on identifying and testing children under the age of five for Malaria, malnutrition, measles, and other common illnesses. The nutrition program leads interventions to address childhood malnutrition, the National Immunization Program leads interventions to address measles and other vaccine-preventable infections, and the disease control program leads interventions to address malaria. The IMNCI program actively engaged with the respective programs to address these issues in a coordinated manner.

Table 21: Classification of childhood illnesses as per IMNCI protocol by district (FY 2078-79)

District	Malaria		Very Serious Febrile Disease	Measles	Ear Infection	Severe Malnutrition	Anemia
	Falciparum	Non Falciparum					
Rukum East	0	0	0	0	434	22	0
Rolpa	0	0	1	1	1372	28	14
Pyuthan	0	0	2	2	1020	35	6
Gulmi	0	0	5	0	902	12	17
Arghakhanchi	0	0	0	0	583	4	13
Palpa	0	0	0	2	666	23	9
Nawalparasi West	0	0	0	11	895	183	31
Rupandehi	0	0	0	0	1681	352	24
Kailbastu	0	0	2	0	2233	274	66
Dang	0	15	0	7	1275	279	84
Banke	0	24	2	1	1989	409	47
Bardiya	0	0	0	1	1466	409	61
Lumbini	**0**	**39**	**12**	**25**	**14516**	**2030**	**372**

Under the IMNCI program, health workers identified no falciparum m malaria cases, 39 non-falciparum malaria cases; 12 very severe febrile disease cases; 25 measles cases; 14516 ear infection cases; 2030 severe malnutrition cases and 372 anemia cases in children under five years of age in FY 2078-79.

2.3 Nutrition

2.3.1 Background

Nutrition is an important aspect of survival, growth, and development and a prerequisite for accelerated attainment of all the Sustainable Development Goals (SDGs). Better nutrition is associated with a better infant, child, and maternal health, stronger immune systems, safer pregnancy and childbirth, a lower risk of noncommunicable diseases (such as diabetes and cardiovascular disease), and longer life. People with adequate nutrition are more productive and can contribute to disrupting the vicious cycle of deprivation and starvation.

The global burden of malnutrition has substantial and long-term developmental, economic, social, and medical consequences for individuals and their families, communities, and countries. Today, the world faces a triple burden of malnutrition: undernutrition, both stunting and wasting; vitamin and other micronutrient deficiencies; and overweight and obesity, particularly in low- and middle-income countries, and Nepal is no exception.

The Nepal government (GoN) is dedicated to ensuring that all its residents have access to appropriate nutritious food, healthcare, and other social services that influence nutrition outcomes. Nepal has made considerable strides in eliminating stunting among children under the age of five. According to the Nepal Demographic Health Survey stunting has dropped from 57 percent in 2001 to 32 percent in 2016, and the 2019 Nepal Multiple Indicator Cluster Survey (NMICS), shows a further reduction to 32 percent. However, the same cannot be said for wasting, NDHS shows that, the prevalence of wasting among children under the age of five was 11 percent in 2001, and 10 percent in 2016, and NMICS shows a slight increase to12 percent in 2019.

In Lumbini Province, the prevalence of stunting among children under five was 39 percent in 2016 (NDHS), and 36 percent in 2019 (NMICS). Wasting prevalence remains stubbornly at an increasing trend from 8% in 2016 (NDHS) to 14% in 2019 (NMICS). Likewise underweight among under 5 children has also increased from 27% (NDHS 2016) to 31% (NMICS 2019). According to the NMICS 2019, the exclusive breastfeeding rate is at 63%, while only half of the children receive breastmilk within the first hour of birth, only one in every four children receives a minimum acceptable diet and only one in every three is meeting the minimum dietary diversity (NMICS 2019). Similarly, the province has a 54 % prevalence of anemia among children under the age of five, and a 44 % prevalence among women of reproductive age (NDHS 2016), which is higher than the national prevalence.

The province government has established a high-level commitment and prioritized nutrition programs to enhance the nutritional status of Lumbini province's children, pregnant women, breastfeeding mothers, and adolescents. The Ministry of Health and the Province Health Directorate (PHD) is responsible for providing nutrition services throughout the province in cooperation and collaboration with federal government and local levels, as well as development partners. As per national policies and strategies, the province has been creating nutrition program policies, strategies, and recommendations.

2.3.2 Key Policy Documents

- The National Nutrition Strategy, of 2077- intends to address all forms of malnutrition through the health sector by implementing nutrition-specific and sensitive interventions and providing strategic and programmatic direction for nutrition interventions in Nepal through the health sector.
- Multi-sector Nutrition Plan (MSNP-II 2018-2022) - a broader national policy framework for nutrition, within and beyond the health sector, coordinated by the National Planning Commission (NPC) at the national level, provides national policy guidance for nutrition-specific and nutrition-sensitive interventions while also creating an enabling environment for nutrition interventions. Likewise, at the provincial level, the Province Planning Commission spearheads the rollout of the Plan.
- The 2071 National Health Policy focuses on nutrition improvement through the effective promotion of high-quality, nutritious foods produced locally.

2.3.3 Strategies

The four key measures outlined in Nepal's National Health Policy 2076 for enhancing nutrition are as follows:

- Policies pertaining to multi-sector nutrition and food security programs will be updated and implemented with high priority.
- Short-term, medium-term, and long-term strategies will be used at all levels to promote nutritional diversification and balanced diet consumption among women and children of various ages.
- The school health and nutrition education programs shall be improved, developed, and implemented.
- Homestead food production will be encouraged while supporting healthy food consumption.

2.3.4 Nutrition interventions

The Ministry of Health has been implementing Comprehensive Nutrition Specific Interventions (CNSI) to address maternal, adolescent, and child malnutrition. Which began with monitoring young children's growth and progressed to promotion, protection, and support for early initiation, exclusive and extended breastfeeding, and appropriate supplemental feeding, as well as community-based micronutrient supplementation. Likewise, Iron Folic Acid Supplementation was also provided for Pregnant, and lactating mothers and adolescent girls. The key interventions are as follows:

- Comprehensive Nutrition Specific Intervention (CNSI)
- Growth Monitoring and Promotion activities
- Maternal Infant and Young Child Nutrition (MIYCN)
- Integrated Management of Acute Malnutrition (IMAM)
- Supplementing IFA for adolescent girls, pregnant women, and breastfeeding mothers
- Supplementing Vitamin A for children aged 6-59 months

- Deworming of children aged 12-59 months and school-going children
- School Health Nutrition program
- Nutrition education and counseling
- Nutrition Rehabilitation Home

2.3.5 Current Global Nutrition Targets and Nepal's Status

Table 22: Global nutrition targets and status of Nepal and Lumbini province

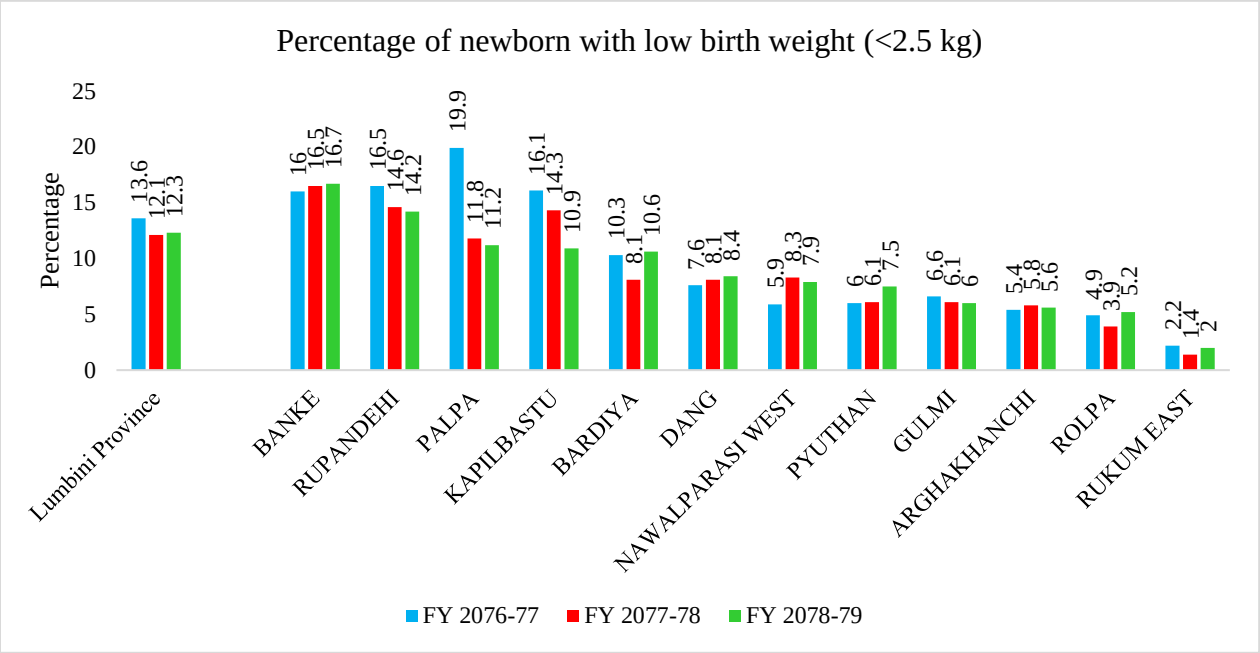
Indicators	Nepal	Lumbini Province	Targets		
			MSNP II 2022	WHA 2025	SDG 2030
Prevalence of stunting among under 5 years children	31.5	35.5	28	24	15
Prevalence of wasting among under 5-year-old children	12	13.7	7	<5	4
Prevalence of underweight among under 5-year-old children	24.3	30.7	20	15	10
Prevalence of low birth weight	12.3*	14.1*	10	≤1.4	≤1.4
% of children under 6 months with exclusive breastfeeding	62.1	63.2	80	85	90
% of children aged 6-23 months having a minimum acceptable diet	31	26.4	60	70	80
Anemia among children aged 6-59 months	53*	53*	28	20	<15
Anemia among WRA (15-49 years)	41*	44*	24	20	<15
% of Women (WRA) with chronic energy deficiency (measured as body mass index <18.5 kg/m2)	17*	19*	12	8	<5
% of overweight and obese women of reproductive age (WRA)	22*	18.5*	18	15	<12

2.3.6 Major achievements

2.3.6.1 Growth Monitoring and Promotion

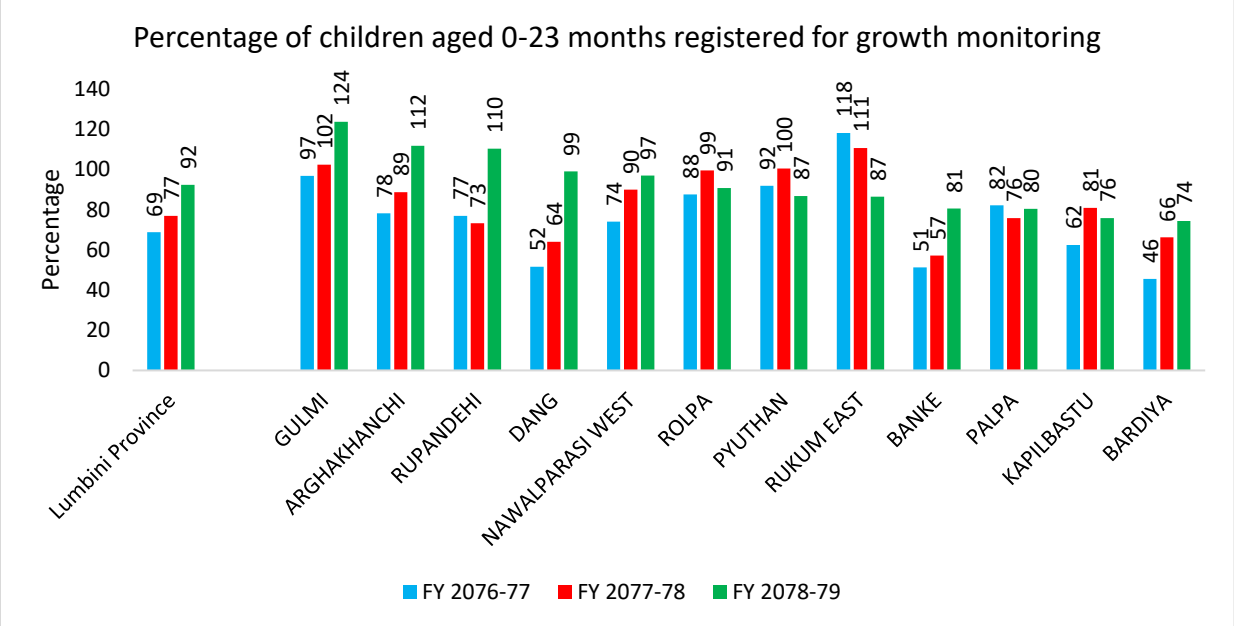
Monitoring the growth of children under the age of two years helps prevent and regulate protein-energy malnutrition and allows for preventive and therapeutic treatments. Every month, health workers at all public health facilities use the growth monitoring card, which is based on the WHO's updated growth requirements for children.

Figure 9: Percentage of newborn with low birth weight (<2.5 kg)



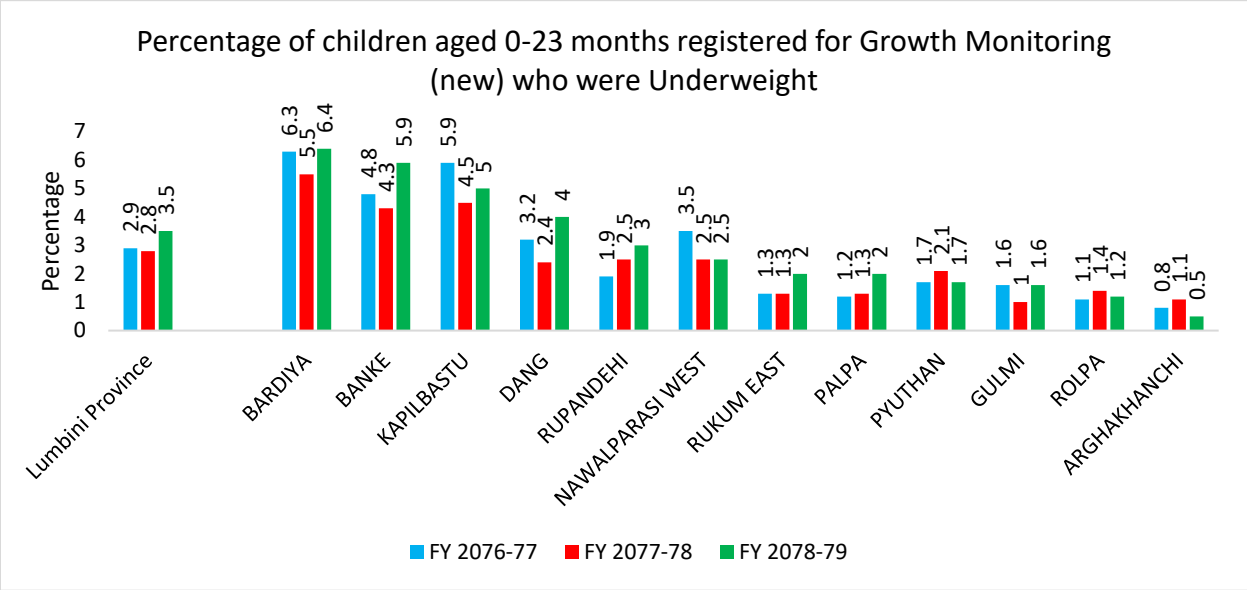
As of the previous fiscal year, the percentage of newborns with low birth weight (2.5 kg) stagnated at 12%. Malnutrition is an intergenerational vicious circle and the prevalence of undernourished mothers in Nepal is one of the leading causes of LBW, which is aggravated by inadequate caloric intake during pregnancy. Therefore, efforts to improve maternal nutrition must be intensified with effective counseling at antenatal visits.

Figure 10: Percentage of children aged 0-23 months registered for growth monitoring



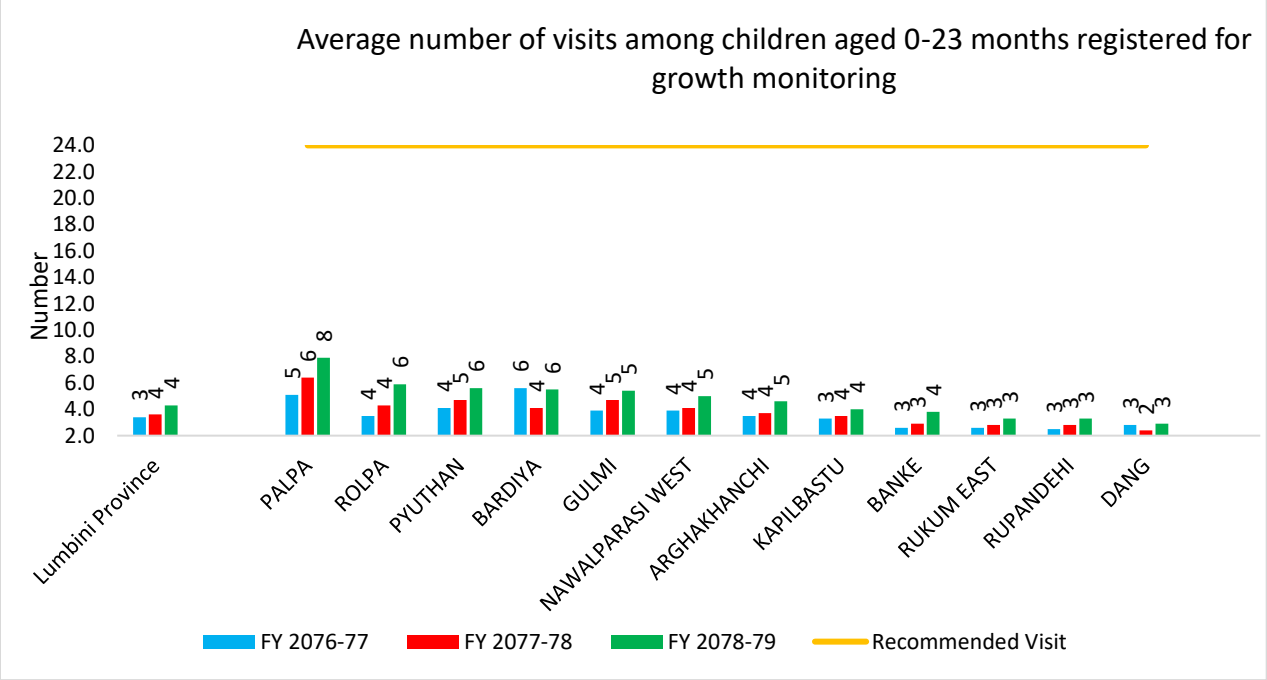
In comparison to the previous two fiscal years, the percentage of children aged 0 to 23 months who were registered for growth monitoring increased to 92% in FY 2078/79. With the implementation of CNSI training, the efforts of local health facilities have also intensified, resulting in an increase.

Figure 11: Percentage of children aged 0-23 months registered for growth monitoring who were underweight



In the fiscal year 2078/79, 3.5 percent of children aged 0 to 23 months were classified as underweight, up from 2.8 percent in the fiscal year 2077/78. Bardiya has the most underweight children (6.4%), followed by Banke (5.9%), and Kapilbastu (5.0%). Whereas Arghakhanchi (0.5%) has the least underweight children (Figure 11). A link can be observed between increased growth monitoring and the increased diagnosis of underweight children.

Figure 12: Average number of visits among children aged 0-23 months registered for GM

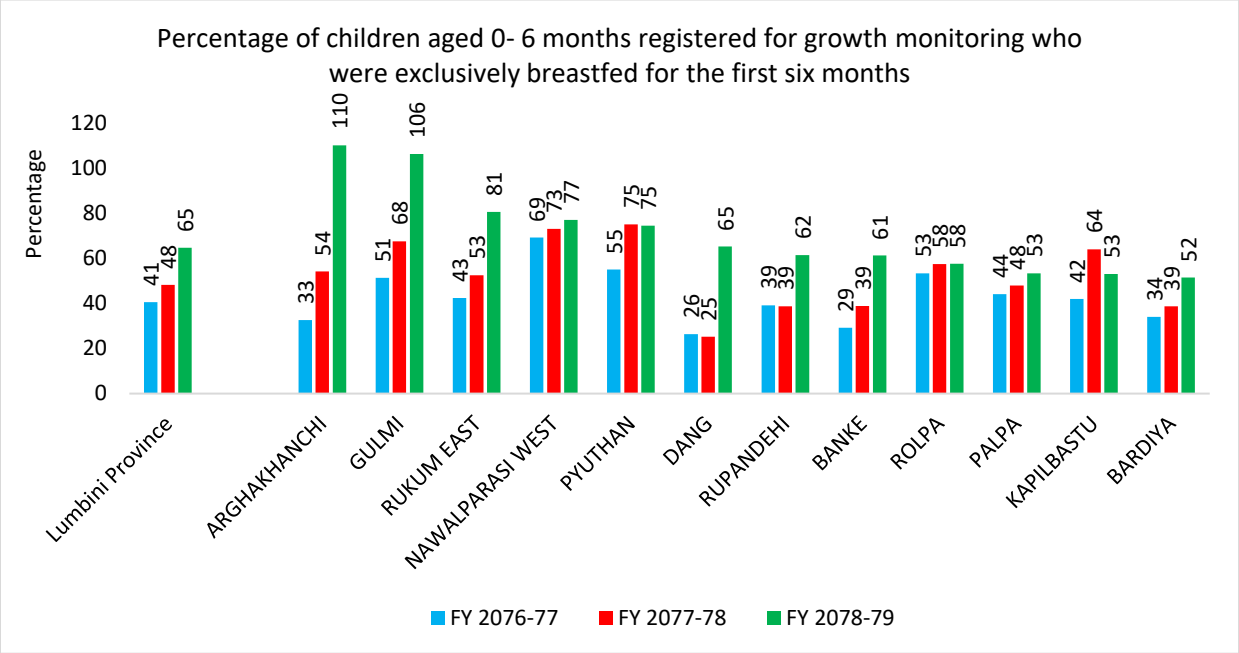


Though the WHO recommends 24 growth monitoring visits for children aged 0 to 23 months, the provincial average for the fiscal year 2078/79 is 4 times, which is equal to the previous fiscal year. Though the number of children registered for growth monitoring is increasing, retaining the revisit is challenging because the growth monitoring sessions are ineffective; the child's weight is taken but not plotted on the graph, and no information/counseling is provided to the mother about the child's nutrition status. Therefore, the parents/care takers do not perceive the benefit of bringing their children for monthly growth monitoring, children are typically weighed only during immunization sessions. However, with the implementation of the CNSI training package up to the FCHV level, measurement of growth monitoring visits based on revised guideline is expected that the growth monitoring indicators will be improved across the province in comparison to the previous fiscal year (Figure.12).

2.3.6.2 Infant and Young Child Feeding (IYCF)

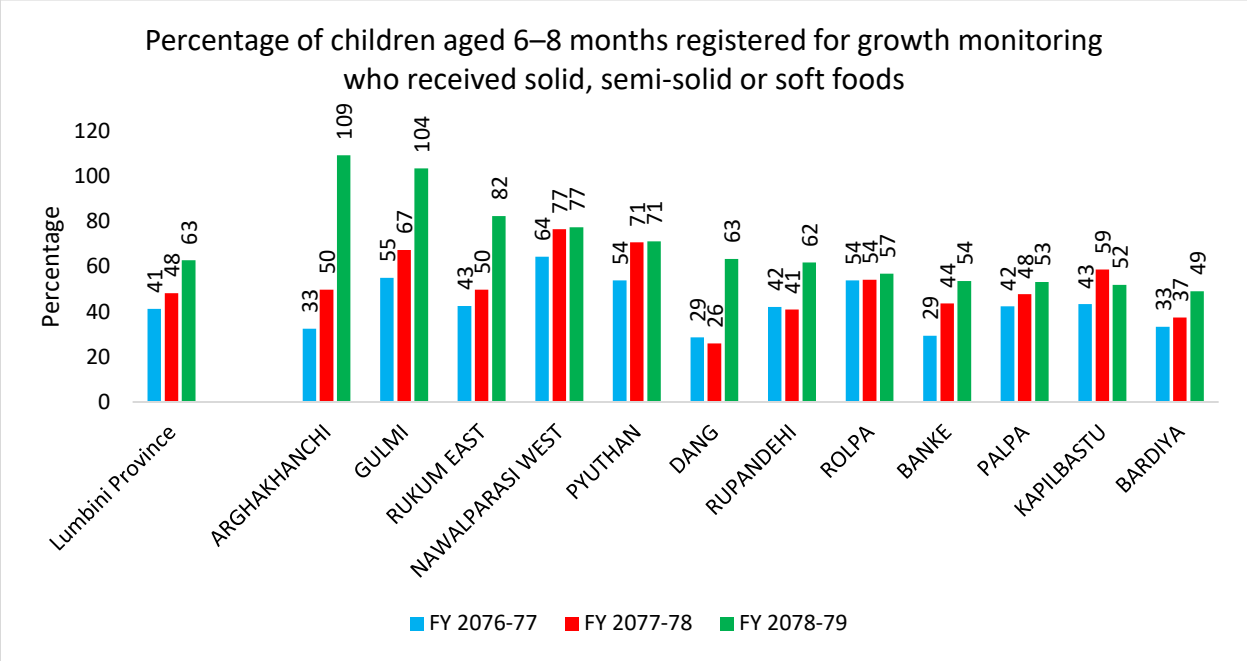
Infant and young child nutrition and care practices are critical for improving child survival, growth, and development. The main components of IYCF include early initiation of breastfeeding (within an hour of childbirth); exclusive breastfeeding for six months; and nutritionally adequate and appropriate complementary feeding beginning at six months with sustained breastfeeding up to two years of age or beyond. With the rollout of the CNSI (Comprehensive Nutrition Specific Interventions), the IYCF program has been expanded to all 12 districts of Lumbini Province. The provincial government with guidance from the Federal Government has been working to improve IYCF practices to improve young children's nutrition.

Figure 13: Percentage of children aged 0- 6 months registered for growth monitoring who were exclusively breastfed for the first six months



In comparison to the previous fiscal year, the percentage of children aged 0-6 months who were exclusively breastfed for the first six months who were registered for growth monitoring increased across the province except in Kapilbastu. As indicated in Figure 14, over two-thirds (65%) of children aged 0-6 months who were registered for growth monitoring were exclusively breastfed in the fiscal year 2078/79, an increase of 17% from the fiscal year 2077/78. This statistic's percentage varies by district. Some districts have reported more than 100% progress, indicating that the recording/reporting systems need to be strengthened.

Figure 14: Percentage of children aged 6–8 months registered for growth monitoring who received solid, semi-solid or soft foods



According to Figure 14, the percentage of children aged 6-8 months who were registered for growth monitoring and received solid, semi-solid, or soft foods in Lumbini Province grew to 63 percent in FY 2078/79, up from 48 percent in FY 2077/78. Except for Kapilvastu, the proportion of this indicator increased in all districts in FY 2077/78. Though the growth monitoring has increased the IYCF practices have not been improved indicating that the behavioral change aspects need more focus during counseling.

2.3.3.3 Integrated Management of Acute Malnutrition

IMAM is a strategy for combating acute malnutrition. IMAM focuses on integrating effective acute malnutrition management into ongoing routine health services at all levels of health facilities, while still striving for maximum coverage. It also intends to integrate acute malnutrition management across sectors to ensure that treatment is connected to ongoing support.

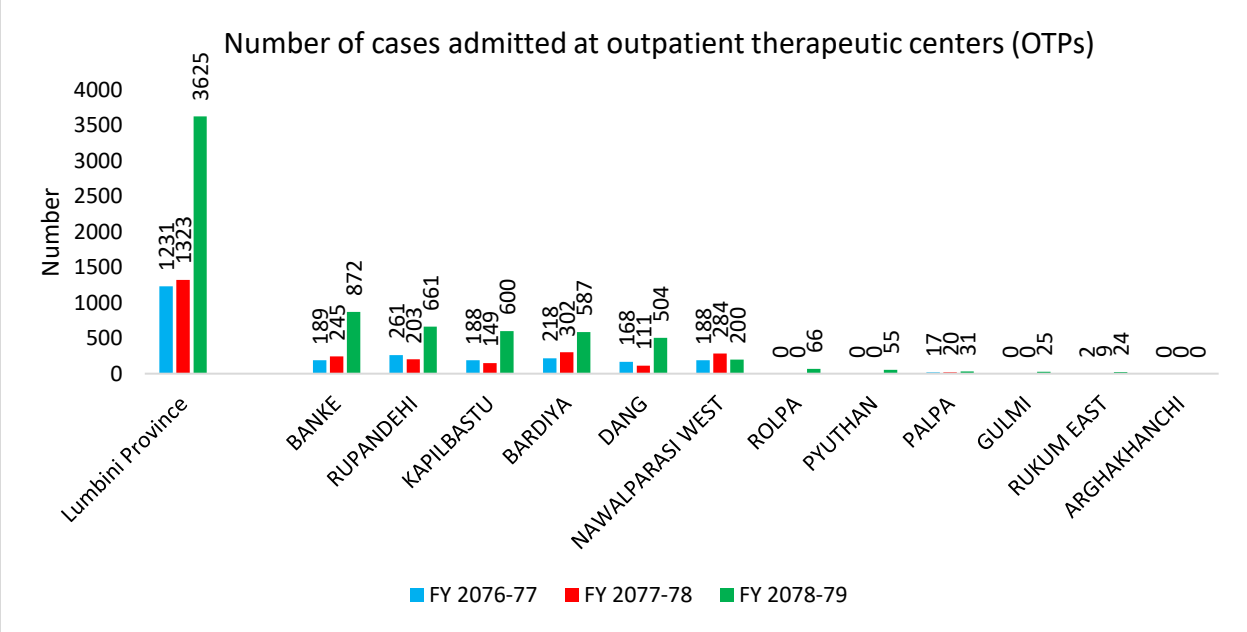
The Principles of IMAM are: Maximum Coverage; Timelines; Appropriate care; Care for as long as it is needed. The Major 4 components of IMAM are Community mobilization, Inpatient Therapeutic Care (ITC), Outpatient Therapeutic Care (OTC), and Management of Moderate Acute Malnutrition. Through MIYCN promotion and support for the sustained rehabilitation of identified cases through supportive follow-up, IMAM strives to integrate nutrition support across the health, early childhood development, WASH, and social protection sectors. With the implementation of the CNSI program, the IMAM program has been launched in all 12 districts of Lumbini Province. However, it will take some time for the new districts to fully implement the program.

Table 23: District-wise number of OTC as of FY 2078/79

District	As of FY 2078/79
Rukum East	5
Rolpa	10
Pyuthan	9
Gulmi	12
Arghakhanchi	2
Palpa	12
Nawalparasi West	15
Rupandehi	19
Kapilbastu	23
Dang	17
Banke	14
Bardiya	33
Total Lumbini Province	171

With the implementation of the CNSI training package, districts started to establish OTCs in strategic areas to serve malnourished children. With this, the number of OTCs in Lumbini Province has increased from 108 to 171. Bardiya has the most OTC (33) while Arghakanchi has the fewest (2). It is vital to note that the CNSI training in Arghakanchi was completed towards the end of FY 2078/79, hence the OTC establishment was not yet completed.

Figure 15: Number of cases admitted at outpatient therapeutic centers (OTPs)



The number of MAM cases admitted to the OTCs has increased substantially, from 1323 in FY 2077/78 to 3625 in FY 2078/79. The key reason could be the implementation of the CNSI program and the expansion of OTCs across the province (Figure 15).

Table 24: District-wise IMAM performance, FY 2078/79

Data	Number of cases admitted at outpatient therapeutic centers	% of defaulter rate of SAM cases	% of recovery rate of SAM cases	% of death rate of SAM cases
Lumbini Province	3625	15.3	76.3	0.06
Rukum East	24	0	100	0
Rolpa	66	6.9	93.1	0
Pyuthan	55	58.2	25	0
Gulmi	25	0	20	0
Palpa	31	0	83.9	0
Nawalparasi West	200	9.8	85.2	0
Rupandehi	661	10	81	0.15
Kapilbastu	600	13.9	71.9	0
Dang	504	19.1	72.7	0.25
Banke	872	15.8	79.2	0
Bardiya	587	22.5	71.1	0

Even though the IMAM program was implemented in all 12 districts, Arghakanchi was the last to establish an OTC, resulting in no cases being handled in the fiscal year 2078/79. The above table summarizes the performance of the eleven districts (Table 24). Although the province cumulatively meets the SPHERE requirements for SAM Management (i.e., recovery rate >75%, defaulter rate 15%, and death rate 5%). This data varies by district. The death rate is acceptable in all eleven program districts; however, the defaulter rate of more than 15% in Pyuthan, Dang, Bardiya, and Banke is cause for concern. The defaulter rate in Pyuthan is 58%, which calls for immediate action to improve the quality of community outreach activities and to build a systematic follow-up mechanism to reduce defaulter cases. Pyuthan had the lowest recovery rate (25%), while Rukum-East had the highest (100%), followed by Rolpa (93%), and Nawalparasi West (85.2%). Only Six districts, Rukum-East, Rolpa, Rupandehi, Palpa, Nawalparasi West, and Banke, are efficiently implementing the program and meeting the SPHERE standards.

Nutrition Rehabilitation Home

Nutrition Rehabilitation Homes are facility-based malnutrition management programs that are integrated with hospital services. The NRH not only treats and manages malnourished children but also provides nutrition education and counseling to mothers/caretakers on appropriate health and nutrition behaviors. With the reopening of the Rapti Academy of Health Science in Pouch 2078, the province now has three NRHs: one at Lumbini Hospital Butwal, one at Bheri Hospital Nepalgunj, and one at the Rapti Academy of Health Science, Dang. Table 25 shows the total number of admitted, discharged, defaulter, LAMA, and death cases of these 3 NRHs.

Table 25: Status of admission, discharge, defaulter, LAMA, and death at NRH

Nutrition Rehabilitation Homes	Total number of SAM case Admitted			Discharged			Defaulter			Death		
	FY 2076/77	FY 2077/78	FY 2078/79	FY 2076/77	FY 2077/78	FY 2078/79	FY 2076/77	FY 2077/78	FY 2078/79	FY 2076/77	FY 2077/78	FY 2078/79
Lumbini Provincial Hospital	72	107	145	36	60	134	25	23	17	0	0	0
Bheri Hospital	110	80	201	103	60	197	2	4	7	0	0	1
Rapti Academy of Health Science	NA	NA	46	NA	NA	41	NA	NA	3	NA	NA	0
Total	**182**	**187**	**392**	**139**	**120**	**372**	**27**	**27**	**27**	**0**	**0**	**1**

2.3.6.4 Prevention and control of iron deficiency Anemia

Since 1998, the Ministry of Health has provided iron folic acid (IFA) supplements to pregnant and post-partum women to prevent maternal anemia. As per the protocol, pregnant women will be given 60 mg of elemental iron and 400 micrograms of folic acid starting in their second and continuing until 45 days after giving birth. In 2003, the Intensification of Maternal and Neonatal Micronutrient Program (IMNMP) began IFA supplementation through Female Community Health Volunteers (FCHVs) to promote access and consumption of IFA supplements. As a result of the intensification program, compliance with taking 180 tablets during pregnancy has increased; nevertheless, compliance with taking 45 tablets after childbirth remains an issue.

Figure 16: Coverage of 180 IFA distribution to pregnant women by districts for last Three Years

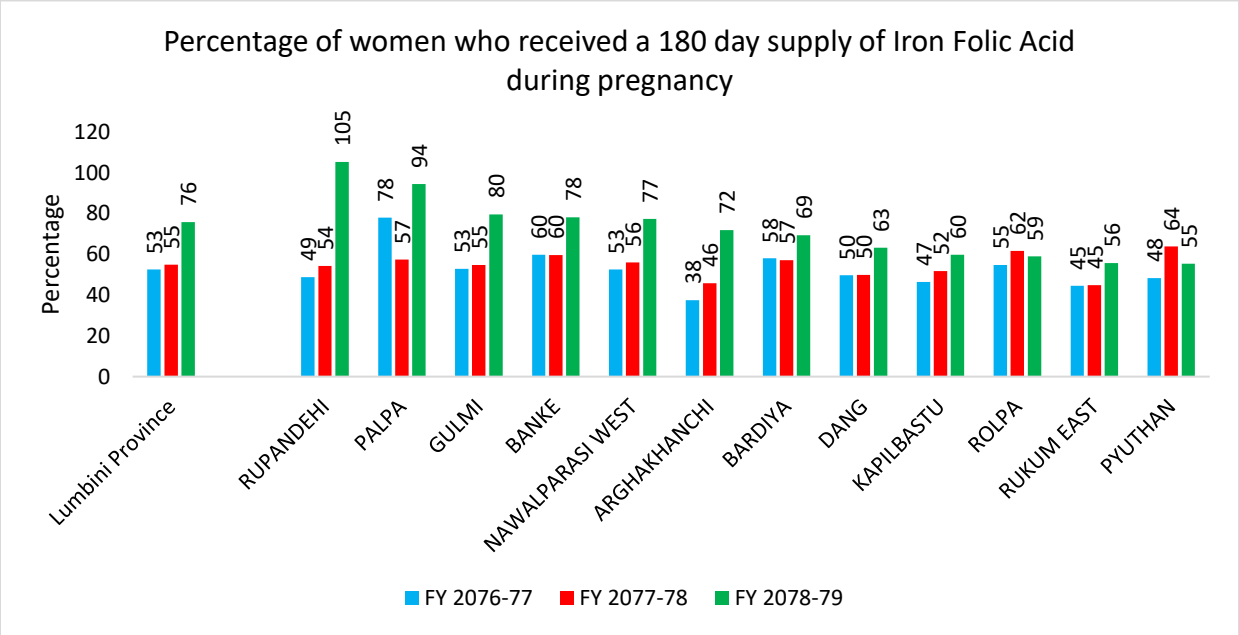
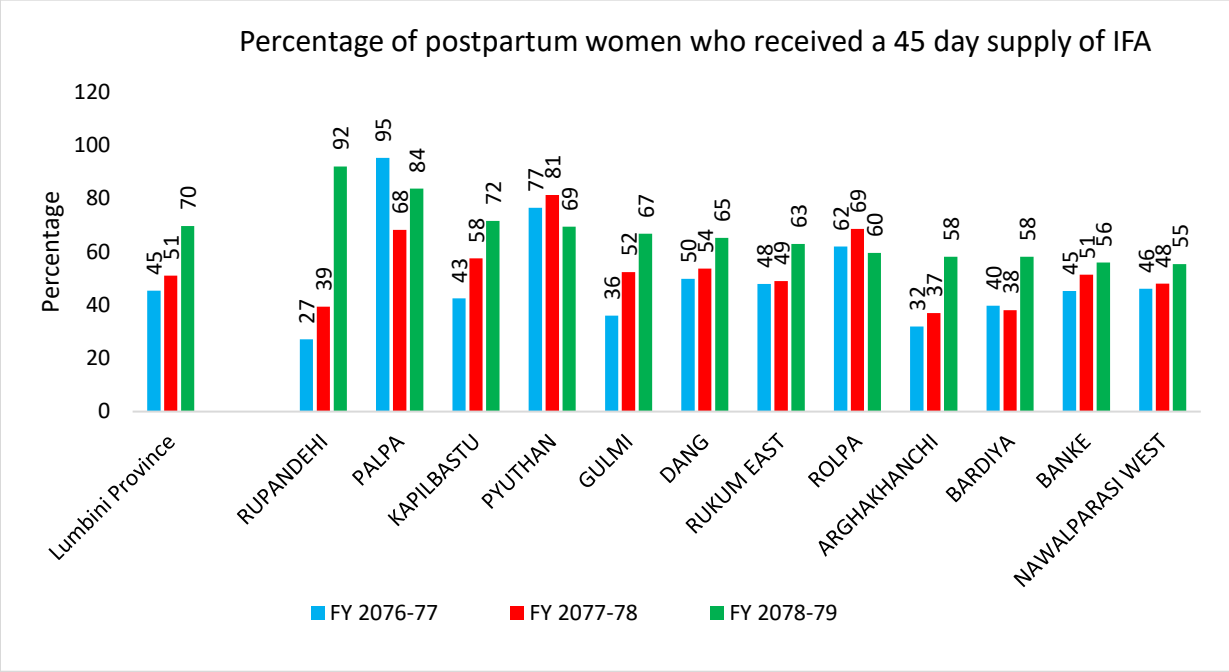


Figure 16 demonstrates that the distribution of iron-folic acid for 180 days in Lumbini Province increased from 55% in FY 2077/78 to 76% in FY 2078/79. One-quarter (25%) of pregnant women,

on the other hand, have not received the necessary 180-day supplementation. Rupandehi had the largest percentage of pregnant women receiving needed doses (105%), followed by Palpa (94%), and Gulmi (80%). Pyuthan has the least coverage (55%). Fifty percent of the districts (Rukum East, Rolpa, Pyuthan, Dang, Kapilbastu, and Bardiya) have lower coverage levels than the provincial average. Which is a cause for concern, and additional effort and Social Behavior Change Communication activities are essential to improve the coverage.

Figure 17: Percentage of post-partum women receiving 45 IFA tablets



The proportion of post-partum women who received 45 IFA tablets increased from 51% in FY 2077/78 to 70% in FY 2078/79. However, when disaggregated down by district, the pattern is varied. Except for Rolpa (60%), and Pyuthan (69%), this coverage has increased in ten districts. Rupandehi has the maximum coverage (92%), followed by Palpa (84%), and Kapilvastu (84%). Nawalparasi-West has the lowest coverage (55%) (Figure 17).

2.3.6.5 Biannual distribution of Deworming Tablets and Vitamin A to Children- 6-59 months

To reduce childhood anemia and parasitic infestation through public health measures distribution of Vitamin A (children aged 6-59 months) along with the distribution of Deworming tablets (children aged 12-59 months) is conducted twice a year in Kartik (October) and Baisakh (April).

Figure 18: Biannual distribution of deworming tablets and Vitamin A supplementation to children aged 6-59 months in Lumbini Province

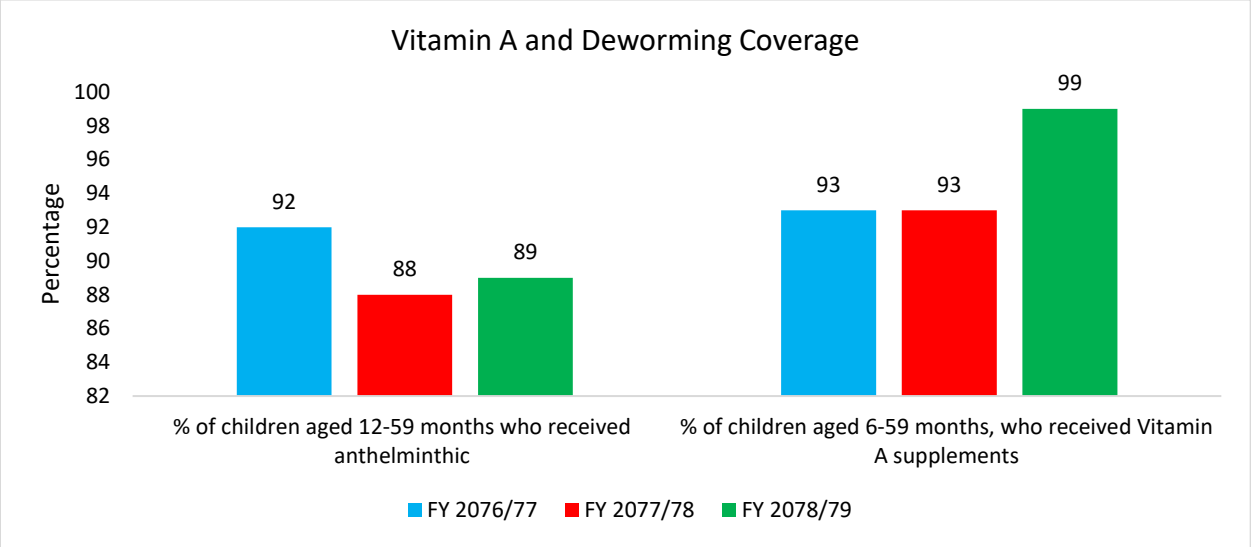


Figure 18 demonstrates that the overall distribution of deworming tablets to children aged 12 to 59 months is nearly constant at 89%. However, vitamin A supplementation coverage has reached 93%, a 6% increase over the previous fiscal year 2077/78.

2.3.6.6 Home Fortification of Complementary Food with Multiple Micronutrient Powder (MNP)/Baal-Vita

According to the NDHS 2006, 48% of Nepalese children aged 6-59 months were anemic, which was mostly due to poor IYCF practices. To combat this issue, the Nepalese government began the home fortification of supplemental foods with Multiple Micronutrient Powder (MNP). MNP, also known as Baal-Vita in Nepali. Baal-Vita is a micronutrient combination that contains 16 micronutrients including iron, vitamin A, and zinc. This intervention is linked to enhancing complementary feeding practices. Mothers and caregivers are advised to begin introducing complementary foods at six months of age, focusing on age-appropriate feeding frequency, enhancing the dietary quality of complementary foods by making them nutrient and calorie-dense, and handwashing with soap before handling food and feeding the child. The recommended amount of fortification for a child aged 6-23 months is 180 sachets divided into three cycles with a four-month interval between each cycle, i.e., a child consumes Baal-Vita for two continuous months, then a four-month break, then another two months, and so on. Each cycle, a child should take 60 sachets of Baal-Vita for two months at a dose of one sachet per day. To improve the micronutrient content of children's diets, the Baal-Vita should be blended with complementary foods. With the launch of the CNSI program, all 12 districts in Lumbini province have begun to implement this intervention; nevertheless, the level of coverage and compliance is inadequate.

Figure 19: Percentage of children who received at least 1 cycle (60 sachets) of MNP

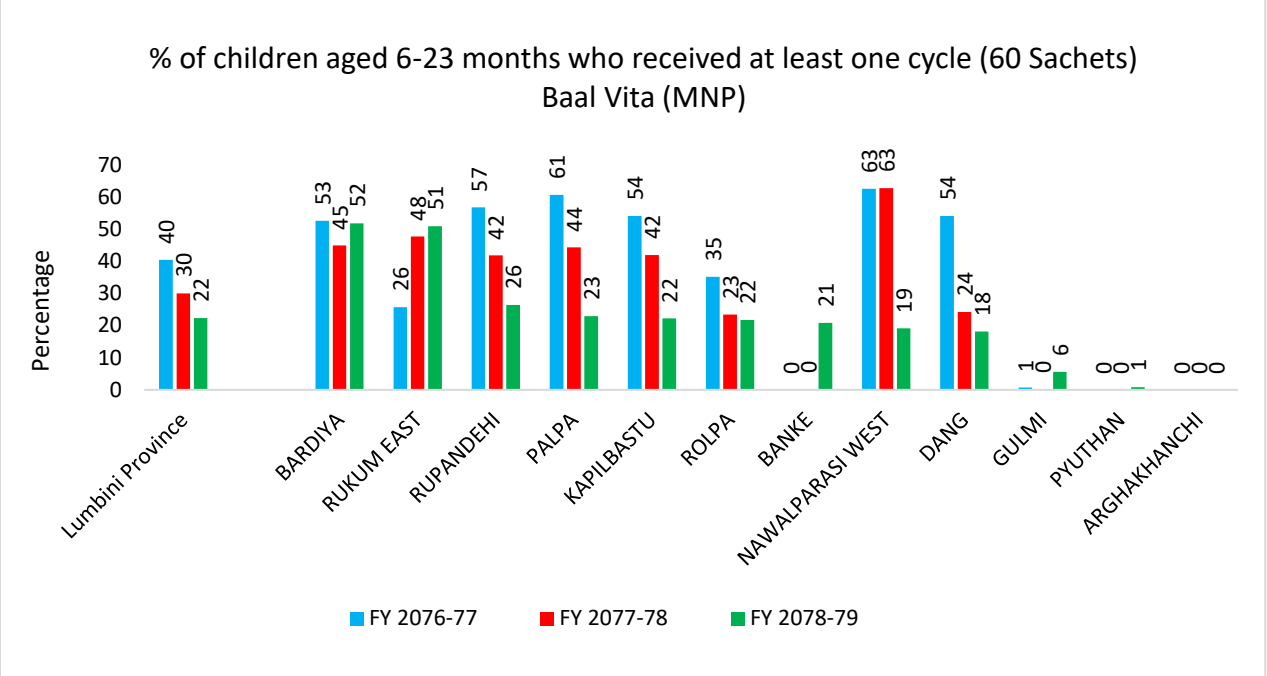
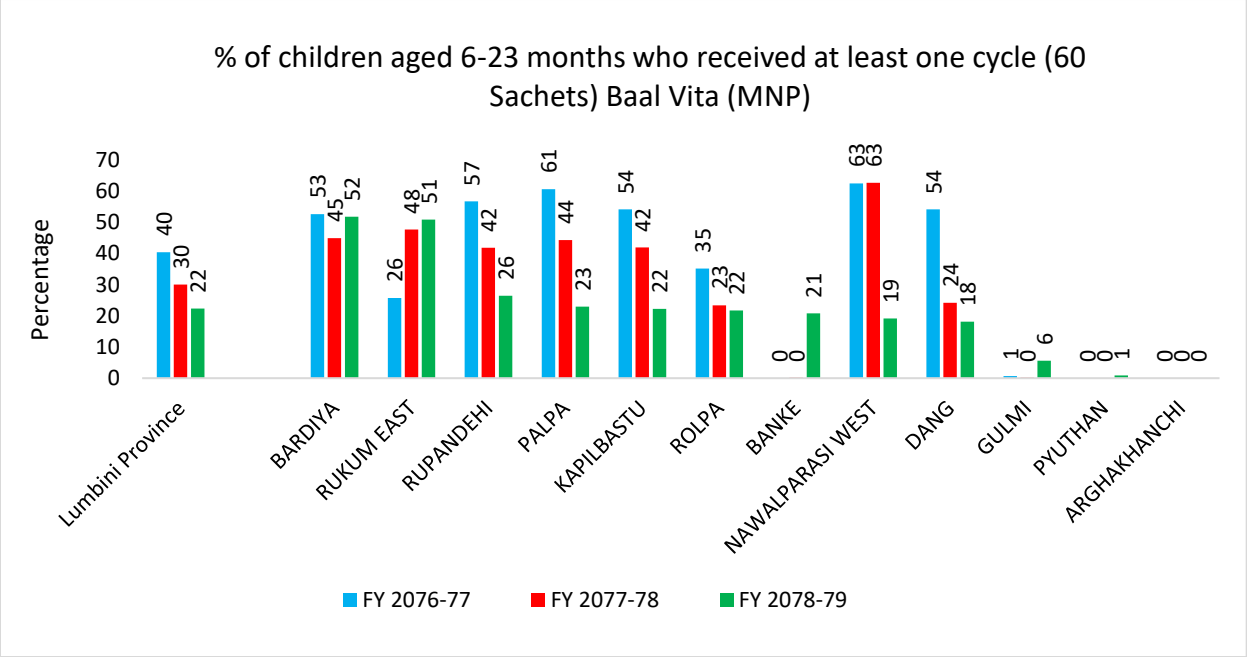


Figure 19 shows that the percentage of children that received at least one cycle of MNP is at its lowest in this fiscal year 2078/79, at 22.3%. It was 30% in the fiscal year 2077/78 and 40.4% in the fiscal year 2076/77. Data by the district shows that Bardiya has the most coverage at 51.8% while Pyuthan has the lowest at 0.9%. It is critical to note that many districts have only recently implemented CNSI programs, hence data has not yet been included in the DHIS2.

Figure 20: Percentage of children aged 6-23 months who received three cycle (180 Sachets) Baal Vita (MNP)



As illustrated in Figure 20, provincial coverage of MNP home fortification (3 cycles) is not satisfactory, with provincial coverage falling to 3.9 percent in FY 2078/79 compared to 6.6 percent in FY 2077/78, a considerable decline from 9.4% in FY 2076/77. Bardiya has the most coverage of the three MNP cycles (10.5%), while Dang has the lowest (1.5%). It is crucial to note that the first cycle intake coverage is determined based on the target population of 6-23 months, whereas the third cycle intake coverage is calculated among children aged 6-23 months who have ever taken MNP. A barrier analysis study is essential to design methods to ensure that the child's mothers and caregivers are completely aware of the benefits of using Baal Vita.

2.3.6.7 School Health and Nutrition Program

In June 2006, the Government of Nepal's Ministry of Health and Population (MoHP) and Ministry of Education (MoE) collaborated to develop and approve the National School Health and Nutrition Strategy. Likewise, the MoHP and MoE developed a 5-year Joint Action Plan (JAP) in 2008, which was later revised/updated because of a 5-year 2014/15-2019/2020 (2071/72-2075/76) JAP with the goals of assisting in the development of the physical, mental, emotional, and educational status of school children through effective implementation and scaling up of SHN programs. The new JAP is a critical document for mainstreaming SHN in the health and education systems, as well as for the effective execution of SHN initiatives, with clear roles and responsibilities of both ministries and assistance from other stakeholders for nationwide scale-up.

The updated JAP proposes:

- To increase the school's capacity for annual physical health screenings in nutrition, vision, dental, and hearing
- To increase the number of schoolchildren who receive deworming and iron supplements
- To increase the capacity of schools to provide first aid services by providing suitable first aid kits
- To increase the number of schools with operational latrines and hand washing facilities
- To strengthen the capacity of SHN focal teachers on School Health and Nutrition services
- To promote healthy school health and nutrition behaviors among children, and
- To implement the SHN program into the school's School Improvement Plan (SIP)/annual work plan

2.3.6.8 One School One Nurse Program

The National Health Policy 2017 envisions one health professional at secondary-level schools entirely committed to promoting health awareness and services to children, adolescents, and young people. This program began as a pilot project in the fiscal year 2075/76 and gradually expanded throughout the country. This initiative began in Lumbini Province in the fiscal year 2077/78, and there are 43 school nurses in 11 LLGs, with 33 financed by the federal government, eight by the provincial government, and two by the local government (Table 26).

Table 26: List of Schools with School Nurses in Lumbini Province

S.N	LLG	District	Number of Schools	Supported by
1	Tilottama NagarLLG	Rupandehi	12	Federal GoN
2	Kotahimai GaunLLG		1	Province GoV
3	Siddhartanagar NagarLLG		1	Province GoV
4	Maharajgunj NagarLLG	Kapilvastu	1	Province GoV
5	Rajapur Municipality	Dang	1	Province GoV
6	Bhumikasthan Gaun LLG	Arghakanchi	12	2 by Local GoN 10 by Federal GoN
7	NarainaPur GaunLLG	Banke	1	Province GoV
8	Tribeni GaunLLG	Rolpa	11	Federal GoN
9	Thabang GaunLLG		1	Province GoV
10	Rajapur NagarLLG	Bardiya	1	Province GoV
11	Putha Uttar Ganga GaunLLG	Rukum-East	1	Province GoV
	Total		**43**	

The province-level review of the One School One Nurse Program was held, and the nurses discussed their accomplishments, concerns, and challenges throughout their employment. This opportunity was also used to orient the school nurses on various programs such as ASRH, Nutrition, etc.). Further research should be conducted to compare the success of schools with and without school nurses in order to justify the expansion to support the effective implementation of programs under the National School Health and Nutrition Strategy.

2.3.6.9 Weekly Iron Folic Acid Supplementation to Adolescent Girls

The government of Nepal has provided weekly Iron Folic Acid (IFA) supplements to adolescent girls aged 10 to 19 under the framework of the School Health and Nutrition Strategy 2004. The purpose was to prevent and control the high prevalence of Iron Deficiency Anemia in this specific population subgroup. The intervention began as a pilot initiative and had since been gradually scaled up to encompass all LLGs in Nepal. This program component seeks to provide weekly Iron Folic Acid pills to all adolescent girls aged 10 to 19 years twice a year in Shrawan (Shrawan-Asoj) and Magh (Magh-Chaitra). They get one IFA tablet every week for 13 weeks throughout each cycle. As a result, each adolescent female should receive a total of 26 IFA tablets over the year. In Lumbini Province, all 109 LLGs are implementing the program; however, due to poorly recorded reporting and school closures during COVID-19, coverage has not been reported. As the DHIS-II has been amended and Adolescent Nutrition indicators have been integrated into the monthly reporting system, it is anticipated that information will be available from the next fiscal year.

2.3.6.10 Nutrition in Emergencies (NiE)

Nutrition in emergencies (NiE) has two major goals: to prevent deaths and to preserve people's right to food. People who are already malnourished before the disaster are more vulnerable to disease and death. Malnutrition is a risk among the areas impacted by the emergency because of a shortage of food or access to inadequate food and water, poor sanitation, and a lack of access to health care. The NiE focuses primarily on pregnant and lactating women (PLWs) and children under the age of five because they are nutritionally most vulnerable. In the impacted areas, the following five nutrition initiatives are implemented:

1. Promotion, protection, and support for breastfeeding of infants and young children aged 0-23 months
2. Promotion of proper complementary feeding for infants and young children aged 6-23 months.
3. Management of moderate acute malnutrition (MAM) among children aged 6-59 months and among PLWs through targeted supplementary feeding program (TSFP)
4. Management of severe acute malnutrition among children aged 6-59 months through therapeutic feeding. Family Welfare 102 DoHS, Annual Report 2077/78 (2020/21)
5. Intensification of Micro-nutrient supplementation for children and women including MNP and Vitamin A for children aged 6-59 months, IFA for pregnant and postnatal women

In Nepal, the Nutrition Section of the Ministry of Health and Population's Family Welfare Division leads the Nutrition Cluster, which is co-led by UNICEF. Similarly, at the provincial level, the health and nutrition clusters have been integrated and are co-led by multiple development partners, including UNICEF (nutrition) and WHO (health). During the COVID-19 Pandemic, the Province Health and Nutrition Cluster was activated and deployed for preparedness, information management, and coordinated response to reach the most vulnerable women and children of Lumbini Province. However, there is very few HR trained on NiE at the provincial and municipal levels, therefore initiatives to expand HR capacity are critical.

The following preparedness and response activities were implemented in the fiscal year 2078/79

- Regular operation of the Health and Nutrition Cluster for a coordinated response, monitoring, and information sharing.
- Comprehensive nutrition-specific interventions (CNSI) training has been implemented throughout the province, and CNSI includes a detailed section on NiE, which is an important component of capacity-building activities.
- Prepared/revised nutrition in emergency preparedness and response plans to address nutrition challenges in the COVID-19 setting, monsoon, and earthquake.
- Essential nutrition items are prepositioned at Provincial Health Logistic Management Centers.

During the COVID-19 Pandemic, the nutrition cluster deployed all cluster partners, health workers, and FCHVs across the province. In this context, the Nutrition cluster's efforts in FY 2078/78 led to the following results:

- Nutritious relief (food packages) provided to golden 1000 days mothers.
- Messages on breastfeeding, and nutrition needs of golden 1000days mothers and children translated in 3 local languages (Tharu, Awadhi, and Kham) and disseminated through various mediums (miking, posters, Pamphlets, FM radios, FCHV, and volunteers' mobilization)
- 42 FM radios aired messages on nutrition and COVID-19 throughout the province.
- Volunteers mobilized at the points of entry with SBCC messages for the returnees focusing on 1000days families.
- SMS, targeted phone calls to the 1000days family to ensure that they are aware of the IYCF and maternal nutrition practices.

2.3.7 Best Practice / Lesson learned / Innovation

Province:

- Province-level consultation on the role of stakeholders to improve the nutrition status of children, adolescents, and women.
- Meetings of the Nutrition and Food Security Steering Committee at the provincial level are held regularly.
- The appointment of a school nurse has aided the school's health and nutrition program.
- Fund allocation for the complementary food supplement to new mothers.
- Additional funding to ensure the smooth operation of NRH Lumbini.
- Fund allocation for the MSNP program.
- Growth Monitoring started at the MCH Clinic of the Hospitals
- Kush Hal Progarmmes with a focus on Muslim and marginalized communities.
- Ayurveda Programs focusing on the "Breastfeeding Promotion" (Satawari Churna)

Local level:

- Local level taking ownership and taking steps such as:
- Nutritional assessment of children under the age of five, as well as the development of a municipal health and nutrition profile (Mayadevi, Rupandehi).
- Nutritional packets are given to mothers during institutional birth. "Upadakshya Koseli Karyakram" and Aama Samuha Dwara Gharbhet.
- Incentives such as Salt packets, lentils, and soaps are provided to mothers of under 2 children to promote growth monitoring (Bachha Jokaun noon Bokaun)
- Establishment of the nutrition corner and breastfeeding room
- Nutrition-friendly health facility declaration in 7 health facilities

2.3.8 Issues and Challenges

- Despite local funding allocations, there is a lack of technical execution capability
- Lack of strategies to address wasting
- MAM management remains difficult since supplies such as RUTF are insufficient.
- Growth monitoring and promotion indicators have not improved. Mothers and caregivers of children under the age of two are uninformed of the location and benefits of GMP sessions.
- Irregular supply of nutrition commodities (MNP, Vitamin A capsules, RUTF, and Iron tablets).
- Active screening to detect children with severe and moderate acute malnutrition is ineffective, as is defaulter tracking.
- The Health Mothers' Groups are not functioning actively.
- The turnover and transfer of skilled health workers have had an impact on services at Outpatient Therapeutic Centers.
- Policy and focus shifts at donor agencies have had an impact on nutrition program.
- Despite the allocation of funds at the local level, there is a lack of technical ability for execution.

Recommendation:

- Develop Policies and Plans to influence the nutrition agenda at the local and provincial levels.
- Evidence generation (e.g., SMART surveys, studies) to enable effective program planning.
- Periodic training and capacity building of frontline service providers.
- Intensive RDQA at the health facility level and periodic data management and reporting training to frontline service providers.
- Develop strategies/interventions for the management of wasting, with an adequate supply of RUTF.
- Focusing on counselling mothers during growth monitoring sessions with visuals (plotted charts of child growth) to help parents realize the importance of regular growth monitoring.
- Uninterrupted supply of nutrition commodities.
- Prioritize community-based programs for active case finding and defaulter case tracking.
- Reactivation of health mothers' group.
- Ongoing capacity building/onsite coaching of OTC staffs, as well as the expansion of OTCs in the remaining districts/LLGs.
- Appointment of nutrition focal point person at the provincial and municipal levels.
- Ensure regular monitoring and supervision of nutrition programs and activities at provincial and municipal levels.

2.4 Safe Motherhood and Newborn

2.4.1 Background

The goal of the National Safe Motherhood Program is to reduce maternal and neonatal morbidity and mortality and improve maternal and neonatal health through preventive and promotive activities and by addressing avoidable factors that cause death during pregnancy, childbirth and the postpartum period. Evidence suggests that three delays are important factors for maternal and newborn morbidity and mortality in Nepal (delays in seeking care, reaching care and receiving care).

The following major strategies have been adopted to reduce risks during pregnancy and childbirth and address factors associated with mortality and morbidity:

- Promoting birth preparedness and complication readiness including awareness raising and improving preparedness for funds, transport and blood transfusion.
- Expansion of 24 hours birthing facilities alongside Aama Suraksha Program promotes continuum of care from ANC to PNC.
- The expansion of 24-hour emergency obstetric care services (basic and comprehensive) at selected health facilities in all districts.

The Safe Motherhood Program, which was started in 1997, has made significant progress with the formulation of a safe motherhood policy in 1998. With the development of policies, programs and protocols, service coverage has been improved tremendously. The policy on skilled birth attendants (2006) emphasizes the importance of SBA at all births and embodies the government's commitment to train and deploy doctors, nurses, and ANMs with the necessary skills across the country. Implementation of the Aama Program to ensure free service and encourage women to give birth in a health facility has increased access to institutional deliveries and emergency obstetric care services. The adoption of the revised National Blood Transfusion Policy (2006) was another important step toward ensuring the availability of safe blood supplies in emergency situations.

2.4.2 Main Strategies of the Safe Motherhood Program

1. Promoting inter-sectoral coordination and collaboration at federal, provincial, districts and local levels to ensure commitment and action for promoting safe motherhood with a focus on poor and excluded groups.
2. Strengthening and expanding delivery by skilled birth attendants and providing basic and comprehensive obstetric care services at all levels. Major interventions include:
    - developing the infrastructure for delivery and emergency obstetric care
    - standardizing basic maternity care and emergency obstetric care at appropriate levels of the health care system
    - strengthening human resource management - training and deployment of advanced skilled birth attendant (ASBA), SBA, anesthesia assistant and contracting short-term human resources for expansion of services sites

- establishing a functional referral system with airlifting for emergency referrals from remote areas, the provision of stretchers in wards and emergency referral funds in all remote districts

3. Strengthening community-based awareness on birth preparedness and complication readiness through FCHVs and increasing access to maternal health information and services
4. Supporting activities that raise the status of women in society
5. Promoting research on safe motherhood to contribute to improved planning, higher quality services and more cost-effective interventions.

In addition, Nepal Safe Motherhood and Newborn Health Roadmap 2030 provides the framework for Nepal to fulfill its commitments under the Safe Motherhood and Reproductive Health Act 2018. This Roadmap lays out a number of evidence-based strategies and activities that all three tires of government should undertake in order to achieve a healthy life and well-being for all mothers and newborns, as well as to end preventable maternal and newborn deaths. The roadmap's five outcomes are listed in Box 1.

Box 1: Five outcomes of the Nepal safe motherhood and newborn health roadmap 2030

- Outcome 1: Availability of high-quality maternal and newborn health services increased, leaving no one behind
- Outcome 2: Demand for and utilization of equitable maternal and newborn health services increased
- Outcome 3: Governance of maternal and neonatal health services is improved, and accountability is ensured
- Outcome 4: Monitoring and evaluation of maternal and newborn health improved
- Outcome 5: Emergency preparedness and response for maternal and newborn health strengthened

The Nepal Health Sector Strategy (NHSS) identifies equity and quality of care gaps as areas of concern for achieving maternal health SDG targets, and provides guidance for improving quality of care, equitable distribution of health services and utilization, and universal health coverage with better financing mechanisms to reduce financial hardship and out-of-pocket expenditure for illness.

2.4.3 Major Programmatic Achievements

Distribution of Facilities for Emergency Obstetric and Newborn Care (EONC) Services

For the delivery of life-saving interventions that treat major causes of maternal and newborn mortality and morbidity, timely access to emergency obstetric and newborn care services is required. On the basis of level of care, these services have been divided into basic and comprehensive emergency obstetric and newborn care services. BEONC services include seven signal functions, whereas CEONC includes two additional signal functions not provided by BEONC.

The services they provide are as follows:

- Signal functions under BEONC include: 1) parenteral administration of antibiotics; 2) parenteral administration of oxytocin or other uterotonic; 3) parenteral administration of anticonvulsant for hypertensive disorders of pregnancy; 4) assisted vaginal delivery; 5) manual removal of retained placenta; 6) removal of retained products of conception; 7) neonatal resuscitation.
- CEONC signal functions, in addition to all seven of the above, include: 8) blood transfusion; and 9) CS.
- BCs can only perform normal deliveries and provide obstetric first aid, including parenteral oxytocin, antibiotics and anticonvulsants; they do not qualify as BEONC facilities.

Table 27: Distribution of Emergency Obstetric and Neonatal Care (EONC) facilities

District	CEONC			BEONC			Birthing Centre		
	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79
Arghakhanchi	1	1	1	2	2	2	21	22	27
Banke	3	4	4	2	3	4	34	32	36
Bardiya	1	1	1	3	3	3	26	23	30
Dang	2	3	3	3	1	2	34	36	40
Gulmi	1	1	1	4	4	4	47	56	66
Kalpilbastu	1	1	1	4	3	4	26	31	33
Nawalparasi-West	1	1	1	4	2	4	13	13	16
Palpa	2	3	2	4	3	4	35	45	52
Pyuthan	1	1	1	2	2	2	49	51	53
Rolpa	1	1	1	2	3	2	49	52	49
Rukum-East	0	0	0	1	1	1	15	15	17
Rupandehi	2	2	4	5	5	4	25	30	25
Lumbini	**16**	**19**	**20**	**36**	**32**	**36**	**374**	**406**	**444**

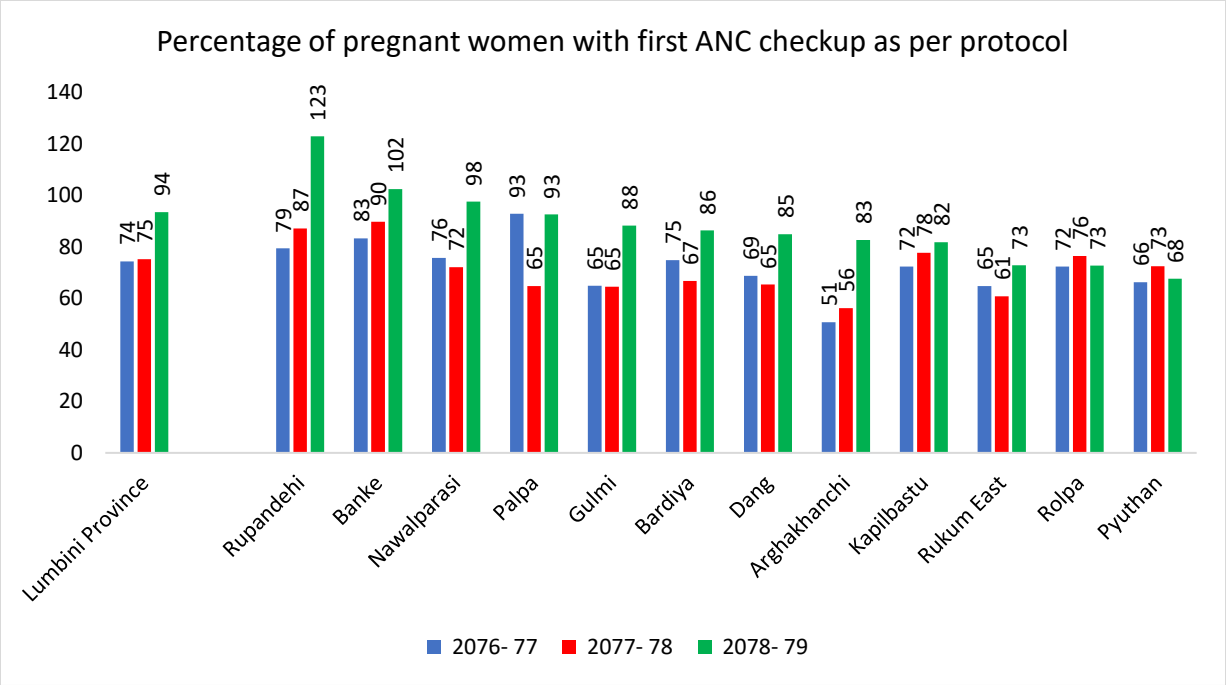
In the province, 20 hospitals have been providing CEONC services and there are 36 BEONC service sites and 444 birthing centers. There has been an absolute increase in 38 birthing centers from FY 2077-78 to FY 2078-79. The district-wise availability of sites for EONC services for the past three years have been shown in the Table 27.

Antenatal Care

According to national protocols, pregnant women should have at least four antenatal check-ups, give birth in a health facility, and have three post-natal check-ups. All pregnant women should have a minimum of four antenatal check-ups in their pregnancy. Women should receive the following services and general health check-ups during these visits:

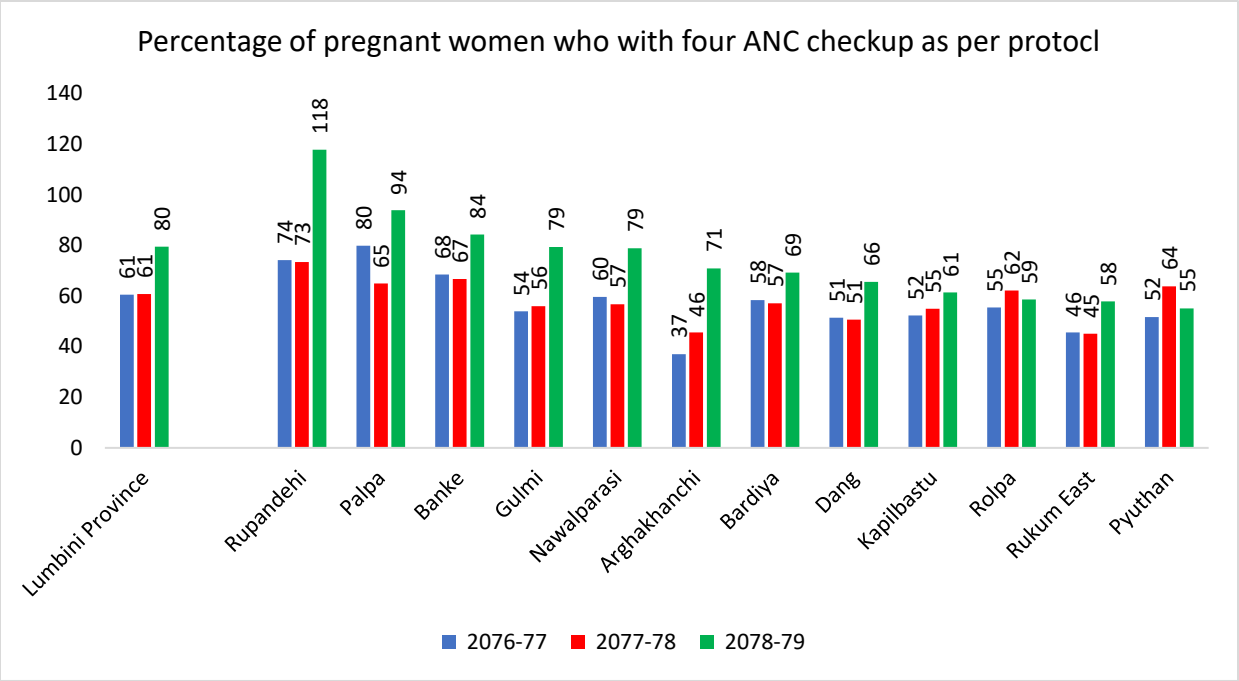
- Monitoring of blood pressure, weight, and fetal heart rate
- IEC and BCC on pregnancy, childbirth, and early newborn care, as well as family planning
- Information on danger signs during pregnancy, childbirth, and the postpartum period, as well as prompt referral to appropriate health facilities.
- Early detection and management of pregnancy complications.
- All pregnant women receive tetanus toxoid and diphtheria (Td) immunization, iron folic acid tablets, and deworming tablets, as well as malaria prophylaxis as needed.

Figure 21: District and provincial trends in percentage of pregnant women with first ANC visits (as per protocol) among expected live births



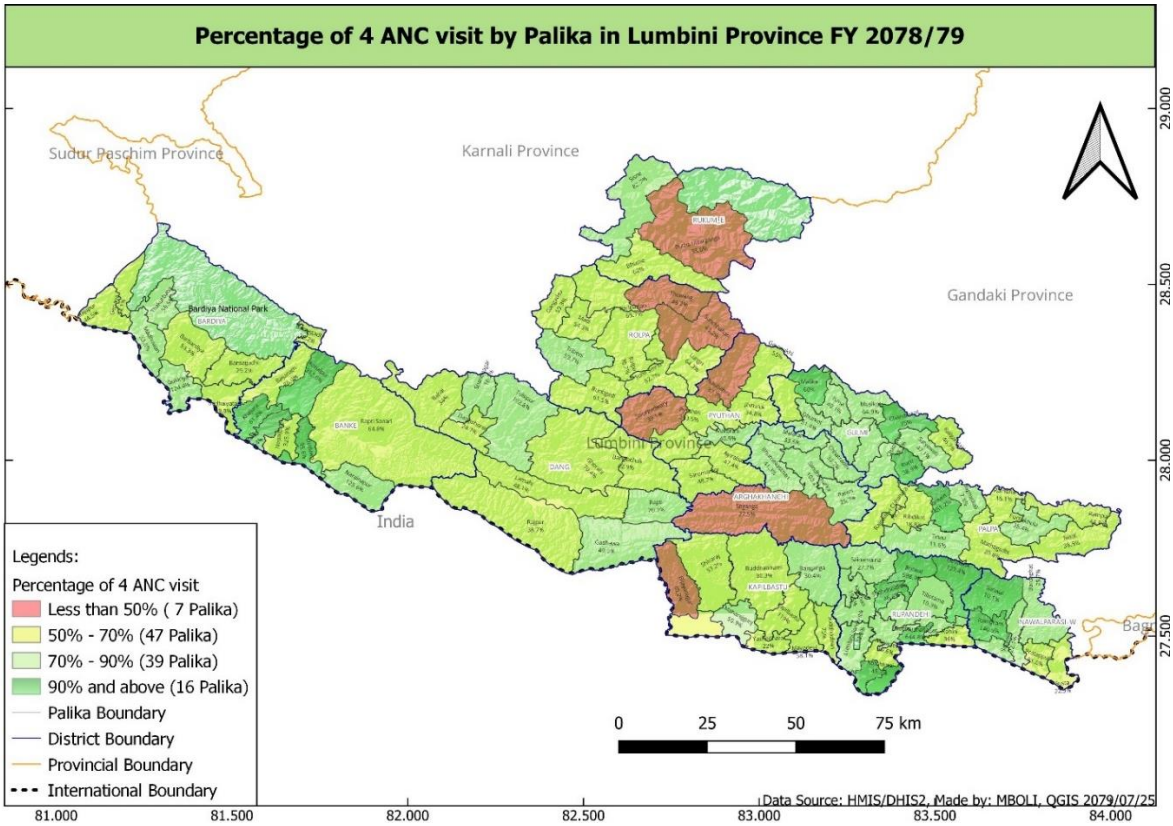
In Lumbini Province, the proportion of pregnant women who received their first antenatal care according to protocol increased from 75% in FY 2077-78 to 94% in FY 2078-79. Rupendehi and Banke has the highest coverage in the protocol-based first ANC visit (123%,102%). In Pyuthan, the proportion of women attending their first ANC appointment fell by 5% points and 4% in Rolpa from FY 2077-78 to FY 2078-79.

Figure 22: District and provincial trends in percentage of pregnant women with four ANC visits (as per protocol) among expected live births



Between FY 2077-78 and FY 2078-79, there is slight change in the number of women receiving complete ANC checkups as per protocol in Lumbini province. Rupendehi has the highest coverage (118%) of four ANC visits in FY 2078-79, while Pyuthan has the lowest (55%). Out of 12 districts, percentage of four ANC check-up dropped in Pyuthan and Rolpa districts.

Map 1: Four ANC visits as per protocol (as % of expected live births)-Local level

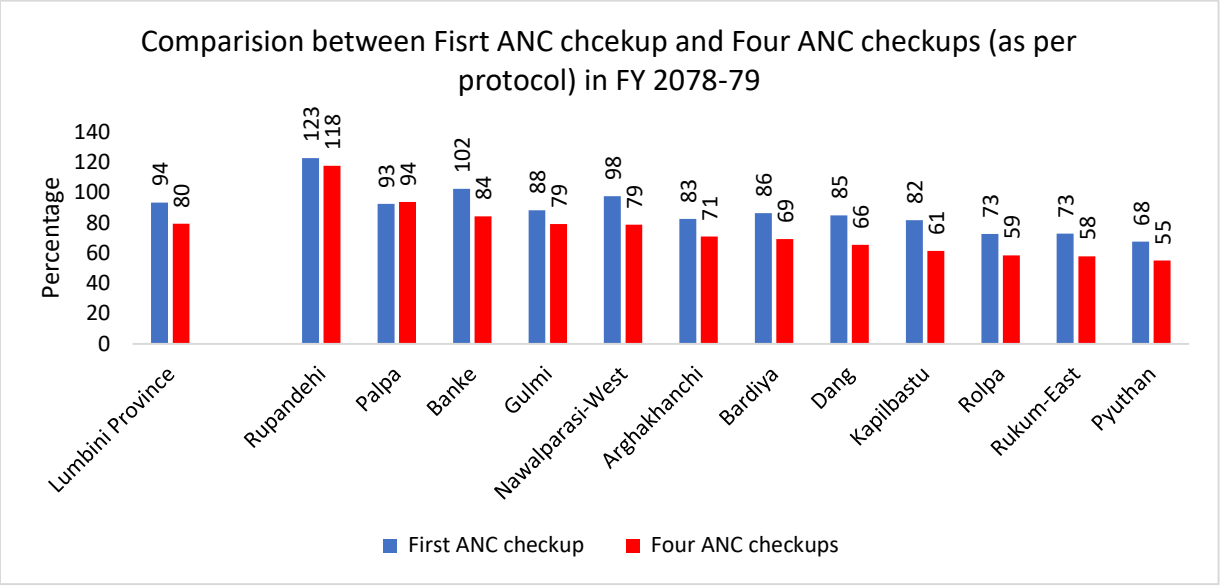


Out of 109 LLGs. only 16 LLGs have 90 % and above 4 ANC visit as per protocol and 7 LLGs still have less than 50 % ANC visit as per protocol which is very less in compared to SDG target.

Comparison between first and four ANC visits

In Lumbini Province, the percentage of women who have their first ANC visit is higher than the percentage of women who have four ANC visits, which is consistent with the national trend. In addition, in most districts, a significant gap was observed between the first and fourth ANC visits.

Figure 23: Comparison between first and four ANC visits

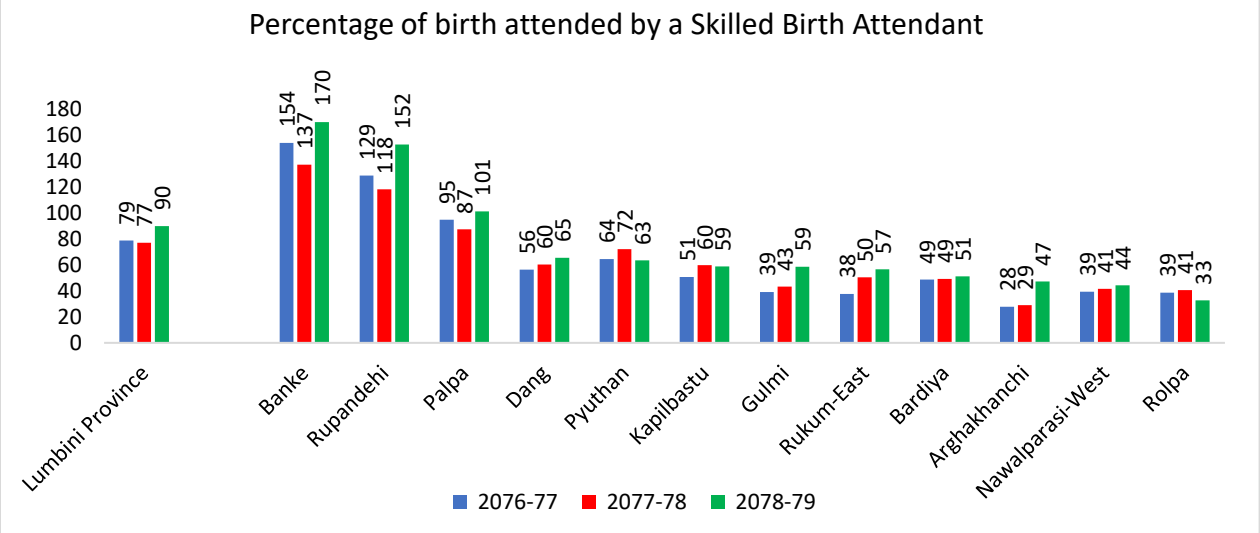


Safe Delivery

A safe delivery care includes skilled birth attendance at home and institutional deliveries; early detection of complicated cases and management or referral (after providing obstetric first aid) to an appropriate health facility with 24-hour emergency obstetric services, and registration of births and maternal and neonatal deaths. Although women are encouraged to give birth in a facility, home delivery with clean delivery kits, misoprostol to prevent post-partum hemorrhage, and early detection of danger signs and complications are important components of delivery care in settings where institutional delivery services are not available or are not used by the women.

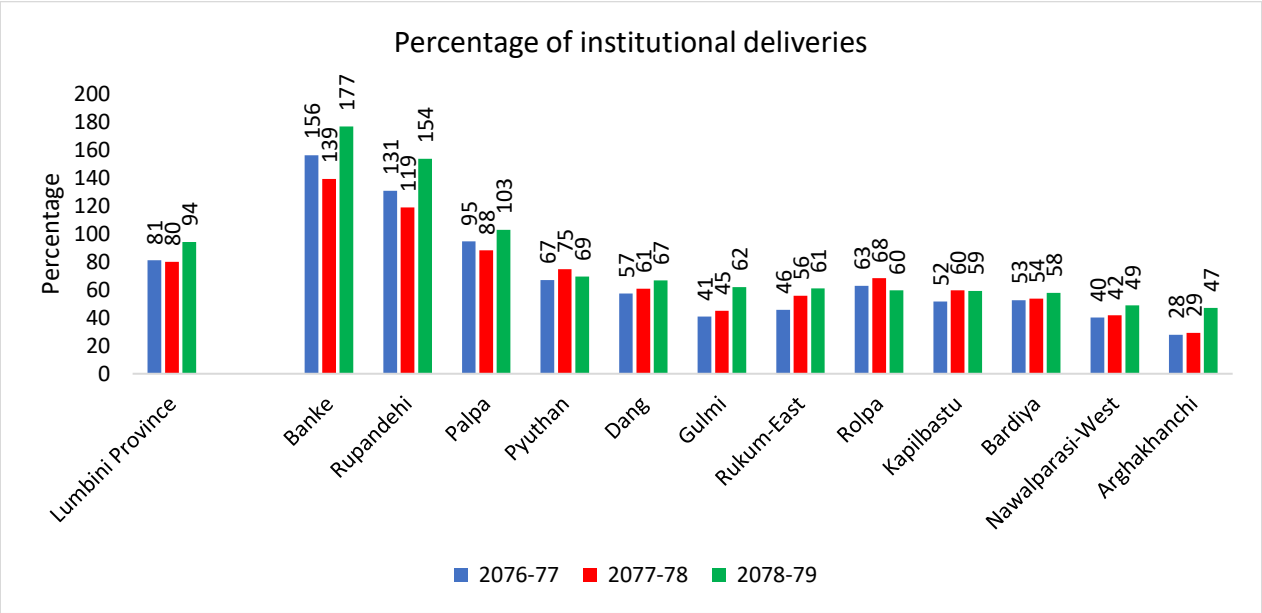
Delivery attended by SBA

Figure 24: Percentage of births attended by skilled birth attendant among expected live births



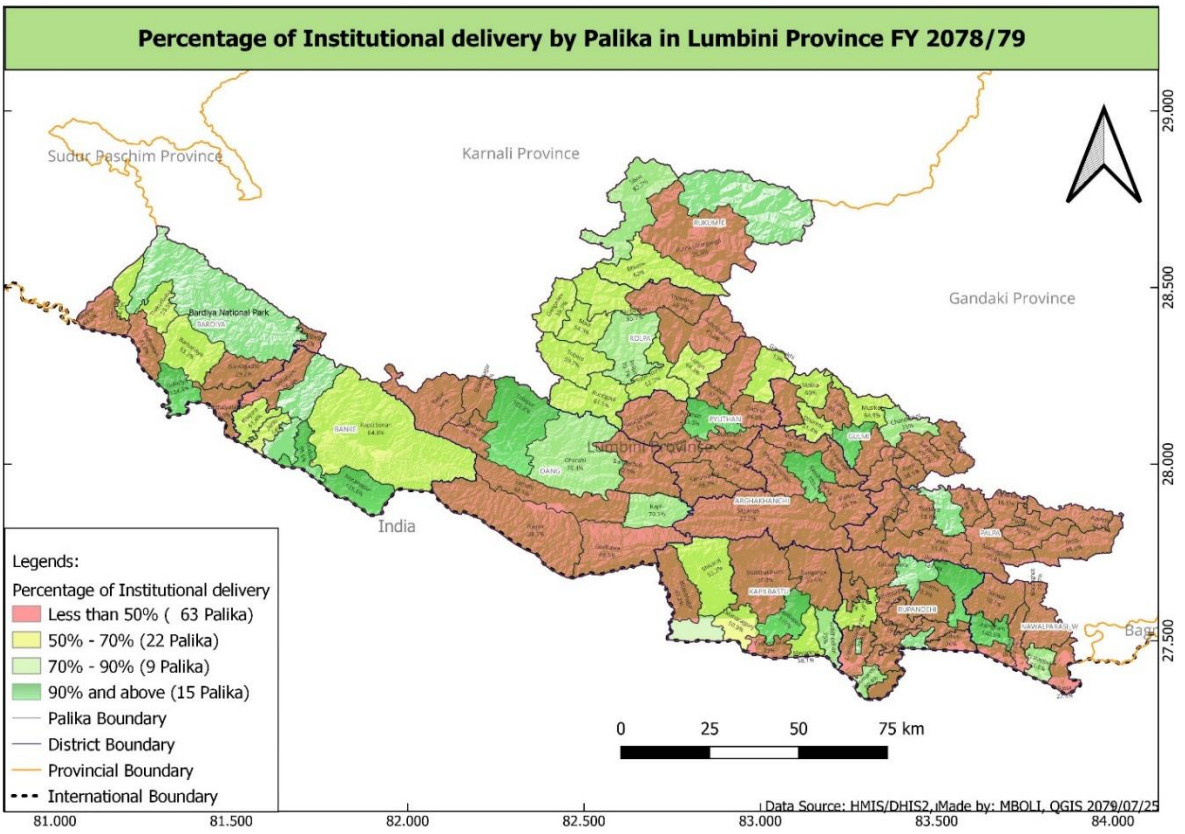
Institutional Delivery

Figure 25:Percentage of institutional delivery



Nepal has committed to achieve 74 percent of all deliveries in health facilities by 2022 in order to meet the SDG target of 90 percent by 2030. Although the percentage of institutional deliveries in Lumbini province in FY 2078-79 (i.e.,94 percent) was higher than the SDG target of 2030. Institutional deliveries were reported to be less than 50% in Nawalparasi, and Arghakhanchi. While larger hospitals in Banke, Rupendehi and Palpa have reported more than 100 percent institutional deliveries. Though institutional delivery is 94%, delivery by SBA seems 90% which shows that still 4 percentage of delivery are attended by non-SBA.

Map 2: Percentage of institutional deliveries in Lumbini province-by Local level

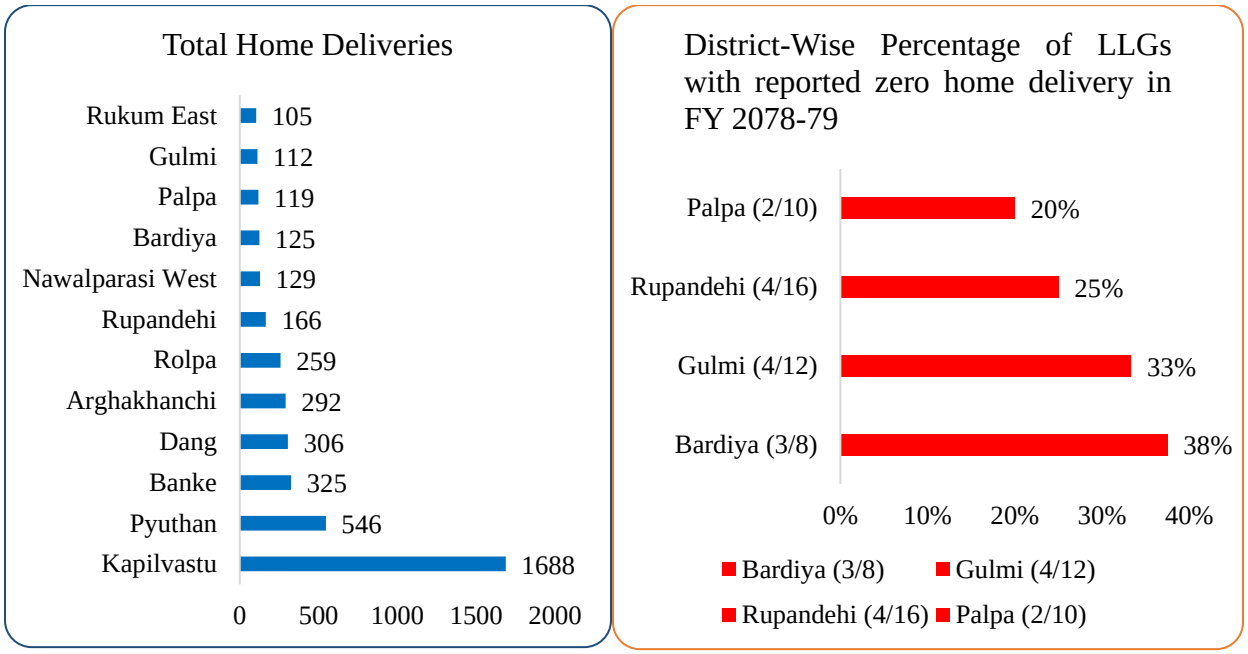


Although the percentage of institutional deliveries in Lumbini Province in FY 2078-79 (i.e.,94 percent) was higher than the SDG target of 2030. Institutional deliveries were reported to be less than 50% in 63 LLGs out of 109 LLGs. While only 15 LLGs have institutional deliveries 90% and above.

Home Delivery

13 out of 109 LLGs (12%) of Bardiya, Gulmi, Rupendehi and Palpa have reported zero home delivery in fiscal year 2078-079, other district doesn't have any LLGs with zero home delivery. Remaining LLGs having home delivery reported a total of 1688 home deliveries which becomes 4.3% home delivery out of expected live birth.

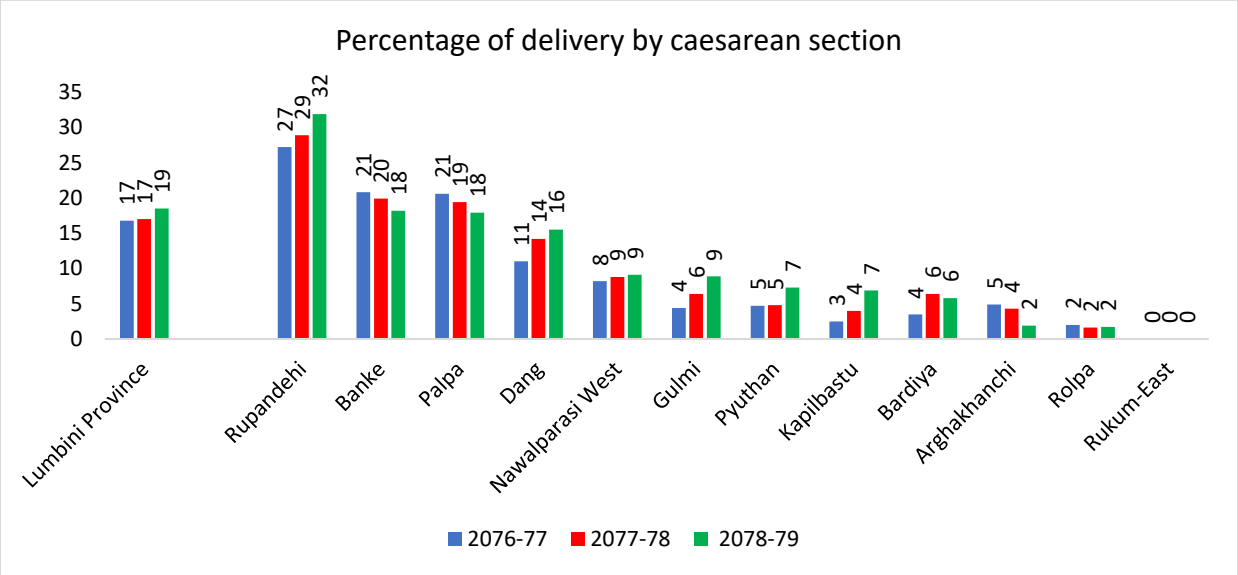
Figure 26: District with home delivery and district wise percentage of LLGs with zero home delivery



Deliveries by Caesarean Section (CS)

Since 1985, the international healthcare community has considered the ideal rate for caesarean sections to be between 10% and 15%. Since then, caesarean sections have become increasingly common in both developed and developing countries WHO concludes that CS are effective in saving maternal and infant lives, but only when they are required for medically indicated reasons. Every effort should be made to provide caesarean sections to women in need, rather than striving to achieve a specific rate -WHO.

Figure 27: Percentage of deliveries by caesarean section



Use of caesarean section continues to gradually rise in Lumbini Province. In FY 2078-79, 19 percent of institutional deliveries in the province were conducted by caesarean section which is higher than the ideal rate of CS (10%-15%). The highest rates of CS delivery were reported in Rupendehi (32%), Banke (18%), Palpa (18%) and Dang (16%) as all of these are districts having referral hospital /hub hospital, due to which all the critical cases are referred in these districts resulted increment in CS cases. To assess the effectiveness of strategies or interventions targeted at optimizing the use of caesarean section, in 2015, WHO proposed the use of the Robson classification (also known as 10-group classification) as a global standard for assessing, monitoring and comparing caesarean section rates both within healthcare facilities and between them.

Table 28: Table: Number of women treated for obstetric complications in FY 2078-79

Obstetric Complication	Rukum-East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi-West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	**Lumbini Province**
Eclampsia	0	3	4	1	1	5	2	124	17	9	110	6	282
Severe/Pre-Eclampsia	2	1	4	0	2	42	6	162	24	4	63	18	328
Puerperal Sepsis	0	0	1	8	0	2	0	15	12	0	2	15	55
Antepartum Haemorrhage	3	0	4	2	1	12	2	64	7	16	219	17	347
Postpartum Haemorrhage	14	9	71	12	35	130	157	326	126	83	208	55	1226
Abortion Complication	2	1	12	20	3	5	22	240	20	302	299	54	980
Ectopic Pregnancy	0	5	5	3	0	17	0	177	2	29	130	1	369
Hyperemesis Grivadarum	1	2	3	16	0	30	16	89	99	29	66	35	386
Obstructed Labor	4	0	5	2	3	421	36	33	2	560	1016	147	2229
Other Complications	1	3	38	8	1	294	41	326	77	65	2382	213	3449
Preg.-Induced Hypertension	0	0	1	0	0	39	3	114	14	23	257	43	494
Prolonged labour	26	8	8	7	2	53	11	508	39	227	301	139	1329
Retained Placenta	37	17	88	13	16	14	22	111	17	90	176	20	621
Ruptured Uterus	0	0	0	1	0	3	1	23	0	0	15	0	43
Total	**90**	**49**	**244**	**93**	**64**	**1067**	**319**	**2312**	**456**	**1437**	**5244**	**763**	**12138**

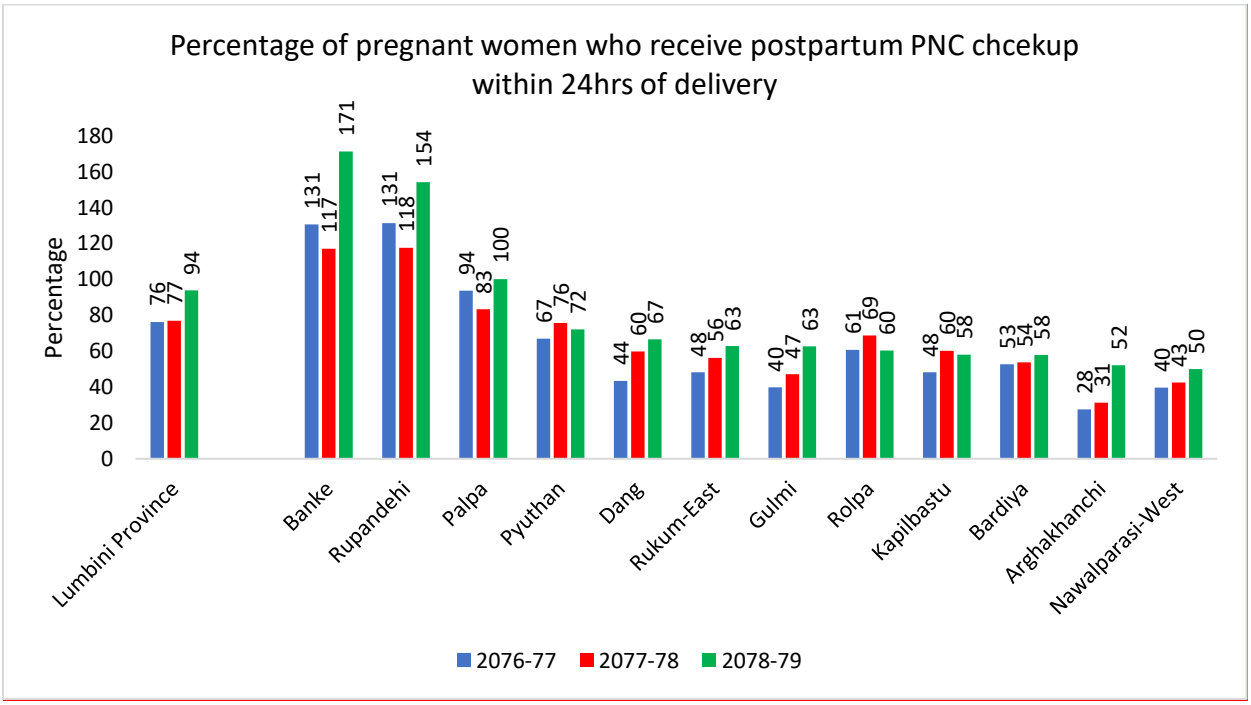
The total number of females receiving treatment for Emergency Obstetric Complication in FY 2078-79 was 12,138. Prolonged/obstructed labor (2229) and hemorrhage (1573) were the most common obstetric complications reported in FY 2078-79. Banke (5244) had the most women treated for emergency obstetric complications, followed by Rupandehi (2312).

Postnatal Care (PNC)

The postnatal period is a critical time in the lives of both mothers and their newborn children. Most maternal and neonatal deaths occur during this time. Yet, this is the most neglected period for the provision of quality care. As per the national protocol, at least three postnatal checkups are recommended for all mothers and newborns: first as early as possible within 24 hours of birth, on the third and seventh day after delivery. The postnatal care services include the following:

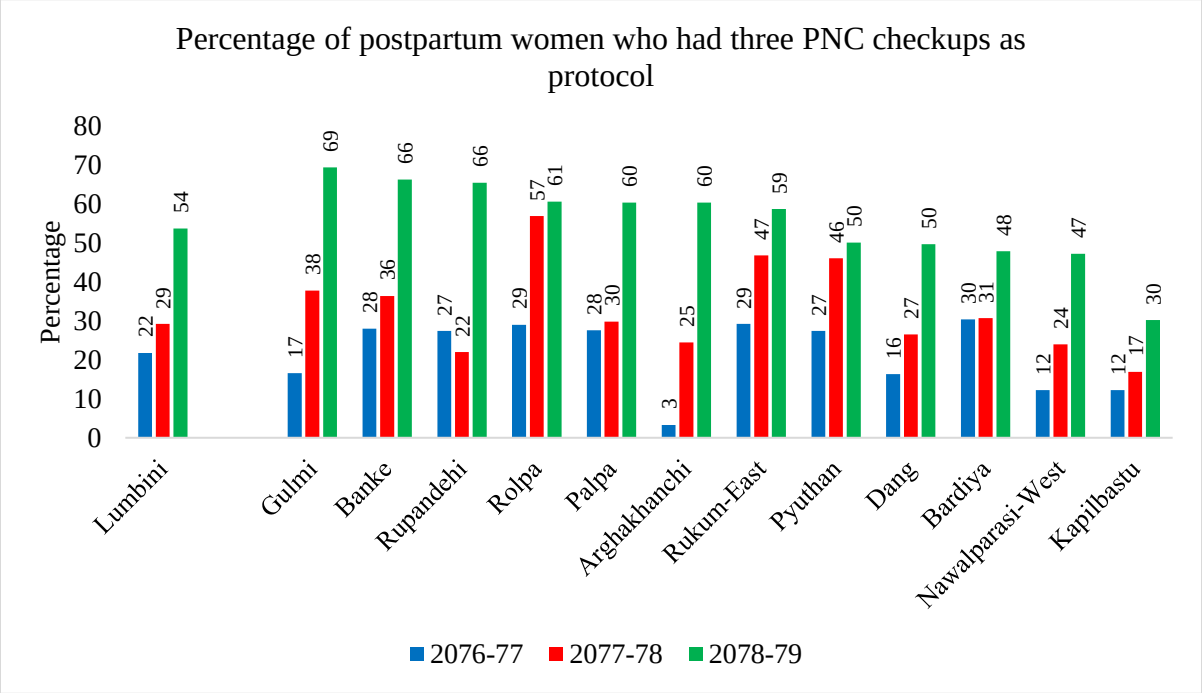
- Identifying and managing complications in mothers and newborns, as well as referring them to appropriate health facilities.
- Promotion of exclusive breastfeeding.
- Postnatal vitamin A and iron supplementation for mothers, as well as personal hygiene and nutrition education.
- Immunization of newborns.
- Counseling and services for postnatal family planning

Figure 28: District and provincial trends in percentage of postpartum women who received a PNC check-up within 24 hours of delivery



The number of mothers who received their first postnatal care at a health facility within 24 hours of delivery is similar to the number of institutional deliveries in almost all health facilities as most health workers reported to have provided post-natal care to both mothers and babies on discharge.

Figure 29: District and provincial trends in percentage of postpartum women who had three PNC check-ups as per protocol



The proportion of mothers attending three PNC visits as per protocol increased in Lumbini province from 29.2 percent in FY 2077-78 to 53.7 percent in FY 2078-79. Gulmi, Banke and Rupandehi has reported more than 65% coverage (Nepal's SDG target for 2022) of three PNC visits. The coverage was reported to be lower than 50% in Bardiya,Dang, Nawalparasi-West and Kapilbastu. Nonetheless, these districts have shown a remarkable improvement between FY 2077-78 and FY 2078-79.

Maternal & Neonatal Deaths and Stillbirths

In Lumbini province, 72 maternal deaths, 512 neonatal deaths, and 1571 stillbirths were reported in fiscal year 2077-78. The number of neonatal deaths in FY 2077-78 was significantly higher than in FY 2076-77(393 neonatal deaths). Banke had the highest number of both maternal and neonatal deaths, followed by Rupandehi. In the previous fiscal year, Dang, Gulmi, Kapilbastu, and Rukum-East did not report any maternal deaths. In FY 2077-78, FCHVs reported 18 maternal deaths, 195 neonatal deaths, and 316 stillbirths from the community.

Table 29: District wise Maternal, Neonatal Deaths and Stillbirths

District	Maternal Death			Neonatal Death			Stillbirth (Fresh)			Stillbirth (macerated)		
	2076-77	2077-78	2078-79	2076-77	2077-78	2078-79	2076-77	2077-78	2078-79	2076-77	2077-78	2078-79
Arghakhanchi	1	1	1	9	10	17	1	13	4	2	4	5
Banke	35	47	32	197	237	250	101	95	165	400	338	377
Bardiya	3	3	4	28	48	38	21	32	12	64	61	66
Dang	3	0	2	15	33	34	20	21	35	47	72	84
Gulmi	1	0	1	4	6	11	18	17	12	13	14	21
Kapilbastu	2	0	2	28	10	23	96	96	64	75	61	72
Nawalparasi West	0	1	0	8	12	6	8	4	5	29	53	32
Palpa	3	4	3	16	30	30	21	26	38	46	51	38
Pyuthan	4	2	3	33	36	28	20	42	26	26	45	44
Rolpa	0	2	3	20	27	30	17	28	15	4	21	18
Rukum-East	0	0	0	1	7	3	2	5	1	4	2	2
Rupandehi	19	12	23	34	56	103	145	110	114	489	360	385
Lumbini	71	72	74	393	512	573	470	489	491	1199	1082	1144

2.3.4 Issues, constraints and recommendations

Table 30: Issues, constraints and recommendations for safe motherhood and newborn health program

Issues and constraints	Recommendations	Responsibilities
High maternal mortality in Banke and Rupandehi	• Implement safe motherhood roadmap strategies • Activate MPDSR committees at the province, hospital and health offices • Effective MPDSR review of maternal deaths, as well as action point implementation and follow-up	HD, MoH, Hospitals Health Offices
Gaps between 1st ANC and four ANC visits as well as very low PNC coverage	• Improve the quality of ANC counselling services by emphasizing on the continuum of care • Introduce m-health technologies, where possible to register and track all pregnant women in communities • Continue/initiate PNC home visitation in hard-to-reach communities	FWD, MoH, HD, Local Levels

Issues and constraints	Recommendations	Responsibilities
No CEONC service in Rukum-East	• Establish and continue CEONC services	MoH, HD
Rapid expansion of birthing centres at local levels, but their utilization has been sub-optimal, and quality is degrading; high case load of deliveries in referral hospitals.	• Rethink the number and location of birthing facilities (collaborate with local governments to limit the expansion of birthing centres and focus on strengthening establishing birthing centres in strategic places) • Create specific criteria and standards for the establishment of birthing centres • Focus on improving the quality of birthing centres. • Develop and implement innovative programs and community engagements to encourage women to give birth in the nearest birthing centres. • Ensure separate birthing units led by professional midwives/nursing staffs in referral hospitals with high caseloads for deliveries (SBAs). • Make provisions for additional human resources in hospitals with high caseloads for deliveries • Map and categorize birthing centres according to the caseload	FWD, HD, and Local Levels
Wrong placement of trained staffs (SBAs, Anesthesia Assistants)	• Initiate discussions with local levels to ensure right health workers in the right place.	HD
Poor referral practice	• Develop a referral guideline that includes provisions for referral forms, as well as communication and feedback mechanisms.	FWD
Services for RH morbidities (cervical cancer screening) not operational in many provincial hospitals despite readiness	• Make cervical cancer screening and treatment services available in hospitals on a regular basis.	Provincial Hospitals

2.5 Family Planning

2.5.1 Background

Family Planning is one of the priority programs of Government of Nepal. The Right to Safe Motherhood and Reproductive Health Act of 2018 and its Regulations of 2020 have articulated quality Family Planning (FP) information and services with a broader method mix, including emergency contraception, as a women's right. The 15th national periodic plan as well as safe motherhood and newborn health roadmap 2030 also emphasizes the availability and accessibility of right-based FP services. Male condoms, oral contraceptive pills, injectables, implants, and IUCD are the five modern temporary family methods that have been an important component of the Basic Health Service.

Lumbini province is also committed to improving access to family planning services within the federal structure. A number of policies and strategies in the province, such as the provincial health policy 2077, the first five-year periodic plan (FY 2076-77-2080-81) and the province's commitment to the SDGs, create a favorable policy environment for family planning programs. The provincial government intends to mobilize resources in order to strengthen health system capacity, improve the enabling environment for effective engagement with external development partners, and involve non-health sectors. FP information and services are available in Lumbini province through the government, social marketing, non-governmental organizations, private sectors, commercial outlets, private clinics and pharmacies, and medical colleges and academies. Short acting reversible contraceptive methods (SARCs: male condoms, oral pills, and injectable) are currently provided free of charge on a regular basis in public health facilities via primary health care centers (PHCC), health posts (HP), and primary health care outreach clinics (PHC/ORC). Female Community Health Volunteers (FCHVs) provide community members with information and education, as well as condoms and resupply of oral contraceptive pills. Long-acting reversible contraceptive (LARC) services like IUCD and implants are only available in a few hospitals, PHCCs, and HPs with trained health care providers. Satellite clinics, visiting service providers (in selected Lumbini districts), and mobile camps provide access to LARC services in remote areas. Sterilization services are mostly provided through seasonal and mobile outreach services as static sites are limited in the Lumbini Province.

2.5.2 Objectives, Policies and Strategic Areas for FP

The overall objective of Nepal's FP program is to improve the health status of all people through informed choice on accessing and utilizing client-centered quality voluntary FP.

National policies and strategic areas for FP:

1. Enabling environment: Strengthen the enabling environment for FP
2. Demand generation: Increase health care seeking behavior among populations with high unmet need for modern contraception
3. Service delivery: Enhance FP service delivery including commodities to respond to the needs of marginalized people, rural people, migrants, adolescents and other special groups.

4. Capacity building: Strengthen the capacity of service providers to expand FP service delivery
5. Research and innovation: Strengthen the evidence base for Program implementation through research and innovation.

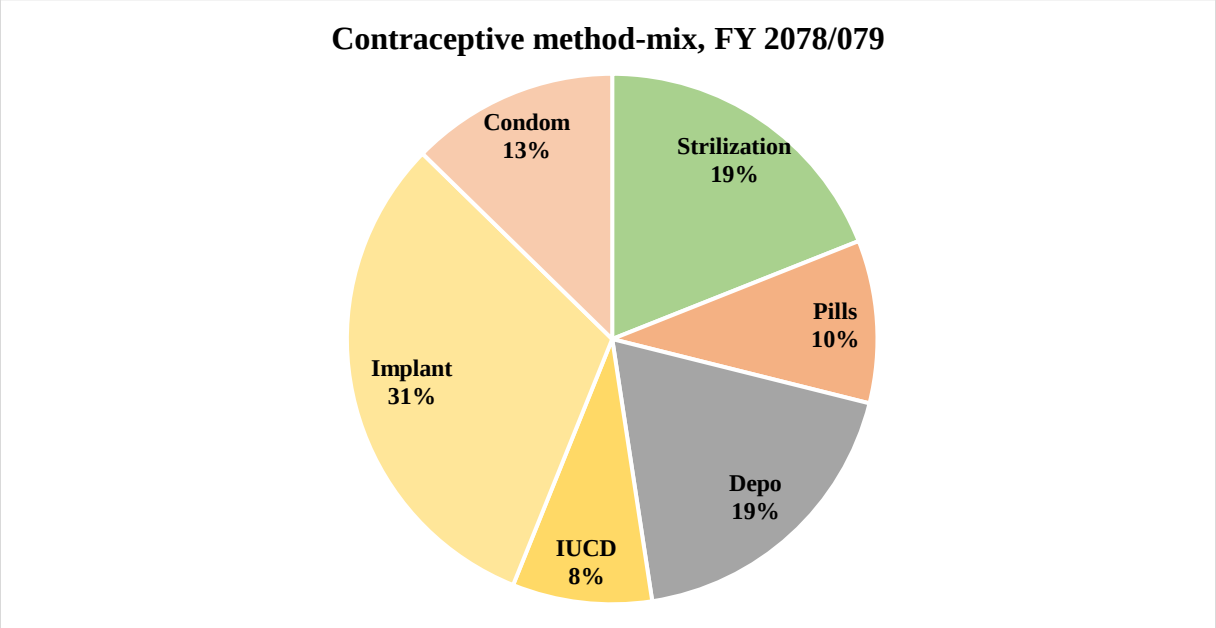
Provincial policies and strategies on FP:

Province Health Policy 2077
Policy 8: Rights of adolescents for safe motherhood and reproductive health will be ensured
Strategy 8.3: Family planning programs will be formulated and implemented as per the need by analyzing the status of safe motherhood and reproductive health of women in different classes, castes, religions and regions.
Policy 24: Health care program will be formulated and implemented on the basis of demographic situation and distribution.
Strategy 24.1: The actual demographic information will be updated based on the gender ratio, and family health programs will be developed and implemented in the targeted age, class, region, and social group.

2.5.3 Major Achievements in the Family Planning Program

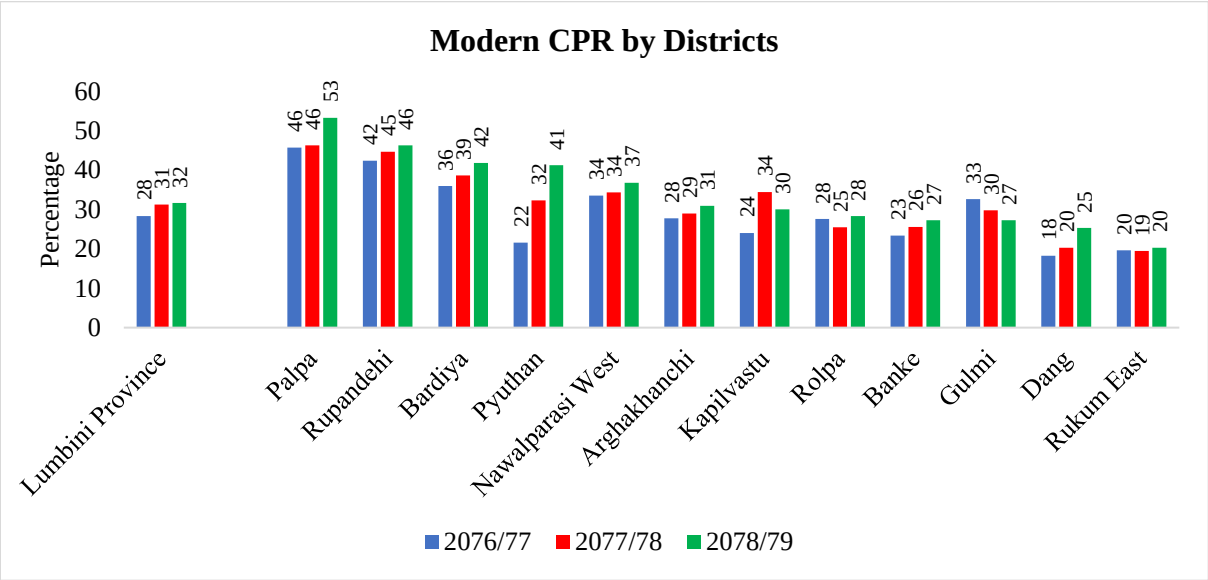
Current Users
Implant (31%) occupies the largest proportion of contraceptive method mix among all current users followed by Depo and Sterilization (19% in each). Whilst Pills (10%), Condom (13%) and IUCD (8%) occupies the lowest part.

Figure 30: Proportion of FP Current Users-Method Mix (FY 2078-79)

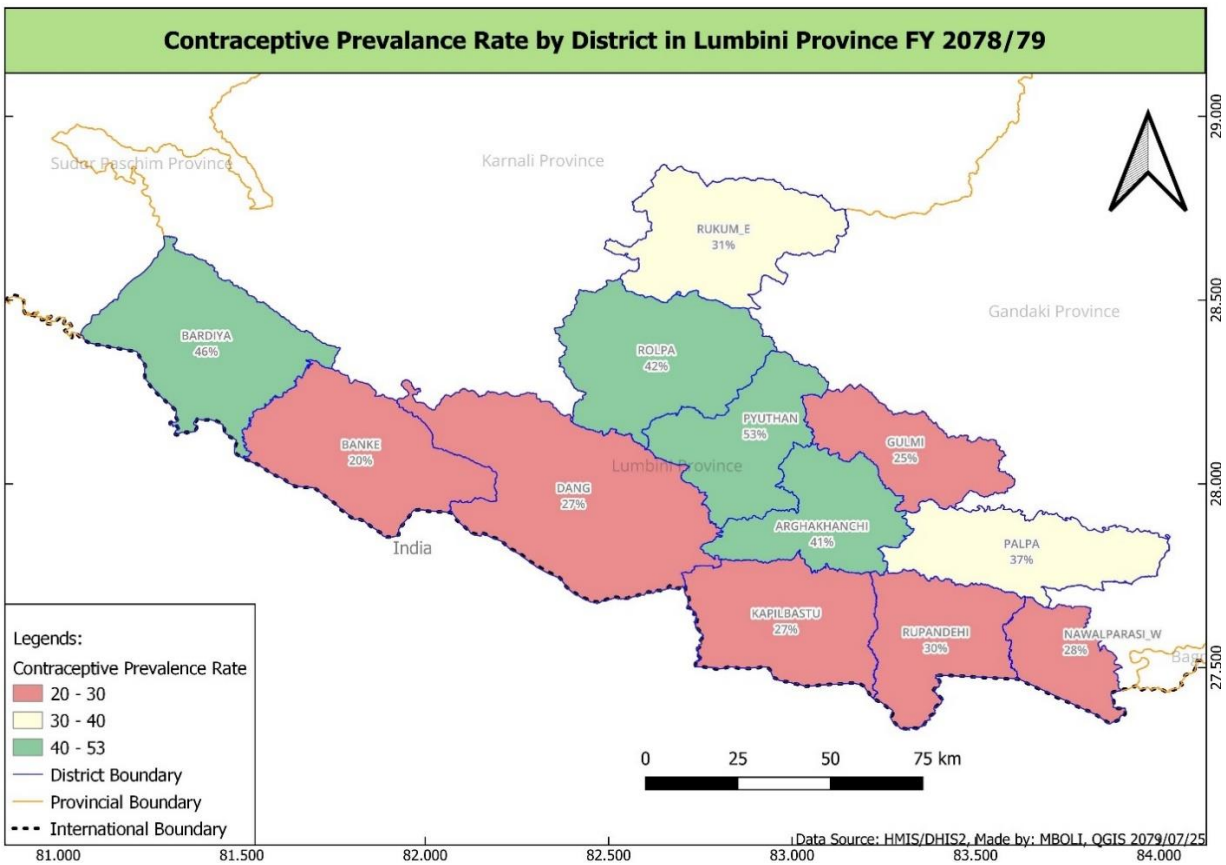


Contraceptive Prevalence Rate (Unadjusted CPR)

Figure 31: Modern contraceptive prevalence rate (mCPR), FY 2078-79 (unadjusted CPR)

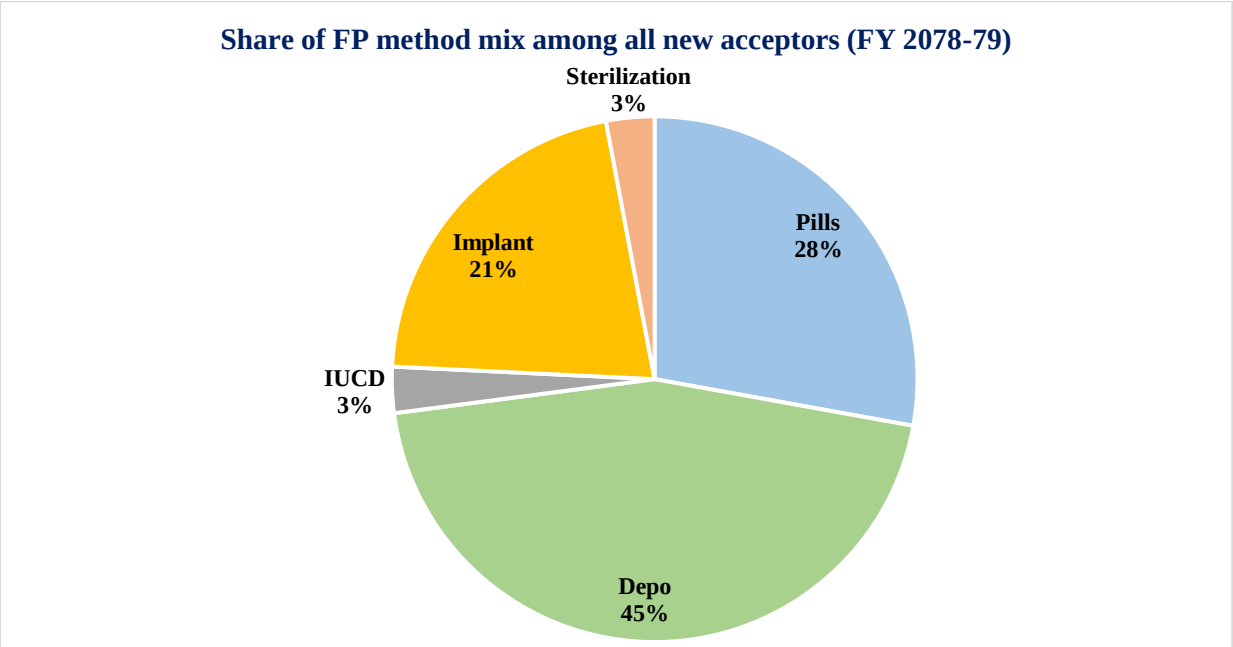


Map 3: Modern contraceptive prevalence rate in FY 2077-78 by district(unadjusted)



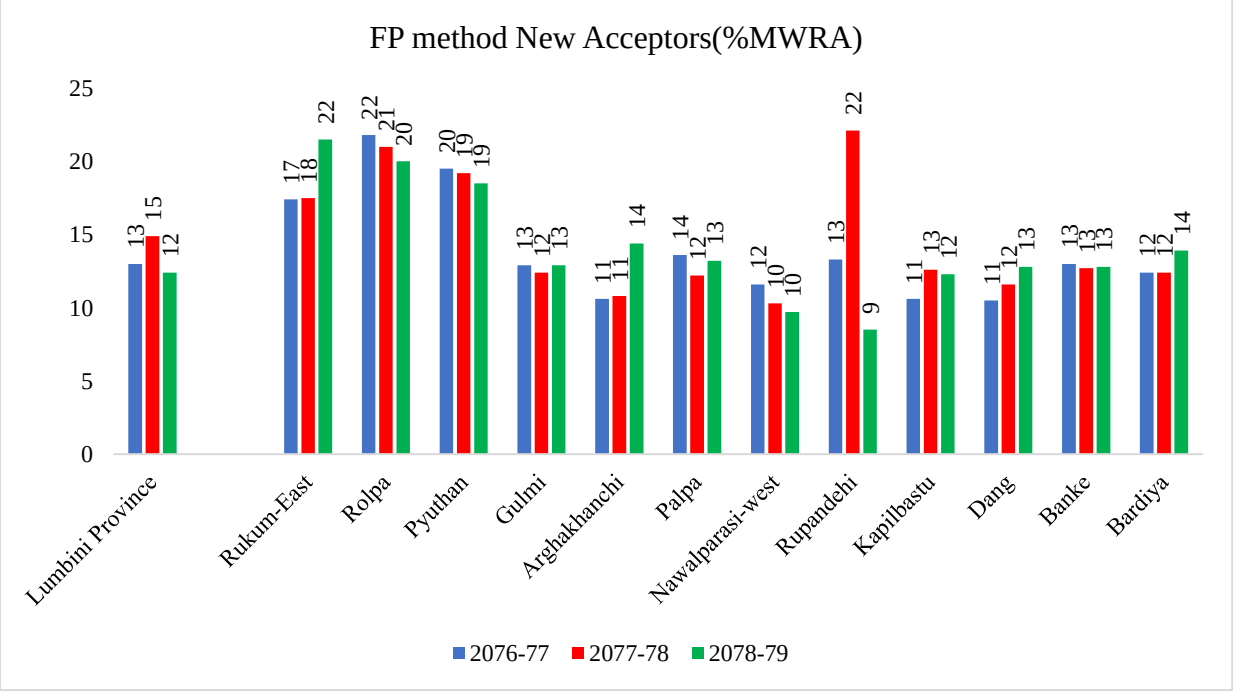
New Acceptors for all Modern Methods of Province

Figure 32: Share of method-mix among new acceptors, FY 2078/079



Nearly half (45%) of the new acceptors of all modern methods of family planning were Depo user whereas 28% were Pills user. Further, Implant consist of 21% share in the method mix while IUCD and sterilization had a 3% (in each) share among the new acceptors.

Figure 33: Proportion of FP methods new acceptors among married women of reproductive age



In Lumbini, the proportion of new FP users among married women of reproductive age was 12 percent in FY 2078-79, down from 15 percent in FY 2077-78. The proportion of FP new acceptors has increased in Rukum-East, Arghakhanchi, Gulmi, Palpa, Dang and Bardiya while in remaining other districts proportion has decreased whereas in Banke it is nearly constant.

Acceptors of Postpartum Family Planning

In Lumbini Province, the use of post-partum family planning methods such as IUCD, Implant, and Tubectomy is suboptimal when compared to the total number of deliveries. Only about 2% women who have given birth have accepted FP methods in the post-partum period. In fiscal year 2078-79, a total of 1980 post-partum mothers chose one of the three methods. Arghakhanchi had the highest proportion of PP-FP users (8.42%) followed by Palpa (6.32%), while there were no post-partum FP users for IUCD, Implant, or Tubectomy in Bardiya.

Table 31: Acceptors of post-partum family planning in FY 2078-79

District	PP-IUCD	PP-Implant	PP-Tubectomy	Total PPFP	Total Deliveries	% of PPFP user
Rukum-East	0	9	0	9	720	1.25
Rolpa	0	1	0	1	3304	0.03
Pyuthan	0	11	21	32	3870	0.83
Gulmi	3	15	9	27	2542	1.06
Arghakhanchi	0	1	120	121	1437	8.42
Palpa	6	185	95	286	4527	6.32
Nawalparasi W	0	11	41	52	3246	1.60
Rupandehi	796	81	357	1234	28863	4.28
Kapilbastu	0	2	0	2	8956	0.02
Dang	0	0	29	29	8046	0.36
Banke	29	1	157	187	20392	0.92
Bardiya	0	0	0	0	4664	0
Lumbini Province	834	317	829	1980	90567	2.19

2.5.4 Issues, Constraints and Recommendations in Family Planning Program

Table 32: Issues, constraints and recommendations for family planning program

Issues/ constraints	Recommendations	Responsibilities
Limited HFs providing all 5 temporary methods; poor uptake of LARCs in HFs where services are available	• Launch innovative local campaigns to ensure that all HFs have 5 methods. • Map HFs and identify training, coaching, or equipment/commodity support needs • Strengthen the capacity of FP service providers through training/onsite coaching • Ensure that LARCs are available and supplied on a regular basis in health facilities.	FWD, HD, PHTC, Local Level

Issues/ constraints	Recommendations	Responsibilities
Stagnant or declining mCPR in districts	• Implementation of FP microplanning in low mCPR districts • Innovate targeted approaches for reaching the unreached populations (adolescents, urban poor, persons with disabilities, ethnic and religious minorities). • Scale up evidence-based good practices such as "Khusahal Parivar" initiatives. • Harness the private and sectors to contribute to access to quality FP services with attention to client rights	FWD, MoH, HD, Local Level
High contraceptive discontinuation	• Develop or improve systems to track clients for continuation or switching methods. • Ensure continuous availability of services including all methods of contraception to meet the changing needs of clients, depending on their ages and reproductive stages (newly married, postpartum, completed family, perimenopause) • Ensure continuous availability of contraceptives in all health facilities. • Strengthen FP counselling to address myths and misconceptions and concerns about side-effects. • Improve follow-up mechanisms- reminding women of appointments for resupply methods • Engage male partners for supporting continued use	FWD, MoH, HD, Local level
Underutilization of post-pregnancy family planning services	• Offer contraceptive counselling and services as part of postnatal care before discharge from the health facility • Integrate and promote FP counselling in ANC clinic and ward, postnatal ward, PNC, post-abortion as well as during immunization. • Strengthen the post-abortion FP strategy to ensure early initiation of FP among women who had an abortion due to the risk of early return of fertility. • Promote post-partum FP counselling and services through FCHVs. • Orient and sensitize service providers including Obs/Gyn on PPFP/PAFP	HD, Provincial Hospitals, Local Level

2.6 Safe Abortion

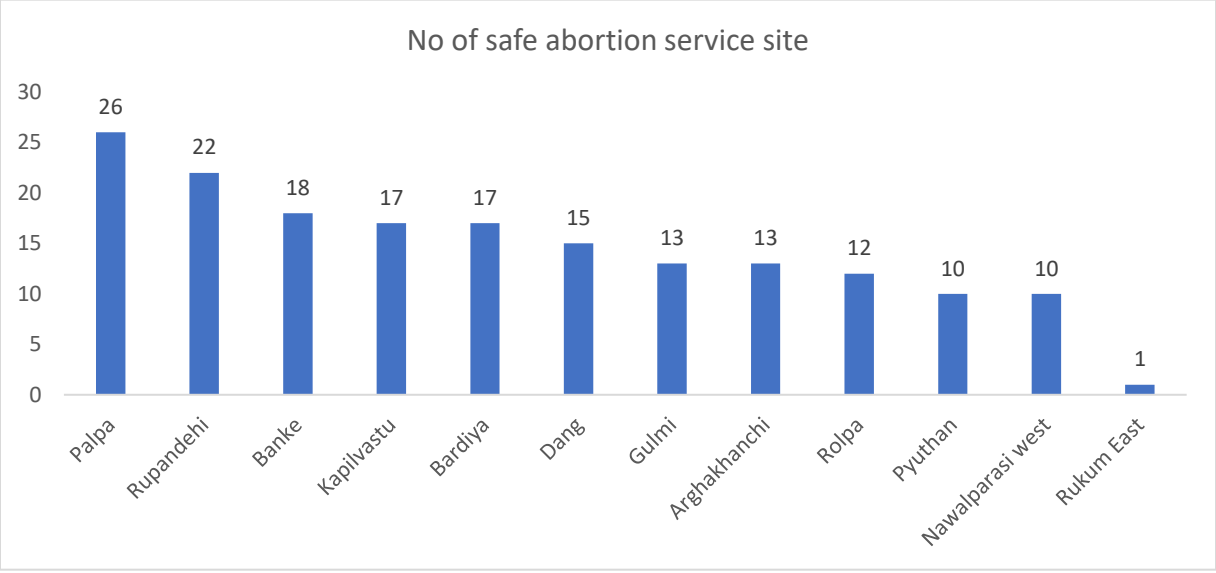
2.6.1 Background

Nepal legalized abortion in 2002 in response to advocacy that emphasized the high rate of maternal morbidity and mortality attributed to unsafe abortion. First trimester surgical abortion was made available throughout the country in 2004. Second trimester abortion training began in 2007 and medical abortion were introduced in 2009. According to Safe motherhood and Reproductive health Right act 2075, the law permits abortion with the consent of pregnant women for any indication up to 12 weeks gestation and up to 28 weeks of gestation in special conditions like Rape, insist, fetus abnormalities, mental condition, immune suppression disease.

In order to reduce unsafe practice of abortion and to reduce maternal morbidity and mortality through unsafe abortion, Safe motherhood and Reproductive health Right act 2075 and regulation 2077 adopted that only licensed health worker who has fulfilled the prescribed standards and qualification and is listed as safe abortion service provider shall have to provide the pregnant woman with safe abortion service pursuant to Section 15 in the licensed health institution which should also be listed as safe abortion service site .In Context of Lumbini Province ,Health directorate has been provided the authority of listing of safe abortion service sites and service provider which comes under provincial level.

2.6.2 Safe Abortion Service Site

Figure 34: District wise no. of health facilities providing safe abortion service to at least one client in FY 2078-79



The figure above shows the number of safe abortion service facilities in each district. Only service sites that served at least one client during fiscal year 2078-79 are included. In the fiscal year 2078-79, 174 health facilities in Lumbini provided safe abortion services. Rukum is the only district where there was no safe abortion service in previous year but from this fiscal year Rukum East

hospital has started safe abortion service. Out of 12 districts, Palpa becomes district having a greater number of safe abortion service sites with 26 sites whereas Rukum east has only one site.

2.6.3 Safe abortion services received

The Table below displays the three-year trend in safe abortion services received by pregnant women at 12 districts of Lumbini province. Rupendehi had the largest number of safe abortion service users (4903), followed by Banke (2864), while Rukum East, had the lowest absolute number of safe abortion service users (30).

Table 33: District wise trends in the utilization of safe abortion services

Districts	FY 2076-77	FY 2077-78	FY 2078-2079
Rupendehi	3602	3553	4903
Banke	2898	2448	2864
Dang	2177	2346	2262
Kapilvastu	2576	2247	1163
Nawalparasi West	1384	1447	1556
Palpa	1630	1323	1404
Bardiya	1101	1157	1122
Rolpa	831	779	840
Gulmi	951	778	742
Pyuthan	982	762	305
Arghakhanchi	653	657	724
Rukum East	0	0	30
Lumbini Province	**18785**	**17497**	**18415**

Out of 13 province-level hospital and 1 Federal level hospital in Lumbini province,3 provincial hospital and 1 federal hospital provides 2nd trimester abortion service whereas Bhim hospital is on process of listing for 2nd trimester abortion service.

Table 34: Government Hospital with Second trimester abortion service in Lumbini Province

S.N	Hospital	Second Trimester Abortion service	
		Yes	No
1.	Lumbini Provincial Hospital	√	
2.	Bhim Hospital		×
3.	Kapilvastu Hospital	√	
4.	Prithivi Chandra Hospital		×
5.	Bardiya Hospital		×
6.	Palpa Hospital		×
7.	Rampur Hospital		×
8.	Gulmi Hospital		×
9.	Rukum East Hospital		×
10.	Rapti Provincial Hospital	√	
11.	Pyuthan Hospital		×
12.	Arghakhanchi Hospital		×
13.	Rolpa Hospital		×
14.	Bheri Hospital *(federal)*	√	

20 out of 109 LLGs (18%) have zero abortion services in fiscal year 2078-79.

Table 35: Table: District wise distribution of LLGs by number of abortion services (2078/79)

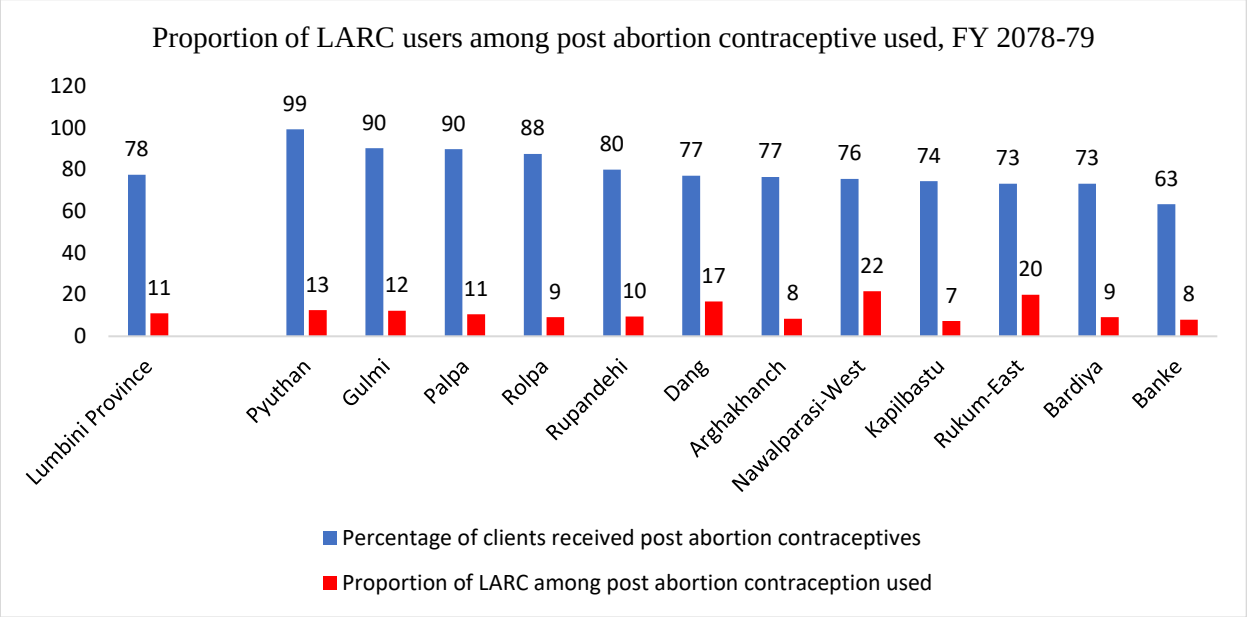
District	Number of LLGs		
	Zero abortion services	<100 services	≥100 services
Arghakhanchi	0	4	2
Banke	0	4	4
Bardiya	0	3	5
Dang	5	3	2
Gulmi	2	7	3
Kapilvastu	4	0	6
Nawalparasi- West	2	1	4
Palpa	0	8	2
Pyuthan	1	7	1
Rolpa	0	6	4
Rukum-East	2	1	0
Rupandehi	4	7	5
Lumbini	**20**	**51**	**38**

2.6.4 Post-abortion contraception use and proportion of LARC users

In the province, almost 78% of pregnant women who underwent an abortion utilized a post-abortion contraception in FY 2078-79. Pyuthan had the largest proportion of abortion clients utilizing post-abortion contraception (99 %), followed by Gulmi (90 %). While this figure was

lowest in Banke (63%). Among 78 % of abortion clients in the province who have used a post-abortion contraceptive, 11% have chosen to use LARC services. In Nawalparasi West, 22 % of abortion clients who took a post-abortion contraception chose LARC, which was the highest proportion amongst all districts in the province.

Figure 35: Proportion of LARC among post abortion contraception used



2.6.5 Issues, constraints and recommendations of safe abortion program

Issues /Constraints	Recommendation	Responsibility
Many safe abortion sites are non-functional due to not having listed service provider.	Training to the new provider regarding Safe abortion services.	PHTC
Stockout of Medical Abortion drugs or MVA syringe.	Provision of managing Medical Abortion drug in Health facility before it got stock out.	Local Level, HFOMC
Lack of understanding at the local level about the process of listing safe abortion service sites and providers, as well as the provisions of the Right to Safe Motherhood and Reproductive Health Regulation 2077.	Orient local governments on the listing process and other provisions of the Right to Safe Motherhood and Reproductive Health Act of 2075 and Regulation 2077.	FWD, Local Levels, EDPs

2.7 Adolescent Sexual and Reproductive Health

2.7.1 Background

National Adolescent Sexual and Reproductive Health is one of the priority programs of Family Welfare Division (FWD), Department of Health Services. Nepal is one of the countries in South Asia developed and endorsed the first National Adolescent Health and Development (NAHD) Strategy in 2000. To address the needs of emerging issues of adolescents in the changing context, the NAHD strategy was revised and endorsed in 2018.The goal of National ASRH program is to promote the sexual and reproductive health of adolescents.

2.7.2 Objectives

- To increase the availability of and access to quality information on adolescent health and development and provide opportunities to build the knowledge and skills of adolescents, service providers and educators.
- To increase the accessibility and use of adolescent health and counselling services.
- To create safe and supportive environments for adolescents to improve their legal, social and economic status.
- To create awareness on adolescence issues through BCC campaigns and at national, provincial and community levels through FCHVs and mother groups

2.7.3 Targets

- To make all health facilities as adolescent friendly as per the envision of National Health policy (2014) and NHSS (2016-2021)
- To ensure universal access to ASRH services, the Nepal Health Sector Strategy Implementation Plan (2016-2021) aims to: scale-up Adolescent Friendly Service (AFS) to all health facilities; provide behavioral skill focused ASRH training to 5,000 health service providers and more than 100 health facilities to be certified with quality AFS by 2021 and to reduce the adolescent fertility rate (AFR) by improving access to family planning services and information.

2.7.4 Key Intervention Area for ASRH Program

- School health nurse program (8 school nurses placed in various schools)
- ASRH site certification (three additional HFs certified in Rolpa and Arghakhanchi)
- Capacity building of health workers
- Scale up and strengthen health facilities for Adolescent Friendly Services (AFS).
- Establishment of Adolescent Friendly Information Corners (AFICs) in schools.
- ASRH training to health workers.
- Menstrual Hygiene management (MHM).
- Comprehensive Sexuality Education (CSE) in School (Kapilbastu and Rukum-East)
- Advocacy

2.7.5 ASRH Certified Health Facilities in Lumbini Province

Table 36:ASRH certified health facilities

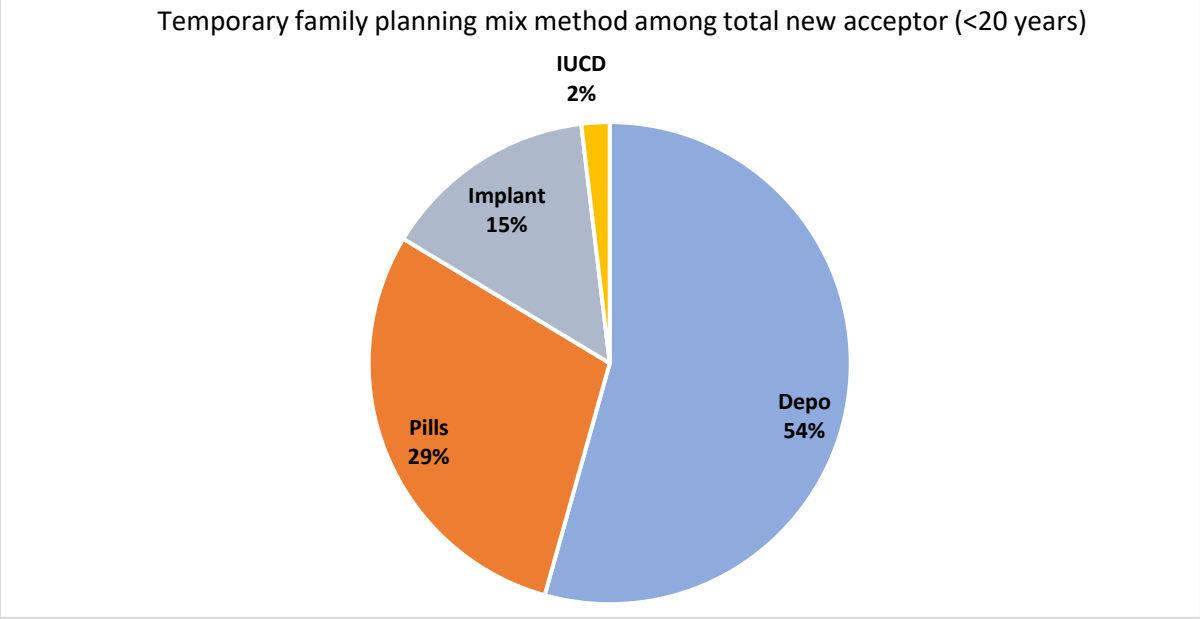
District	Health Facilities	Total
Arghakhanchi	Thada PHC, Hasanpur HP, Pokharathok HP, Arghatosh HP, Banghi HP and Subarnakhal HP	6
Dang	Gadawa HP, Satbariya HP, Sisahaniya HP	3
Kapilvastu	Gauri HP, Tilaurakot HP, Shivapur HP, Jayanagar HP, Barkalpur HP	5
Pyuthan	Puranthani HP, Okharkot HP, Khaira HP, Sotre HP, Bhingri PHC, Gothiwang HP	6
Rolpa	Khumel HP, Libang HP, Kotgaun HP, Korchawang HF, Gairegaun HF, Khungri HP and Ghartigaun HP	7
Rukum	Sylakapha HP, Bafikot HP, Smiruti HP	3
Total		30

2.7.6 Family Planning Service Among Adolescent Women

New acceptor of spacing methods among women under 20-year

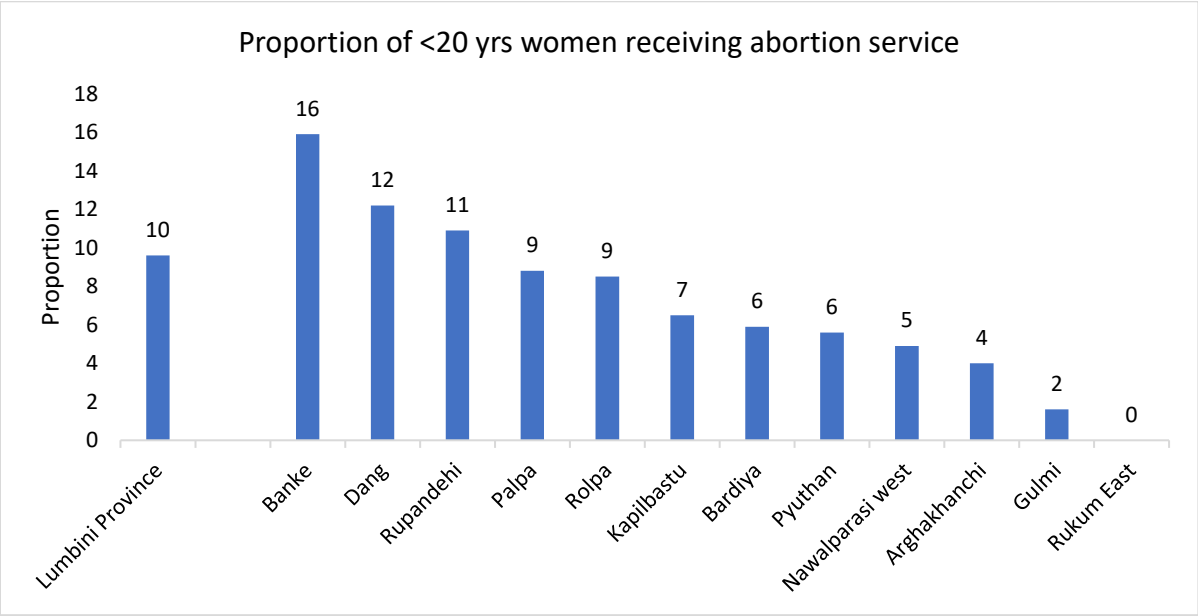
In fiscal year 2078-79, more than half (54%) of new acceptors under the age of 20 utilized depo for birth spacing, followed by pills (29%). IUCD is the least popular method for spacing, accounting for 2% of the total method mix.

Figure 36:Temporary family planning mix method among <20 total new acceptor



Safe abortion service among adolescents

Figure 37:Proportion of women under 20 years using safe abortion service in FY 2078-79



The Figure 37 shows that, 10% of women receiving safe abortion services in Lumbini province were adolescents. According to district-level data, Banke has the highest percentage of adolescents accessing safe abortion services (16%), followed by Dang (12%) while Rukum East there is no adolescents receiving safe abortion services.

District wise service utilization by adolescent in FY 2078-79

Table 37:Family Planning and ANC service utilization by adolescent

District	First ANC visit as per protocol< 20 years	Four ANC visits as per protocol< 20 years	FP new user <20 years
Rukum East	216	148	286
Rolpa	769	582	1170
Pyuthan	703	489	374
Gulmi	498	365	216
Arghakhanchi	352	215	189
Palpa	615	494	371
Nawalparasi West	377	207	166
Rupandehi	1048	768	213
Kapilbastu	285	137	183
Dang	1575	1158	1174
Banke	777	758	515
Bardiya	887	635	648
Lumbini Province	**8102**	**5956**	**5505**

2.7.7 Issues, Constraints and Recommendations of ASRH Program

Issues / constraints	Recommendation	Responsibility
High prevalence of early marriage and teenage pregnancy	Intensify community awareness activities and comprehensive sexuality education in schools	MoHP (Federal, Provincial), Local Level
Less priority and inadequate resource allocation for ASRH program.	Sensitization/advocacy with decision makers at province and local level for increased investment in adolescents and youths	MoHP (Federal, Provincial), Local Level and ASRH partners
Low CPR and high unmet need for contraception among vulnerable populations including adolescents	Intensify information and awareness programs targeted to adolescents. Strengthen Adolescent Friendly Service Sites and information corners. Capacitate health workers regarding adolescent responsive service provision.	MoHP (Federal, Province), Local Level
Declining trends in the utilization of sexual and reproductive health services by adolescents in many districts	Strengthen adolescent friendly service sites Ensure functional integration of ASRH issues and services in the school nurse program Intensify adolescent-focused community and school awareness activities and comprehensive sexuality education	FWD, Province, Local Level and ASRH partners
Inadequate trained human resources on ASRH in health facilities	Strengthen ASRH clinical training sites and develop the capacity of service providers with behavioral and skill focused competency based ASRH training" at all health facilities and specially AFS sites	FWD, MOH, Local Level

Chapter 3: Epidemiology and Disease Control

3.1 Tuberculosis

3.1.1 Background

Tuberculosis (TB) is a communicable disease that is a major cause of ill health and one of the leading causes of death worldwide. About a quarter of the global population is estimated to have been infected with TB, but most people will not go on to develop TB disease and some will clear the infection. Tuberculosis remains as a public health challenge in Nepal. It is preventable and curable, however large number of Tuberculosis patients are registered and large number of deaths due to Tuberculosis are reported every year.

As per National Strategic Plan (2021-2026), each year 68,000 fall ill with Tuberculosis with 238/100000 population incidence per year. where TB prevalence rate is 416/100,000 which is 1.8 times higher than previously estimated by WHO, and revised incidence rate is 238/100,000 which is 1.6 times higher than previously estimated. The mortality rates associated with TB were also re-estimated to be 3.1 times higher than previous estimation while TB drug resistance is 1.6 times higher than the previous estimation. Hence, Nepal has been enlisted in WHO bulletin as a country having high resistance towards TB drugs. National Strategic Plan (2021/22-2025-26) of National Tuberculosis Program has guided to prepare in line with WHO END TB strategy and Sustainable Development Goal (SDG 2030).

Figure 38: Service delivery sites related to Tuberculosis Control Program

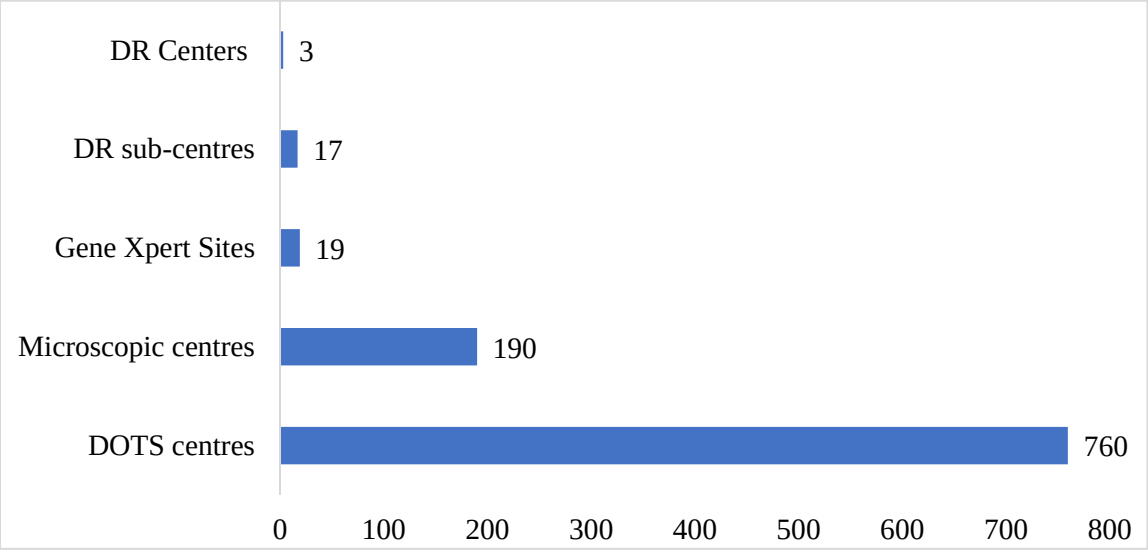


Figure 38 shows the service delivery sites related to TB control program of Lumbini Province. Currently there are 3 DR centres, 17 DR sub-centres, 19 Genexpert sites, 190 microscopy sites and 760 DOTS centers in Lumbini Province. 35 microscopy centres and 116 DOTS centres were added in this fiscal year.

3.1.2 TB Case Finding

Table 39: District wise TB Case finding of all forms, 2076-77 to 2078-79

District	FY 2076-77	FY 2077-78	FY 2078-79
Rupandehi	1164	1238	1705
Dang	915	902	1453
Banke	834	839	1089
Kapilbastu	585	633	900
Bardiya	521	596	792
Nawalparasi west	420	421	472
Pyuthan	299	256	402
Palpa	304	339	345
Rolpa	209	221	333
Gulmi	195	186	289
Arghakanchi	194	178	249
Rukum east	25	53	56
Total	**5665**	**5862**	**8085**

In Table 39, trend of TB case finding of all form during 3 fiscal years is presented. The overall case finding has increased by 38% compared to FY 2077-78. The highest number of case finding can be seen in Rupandehi (1705) followed by Dang (1453) and Banke (1089) respectively. The highest increment from last fiscal year is noted in Dang (551 additional cases) and the least increment is seen in Rukum East with only 3 additional cases. Daily sputum transportation to designated Gene Xpert site by partner NGO (KIDS), FAST program at major hospitals, routine data review and mobilization of data monitoring team up to SDP level has minimized data inconsistencies and in turn has contributed to 38% increment in overall case notification.

3.1.3 Case Notification Rate

Table 38: TB case notification rate of Lumbini Province from 2076-77 to 2078-79

District	2076-77	2077-78	2078-79
Dang	142	138	214
Banke	139	136	180
Pyuthan	124	105	173
Bardiya	109	123	172
Rupandehi	110	115	152
Palpa	122	137	142
Rolpa	88	93	141
Arghakhanchi	96	88	140
Kapilbastu	88	94	131
Nawalparasi West	113	111	122
Gulmi	76	73	117

District	2076-77	2077-78	2078-79
Rukum east	43	90	96
Total	112	114	157

In the Province, Case Notification Rate (all forms) in 2078-79 is 157/100,000 population, which is increased by 43/100,000 than previous fiscal year. District having highest CNR is Dang (214) and with lowest CNR is Rukum East (96). Still the CNR of Lumbini Province is 81/100,000 population and is less than the national estimation. Periodic review with major hospitals, orientation to district TB focal person and local levels helped in realizing the national strategic gap and required case notification rate. LLG wise target distribution based on the prevalence survey estimation has contributed to the effort of SDPs to increase case finding which relates to case notification rate.

Table 39: Overall TB Case Notification status, FY 2078-79

TB case Notification 2078-79	Status
CNR (New and relapse)/100,000	157
% of HIV testing among TB patient	85
% of Pulmonary bacteriologically confirmed	60
% of children aged 0-4 years diagnosed with TB	6.4
% of children aged 5-14 years diagnosed with TB	3.8
% of women diagnosed with TB	38
% of men diagnosed with TB	62
% of TB cases notified by private sectors	34
Total notified TB cases	8085

Table 40: Type of TB notified in each district of Lumbini Province from 2076-77 to 2078-79

District	2076-77			2077-78			2078-79		
	PBC	PCD	EP	PBC	PCD	EP	PBC	PCD	EP
Rukum east	12	4	9	28	6	19	32	5	19
Rolpa	117	29	63	130	29	62	205	39	89
Pyuthan	201	43	55	156	30	70	294	37	71
Gulmi	96	26	73	96	31	59	131	49	109
Arghakhanchi	76	47	71	73	39	66	114	55	80
Palpa	161	27	116	207	21	111	211	28	106
Nawalparasi west	259	49	112	262	59	100	314	61	97
Rupandehi	619	171	374	748	125	365	1015	211	479
Kapilbastu	372	84	129	427	79	127	591	120	189
Dang	488	180	247	533	172	197	783	317	353
Banke	480	126	228	495	139	205	653	173	263
Bardiya	316	72	133	386	83	127	497	150	145
Total	**3197**	**858**	**1610**	**3541**	**813**	**1508**	**4840**	**1245**	**2000**

Table 40 shows the type of TB cases notified in the province. Notified PBC cases has increased by 37% in FY 2078-79 compared to 2077-78. Similarly, PCD cases has increased by 53% and EP cases by 33%. Overall, 60% PBC cases, 15% PCD cases and 25% EP are reported in this fiscal year where proportion of PCD cases compared to national standard is slightly less in Lumbini Province due to low utilization of chest x-ray in the diagnosis of TB cases.

3.1.3 Treatment Outcomes

Table 41: TB treatment success rate from FY 2076-77 to FY 2078-79

Districts	2076-77	2077-78	2078-79
Rukum East	85.7	83.9	90.6
Rolpa	96.8	94.2	94.3
Pyuthan	90.5	92.6	91.7
Gulmi	97.8	79.6	85.3
Arghakhanchi	92	95.9	91.7
Palpa	100	91.8	88.7
Nawalparasi West	86.6	87.9	86
Rupandehi	92	89.9	91.1
Kapilvastu	92.1	88.2	89.4
Dang	92.7	92.5	92.9
Banke	95.4	88.9	91.2
Bardiya	93.3	90.5	93.6
Lumbini Province	93.2	90.2	91

Treatment success rate of TB in 2078-79 is 91.0% which is increased from 90.2% of last fiscal year. Treatment success rate is lowest in Gulmi (85.3%) whereas highest is in Rolpa (94.3%) among all districts of Lumbini Province.

3.1.4 Drug Resistant Tuberculosis

Drug-resistant TB has become a great challenge for the NTP and a major public health concern in the province. Multi-drug resistant TB (MDR-TB) is multifactorial and fueled by improper treatment of patients, poor management of supply and quality of drugs and airborne transmission of bacteria in public places. Case management has become difficult, and the challenge is confounded by catastrophic economic and social costs that patients incur while seeking care and on treatment. Innovative approaches and more funding are urgently needed for the programmatic management of drug resistance-TB nationally to detect and enroll more patients on multi-drug resistant (MDR) TB treatment, and to improve outcomes.

Table 42: MDR TB cases notified by DR center from 2076-77 to 2078-79)

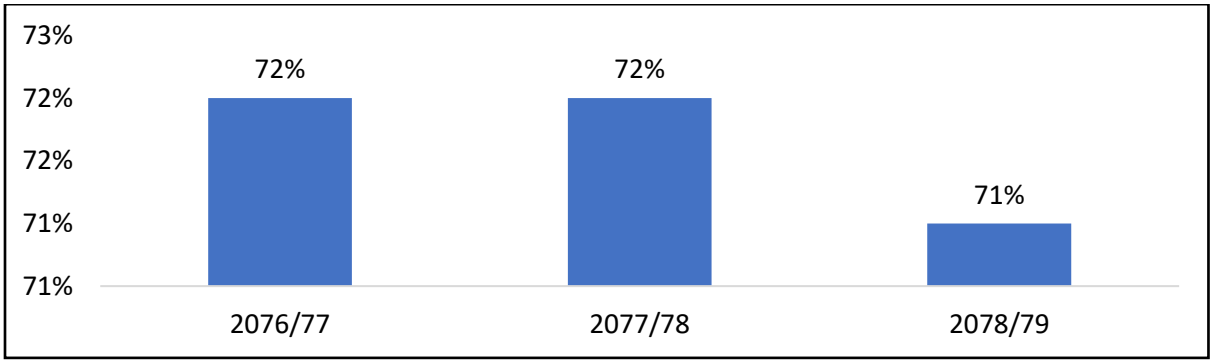
District/Province	2076-77	2077-78	2078-79
Banke	41	62	52
Rupandehi	32	74	107
Dang	2	8	10
Lumbini Province	**75**	**144**	**169**

In FY 2078-79, highest DR TB case holding is in Rupandehi where lowest DR-TB case holding is Dang. Overall, 169 DR TB cases were in holding in Lumbini province. DR cases compared to FY 2077-78 has increased by 25 cases.

On average, 3% RR-TB among new cases has been reported through Genxpert test. The expansion and initial diagnosis of TB cases from GeneXpert has slightly increased the detection of RR-TB cases.

Treatment outcome of Drug -resistant TB

Figure 40: Treatment success rate of MDR TB cases



National Tuberculosis program has focused the treatment success rate of DR-TB at 75%. However, it is slightly below than expected target in the Lumbini Province. Also, DR TB treatment success rate has decreased from the previous year.

3.2 HIV/AIDS and STI

3.2.1 Background

With the first case of HIV identification in 1988, Nepal started its policy response to the epidemic of HIV through its first National Policy on Acquired Immunity Deficiency Syndrome (AIDS) and Sexually Transmitted Diseases (STDs) Control, 1995 (2052 BS). Taking the dynamic nature of the epidemic of HIV into consideration, Nepal revisited its first national policy on 1995 and endorsed the latest version: National Policy on Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs), 2011. A new National HIV Strategic Plan 2021-2026 is in place to achieve ambitious global goal of 95-95-95 By 2026, 95% of all people living with HIV (PLHIV) will know their HIV status, 95% of all people with diagnosed HIV will receive sustained antiretroviral therapy, and 95% of all people receiving antiretroviral therapy will have viral suppression. The NHSP (2021-2026) aims and guides to achieve 95-95-95 goals and elimination of vertical transmission by adopting IRRTTR fast track approach in integration with components such as TB program, CB-IMNCI, safe motherhood program etc. within strategic period.

3.2.2 Overview of the Epidemic

Starting from a 'low level epidemic' over the period of time, HIV infection in Nepal evolved itself to become a 'concentrated epidemic' among key populations (KPs), notably in People who Inject Drugs (PWID), Female Sex Workers (FSW), Men who have Sex with Men (MSM) and Transgender (TG) in this Province as well. Therefore, HIV and AIDS related program intervention are focused to KPs, others vulnerable population (Prison innmate, Migrant & their spouse) and prevention of mothers to child transmission of HIV (PMTCT) at ANC setting.

3.2.3 Progress and Major Achievements

HIV Testing Services

HIV testing and counseling services is the key approach to achive first 95 goal as prioritized by NHSP (2021-2026). HIV testing and counseling services are provided through 23 government and 45 non-government service sites including CLT sites in Lumbini Province. Total 659 people are diagnosed HIV in 2078-79 performing the HIV testing among 133,184 people.

Table 43: Service Statistics HIV Testing and Counselling for the period of BS 2076-77-2078-79

Indicators	2076-77	2077-78	2078-79
Total tested for HIV	33008	51856	133184
Total Positive reported	485	473	659

The number of HIV tested is 133184 in FY 2078-79 which has increased to 157% compared with previous fiscal year. In the same way, the number of positive cases has also increased in FY 2078-79 than previous fiscal year by 186 (39%). HIV testing coverage has increased due to efforts of several NGOs and pool fund program in the province, introduction of CLT, HIV self-testing, and

index testing approaches has contributed to the overall increment of HIV testing. Specific and targeted approach of HIV testing has led to increased identification of HIV positive people.

Table 44: District wise Service Statistics HIV Testing and Counselling in 2078-79

Districts	Tested for HIV			Positive reported		
	2076-77	2077-78	2078-79	2076-77	2077-78	2078-79
Rukum East	0	0	306	0	0	0
Rolpa	356	394	312	4	5	1
Pyuthan	84	240	11514	9	15	29
Gulmi	295	17924	14882	4	9	29
Arghakhanchi	219	166	11176	7	1	18
Palpa	1644	845	9978	42	21	51
Nawalparasi West	1451	1177	11800	28	23	51
Rupandehi	9906	14321	18544	157	146	167
Kapilvastu	5919	2108	19303	59	55	65
Dang	3035	878	12504	55	41	58
Banke	6270	9577	11745	116	117	157
Bardiya	3829	4226	11120	4	40	33
Lumbini Province	33008	51856	133184	485	473	659

Table 44 presents the service statistics of HIV testing and counseling. The HIV testing is higher in Kapilvastu (19,303) among twelve districts, followed by Rupandehi (18,544) and Gulmi (14,882) in FY 2078-79 whereas the positive yield among HIV testing is higher in Rupandehi which is (167) follows by Banke (157) and Kapilvastu (65).

Prevention of Mother to Child Transmission (PMTCT)

Aiming to the elimination of mother to child transmission, Ministry of Health and Population, Nepal taking a major transformative measure this fiscal year, providing lifelong ART for all identified pregnant women and breastfeeding mothers with HIV, regardless of CD4, along with prophylaxis treatment for their infants. The rollout of the lifelong treatment adds to the benefits of the triple reinforcing effectiveness of the HIV response: (a) help improve maternal health (b) prevent vertical transmission, and (c) reduce sexual transmission of HIV to sexual partners.

Table 45: Service statistics on PMTCT for the period, 2078-79

Indicators	2076-77	2077-78	2078-79
Tested for HIV: ANC, Labour and Puerperium	75435	88644	103966
HIV Positive pregnant women	33	61	16
Total deliveries by HIV+ mothers	5	27	26
Mothers enrolled in ART	36	43	17
Babies received prophylaxis	5	27	29

Table 45 reveals the three years trend of service statistics of PMTCT. Provincial commitment is to eliminate vertical transmission of HIV among children by 2026, in line with national strategy. The number of women attending ANC, delivery and post-natal care who were tested and received results has increased than previous year. The number of HIV positive pregnant women decreased to 16 from 61 in FY 2078-79 compared to 2077-78. The coverage for PMTCT has also increased. Mandatory HIV testing among ANC attending pregrant women over a long period as well as testing in key population contributed in prevention of HIV transmission. Similarly, routine HIV test kit supply has been maintained which helped in sustaining regular testing of ANC attending women.

Antiretroviral Treatment (ART)

Aiming to the suppression of HIV virus load among PLHIVs, ART plays a crucial role to maintain their quality of life. Total of 15 ART sites are providing regular treatment services along with counselling to HIV patients which has been maintaining treatment adherence more that 95% in Lumbini Province.

Table 46: Service statistics on ART for the period, 2077/78

Districts	No. of ART Site	PLHIV on ART	
		On ART (end of Ashad 2079)	New enrollment in FY 2078/79
Rukum East	0	0	0
Rolpa	1	49	1
Pyuthan	1	114	15
Gulmi	1	192	24
Arghakhanchi	1	119	14
Palpa	2	324	35
Nawalparasi West	1	304	49
Rupandehi	2	1633	187
Kapilvastu	2	532	51
Dang	2	361	48
Banke	1	537	91
Bardiya	1	160	42
Lumbini Province	**15**	**4325**	**557**

Table 46 reveals the service statistics on ART client. Total 4325 PLHIVs are currently receiving ART from 15 different ART sites of Lumbini Province where 557 newly diagnosed PLHIV are enrolled in ART in FY 2078/79 by adopting the test and treat approach.

3.3 Malaria

3.3.1 Background

Nepal's malaria control Program began in 1954, mainly in the Terai belt of central Nepal with support from the United States. In 1958, the National Malaria Eradication Program was initiated and in 1978 the concept reverted to a control Program. In 1998, the Roll Back Malaria (RBM) initiative was launched for control in hard-core forests, foothills, the inner Terai and hilly river valleys, which accounted for more than 70 percent of malaria cases in Nepal. Malaria is a greater risk in areas with an abundance of vector mosquitoes, amongst mobile and vulnerable populations, in relatively inaccessible areas, and during times of certain temperatures.

Nepal aims to consolidate the gains secured so far and accelerate efforts to interrupt local malaria transmission and end indigenous malaria to zero case by 2022 and achieve malaria elimination by 2025. As countries move towards malaria elimination, imported infections become increasingly significant as they often represent most of the cases, can sustain transmission, cause resurgences, and lead to mortality.

Malaria risk stratification 2076-77 (2021) was tailored to suit the changing epidemiology of malaria in the country and to ensure appropriate weightage is allotted to key determinants of malaria transmission as recommended by external malaria program review. Malaria data from last three years reveals that even within Rural Municipalities or Municipalities, malaria is concentrated within some wards while other wards remain relatively free of malaria. In these settings, transmission is typically sufficiently low and spatially heterogeneous to warrant a need for estimates of malaria risk at a community level, the wards.

National Malaria Strategic Plan (2014–2025 updated)

Current National Malaria Strategic Plan (NMSP) 2014-2025 was updated since it was developed in 2013 and targeted Pre-elimination and is as a result out of step with the latest normative guidance on malaria elimination from the World Health Organization (WHO) ("Global Technical Strategy 2016 – 2030" and 'A framework for malaria elimination, 2017'), current country structure, disease epidemiology, 2017 midterm malaria program review. The aim of NMSP is to attain "Malaria Elimination in Nepal by 2025".

- Vision: Malaria Elimination in Nepal by 2025.
- Mission: Ensure universal access to quality assured malaria services for prevention, diagnosis, treatment and prompt response in outbreak.
- Goal: Reduce the indigenous malaria cases to zero by 2022 and sustain thereafter.
- Sustain zero malaria mortality

3.3.2 Objetives

- To ensure proportional and equitable access to quality assured diagnosis and treatment in health facilities as per federal structure and implement effective preventive measures to achieve malaria elimination.
- The updated NMSP (2014-2025) will attain the elimination goals through the implementation of following five strategies:
- Strengthen surveillance and information system on malaria for effective decision making.
- Ensure effective coverage of vector control interventions in malaria risk areas to reduce transmission.
- Ensure universal access to quality assured diagnosis and effective treatment for malaria.
- Ensure government committed leadership and engage community for malaria elimination.
- Strengthen technical and managerial capacities towards malaria elimination.

3.3.4 Achievements in FY 2078-79

Epidemiology of Malaria

Table 47: Malaria epidemiological information (2076-77 to 2078-79)

Data / Period	2076-77	2077-78	2078-79
Population of Malaria endemic area	3529205	1918364	2434238
Total Slide examined	68625	51843	57376
Total Malaria positive Cases	141	85	153
Total Malaria PF cases	9	25	55
% of PF cases	6.3	29.4	35.9
Total Malaria PF indigenous	1	1	0
Total Malaria PF imported	8	24	55
Total Malaria Indigenous Cases	16	7	7
Total P. Vivax (PV) cases	132	60	95
Annual blood examination rate (ABER) of malaria in high-risk districts	1.94	2.7	3.0
Annual parasite incidence rate	0.043	0.044	0.08
Annual PF incidence rate	0.002	0.013	0.022
Slide positivity rate (SPR) of malaria in high-risk districts	0.20	0.16	0.27
Slide positivity rate (SPR) of PF malaria in high-risk districts	0.01	0.048	0.001

*Risk population of F/Y 2078-79 has been calculated as per the malaria Microstratification result of 2021.

The trends of malaria epidemiological situation for recent three years show decreasing trends. Confirmed malaria cases decreased from141 and 85 in 2076-77, 2077-78 but increased from 85 to 153 in 2078-79. However, the proportion of P. falciparum infections is sharply increased and accounted for 35.9 percent of all cases in current year. The number of total slides examined for malaria has slightly increased in Lumbini Province to 57376 in 2078-79 compared to 51843 in last fiscal year. The annual parasite incidence (API) increased to 0.08 in this fiscal year in risk districts.

There are no cases of indigenous P. falciparum cases reported in this fiscal year whereas number of indigenous P. vivax cases remains the same in both FYs 2077-78 and 2078-79.
Implementation of community-based testing by mobilization of Village Malaria Workers (VMW) in malaria high and moderate risk wards, integration of mandatory malaria testing at point of entries (POE) and re-sensitization through refresher sessions by LLGs triggered increased malaria testing.

3.4 Kala-azar

3.4.1 Background

Kala-azar is a vector-borne disease caused by the parasite *Leishmania Donovani,* which is transmitted by the sand fly *Phlebotomus Argentipes.* The disease is characterized by fever for more than two weeks with splenomegaly, anemia, and progressive weight loss and sometimes darkening of the skin. In endemic areas, children and young adults are the principal victims. The disease is fatal if not treated on time.

National strategic guideline on Kala−azar elimination in Nepal recommended rK39 as a rapid diagnostic test kit and Miltefosine as the first line treatment of Kala−azar in most situations. The 2010 guideline was updated in 2014 to introduce Liposomal Amphotericin B and combination therapy in the national treatment guideline. The 2014 national guideline was revised again in 2019 which recommended single dose liposomal amphotericin B as the first line treatment for primary kala−azar. L−AmB was introduced in Nepal in December 2015 after training about 60 doctors and nurses fromendemic districts. The therapy should be directly observed, and patients should be hospitalized for the full duration of the therapy. L−AmB needs a cold chain (<25˚Celsius) for storage; and therefore,should be made available only in hospitals where proper storage is ensured. The revised national Kala−azar guideline, 2019 has recommended single-dose liposomal amphotericin B as the first-line therapy for primary Kala−azar.

Disease surveillance: Kala−azar tends to be underreported as most data is obtained through passive case detection, especially from diagnostic hospitals. During 2078-79, active case detection was carried out in endemic and non−endemic rural/municipalities. VL assessment survey was also carried out in Gulmi, Arghakhanchi, and Rupandehi districts this year. This was done through case-based and camp-based approaches. The sites were selected based on the number of new cases reported in the previous and running fiscal year.

Goal, Objective, and Strategies of Kala-azar

Goal	Objective	Strategies
Contribute to the mitigation of poverty in kala-azar endemic districts of Nepal by reducing the morbidity and mortality of the disease and assisting in the development of equitable health systems	Reduce the incidence of kala-azar in endemic communities with special emphasis on poor, vulnerable and unreached populations.	• Early diagnosis and complete treatment • Integrated Vector Management • Effective disease and vector surveillance • Social mobilization and partnership • Improve program management. • Clinical, implementation and operational research
	Reduce case fatality rates from primary Kala-azar to ZERO	
	Detect and treat PKDL to reduce the parasite reservoir. Prevent and manage Kala-azar HIV-TB co-infections.	

Current interventions of Kala-azar:

1. **Early Diagnosis and Treatment**
   - Free diagnosis of Kala-azar cases using RDT (rK39) and provision of free treatment with Liposomal Amphotericin B (LAmB).
   - Diagnosis services are provided from the PHC level of government health facilities.
   - Treatment services are provided from selected three hospitals (1 Bheri Hospital Nepalgunj 2. Lumbini provincial Hospital Butwal 3. United mission hospital Palpa) of Lumbini province.
   - Provision of NPR 2000 per patient for travel during the discharge time of treatment.
   - Provision of NPR 5000 per patient to the hospital for treatment.
2. **Surveillance System Strengthening**
   - Kala-azar surveillance system strengthening along with the introduction of online DHIS2/EWARS based reporting.
3. **Indoor residual spraying**
   - IRS activities ongoing in selected districts as per the need.
4. **Active case detection**
   - Social mobilization and partnership
   - Develop and distribute IEC/BCC
   - Training /orientation /symposium

Table 48: Reported case of Kala-Azar by districts in OPD morbidity for FY 2076-77-2078-79

S N	District	2076-77	2077-78	2078-79
1	Rukum East	0	0	0
2	Rolpa	0	0	0
3	Pyuthan	0	0	1
4	Gulmi	0	0	0
5	Arghakhanchi	0	0	0
6	Palpa	13	5	16
7	Nawalparasi West	0	0	0
8	Rupandehi	12	17	6
9	Kapilbastu	0	0	0
10	Dang	0	0	0
11	Banke	29	19	46
12	Bardiya	1	0	0
Lumbini Province total		**54**	**41**	**69**

In 2078/079, total 69 Kala-azar cases were reported in Lumbini province, which is an increase in status compared with the previous year (see above table). Most of the cases were reported from Banke (46) and Palpa (16) districts. The number of new cases decreased in Rupandehi district this year and the remaining districts of the province reported no cases.

Table 49: Special activities conducted for Kala-azar elimination

S N	Name of District	Name of Activities	No. of events
1	Rukum East	ACD	0
2	Rolpa	ACD	1
3	Pyuthan	ACD	5
4	Gulmi	ACD	3
		VL assessment survey	1
5	Arghakhanchi	ACD	3
		VL assessment survey	1
6	Palpa	ACD	7
7	Nawalparasi West	ACD	0
8	Rupandehi	ACD	3
		VL assessment survey	1
9	Kapilbastu	ACD	0
10	Dang	ACD	3
11	Banke	ACD	3
12	Bardiya	ACD	4
		Total	**35**

Active case detection program is very effective program for early detection and prompt treatment of Kala-azar cases which will be supportive to national Kala-azar elimination program. In FY 2078/079, 35 events were carried out for case detection where 9 new cases were found in different community of Lumbini province among them we were found one patient with serious condition in Dang District and provided prompt treatment from treatment center.

Issues, constraints and actions to be taken

Table 50: Issues and recommendations to be taken in Kala-Azar control

Issues	Recommendations	Responsibility
Inadequate case detection and treatment of cases	A regular supply of rK39 test kits and drugs. Conduct active case detection in endemic districts. Case-based surveillance reporting with line listing of cases	MoHP, MoH, Local Level
Inadequate awareness about the disease in community level	Dissemination of educational messages to the public, and health professionals related to Kala−azar.	MoHP, MoH, Local Level
Lack of trained staff to monitor outbreak investigation and response efforts	capacity building to relevant staff	MoHP, MoH, Local Level

New Interventions of Kala-azar:

VL Assessment Survey:

The approach for establishing local transmission of visceral leishmaniasis in non-program areas/districts will be based on previous experience in Nepal and has proven to be sufficiently robust to lead to the declaration of endemicity by the Nepalese government for six additional districts in 2016 (Bart *et al.* 2015).

We propose a similar though simplified approach to be rolled out to assess the endemicity status for remaining Kala-azar non-program or non-endemic districts. In order to address the question of local transmission, the approach will be based on three pillars.

a) Epidemiological investigation: conducted interview with case and control of Kala-azar
b) Serological investigation: conducted sample collection program in selected area based on to find out local transmission of Kala-azar.
c) Entomological investigation conducted sample collection program of victor and sanded BPKIHS for detail investigation.

Summary sheet of VL assessment survey:

The VL assessment survey was jointly implemented by MoHP/EDCD/PHD. World Health Organization (WHO) Nepal and B.P. Koirala Institute of Health Science (BPKIHS) has provided the technical support and ASCEND Program has provided technical and financial support for the overall activity and was implemented in close collaboration and coordination with district and local health authorities. The activity was implemented in three districts of Lumbini Province- Rupamdehi District, Arghakhanchi District and Gulmi District

District	Address	Name of index case(s)	# of index case	# HH screened	# Persons enrolled/ screened	# Person tested / sample taken	# Total positive cases
Arghakhanchi	Panini RM-4 Kudapani	Tikaram Raskoti	1	8	34	15	1
Arghakhanchi	Bhumikasthan M-7 Dhaireni Salimdhara	Nisha Khasu	1	9	43	18	1
Arghakhanchi	Sitganga Municipality - 7 Naumuri	Srijana Pun	1	5	18	10	0
Gulmi	Ruruchatra RM-4 Okhaldhunga	Sandhya Gyawali	1	7	26	13	0
Gulmi	Satyawoti RM 2 Pahadi	Rudra Bahadur Kunwar	1	13	48	48	1
Gulmi	Chandrakot RM- 2 Turung	Samir Pariyar	1	11	47	47	0
Rupandehi	Sainamaina-2 Bihanitole	Amrita Thapa	1	29	121	27	0
Rupandehi	Butwal SMC-11 Naulomarg	Lukup Budha	1	31	97	89	0
Rupandehi	Tiloottama Municipality 14 Bandraiya	Nanda Ram Sunar	1	31	128	105	0
Total			**9**	**165**	**637**	**411**	**4**

3.5 Lymphatic Filariasis

Background

Lymphatic filariasis is a public health problem in Nepal. The disease has been detected inTerai from 300 feet above sea level to 5,800 feet above sea level in the mid hills. Comparatively more cases are seen in the Terai than the hills, but hill valleys and river basins also have high disease burdens. The disease is more prevalent in rural areas, predominantly affecting poorer people. *Wuchereriabancrofti* is the only recorded parasite in Nepal. The mosquito *Culexquinquefasciatus*, an efficient vector of the disease, has been recorded in all endemic areas of the country.

Campaign data, round of campaign conducted, future plan

Goal	Objective	Strategies
The people of Nepal no longer suffer from Lymphatic Filariasis.	• To eliminate Lymphatic Filariasis as a public health problem by 2020 • To interrupt the transmission of Lymphatic Filariasis • To reduce and prevent morbidity • To provide deworming through Albendazole to endemic communities especially to children • To reduce mosquito vectors by the application of suitable available vector control measures	• Interrupt transmission by yearly mass drug administration using two drug regimens (diethylcarbamazine citrate and albendazole) for six years • Morbidity management by self-care and support using intensive simple, effective and local hygienic techniques.

Reported cases of Lymphatic Filariasis

Table 51: The reported case of Filariasis by districts, FY 2076-77-2078-79

District	2076-77	2077-78	2078-79
Pyuthan	0	0	0
Gulmi	9	4	2
Rukum East	0	0	0
Banke	3	2	1
Dang	13	16	12
Nawalparasi West	5	4	3
Kapilbastu	4	5	4
Bardiya	0	0	0
Rolpa	4	8	7
Palpa	1	0	0
Arghakhanchi	0	0	0
Rupandehi	17	12	13
Lumbini Province Total	**56**	**51**	**42**

A total of 42 new cases of Lymphatic Filariasis have been identified in Lumbini. Out of 42 reported cases in FY 2078-79, highest number (12) of case reporting was cases from Dang districts based on the HMIS OPD morbidity reporting.

Table 52: Free Hydrocele Surgery FY 2078/2079

S.N.	Name of the Hospital	Target Given by PHD	Hydrocele surgery 2078-079
1	Lumbini Provincial Hospital Butwal	70	56
2	Prithivi Chandra Hospital	20	0
3	Bhim Hospital Bhairahawa	10	0
4	Hospital Kapilvastu	25	5
5	Bheri Central Hospital Banke	45	42
6	Bardiya Hospital	90	90

S.N.	Name of the Hospital	Target Given by PHD	Hydrocele surgery 2078-079
7	Rapti Provincial Hospital Dang	10	0
8	Pyuthan Hospital	10	0
	Total Surgeries	**280**	**193**

Source: Surgery record book of Hospitals

Lymphatic Filariasis elimination status of Lumbini Province

Among 12 districts, six districts (Nawalparasi-west, Rupandehi, Palpa, Arghakhanchi, Pyuthan, Bardiya and Rukum east) are near to achieve the elimination status of Filariasis.

Table 53: Lymphatic Filariasis Elimination Status of Lumbini Province

Districts	LF MDA status	Survey status	Upcoming activity	Remarks
Nawalparasi	MDA Stopped	TAS III Pass 2018		Mapped
Rupandehi	MDA Stopped	TAS III Pass 2017		Mapped
Palpa	MDA Stopped	TAS III Pass 2019		Mapped
Arghakhanchi	MDA Stopped	TAS II Pass 2019		Mapped
Pyuthan	MDA Stopped	TAS II Pass 2019		Mapped
Rukum	MDA Stopped	TAS II Pass 2019	TAS III 2022	Mapped
Gulmi	Non-Endemic			
Kapilvastu	MDA	Pre-Re-TAS Fail2020		
Dang	MDA	Pre-TAS Fail 2019	Re-Pre TAS 2021	Mapped
Banke	MDA	Pre-TAS Fail 2019	Mapping 2021	Mapped
Bardiya	MDA (stoop after TAS Pass)	Re-Pre-TAS Pass 2020	AS 2021	Mapped
Rolpa	MDA Stooped	TAS II Pass 2019	Mapping 2021	Mapped

Source: MMDP report of Health Office

MDA Status of Lumbini Province FY 2078/2079

Table 54: MDA Status of Lumbini Province FY 2078/2079

SN	District	Reported Lymphedema Cases	Reported Hydrocele cases	Running Round	Coverage	Remarks
1	Banke	3	12	12th	**73%**	Continued
2	Dang	28	59	12th	**68%**	Continued
3	Kapilvastu	146	185	14th	**89%**	Continued

Source: MDA report of Health office

MDA related major activities

- Implementation unit and local level activities: Planning meetings, training of health workers, advocacy, social mobilization, IEC/BCC, monitoring and supervision, interactions with the media, interactions with multi-sector stakeholders including newly elected local body and logistics supply.
- Community level activities: Volunteer's orientations, advocacy, social mobilization, IEC/BCC, implementation of MDA activities and monitoring and supervision.

- Social mobilization activities: The production of revised IEC materials, checklists, reporting

The following are the major Program recommendations

- Continue MDA for Pre TAS- unsuccess districts, and carry out transmission assessment, periodic surveillance, and follow-up surveys to monitor progress towards elimination.
- Strengthen the health system and service providers' capacity for morbidity management, disability prevention, and post−MDA surveillance.
- Carry out operational research, studies, and Program reviews.
- Consolidate all documents related to the Program in a dossier for the later validation andverification of elimination.

3.6 Dengue

Background

Dengue is a mosquito-borne disease that is transmitted by mosquitoes (Aedes aegypti and Aedes albopictus) and occurs in most of the districts of Nepal. WHO (2009) classified dengue i) Dengue without warning signs, ii) Dengue with warning signs, iii) Severe Dengue. The first dengue case was reported from Chitwan district in a foreigner. The earliest cases were detected in 2005. Since 2010, dengue epidemics have continued to affect lowland districts as well as mid-hill areas. This trend of increased magnitude has since continued with number of outbreaks reported each year in many districts- Chitwan, Jhapa, Parsa (2012-2013), Jhapa, Chitwan (2016-2016), Rupandehi, Jhapa, Mahottari(2017), Kaski (2018) and Sunsari, Kaski, Chitwan (2019). The mostly affected districts in Lumbini province are Rupandehi, Banke, Bardiya, Dang and Kapilbastu though all 12 districts are affected. Aedes aegypti (the mosquito-vector) was identified in five peri-urban areas of the Terai (Kailali, Dang, Chitwan, Parsa and Jhapa) during entomological surveillance by EDCD during 2006–2010, indicating the local transmission of dengue. However, recent study carried out by VBDRTC has shown that both the mosquitoes (A. aegypti and A. albopictus) have found to be transmitting the disease in Nepal. Studies carried out in collaboration with the Walter Reed/AFRIMS Research Unit (WARUN) in 2006 by EDCD and the National Public Health Laboratory (NPHL) found that all four sub-types of the Dengue viruses (DEN-1, DEN-2, DEN-3 and DEN-4) were circulating in Nepal.

Goal, Objectives and Strategy of Dengue Control Program:

Goal:

To reduce the morbidity and mortality due to dengue fever, Dengue Haemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS).

Objectives:

- To develop an integrated vector management (IVM) approach for prevention and control.
- To develop capacity on diagnosis and case management of dengue fever, DHF and DSS.
- To intensify health education and IEC activities.
- To strengthen the surveillance system for prediction, early detection, preparedness and early response to dengue outbreaks.

Strategies:

- Early case detection, diagnosis, management and reporting of dengue fever
- Regular monitoring of dengue fever surveillance through the EWARS
- Mosquito vector surveillance in municipalities
- The integrated vector control approach where a combination of several approaches are directed towards containment and source reduction

Major activities in 2078-79

- Trained physicians, nurses, paramedics and laboratory technicians on dengue case detection, diagnosis, management and reporting
- Orientated municipality stakeholders on dengue prevention and management
- Supplied rapid diagnostic test kits (IgM)
- Dengue case monitoring and vector surveillance
- Search and destruction of dengue vector larvae in different local levels
- Developed IEC materials and disseminated health education messages engaging various stakeholders including the media and youth
- Distribution of nets

Table 55: New Dengue cases of 2076/077 to 2078/079

Districts	2076-77	2077-78	2078-79
Arghakhanchi	50	6	18
Palpa	63	1	7
Nawalparasi-W	81	0	1
Rupandehi	1386	25	92
Kapilvastu	129	5	22
Pyuthan	17	1	3
Rolpa	6	6	0
Rukum-E	1	0	0
Dang	86	15	6
Banke	40	13	41
Gulmi	43	18	17
Bardiya	0	1	115
Lumbini Province	1902	85	322

The number of reported dengue cases decreased significantly over last few years, however increased this year against the FY 2077/77. District wise, Dengue cases increased in all districts except Gulmi, Dang and Rolpa.

3.7 Leprosy

3.7.1 National Leprosy Control Program

Nepal has achieved the elimination of Leprosy as a public health problem in Dec 2009 and declared elimination in 2010. Elimination status at national level has been sustained since then, however further reducing the disease burden and eliminating Leprosy at sub-national level is still a challenge. National Leprosy Strategy (2016-20) envisioned Leprosy Free Nepal with a goal to end the consequences of Leprosy including disability and stigma. In July 1019, Leprosy control and disability management section (LCDMS), EDCD, MoHP with support of WHO, GPZL and all ILEP partners reviewed the implementation of National Leprosy Strategy and envisioned the Zero Leprosy Roadmap (2021-2030).

Vision, goal and strategic pillars:

Vision: Leprosy free Nepal
Goal: Elimination of Leprosy at the sub-national level (municipality)
Strategic pillars:

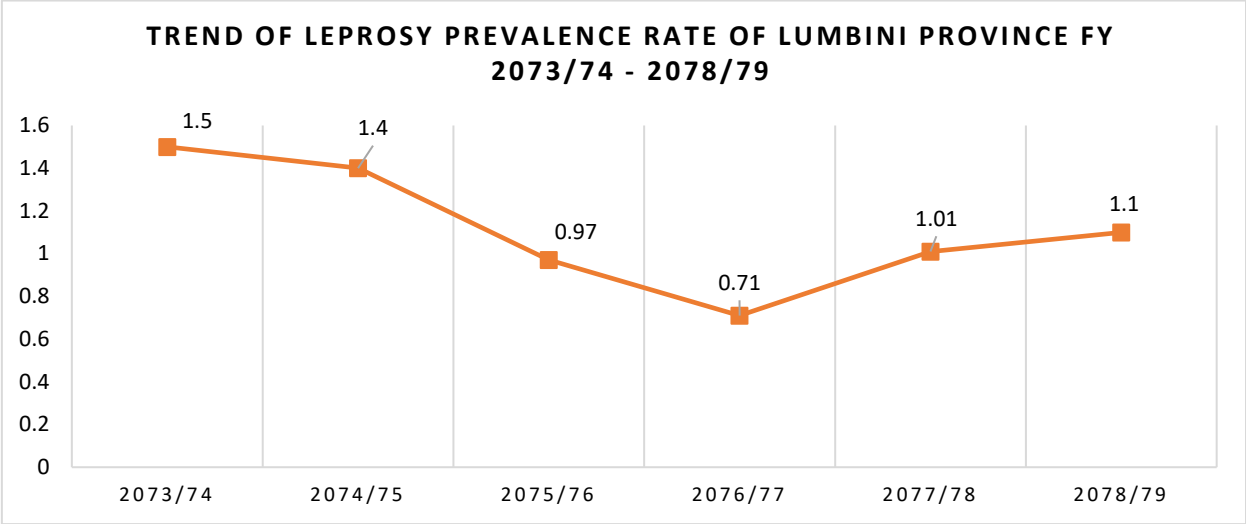
1. Implement the national Leprosy roadmap for zero Leprosy across all levels
2. Scale-up leprosy prevention alongside integrated active case detection
3. Manage Leprosy and its complications and prevent new disability
4. Combat stigma and ensure human rights are respected

3.7.2 Prevalence and new case detection rate

Trend of Leprosy prevalence

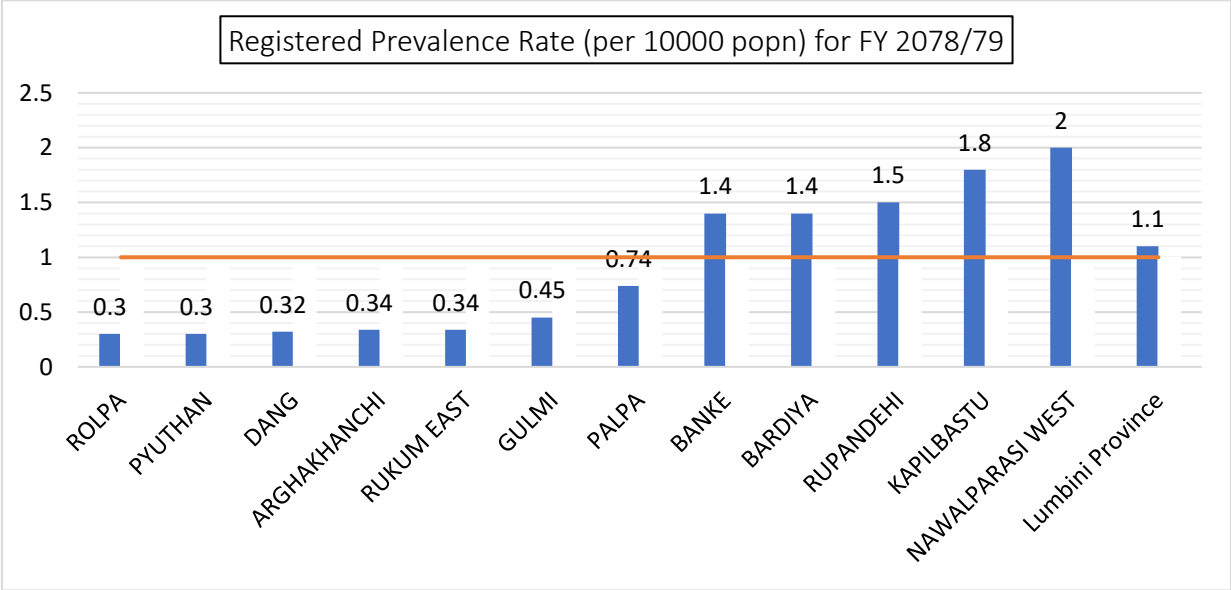
The trend of Leprosy prevalence rate of Lumbini Province from FY 2073/74 to FY2078/79 has decreased from 1.5 to 1.1 per 10000 population. This rate is above the cut-off point of 1 case per 10,000 set by WHO to indicate the elimination of Leprosy as a public health problem. In last six years, the Leprosy prevalence was reported below 1 in two consecutive years between 2075/76 and 2076/77. However, this is slowly in increasing trend. The New Case Detection Rate (NCDR) has gradually decreased from 17.6 to 11.4 per 100,000 population from FY2073/74 to 2078/79. The NCDR was above 10 except in FY2076/77 where active case detection activities, contact examination were limited due low priority placed in terms resource and funding.

Figure 41: Trend of Leprosy Prevalence rate



District wise prevalence of Leprosy

Figure 42: District wise prevalence of Leprosy



In Fiscal Year 2078/79, total five terai districts (Banke, Bardiya, Rupandehi, Kapilbastu and Nawalparasi West) of Lumbini Province reported prevalence rate above 1 per 10000 population. Nawalparasi West reported the highest prevalence rate of 2.0 followed by 1.8 of Kapilbastu.

New Case Detection

The detection of new cases signifies the ongoing transmission with the rate measured per 100,000 population. A total 584 new Leprosy cases were detected in 2078/79 and Rupandehi reported 165 new cases, which is highest in this Province. Nawalparasi West reported the highest new case detection rate with 19.9 per 100,000 populations with detection of 77 new Leprosy cases. The

NCDR of Lumbini Province has increased from 10.92 to 11.4 in FY 2078/79 compared to earlier fiscal years.

Table 56: District-wise new case detection rate (NCDR) of Leprosy for FY2078/79

Districts	Total new cases	NCDR per 100000	Proportion of Grade-2 Disability (G2D) among new cases	Proportion of child cases among new
Rukum East	2	3.4	0	0
Rolpa	7	3	14.3	0
Pyuthan	7	3	0	0
Gulmi	11	4.5	0	0
Arghakhanchi	6	3.4	16.7	0
Palpa	18	7.4	0	0
Nawalparasi West	77	19.9	5.2	1.3
Rupandehi	165	14.7	9.1	3
Kapilbastu	121	17.6	1.7	3.3
Dang	22	3.2	9.1	0
Banke	85	14	4.7	5.9
Bardiya	63	13.6	7.9	3.2
Lumbini Province	584	11.4	**7.7**	2.9

The proportion of grade-2 disability among new cases of the province has increased from 3.4 (FY 2077/078) to 7.7 (FY 2078/079). Among districts, Argakhanchi reported the highest proportion of G2D disability with 14.3 followed by 14.3 in Rolpa, while four districts (Rukum, Pyuthan, Gulmi and Palpa) maintained 0 Grade-2 disable cases. Similarly, the proportion of child cases among new reduced from 6.6 to 2.9 (17 cases) at Provincial level for FY 2078/079 (Table 56).

Strengths, Weakness and Challenges for Leprosy Control Program

Strength	Weakness	Challenges
High level political commitment and expression of interest in accelerating Leprosy control at provincial/local level	Program implementation and monitoring from local government is inadequate	Follow up and care of patients released from treatment (RFT)
Availability of Diagnostic standard, protocol, and operational guideline for curative services of Leprosy	Limited Human Resource at all levels and inadequate expertise among those available staffs	Recording and Reporting of cross-border cases
Good collaboration and communication among supporting partners	Continuation of contact examination and LPEP implementation	Social stigma is still prevalent in society due to lack of awareness about Leprosy among community people

Strength	Weakness	Challenges
Free MDT, transport service for released from treatment cases and other service for treating complications	Lack of rehabilitative care and services those affected by Leprosy	Channelizing and supply of assistive devices from PHLMC to far districts
Integration of Leprosy services at health facility level with other programs	Under and over reporting of Leprosy data in HMIS	Unavailability of disability related data at local level

3.8 Snake bite

Background

Snakebite is an important occupational hazard affecting farmers, plantation workers, herders and fishermen. Snakebite is a life-threatening medical emergency and survival of the victims depends much on the appropriate first aid measures and immediate transportation to the nearest health center where the facility to administer anti-snake venom and supportive care is available. In rural population of Nepal, the doctor population ratio is far from accepted norms and most of the trained health workforce are based in urban areas. Therefore, the people of rural areas often seek health care from practitioners of indigenous medicine. Most of the death related to snakebite occurs before reaching the treatment center, either during transportation or at the village. Doctors or health workers at primary care level as well as some of the district and provincial level hospital do not treat snakebite, likely due to inadequate training on snakebite management during medical schools resulting in lack of confidence on management of snake envenoming. This national guideline is intended to ensure standardized, timely and effective management of snakebite in the country.

Table 57: Snake bite cases in last three fiscal years

Data	Snake bite: non-poisonous			Snake bite: poisonous		
Organization unit	2076/ 077	2077/078	2078/079	2076/ 077	2077/078	2078/079
Lumbini Province	822	1920	3022	399	278	379
Rukum East	5	5	15	1	2	2
Rolpa	26	65	91	6	18	63
Pyuthan	16	10	9	1	1	2
Gulmi	37	56	66	10	13	10
Arghakhanchi	6	29	21	1	14	1
Palpa	290	288	316	124	34	31
Nawalparasi West	18	32	186	1	26	19
Rupandehi	335	1181	1880	232	93	189
Kapilbastu	15	6	0	6	42	1
Dang	29	225	412	9	35	42
Banke	1	0	1	3	0	0
Bardiya	44	23	25	5	0	11

In 2078/079, 3022 non-poisonous and 379 poisonous cases were reported in Lumbini Province, which is in increasing trend compared with the previous years (see above table). Most cases were reported from Rupandehi (2069) while least were reported from Banke in FY 2078/079.

3.9 Scrub Typhus

Background

Scrub Typhus is an acute, febrile, infectious disease that is caused by Orientia (formerly Rickettsia) tsutsugamushi. It is also known as tsutsugamushi disease. It is an obligate intracellular gram-negative bacterium from the Rickettsiaceae family.

In FY 2078/079, total of 1035 Scrup Typhus cases were reported in Lumbini Province with highest cases reported from Arghakhanchi district.

Table 58: Scrub Typhus cases in FY 2078/079

Scrub Typhus- FY 2078/079	
Lumbini Province	1035
Rukum East	0
Rolpa	9
Pyuthan	0
Gulmi	136
Arghakhanchi	303
Palpa	254
Nawalparasi West	4
Rupandehi	221
Kapilbastu	0
Dang	74
Banke	12
Bardiya	22

According to DHIS2 record, data has not found in previous fiscal years

3.10 Rabies/Dog bite

Background

Rabies is a vaccine-preventable viral zoonotic disease responsible for an estimated 59,000 human deaths every year across the world. All warm-blooded mammals are susceptible to infection by the rabies virus (RABV). Transmission of RABV by dogs is responsible for up to 99% of human rabies cases in rabies-endemic regions, and more than 95 % of the patients seek Rabies PEP for dog bites. However, there is a small proportion of human rabies reported due to transmission via wildlife (such as foxes, wolves, jackals, mongoose, racoons, skunks and bats). The virus is present in the saliva of the infected animal and is transmitted to other animals and to humans through the saliva. Rabies is a disease with the highest documented case-fatality rate, close to 100%. Rabies has terrifi

ed man since antiquity. Rural populations are disproportionately affected, experiencing the greatest burden with the least access to affordable preventive treatment.

Rabies is caused by Lyssavirus belonging to the family Rhabdoviridae which are enveloped viruses having single-stranded, negative-sense RNA genome of approximately 12 kilobytes size The genus, Lyssa, comes from the Greek goddess Lyssa, the 11 spirits of madness, frenzy, and rage Meanwhile, rabies on itself is derived from Latin term rabere that implies madness and raving In Sanskrit, the word rabies is derived from an ancient word rabhas that implies 'to create violence. Dogs are responsible for the spread of rabies,

Table 59: Dog bite cases in last three fiscal years

Data	**Dog Bite**		
Organization unit / Period	**FY 2076/077**	**FY 2077/078**	**FY 2078/079**
Lumbini Province	**9641**	**16715**	**22914**
Rukum East	47	39	79
Rolpa	248	283	307
Pyuthan	209	229	153
Gulmi	664	689	915
Arghakhanchi	141	542	573
Palpa	1618	747	2180
Nawalparasi West	1530	1462	2676
Rupandehi	2538	7469	10186
Kapilbastu	1000	2157	1785
Dang	555	1768	2445
Banke	33	51	40
Bardiya	1058	1279	1575

In 2078/079, 22,914 dog bite cases were reported in Lumbini Province, which is in increasing trend as compared with the previous years (Table 59). Most cases were reported from Rupandehi (10,186) and least from Banke district.

3.11 Outbreak

Cholera:

Background

Cholera is a disease is transmitted through drinking water or eating food contaminated with cholera bacteria. Severe cholera is characterized by large amounts of watery diarrhea, often described as "rice-water stool" because it can have a pale, milky appearance. It can also be accompanied by nausea and vomiting. If untreated, the loss of fluid can be deadly. But simple treatment, including replacing lost body fluids, can lower the risk of death to less than 1%. The Ministry of Health and Population reported a cholera outbreak in Krishnanagar Municipality of Kapilvastu district, Lumbini Province.

On 18th Ashoj 2078, Shivaraj Hospital in Kapilvastu district, received over 100 cases of acute diarrhea from nearby Krishnanagar municipality in a single day. By the end of the month, five out of ten municipalities in the district had reported over 1300 acute diarrhea cases including six deaths. Vibrio cholerae 01 Ogawa serotype was confirmed in stool samples of the patients.

Table 60: LLGwise Cholera cases and death cases of Kapilbastu in FY 2078/79

Name of LLG	Number of cases	Number of deaths
Bijayanagar	55	1
Budhabhumi	16	
Kapilbastu	23	
Krishnanagar	1198	2
Maharajgunj	76	
Mayadevi	5	
Shivaraj	83	2
Yasodhara	114	1
Total	**1570**	**6**

Source: Health Office Kapilvastu

Early interventions:

- Managed additional 15 beds in the hospital for the treatment of Cholera patients
- Managed additional human resource from outside the outbreak area (paramedics and nursing from health post, 3 Doctor from Kapilvastu hospital and 2 Doctor from Lumbini Provincial hospital)
- Conducted awareness rising program at outbreak and prone areas, also mobilized Nepal police for miking to disseminate useful messages for disease prevention and control
- Conducted focus group discussion in different places and distributed ORS in community by health workers
- Conducted discussion meeting with political leaders of Sukrampur for community awareness and sensitization
- Conducted water testing Program in different places of the affected municipalities

Further Intervention:

- Expanded 40 beds in Ram Gorkha High school, nearby hospital
- Conducted home visit program by health worker and distributed Piyush and chlorine tab for water purification and filled Outbreak investigation form
- Requested private sector for the proper record of Diarrhoea cases and hotels for the sanitation
- Continued awareness raising interventions, including miking and community sensitization activities
- Conducted water investigation and purification program in affected communities
- Conducted discussion meetings at different levels for resource generation and overall outbreak management

Achievement:

The cholera outbreak subsided from Poush 2078.

Cholera vaccination status:

Table 61: Cholera vaccination status

SN	Local Level	Target	OCV First Dose	OCV Second Dose	Coverage First Dose	Coverage Full dose
	Yashodhara	37783	32454	25114	85.90	66.47
2	Krishnanagar	60743	56039	58259	92.26	95.91
3	Maharajgunj	53156	48003	42425	90.31	79.81
4	Bijayanagar	35903	31225	24658	86.97	68.68
5	Shivaraj	64778	63280	53164	97.69	82.07
2	Banganga	91014	74245	70377	81.58	77.33
7	Buddhabhumi	72482	59334	48424	81.86	66.81
8	Kapilvastu	84882	62722	58940	73.89	69.44
9	Mayadevi	53212	43065	41024	80.93	77.10
10	Suddhodhan	49720	43996	38832	88.49	78.10

Source: Health Office Kapilvastu

3.12 Early Warning and Reporting System (EWARS)

EWARS reporting Status of Sentinel Sites

There are currently 18 sentinel sites in Lumbini province that are reporting on EWARS: two from federal level hospitals, nine from provincial level hospitals, four from medical colleges and three private/ community hospitals. The table 62 depicts the status of EWARS reporting from 18 sentinel sites in FY 2078-79, of which all hospitals have actively reported.

Table 62: Reporting status of EWARS

Status	Federal hospital / Institute	Provincial hospital	Private medical college/ hospital
Active Reporting	Bheri Hospital Rapti Academy of Health Sciences	Bardiya Hospital Pyuthan Hospital Rolpa Hospital Lumbini Provincial Hospital Kapilvastu Hospital Prithvi Chandra Hospital Rapti Provincial Hospital Gulmi Hospital Arghakhanchi Hospital	Universal College of Medical Sciences AMDA Hospital Crimson Hospital Nepalgunj Medical College Teaching Hospital_Kohalpur Devdaha Medical College Lumbini Medical College_Palpa United mission Hospital

7.2.4 Issues, constraints, and recommendations

Issues and constraints	Recommendations	Responsibility
Existence of reporting and data quality issues in EWARS	Regular data quality assessment, review, and feedback	Health Directorate, Health Offices, Local levels
Inadequate skilled human resource, and financial resources for information collection, analysis, dissemination and use at local level	Capacity building of health workers and managers on recording/reporting systems, including public health analytics Allocate of adequate resources for information management at local, province and federal level	Federal MoHP, Provincial MoH/HD, local level
Limited analyses, interpretation, dissemination, and use of data for policy and planning	Promote evidence-informed policy development, planning and decision making at all levels	Federal MoHP, Provincial MoH/PHD, local level
No sentinel sites in some hospitals	Expansion of sentinel site in East Rukum and Palpa Hospital, and selected private hospitals	Provincial MoH/HD, local level

Chapter 4: Hospital Services

4.1 Background

The Lumbini Province is committed to improve health status of people by delivering high quality health services. The key objective of the province is to provide quality curative health services with specialized care to reduce morbidity and mortality by ensuring early diagnosis and prompt treatment from hospitals. In 2006, the government of Nepal incorporate emergency and inpatient services as Essential Health Care Services Package. This package aims to provide free of charge to destitute, poor, disabled, senior citizens, FCHVs, victims of gender-based violence and others from provincial hospitals, PHCCs and for all citizens through health post. The constitution of Nepal has guaranteed the basic health services as the fundamental human right of the people. To ensure the fundamental right of people province government strengthen all provincial, as well as local and tertiary level health facilities to deliver quality health care services.

After implementation of federal system in Nepal, three tires of government were there to provide services in their jurisdiction. In the province, there are 20 hospitals currently operated under federal and province government and local levels. Among them, three federal hospitals are tertiary level, one secondary B level and 12 Secondary A level hospitals operates under the province and 4 primary hospitals operate under the local government (Table 63).

Table 63: Hospitals categorized by ownership and level

Hospitals by Ownership		**By Level**
Federal level (3)		
1	Bheri Hospital	Tertiary
2	Rapti Academy of Health Science	Tertiary
3	Sushil Koirala Prakhar Cancer Hospital	Tertiary
Provincial level (13)		
1	Lumbini Provincial Hospital	Secondary B
2	Rapti Provincial Hospital	Secondary A
3	Arghakhanchi Hospital	Secondary A
4	Bardiya Hospital	Secondary A
5	Pyuthan Hospital	Secondary A
6	Rolpa Hospital	Secondary A
7	Gulmi Hospital	Secondary A
8	Prithvi Chandra Hospital	Secondary A
9	Bhim Hospital	Secondary A
10	Kapilvastu Hospital	Secondary A
11	Rampur Hospital	Secondary A
12	Rukum East Hospital	Secondary A
13	Palpa Hospital	Secondary A
14	Proposed Bhaluwang Hospital	Secondary A

Hospitals by Ownership		By Level
Local level (4)		
1	Lamahi Hospital	Primary
2	Pipara Hospital	Primary
3	Shivaraj Hospital	Primary
4	Chisapani Hospital	Primary

Infrastructure Availability

The Table 64 shows the infrastructure status of all provincial hospitals of which all hospital owns a land and has been functional. Lumbini provincial hospital operates 400 beds and other 12 hospitals operate 50 beds.

Table 64: Infrastructure availability in provincial hospitals

SN	Hospitals	Total Beds	Land	Building
1	Lumbini Provincial Hospital	400*	Available	Under process
2	Rapti Provincial Hospital	50	Available	Available but not adequate
3	Arghakhanchi Hospital	50	Available	Available, but not as per MOH standard
4	Bardiya Hospital	50	Available	Available and adequate
5	Pyuthan Hospital	50	Available	Available but not as per Secondary A (MoH standard)
6	Rolpa Hospital	50	Available	Under construction (nearly completed)
7	Gulmi Hospital	50	Available	Under construction
8	Prithvi Chandra Hospital	50	Available	Under construction
9	Bhim Hospital	50	Available	Under construction
10	Kapilvastu Hospital	50	Available	Available and adequate
11	Rampur Hospital	50	Available	Nearly completed (yet to handover)
12	Rukum East Hospital	50	Available	Under construction
13	Palpa Hospital	50	Available	Available but not adequate room

*100 bed allocated by hospital development committee

Availability of major hospital services

Table 65 depicts the availability status of major hospital services in the province-level hospitals of Lumbini Province.

Table 65: Availability of major services in provincial hospitals

Key Service indicators		No. of hospitals	Name of Hospitals
IPD service	Medical Ward	12	All province-level hospitals except Rukum East and Bhaluwang Hospital
	Surgical Ward	6	Lumbini provincial, Rapti provincial, Bardiya, Kapilvastu, Gulmi, Prithvi Chandra hospital
	Maternity Ward	12	All provincial hospital except Rukum East, and Bhaluwang
	Paediatric Ward	6	Lumbini provincial, Rapti provincial, Bardiya, Kapilvastu, Gulmi, Arghakhanchi hospital
	Orthopaedic Ward	1	Lumbini provincial hospital
ER service		14	All province-level hospitals
Surgical service	Operation threater (OT)	12	All province-level hospitals except Rukum East hospital
	Post-Operative Ward	11	All province-level hospitals except Palpa, Rampur and Rukum East
Pharmacy service		13	All province-level hospitals except Rukum East hospital
24 hrs Laboratory service		11	All province-level hospitals except Bhaluwang, Bhim and Palpa hospital
Blood Bank		9	All province-level hospitals except Bhim, Palpa, Rampur, Rukum East, and Bhaluwang
X-ray service		14	All province-level hospitals
USG service		14	All province-level hospitals
CT Scan service		2	Lumbini provincial and Rapti provincial hospital
Intensive Care Unit (ICU)		6	Lumbini provincial, Rapti provincial, Kapilvastu, Bardiya, Bhim and Prithvi Chandra
Neonatal Intensive Care Unit (NICU)		2	Lumbini provincial and Kapilvastu hospital
Pediatric Intensive Care Unit (PICU)		1	Lumbini provincial hospital
Endoscopy service		2	Lumbini provincial and Rapti provincial hospital
Haemodialysis service		2	Lumbini provincial and Rapti provincial hospital
Dental service		12	All provincial hospital except Rukum East and Bhaluwang
Extended Health Service (EHS)		2	Lumbini provincial and Pyuthan hospital
Nutrition Rehabilitation Centre		1	Lumbini provincial hospital
One Stop Crisis Management Centre		12	All province-level hospitals except Rampur, and Bhaluwang hospital

Major Achievements of Hospital:

- Lumbini Provincial hospital is upgraded to 400 beds and all other province-level hospitals are upgraded to 50 bedded hospitals, providing eye, dental, ENT, physiotherapy, 24 hours laboratory, and pharmacy and USG services
- Expansion of Hospital Services:
  - Lumbini Province Hospital: Procurement of MRI machine, operates burn ward and Cath-lab
  - Bhim Hospital: Start CT Scan service
  - Pyuthan hospital: Commencement of Endoscopy service
  - Provincial Ayurveda Hospital: Expansion of surgical service
- Building of Trauma Centre is under construction in Dang, Lamahi through the investment of Province Government.
- Sickle cell and thalassemia disease diagnosis and counselling centers was established in eight hospitals.
- Continued dental services from dental surgeon in 8 hospitals (Rolpa, Bhim, Bardiya, Pyuthan, Prithvi Chandra, Gulmi, Kapilvastu and Arghakhanchi).
- Continued to provide antenatal care, postnatal care, Family planning, Nutrition, and Immunization services from MCH clinics under all province level hospitals.
- Free Screening and treatment of Sickle cell and thalassemia from Prithvi Chandra, Lumbini, Kapilvastu, Rapti, Bheri and Bardiya hospitals
- Dialysis service, CT scan service is continued from Rapti provincial hospital and Lumbini provincial hospital.
- Free COPD service from all provincial hospital

4.2 Hospital Management Strengthening Program

Since FY 2071/072, the Ministry of Health and Population (MoHP) implemented Hospital Management Strengthening Program (HMSP) in Nepal. In 2013, this program was initiated as a Hospital Management Training (HMT) in collaboration with National Health Training Center (NHTC) and Nick Simons Institute (NSI) and piloted in four district hospitals and two hospitals-Pyuthan and Gulmi are included from Lumbini province.

Later in 2014, the Hospital Management Training became the Hospital Management Strengthening Program due to its modality and coverage. This program intended to identify existing gaps in service availability and readiness through self and joint assessment using the Minimum Service Standards (MSS) tool, as well as help to develop evidence-based action plan. This initiative was planned to implement in all district level hospitals in phase-wise manner (15 to 50 bedded). By FY 2075/76, the MSS program reached to 83 district level hospitals. After four years of successful implementation of the District Hospital MSS; the district hospital MSS tool was revised and strengthen its implementation up to Tertiary Hospital. After the revision, four different MSS tools (Primary, Secondary A, Secondary B and Tertiary level MSS) are introduced for different level of hospitals. Altogether, MSS covered 130 hospitals from local, province and federal level in Nepal.

In Lumbini province, MSS program was implemented in 19 hospitals that included 2 federal, 13 provincial and four local level hospitals. The hospital MSS reflects the most important minimum criteria for providing services, but it is not an "ideal" list of maximum standards. This MSS checklist differs from a program-specific quality improvement tool which outlines the equipment, supplies, furniture, and human resources needed to provide service reflecting the service's standard operating guideline.

The major achievements of Lumbini province under three MSS domains are described hereunder:

Governance and Management: The federal and province government and local levels now place a high importance on hospital service quality as they started to monitor hospital services based on MSS score. The hospital development committee, which was vacant in many hospitals before, has now been completed, which has helped in creating favorable environment in the hospitals with respect to leadership and governance. Hospital Development Committee (HDC) is taking charge of overall service improvement and hospital service expansion. The majority of Hospital Development Committee (HDC) chairpersons and Medical Superintendent considered MSS as a guiding principle for quality healthcare services. On set agendas, meeting was organized regularly that usually cover all hospital related issues and way forwards. Hospitals now adopted best practices like, displaying hospital organograms, service utilization charts, citizen charters, information officer contact information, and other crucial service delivery statistics.

Clinical Service Management: The Province government has focused on ensuring adequate physical infrastructure, equipment, human resources, and instrument in each hospital. After implementation of federal system, Province government upgraded five primary hospitals in Secondary A level hospital to deliver the specialist services. In order to manage quality OPD services, at least one specialist doctor is deployed in all province-level hospitals. Province government has given a special emphasis on surgical services. The CEONC service was implemented in all provincial hospitals except Palpa Hospital and newly upgraded Rukum East Hospital and MoH has a plan to strengthen this in FY 2078/79. Beside CEONC, most of the hospitals expanded their other major surgical services and few hospitals also have new modular OT set-up. With the aim to strengthen preventive services; MCH clinic was established in all provincial hospitals to deliver preventive services: ANC, PNC, family planning and immunization in an integrated way. In diagnostic service, all hospital replaced old x-ray machine with digital and DR system x-ray machines likewise laboratory services also strengthened, fully automated and semiauto analyzers and wide range of tests including culture, T3, T4 TSH, HbA1C, and other major tests were available. Free screening and treatment of sickle cell and thalassemia services were started in six terai region hospital including federal hospital (Bheri Hospital). Remarkable milestone was achieved in regard to add services like ICU with ventilators, Special Newborn Care Unit (SNCU), Electronic Health Record (EHR), Hemodialysis, ENT, and CT scan services.

Hospital Support Services: The support service management contributes to improve the quality of hospital clinical services. Separate CSSD, laundry and housekeeping departments were

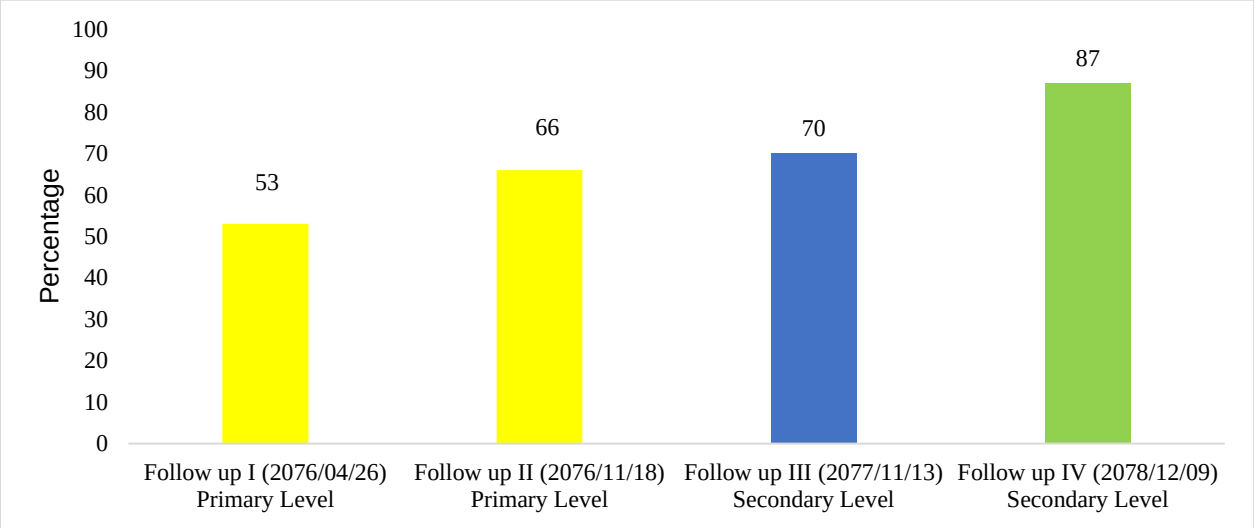
established in hospital. The need for a separate repair and maintenance department in the hospital after the MSS follow-up assessment of various departments found that expensive medical equipment used to be broken and stored. To solve this issue, many hospitals established repair and maintenance department and deputed biomedical engineers or biomedical technicians. Now, province government given a special attention to manage hazardous health care waste, there is an arrangement of Autoclave in most of the hospital and some hospital started to sterilize waste before its disposal. According to the policy of the government, a social service unit was established, and free treatment was arranged for the poor, destitute and helpless citizens from all provincial hospitals**.**

MSS trend and action plan of individual hospitals

Kapilvastu Hospital

Kapilvastu Hospital was established in 2029 BS with 15 bedded hospital and latter it was upgraded to 50 bedded hospital by province government in FY 2077/078. The hospital is located in Kapilvastu municipality-05 of Kapilvastu district.

Figure 43: MSS Trend of Kapilvastu Hospital



The figure 43 depicts the trend of MSS score in last three fiscal years and shows the overall score in increasing trend. In FY 2078/79, Kapilvastu hospital scored 87 percent which is highest among the provincial hospitals. Hospital achieved this success by establishing the infrastructure and addressing the health service gaps outlined in the earlier MSS and following MSS guideline for governance and management, clinical service management and hospital support services.

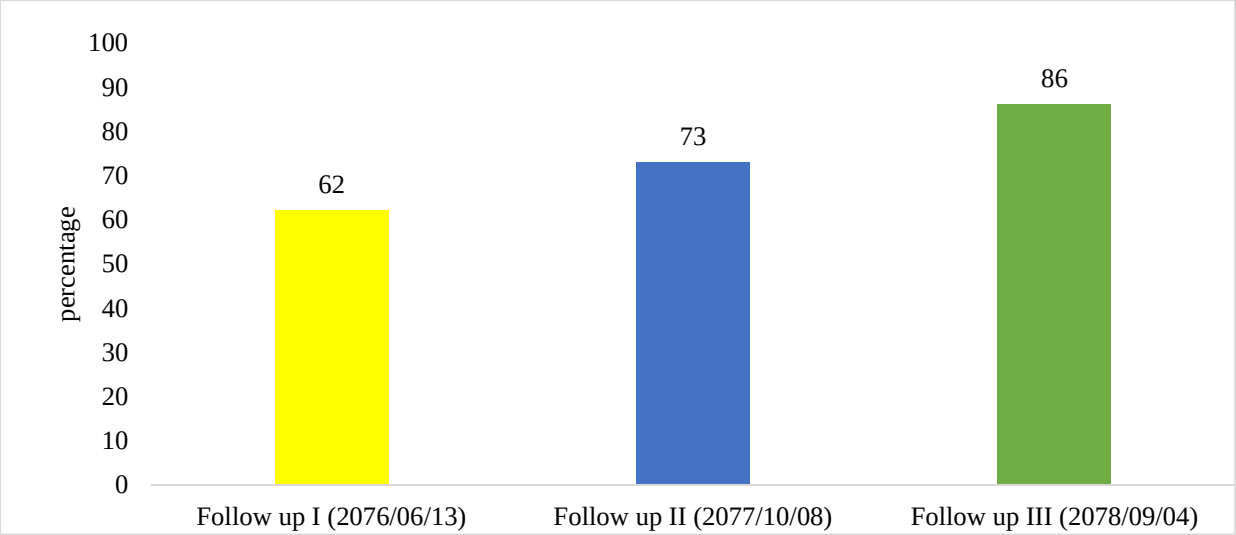
Action plan of Kapilvastu Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Unavailability of operational manual indicating how the hospital operates its services	Jointly with MoH, develop hospital operational manual with clear guidance to operate its services
2.	No waste segregation unit	Construction of dedicated waste management unit with installation of autoclave
3.	Hospital don't organize CPD/CME classes to staff	Organize weekly CPD/CME classes to staff
4.	Limited space available for visitors	Manage visitor's waiting home
5.	Not have well managed staff quarter	Coordinate with NSI and province and manage staff quarter

Bardiya Hospital

Bardiya Hospital was established in 1991 B.S. It is located in Gulariya Municipality, ward no. 6, Bardiya district. Bardiya Hospital is the only referral center of district, which has been delivering top-notch healthcare services with limited resources. This hospital was upgraded to 50 bedded hospitals in 2071-72.

Figure 44: MSS Trend of Bardiya Hospital



The Figure 44 shows that Bardiya hospital is progressing to fulfill the service availability and readiness gap. In 2078/79, Bardiya hospital obtained 86 percent overall score, which is a second highest score in province after Kapilvastu hospital. To achieve this, all staff of hospital and hospital development committee is dedicated to establishing well managed hospital in all domains, strengthening services and delivering quality health care services.

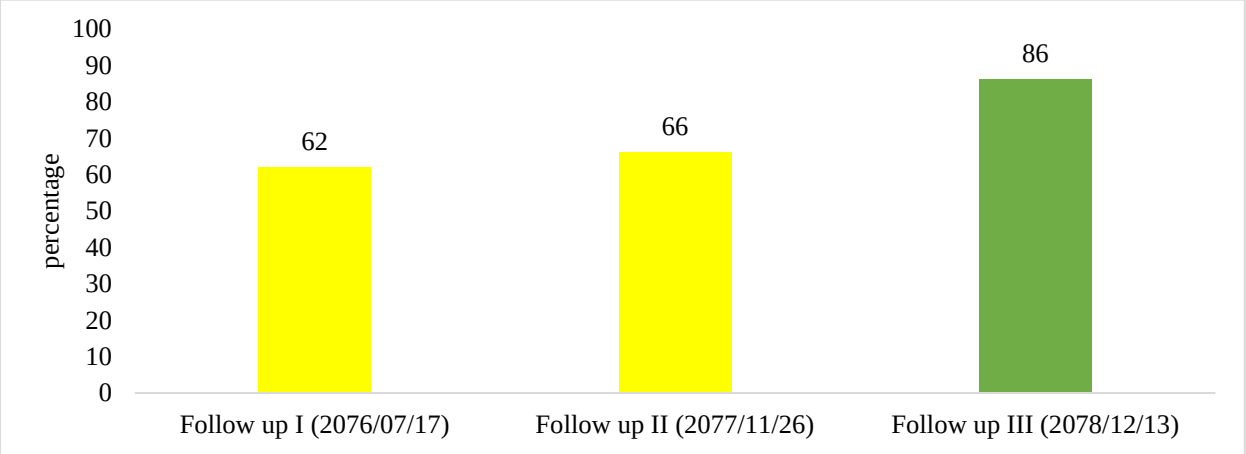
Action plan prepared by Bardiya Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	HMIS standard formats are not used by hospital for referral cases	Maintain referral slip (HMIS 1.4) as per the HMIS guideline
2.	No dedicated area for playroom with play materials for different paediatric age groups	Allocate separate room for children
3.	No public contact or information centre in prime location of hospital with 24 hours staff availability	Information centre will be established in prime location ensuring the availability of dedicated staff
4.	No auction for old logistic annually	Formation of auction committee for auctioning old logistics

Gulmi Hospital

Gulmi hospital, located in Tamghas Municipality was established in 2022 BS as a 15 bedded hospital and later upgraded to 50 bedded hospitals in 2071.

Figure 45: MSS Trend of Gulmi Hospital



The figure above shows the MSS score status of Gulmi hospital in last three fiscal years. Overall, the score is in increasing trend. In the last fiscal year, the hospital scored 86 percent being the second highest MSS scorer after Kapilvastu hospital and with consistent score of Bardiya hospital.

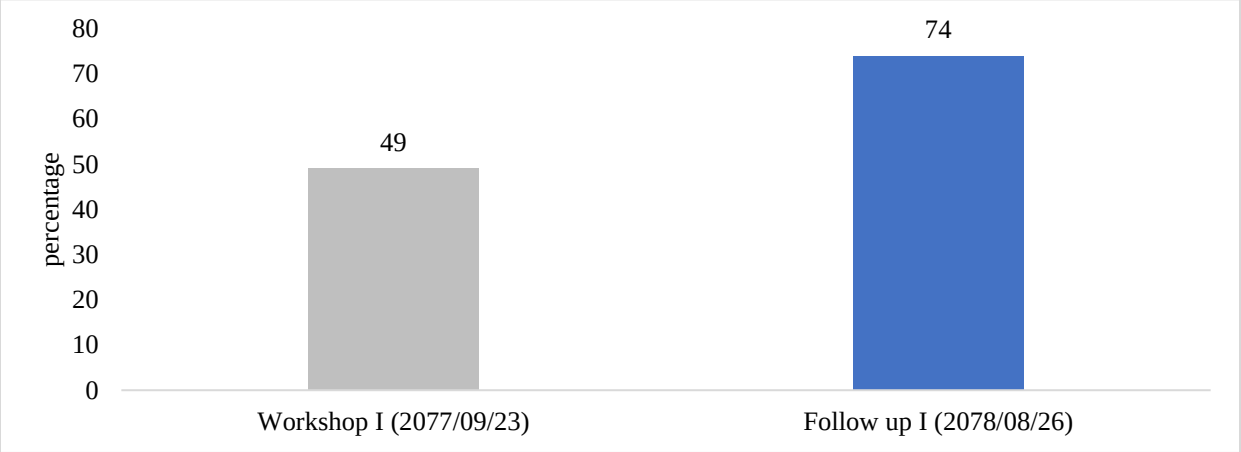
Action Plan prepared by Gulmi Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	No ICU service	Coordination with MoH of human resource to operate ICU service
2.	Inadequate oxygen pipeline	Coordinate with MoH for budget allocation, tender notice for renovation
3.	No canteen facility for visitors	Organize HDC meeting, resource estimation and manage canteen
4.	No specialized orthopaedic service	Coordination with federal MoHP, MoH, Lumbini province and Resunga Municipality for human resource and equipment needed for orthopaedic service

Lumbini Provincial Hospital

Lumbini Provincial Hospital is situated at the junction of Mahendra and Siddhartha highway in Butwal Sub-Metropolitan City of Rupandehi District. Lumbini Zonal Hospital was established in 1967 B.S as a 6 bedded hospital and later upgraded as Lumbini Provincial Hospital in 2071/72. Lumbini Provincial hospital is only a Secondary B level hospital under Province government and one of the main referral hospitals of Lumbini Province also play a crucial to serve poor citizens who cannot afford private hospitals.

Figure 46: MSS Trend of Lumbini Provincial Hospital



The above diagram shows the MSS score of two MSS assessments done in this hospital. Within the short period of time, hospital succeeded to achieve significant progress to fulfill MSS gaps. Hospital performed new initiatives, like; provisioned a designated staff like MSS focal person, In charge for every department, allocated space set-up different staff. Another major support for progress is from infrastructure development. Now, hospital operate separate maternity building.

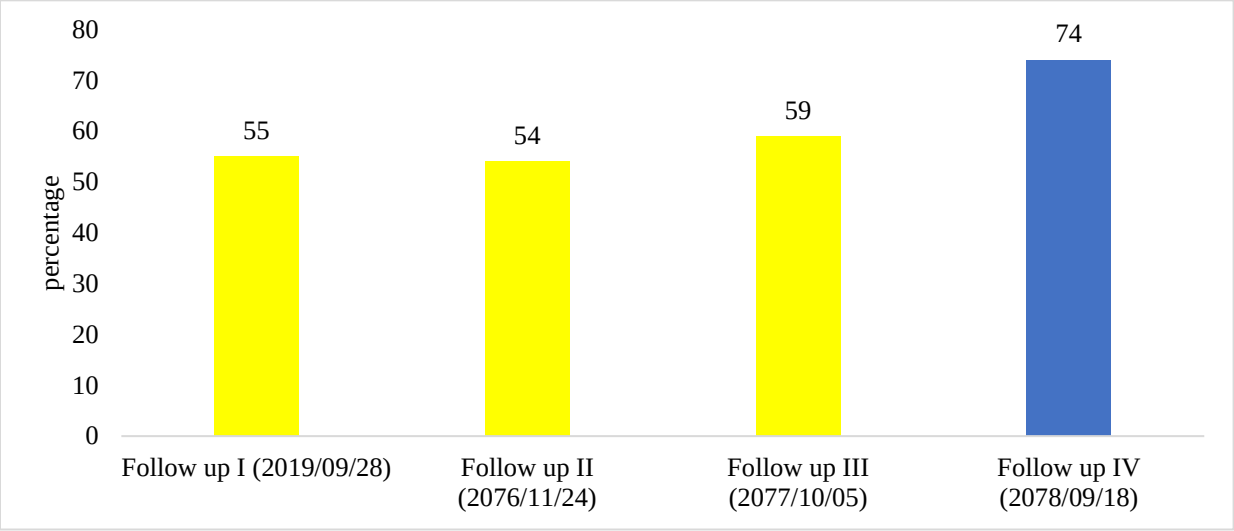
Action Plan prepared by Lumbini Provincial Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Cardiac catheterisation service not available	Initiate a process to construct Cath lab
2.	No PICU	Construction of building
4.	Social audit was not conducted annually	Conduct social audit yearly
5.	No MRI service	Initiate MRI services

Pyuthan Hospital

Pyuthan Hospital the only government hospital of Pyuthan district situated at Pyuthan Municipality ward no. 4, Bijuwar. It was established in 2045 B.S as a 15 bedded hospital. Before the establishment of the hospital, it was a health care center located at the district headquarter 'Khalanga'. In 2045 B.S, the health care center was upgraded to District Hospital. This hospital has been upgraded to 50 bedded by the government since 2073 BS. Pyuthan hospital has been selected as a HUB hospital by Ministry of Health and Population in collaboration with Ministry of Health, Lumbini province, and Nick Simons Institute since FY 2077/78.

Figure 47: MSS Trend of Pyuthan Hospital



The above diagram shows the increasing trend of MSS score in Pyuthan Hospital. In FY 2078/79, Pyuthan hospital scored 74 percent, which is n significant increment compared with previous years.

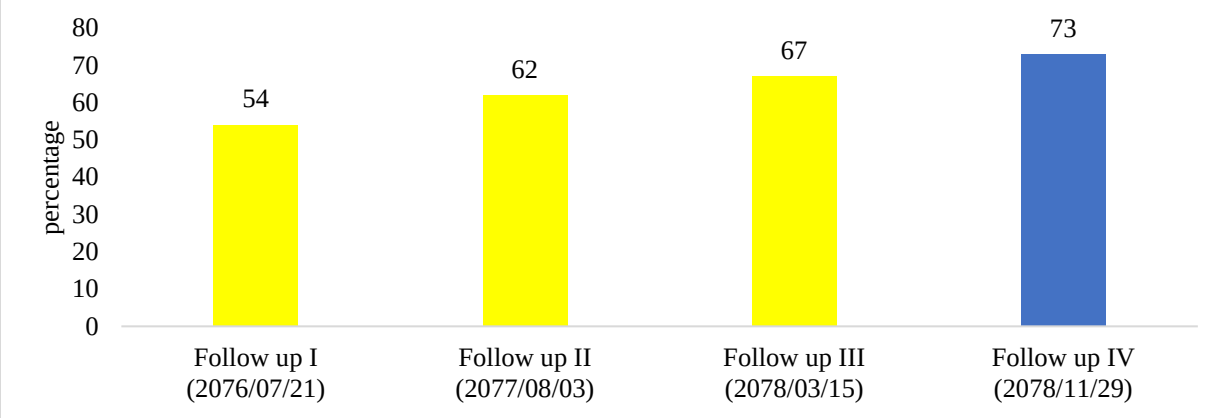
Action plan prepared by Pyuthan Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	QI Committee was not formed	Hospital QI committee formation
2.	No proper recording and reporting of OPD service data	Implement Electronic Health Record System
3.	X-ray machine and USG machine are not working	Procure new 500 MA X-ray machine and USG
4.	No proper hospital waste disposal system	Installation of autoclave for waste disinfection for which install transformer

Prithvi Chandra Hospital

Prithvi Chandra Hospital was established in 1968 B.S. The hospital is located in Ramgram Municipality ward no. 5, Parasi-Bazaar. This hospital was upgraded in 50 bedded in 2073 B.S. and it serves as the district sole referral facility.

Figure 48: MSS Trend of Prithvi Chandra Hospital



The MSS score trend of Prithvi Chandra Hospital is illustrated in figure 48. The MSS score of this hospital is also on increasing trend with 73% score in last MSS assessment.

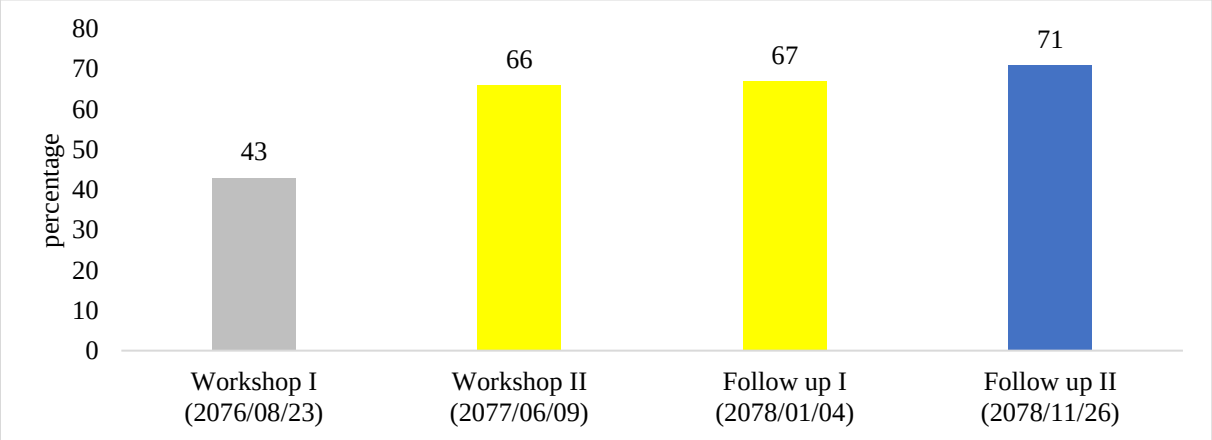
Action Plan prepared by Prithvi Chandra Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	No separate ward as per MSS	Provision of separate medical, surgical and paediatric wards with dedicated staff
2.	X-ray service not available round the clock	Staff management for 24 hours X-ray service
3.	Social audit not done annually	Conduct social audit yearly in coordination with line agencies
4.	No proper room for security guard	Arrange space for dedicated security guard unit

Rapti Provincial Hospital

Rapti Provincial Hospital is in Tulsipur Sub-Metropolitan city of Dang district. Rapti Zonal hospital was declared as Rapti Provincial Hospital by cabinet of Lumbini province Government in 2019. Rapti Provincial Hospital is the one of the major referral health institutions not only for Dang but also for citizen of Rukum, Rolpa, Pyuthan and Salyan districts.

Figure 49: MSS trend of Rapti Provincial Hospital



The figure above portraits the increasing trend of MSS score over the years in Rapti Provincial hospital. In FY 2078/79, two MSS follow-up has been done and the hospital achieved 71% of overall score in last assessment.

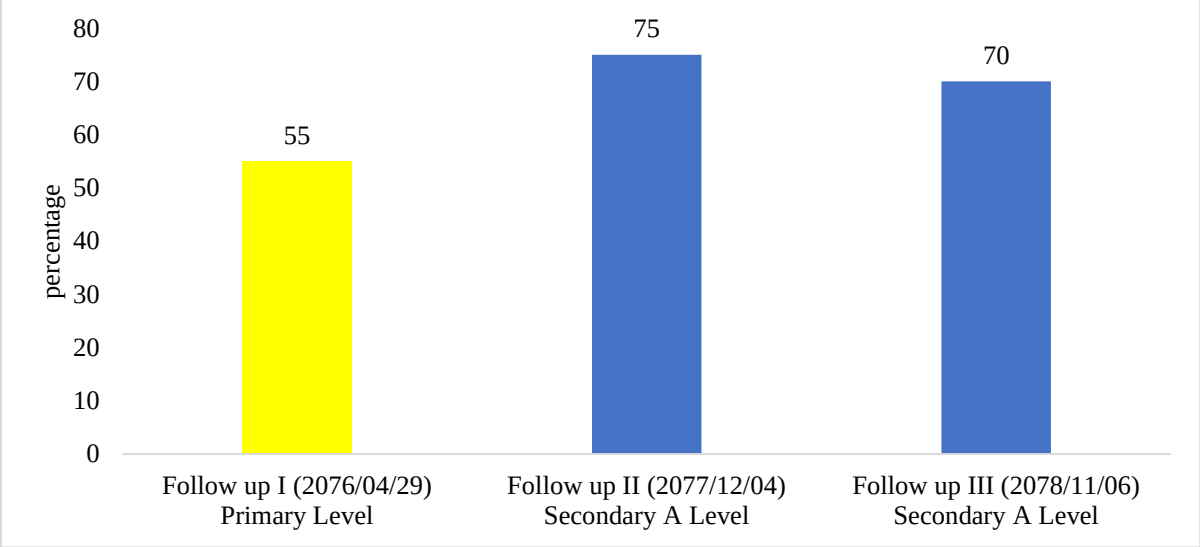
Action plan prepared by Rapti Provincial Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Organogram not displayed in the hospital premises	Preparation and posting of flex board of organogram showing hospitals departments/units with number of staff in hospital premises
2.	Token system not available	Discuss with HDC and iImplement token and/or queue system
3.	Timely inter-departmental meetings not conducted	Conduct inter-departmental meetings every two weeks with well-maintained minuting
4.	Work plan of the hospital waste management not implemented	Hospital waste management as per the work plan prepared by the hospital

Arghakhanchi Hospital

Arghakhanchi hospital is located at Sandhikharka Municipality Ward no. 1, Syale Bazaar of Arghakhanchi district. This hospital was established in 2045 B.S as 15 bedded hospital and later upgraded to 50 bedded hospital in 2077/78.

Figure 50: MSS Trend of Arghakhanchi Hospital



The above diagram shows the MSS score trend of Arghakhanchi hospital. MSS score of Arghakhanchi hospital decreased by 5% in this fiscal year (against the MSS of 2077). Inadequate infrastructure of hospital for service extension and frequent change in leadership and management positions hampered the progress of MSS in Arghakhanchi hospital.

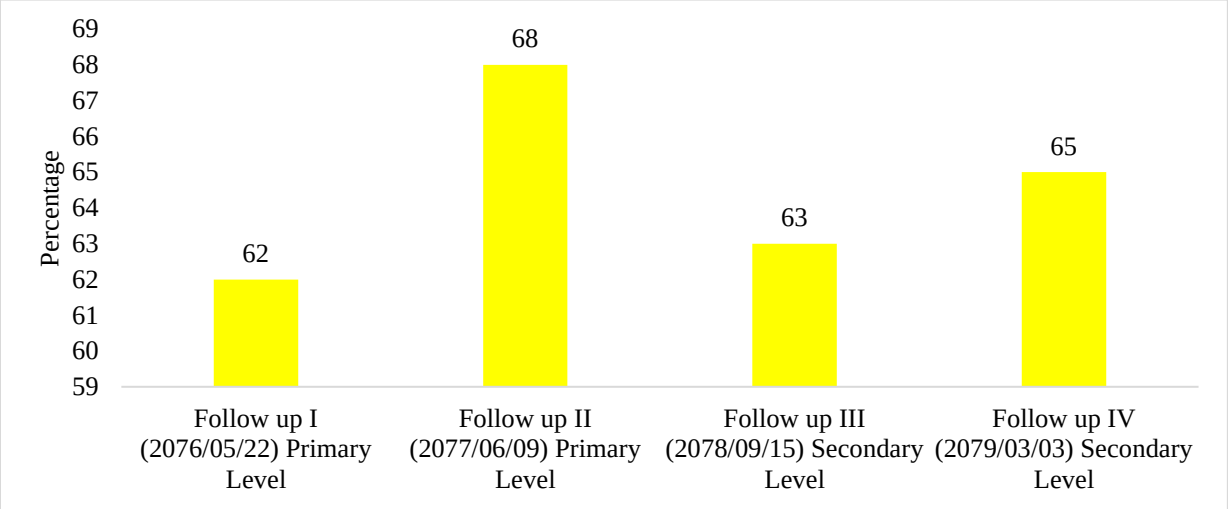
Action Plan prepared by Arghakhanchi Hospital

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Inadequate human resource as per sanctioned position	Appointment of staff in contract
2.	Poor quality of recorded data, specifically-OPD, IPD and surveillance data	Instalment of Electronic Health Record System (EHR) Analyse periodic progress and discuss in staff meeting
3.	Inadequate infrastructure: limited room for service delivery (e.g., operation) and space for visitors	Construction of building as per MoHP infrastructure standard
4.	Problem in insurance claim payments	Claiming insurance payment in appropriate way

Rolpa Hospital

Rolpa Hospital is in Rolpa Municipality Ward No. 2, Reugha of Rolpa district. It was established in 2059 B.S as a Health Center and later it was upgraded to District Hospital in 2061 B.S. The name of hospital was changed to Rolpa Hospital, Reugha in 2075. Rolpa Hospital approved 15 bedded, but in FY 2077/78 Rolpa Hospital is upgraded to 50 bedded by provincial government.

Figure 51: MSS Trend of Rolpa Hospital



The above diagram shows the MSS score of Rolpa hospital, which is in between the range of 62-68% over the three years period. In last fiscal year, two MSS assessments were conducted, and hospital succeeded to achieve 65% in last assessment.

Action plan prepared by Rolpa Hospital:

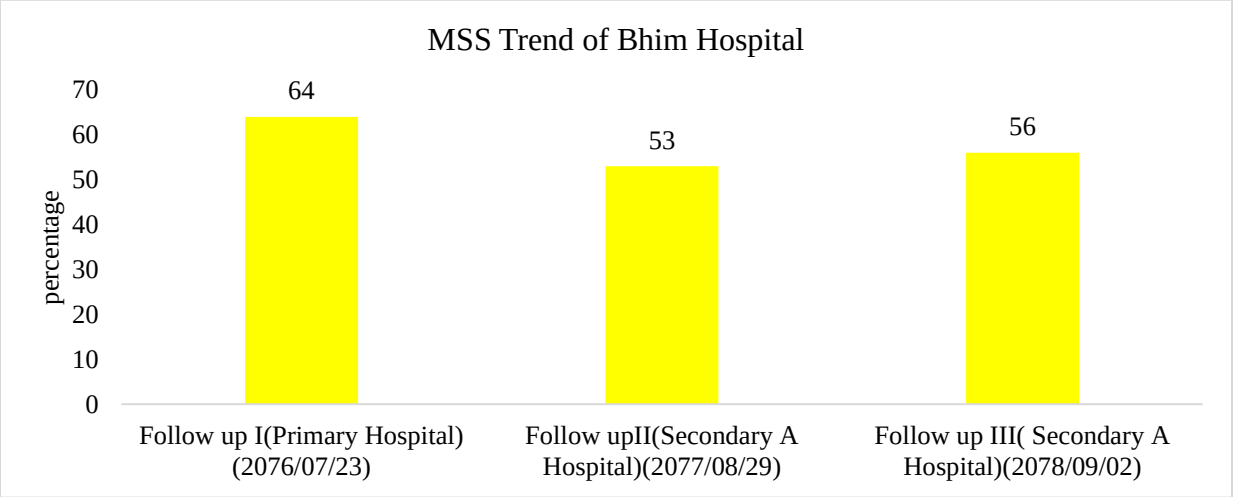
SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	No SNCU service	Construction of separate room/space for SNCU
2.	No proper waiting space in OPD area	Trust instalment for waiting area

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
3.	No work plan for waste management	Allocated separate dedicated space and prepare work plan for waste management
4.	No human resource available for repair and maintenance of hospital equipment	Recruitment of BMET for repair and maintenance of medical equipment

Bhim Hospital

Bhim Hospital is in Siddharthanagar Municipality Ward No. 13, Bank Road in the southern part of Rupandehi district of Lumbini Province. Bhim Hospital was established in 1990 B.S as 3 bedded hospital and upgraded to 15 bedded in 2035 and it was again upgraded to 25 bedded in 2041 B.S. And in FY 2077/78, it has been upgraded from 25 to 50 bedded hospital.

Figure 52: MSS Trend of Bhim Hospital



The MSS score of Bhim hospital shows slight increment against the Follow-up II and the recent score is 56 percent.

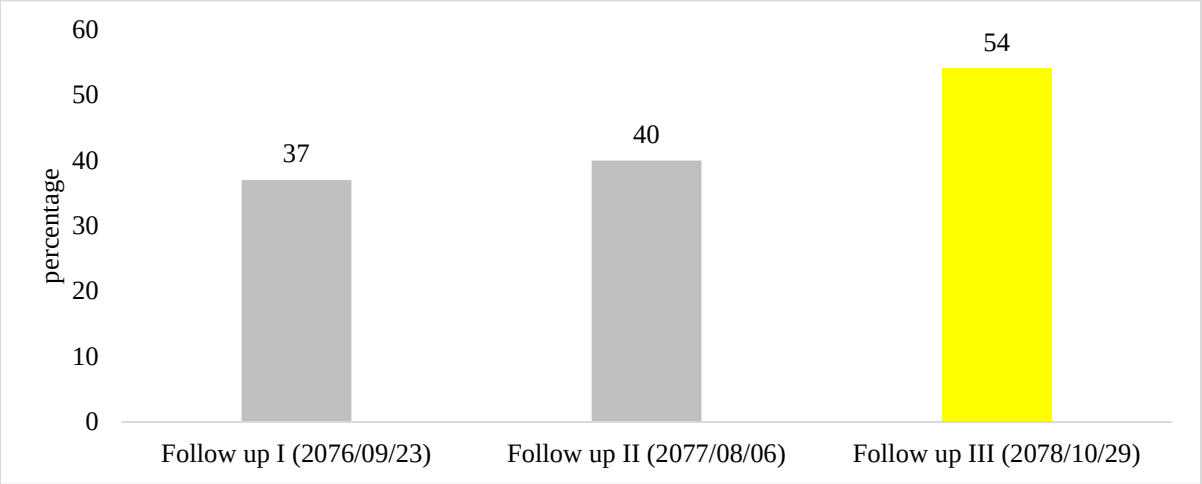
Action plan prepared by Bhim Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Inadequate human resource (based on sanctioned position)	Send staff demand form to MoH, PPSC Recruit required staff in contractual basis
2.	No adequate housekeeping space	Manage separate space for housekeeping
3.	Hospital has not its own Canteen facility	Manage own canteen facility with availability of sitting arrangements in hospital

Rampur Hospital

Rampur Hospital is in Rampur municipality, ward no. 5, Saniamrai of Palpa district. It was established in 2052 B.S as a health center and later upgraded as 15 bedded hospital in 2069 B.S. And in 2071/72, it has been upgraded to 50-bedded hospital.

Figure 53: MSS Trend of Rampur Hospital



The above diagram shows the MSS score trend of Rampur hospital. The Rampur hospital shows the increasing trend of MSS. In FY 2078/79, Rampur hospital has scored 54 percent. Hospital building is near to complete. Inadequate infrastructure, and lack of major equipment in OT, Lab hampers to deliver quality services.

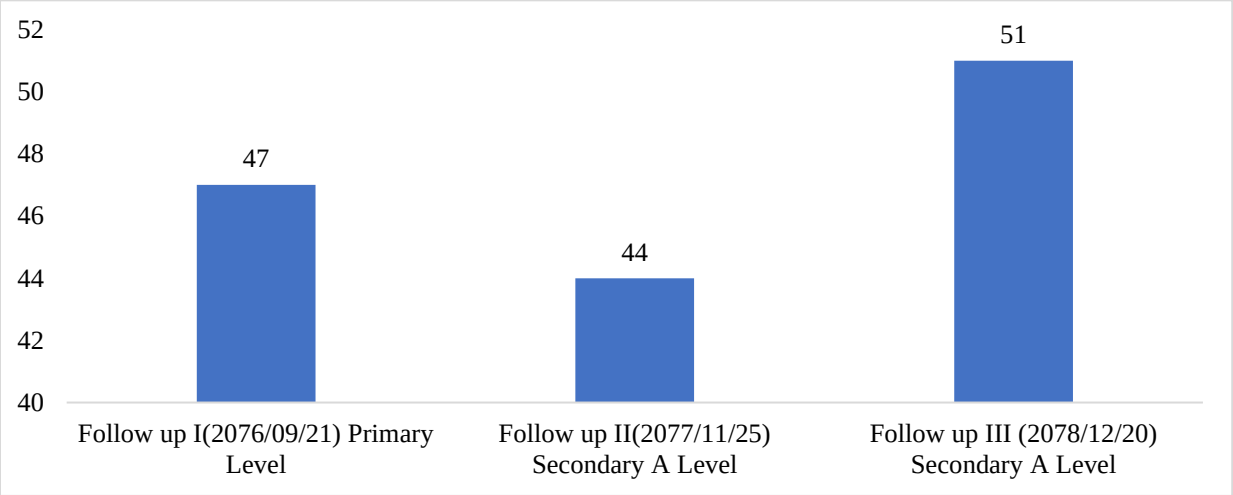
Action Plan prepared by Rampur Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	No dialysis service	Dialysis service will be starting in support of Rampur Municipality
2.	Inadequate space and equipment for lab	Coordination with province logistic and health directorate for laboratory management
3.	Inadequate space and equipment for OT	Coordination with province logistic and health directorate for OT management

Palpa Hospital

Palpa hospital is in Silikhantole, Ward no. 4 of Tansen Municipality, Palpa. It was first established as a Primary Health Care Center. Later it was upgraded in 15 bedded and renamed as Palpa Hospital in 2046 B.S. Additionally, it was upgraded by the provincial government in 50 bedded hospitals in FY 2077/78.

Figure 54: MSS Trend of Palpa Hospital



The above diagram shows the MSS score trend of Palpa hospital. The Palpa hospital shows the increasing trend of MSS. In FY 2078/79, Palpa hospital has scored 51 percent, which is an 7% increment compared with the previous score.

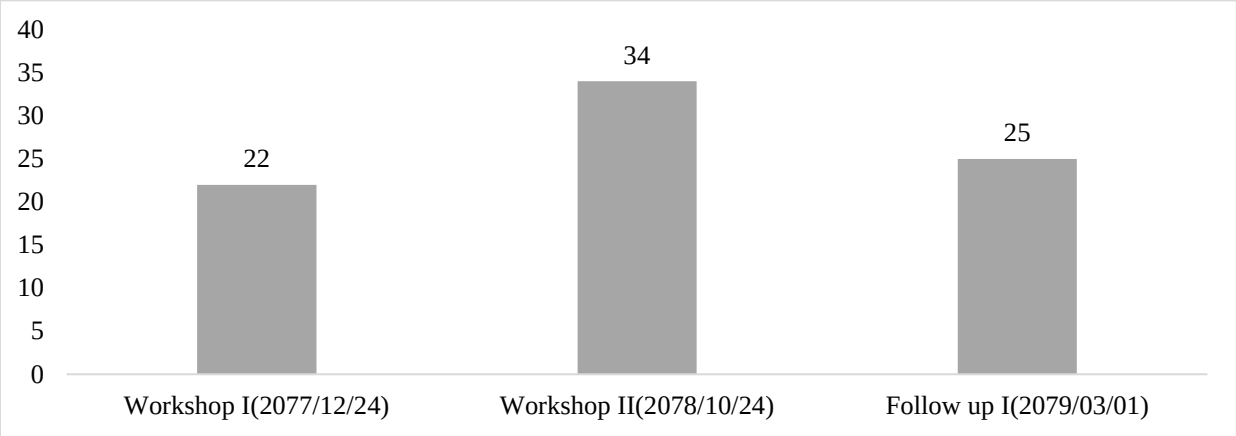
Action Plan prepared by Palpa Hospital:

SN	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	Inadequate human resource	Fulfilment of vacant posts
2.	No Hospital Pharmacy	Tender for medicine
3.	Difficulty to provide 24-hour laboratory and radiology service	HR management for 24 hr lab and radiology service
4.	Challenge to operate 24-hour pharmacy service	HR management for 24 hr pharmacy service

Rukum East Hospital

Rukum East Hospital is located on Sisne Rural Municipality Ward no. 5, Rukumkot. Rukum East is geographically remote as well as economically and educationally backward district with lack of basic health facility and health services. Rukum East Hospital has been established to provide health services to the people of Rukum East. Currently, the hospital building is under construction and has been running on the building of Rukumkot Health Post.

Figure 55: MSS Trend of Rukum East Hospital



The above diagram shows the MSS score trend of Rukum East hospital. In FY 2078/79, one workshop and one follow up has been done and lately MSS score has been decreased to 25 percent in comparison to previous 34 percent. The MSS score was decreased because of hospital has limited human resource as well as limited infrastructure. Other factor is hospital do not have management and leadership positions as per organogram.

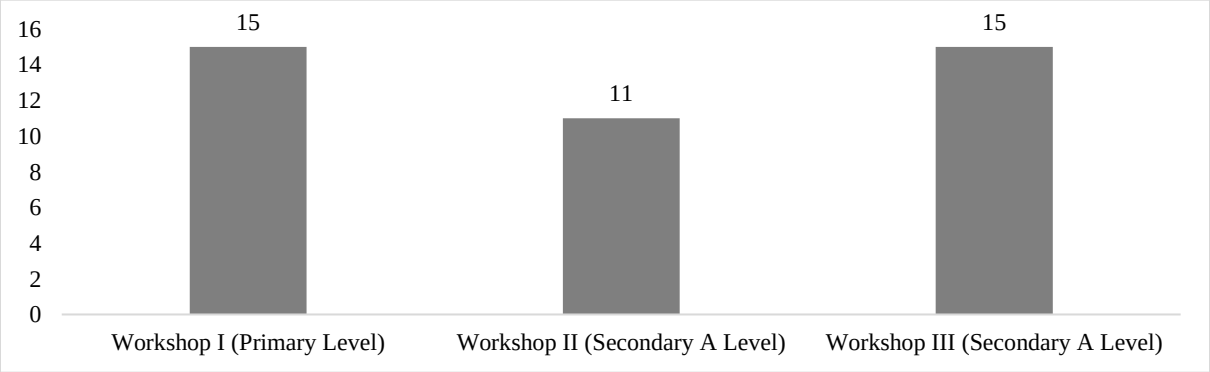
Action Plan prepared by Rukum East Hospital:

S.N.	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	CEONC service not available	Start CEONC service with support from province government and NSI
2.	No Social Service Unit	Start SSU with assigned staff
3.	Lack of adequate hospital waste management	Provide training and supervision to all staffs working on it. Install autoclave machine and allocate focal person.
4.	No Hospital Pharmacy	Start hospital's own pharmacy

Proposed Bhaluwang Hospital

Lalmatiya Health Post was proposed to upgrade in 50-bedded Secondary A level hospital in 2078 BS. Initially, Hospital was established as a Sub-Health post in 2052 B.S. and upgraded as Health Post in 2072 B.S. Hospital is located in Rapti Rural Municipality, Deukhuri Valley, Dang.

Figure 56: MSS Trend of Bhaluwang Hospital



Being the recently upgraded hospital, the MSS score seems poor compared with province-level hospitals. Multisector collaboration is needed to strengthen the services of Bhaluwang hospital.

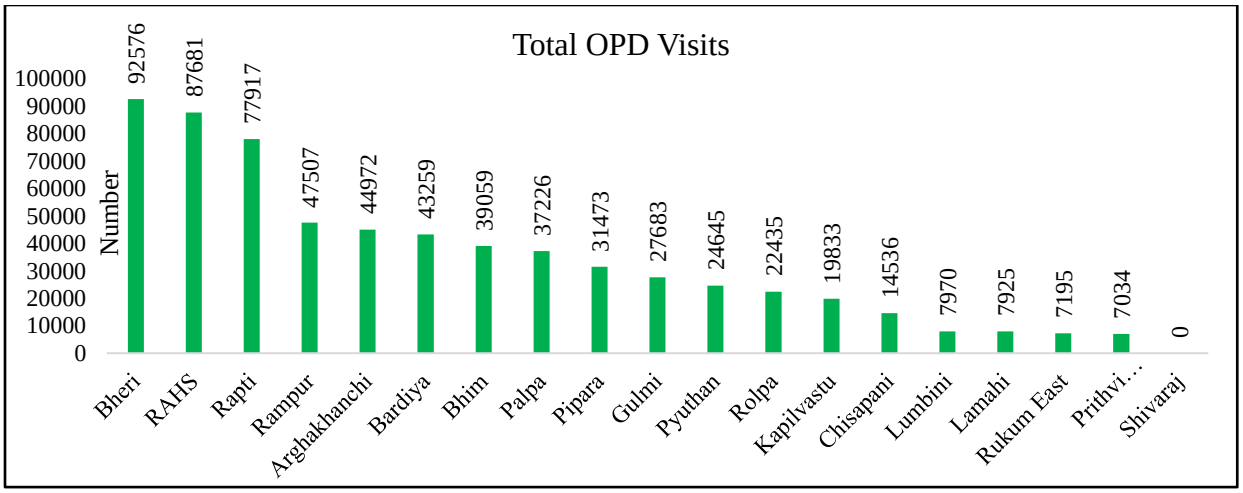
Action plan prepared by Bhaluwang Hospital:

S.N.	Prioritized gaps	Steps to be taken to fulfill the gaps
1.	24-hour emergency service not available	Initiate to provide emergency service in coordination with LLG and NSI
2.	Limited infrastructure for quality service delivery	Coordination with LLG and province to build prefab building and DPR for 50 bedded Hospital
3.	No hospital pharmacy	Manage seed money to operate own pharmacy

4.3 Outpatients and Inpatient Services

The figure below shows that there were 6,40,926 total OPD visits and 369,214 new OPD visit in FY 2078-79. The number of OPD visits is higher in Bheri hospital followed by RAHS, Rapti Provincial and Rampur Hospital, and Rukum East hospital with the fewest new OPD visits. However, Lumbini provincial hospital had relatively low case reporting, which indicate the necessity of routine data review.

Figure 57: New OPD visit of hospitals in FY 2078-79



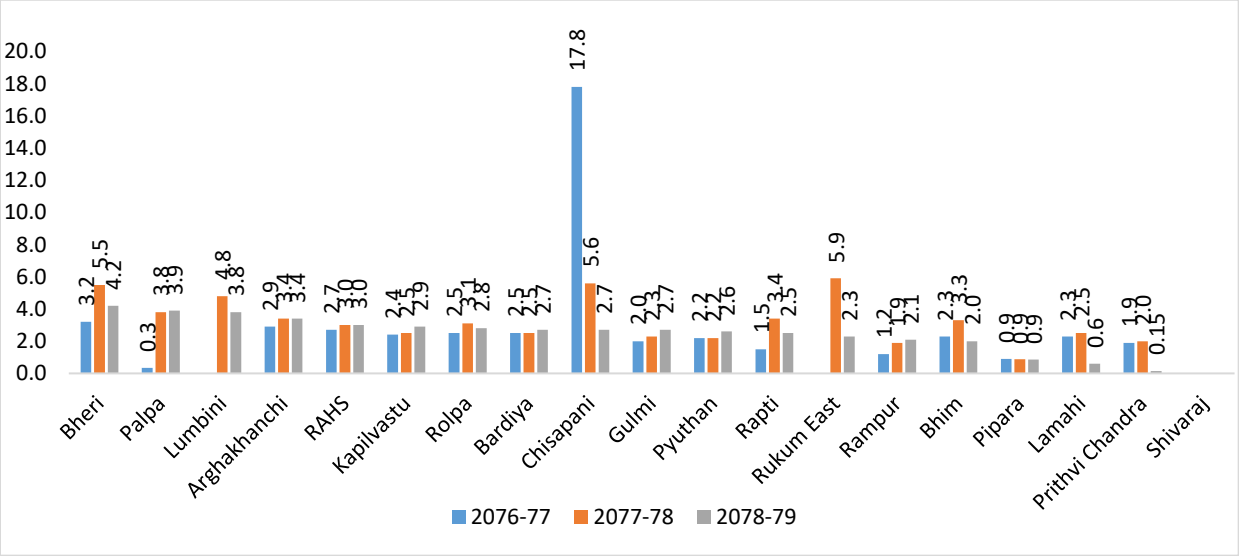
Below table shows the hospital wise bed occupancy rate in last three fiscal years. Bed occupancy rate in FY 2078/79 increased in Pyuthan, Gulmi and Rampur hospitals, while decreased in Bheri, Bhim, Kapilvastu, Rolpa, Prithvi Chandra and Chisapani hospital as compared with FY 2077/078. Although the case flow of Lumbini provincial hospital is high, the bed occupancy looks low due to the poor reporting. Similarly, Rukum East hospital has started its reporting from FY 2077-78. Overall, the bed occupancy rate of majority of hospitals looks poor owing to patient flow that signifies to improve the recording and reporting system of hospital.

Table 66: Bed Occupancy rate in last three years

Hospitals	2076-77	2077-78	2078-79
Bheri	70	125	89
Pyuthan	61	56	70
Lumbini	10	44	61
Kapilvastu	64	68	56
Bardiya	35	45	48
Gulmi	25	26	47
Rolpa	60	52	37
RAHS	24	33	37
Rapti	3	55	34
Rampur	15	20	28
Arghakhachi	50	27	26
Bhim	26	42	23
Chisapani	26	20	12
Palpa	3	10	10
Pipara	11	10	8
Rukum East	0	57	7
Prithvi Chandra	31	31	2
Shivaraj	0	0	0
Lamahi	1	9	0

The average length of stay in hospital is highest in Bheri hospital (4.2), followed by Palpa hospital (3.9), Lumbini provincial hospital (3.8) and Arghakhanchi hospital (3.4) and lowest in Prithvi Chandra hospital (0.15) and Lamahi hospital (0.6) in FY 2078-79. Significant decrement was seen in Chisapani hospital in previous and this year as compared to FY 2076-77. Data recording inaccuracy was also observed in Rukum East while there was no reporting from Shivaraj hospital.

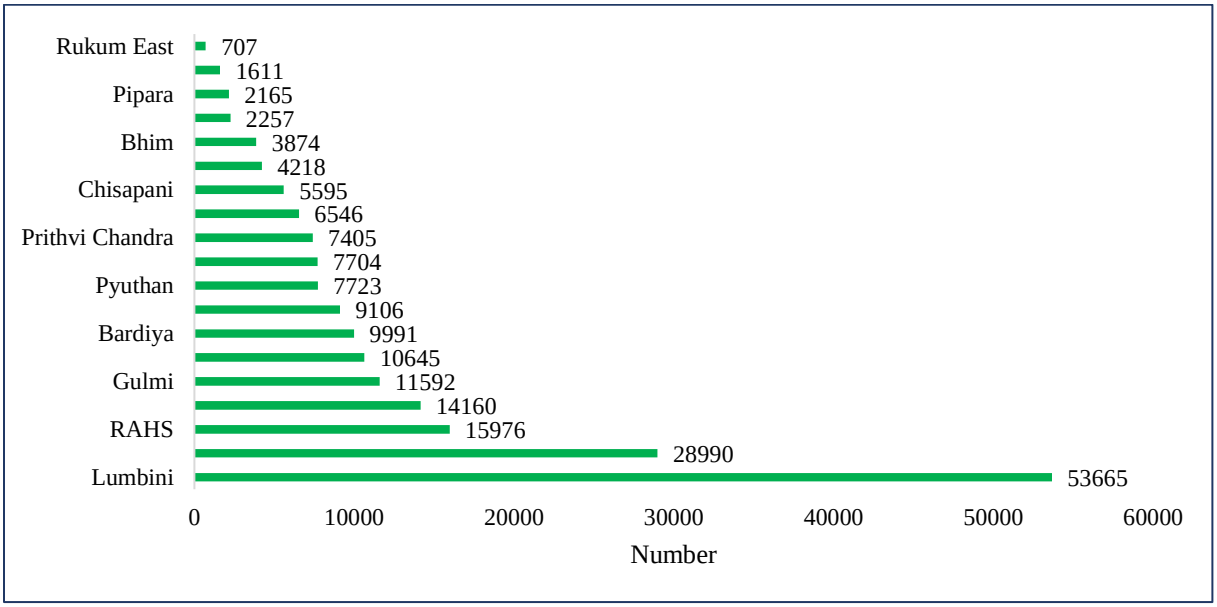
Figure 58: Average length of stay in hospitals in last three years



4.4 Emergency Services

The below figure shows the emergency services provided by hospital in Lumbini province in FY 2078-79. A total of 2,03,930 patients received emergency service in FY 2078-79 which was 1,57,864 in FY 2077-78. Majority of the emergency services is provided by Lumbini provincial hospital, which is followed by Bheri hospital, RAHS and Kapilvastu hospital. Rukum East hospital account the lowest number of emergency services provided which is followed by Palpa and Pipara hospital. Currently, all hospitals in Lumbini province are operating emergency services.

Figure 59: Emergency services provided by hospital in FY 2078-79



4.5 Radiology Services

The Table 67 shows an average number of CT scan performed per day by hospitals in last three fiscal years. Currently, CT-Scan service has been provided by four hospitals under Lumbini Province, namely, Lumbini provincial hospital, Rapti Academy of Heath Sciences, Bheri hospital and Rapti Provincial hospital. Lumbini provincial hospital (11) has performed highest CT scan per day in FY 2078-79 which is followed by Rapti Academy of Health Sciences (6). Rapti Provincial Hospital has also started CT scan service from 2076/77 and has reported 3 CT scan per day in FY 2078/79.

Table 67: Average number of CT scan per day

Hospitals	FY 2076/077	FY 2077/078	FY 2078/079
Lumbini Provincial Hospital	6	7	11
Rapti Academy of Health Sciences	0	2	6
Bheri Hospital	2	4	5
Rapti Provincial Hospital	0	2	3

The Table 68 depicts an average number of ultrasounds performed by hospitals in last three years. The highest average number of ultrasounds performed per day by hospital is reported by Lumbini (131) and lowest by Shivaraj, Rukum East and Palpa (only 2 in each) in FY 2078-79 while no services is provided from Lamahi hospital and Pipara hospital. Besides, the increment in an average number of ultrasounds per day was observed from Lumbini hospital and Bheri which is followed by RAHS, Rapti Provincial hospital, Bardiya hospital and almost similar in Rolpa hospital and Prithvi Chandra hospital in FY 2078-79 in comparison to last FY 2077-78.

Table 68: Average number of Ultrasound per day

Hospitals	2076-77	2077-78	2078-79
Lumbini	77	82	131
Bheri	26	22	44
RAHS	23	27	37
Rapti	22	26	32
Bardiya	37	25	29
Kapilvastu	20	18	23
Bhim	17	12	21
Gulmi	14	16	20
Arghakhanchi	13	13	16
Rolpa	14	13	15
Prithvi Chandra	9	12	14
Pyuthan	15	11	9
Rampur	0	3	6
Chisapani	2	1	4
Palpa	1	1	2
Rukum East	0	2	2
Shivaraj	8	3	2

The Table 68 shows the average number of X-ray per day performed by hospitals in last three fiscal years. In FY 2078-79, Lumbini provincial hospital has performed highest average number of x-rays per day, which is followed by Bheri hospital, RAHS and Gulmi hospital and lowest by Pipara, Shivaraj and Rukum East Hospital. All hospitals show an increment in an average number of x-rays per day in this FY 2078-79 in comparison to FY 2077-78.

Table 69: Average number of X-ray per day

Hospitals	2076-77	2077-78	2078-79
Lumbini	92	106	182
Bheri	62	67	86
RAHS	44	34	65
Gulmi	18	24	41
Pyuthan	26	24	36

Hospitals	2076-77	2077-78	2078-79
Rapti	28	30	35
Bardiya	20	26	28
Kapilvastu	14	16	23
Palpa	15	17	23
Bhim	10	11	22
Prithvi Chandra	10	16	19
Rolpa	12	15	18
Arghakhanchi	11	13	15
Rampur	8	11	14
Lamahi	1	3	7
Chisapani	4	6	3
Rukum East	1	0	2
Shivaraj	2	2	2
Pipara	0	0	2

The Table 69 shows the average number of laboratory test performed per day in hospitals of Lumbini province in last three years. Majority of the test per day is performed in Lumbini provincial hospital followed by Bheri and RAHS and that of the lowest in Shivaraj hospital in FY 2078-79. As like other service utilization indicator, Lumbini provincial hospital and Chisapani hospital has also started reporting of lab services from fiscal year 2078/079.

Table 70: Average number of laboratory test per day

Hospitals	2076-77	2077-78	2078-79
Lumbini	0	810	2851
Bheri	684	69	1420
RAHS	547	619	954
Bhim	170	326	570
Gulmi	179	350	548
Bardiya	303	411	522
Pyuthan	221	272	496
Rapti	573	496	433
Kapilvastu	245	276	420
Prithvi Chandra	145	167	231
Arghakhanchi	117	147	219
Rampur	65	91	180
Rolpa	120	166	178
Palpa	107	68	168
Lamahi	38	32	62
Chisapani	0	10	55
Pipara	36	24	53
Rukum East	4	25	42
Shivaraj	33	20	17

4.6 Major and Minor Surgeries Conducted by Hospitals

Table 71 shows that there are altogether 29,908 surgeries conducted by hospitals in Lumbini province in FY 2078-79 of which 52% is major surgeries and 48% is minor surgeries. Of all minor surgeries, majority is from outpatients undergoing minor surgeries (60%) which is followed by emergency (27%) and inpatients (13%). No surgeries were performed by Pipara hospital and Shivaraj hospital as there was also no reporting done by these hospitals. The high number of major surgeries is reported from Lumbini provincial hospital which is followed by Bheri hospital, RAHS and Bhim hospital and minor surgeries is reported from Rapti provincial hospital followed by Lumbini provincial hospital and Kapilvastu hospital. There is also a need to strengthen recording of minor cases in hospitals wherein there is high patient flow in emergency, outpatients, and inpatients.

Table 71: Major and Minor surgeries conducted by hospitals

Hospitals	Major surgeries	Minor surgeries	Emergency patients: Minor Surgeries	Inpatients: minor surgeries	Outpatients: minor surgeries
Lumbini	7061	1842	13	62	1767
Bheri	2473	656	14	109	533
RAHS	2030	844	0	844	0
Bhim	1125	1225	764	0	461
Rapti	736	3145	136	76	2933
Kapilvastu	684	1479	1302	46	131
Pyuthan	430	1088	0	435	653
Bardiya	352	323	14	90	219
Prithvi Chandra	340	164	103	22	39
Gulmi	228	1284	503	201	580
Rolpa	54	427	287	0	140
Arghakhanchi	23	437	310	22	105
Rampur	14	93	17	7	69
Lamahi	7	75	59	0	16
Chisapani	0	157	145	0	12
Palpa	0	512	186	0	326
RukumEast	0	600	0	13	587
Total	**15557**	**14351**	**3853**	**1927**	**8571**

4.7 Maternity Service

Table below shows the data regarding maternity service provided by hospital of FY 2078-79. The highest number of clients has been served by Lumbini provincial hospital. CEONC service has not been started from Palpa and Rukum East hospital. A significant gap in number of women attending 4th ANC visits compared to 1st ANC visits exists which highlights the importance of proper counselling and addressing the barriers during antenatal period.

Table 72: Maternity service provided by hospital

Hospitals	Total ANC 1st Visit	Total ANC 4th Visit	Total Institutional Deliveries	Total C/S Delivery
Lumbini	2833	4279	12930	4366
Rapti	1613	997	2873	494
Kapilvastu	499	529	2241	572
Rampur	345	303	276	16
Bheri	341	205	5514	1351
Palpa	341	130	20	0
Bardiya	273	211	1445	270
Arghakhanchi	266	195	607	28
Prithvi Chandra	259	273	1550	294
Gulmi	235	181	768	226
Rolpa	225	181	347	55
Pyuthan	208	169	1707	282
Bhim	202	318	3265	1126
Rukum East	87	40	92	0
RAHS	0	0	1587	552

4.8 Postmortem Conducted in Hospital

As of the below table, the total postmortem conducted in hospital was 3060 in FY 2078-79. Irregular reporting was observed in Rapti provincial hospital and Arghakhanchi hospital as report was missed in FY 2076-77 while no postmortem cases was observed in Chisapani, Shivaraj and Pipara hospital. Regular follow up of postmortem conducted in hospitals is required.

Table 73: Post-mortem conducted in hospital

Hospitals	2076-77	2077-78	2078-79	Hospitals	2076-77	2077-78	2078-79
Bheri	543	527	511	Palpa	128	134	121
Lumbini	0	482	487	Arghakhanchi	0	114	92
Bhim	313	344	341	Lamahi	54	105	89
Bardiya	178	213	231	Rolpa	55	47	81
RAHS	179	257	222	Rampur	9	32	42
Kapilvastu	187	163	203	Rukum East	0	29	32
Rapti	0	149	190	Chisapani	0	0	0
Pyuthan	99	148	158	Pipara	0	0	0
Gulmi	109	144	136	Shivaraj	0	0	0
Prithvi Chandra	130	187	126				

Chapter 5: Social Security and Other Public Health Programs

5.1 One-Stop Crisis Management Center

Background:

Gender Based Violence (GBV) is a complex issue, requiring a multi-layered and multi-sectoral approach. Thus, it is important to involve and engage various sectors such as legal, safety and security, communication, and health. The health sector (OCMC) has a crucial role in helping GBV survivors. A health service provider is often the first point of professional contact for GBV survivors. However, health service providers often tend to miss the opportunity to identify GBV survivors due to a lack of awareness. Thus, proper training is necessary for health service providers to recognize, treat, and coordinate with other sectors to address the problems faced by GBV survivors.

According to National Demographic Health Survey (NDHS) 2016, 22 % of women of reproductive age have experienced physical violence since age 15, and 7% have ever experienced sexual violence. Moreover, 6% of them have experienced violence during their pregnancy. The most common form of reported violence among married women includes physical violence (23%), followed by emotional violence (12%), and sexual violence (7%).

The Ministry of Health and Population has created 92 one-stop crisis management centers (OCMCs) in 77 districts since 2011. These were established in response to Clause 3 of the 'National Action Plan 2010 against Gender Based Violence', which calls for the establishment of hospital based OCMCs to provide integrated care to survivors of GBV.

'Hospital-based OCMC Operational Manual' (MoHP 2016) states that OCMCs shall provide the following seven kinds of services through multi-faceted coordination with other agencies:

- Health services - Immediate treatment of physical and mental health needs of GBV survivors with OCMCs having to stock the equipment and the free health service medicines to provide these services.
- Psycho-social counseling to survivors and perpetrators.
- Security - by working with the police and district administration offices to provide security to survivors in hospitals, safe houses, and in their communities.
- Safe homes services- for temporary stay of women and child survivors.
- Legal advice, counseling, and support to survivors through district attorney, paralegal and legal counselors.
- Rehabilitation-by providing further counselling, education, vocational skills training, and another livelihood support
- Information, education and empowerment- through provision of information concerning the services provided by OCMC, measures to protect against GBV, legal aid and other support services for GBV survivors, and information on safety measures.

OCMCs are designed to provide GBV survivors with a comprehensive range of services, including health care, psychosocial counseling, access to safe homes, legal protection, personal security, and rehabilitation support through education, vocational skills training, and other livelihood support, using a multisectoral and locally coordinated approach. Gender-based violence (GBV) affects many women and children in Nepal causing physical, sexual, and psychological harm. In Lumbini province, there are 15 hospital-based One-Stop Crisis Management Centers in operation. With the support of MoHP federal and province, web-based platform DHIS2 was introduced in the province for recording and reporting purpose of OCMCs services. The OCMC focal persons of all 15 hospitals were provided training in FY 2078-79.

Major Achievements

Table 74: Service utilization status of OCMCs

Name of Hospital run OCMCs	FY 2076-77	FY 2077-78	FY 2078-79
Kapilbastu Hospital	697	1063	89
Lumbini Provincial Hospital	59	275	490
Bhim Hospital	0	201	231
Arghakhanchi Hospital	78	62	44
Rukum East Hospital	0	22	89
Rolpa Hospital	39	70	68
Pyuthan Hospital	82	463	481
Gulmi Hospital	36	51	50
Rapti Provincial Hospital	0	23	155
Bardiya Hospital	106	115	134
Prithivi Chandra Hospital	300	329	342
Bheri Hospital	0	0	180
Palpa Hospital	20	28	38
Rapti Academy of Health sciences	0	0	86
Total number of survivors	**1417**	**2702**	**2477**

Table shows the utilization of OCMC services by district in last three fiscal years. Overall, 2,477 persons were served by OCMCs across the province, a trend that has been expanding for the past three years. In FY 2078-79, the OCMC at Lumbini Provincial Hospital offered the most services, while Palpa Hospital provided the least. Until FY 2078-79, all 14 hospitals has continued reporting including the federal level hospitals: Bheri Hospital and Rapti Academy of Health Services. As Rampur hospital just established OCMC in the end of FY 2078/79, service delivery statistics will be available from new fiscal year.

GBV cases by type of violence

Of the total 2,477 cases, the most commonly reported cases were physical assault (781), early child marriage (458), emotional/psychological abuse/mental torture (369), rape (350), sexual abuse (330) and others (69). By district, Lumbini Province Hospital reported the highest number of cases and Palpa the least (detail in the Table below).

Table 75: Total number of survivors by type of violence

District	Rape	Sexual Abuse	Physical Assault	Force Marriage/Child marriage	Denial of Resources and Opportunities/Services	Emotional/ Psychological Abuse/Mental Torture	Other
Kapilbastu Hospital	44	4	15	15	5	6	0
Lumbini Provincial Hospital	107	34	103	23	3	220	0
Bhim Hospital	58	23	64	71	0	8	7
Arghakhanchi Hospital	6	7	26	4	0	1	0
Rukum Hospital	8	18	28	19	2	12	2
Rolpa Hospital	15	8	22	14	4	5	0
Pyuthan Hospital	5	24	32	231	102	47	40
Gulmi Hospital	17	11	22	0	0	0	0
Rapti Provincial Hospital	35	13	18	77	2	9	1
Bardiya Hospital	18	55	50	1	1	9	0
Prithivi Chandra Hospital	16	4	284	0	1	18	19
Bheri Hospital	5	106	68	0	0	1	0
Palpa Hospital	5	20	10	3	0	0	0
Rapti Academy of Health Sciences	11	3	39	0	6	27	0
Total No. of survivors	**350**	**330**	**781**	**458**	**126**	**363**	**69**

GBV cases disaggregated by age and sex:

A vast majority of GBV survivors were female (2339) and more than two-third (1558) represent from the age group 19-59 years. Of the total cases, 94 and 39 cases were reported from elderly population (>60 Years) and person with disabilities, respectively. However, Rampur Hospital has not provided OCMC services till the end of FY 2078/079 (detail in the Table below).

Table 76: Total cases disaggregated by age, sex and presence of disability

District	Total cases	Disaggregation by age, sex & Presence of disability(N)								
		Below 9 Yrs.	10-14 Yrs.	15-18 Yrs.	19-59 Yrs	Above 60 Yrs.	Female	Male	Others	Persons with Disabilities
Kapilvastu Hospital	89	0	20	31	38	0	87	2	0	2
Lumbini Provincial Hospital	490	0	70	79	331	10	427	63	0	14
Bhim Hospital	231	7	20	68	134	2	222	9	0	0
Arghakhanchi Hospital	44	1	4	9	27	3	38	6	0	0
Rukum-East Hospital	89	0	7	15	62	5	79	10	0	3
Rolpa Hospital	68	1	9	24	34	1	68	0	0	2
Pyuthan Hospital	481	0	11	142	293	35	466	15	0	2
Gulmi Hospital	50	3	4	8	33	2	50	0	0	0
Rapti Provincial Hospital	155	0	19	69	63	4	154	1	0	5
Bardiya Hospital	134	0	19	27	83	5	120	14	0	5
Prithvi Chandra Hospital	342	0	16	64	239	23	325	17	0	2
Bheri Hospital	180	2	21	31	124	2	180	0	0	2
Palpa Hospital	38	0	8	11	17	2	38	0	0	2
Rapti Academy of health science	86	0	0	5	81	0	86	0	0	0
Total No. of Survivors	**2477**	**14**	**228**	**583**	**1558**	**94**	**2340**	**137**	**0**	**39**

5.2 Social Service Unit (SSU)

Senior citizens, poor and helpless, and people with disabilities have had difficulties in getting health care for many years due to the lack of medicines, inability to pay for services through out-of-pocket, and other factors. In the spirit of the Constitution and in recognition of the State's responsibility to provide health care services, the MoHP decided to operate a pilot program in eight hospitals for two years (fiscal years 2069/70-2070/71), to test the concept and collect experiences and learnings. Following federalism, it is the province's responsibility of province government to maintain and expand services in the remaining hospitals. In the Lumbini Province, 12 hospitals currently run social service unit. With the support of federal MoHP and province, web-based platform DHIS2 was introduced in the province to record and report SSU services including OCMC and geriatric services. All hospital staff SSU focal person of all the hospitals were trained in FY 2078-79.

Service utilization status of SSU

Table 77: Service Statistics of SSU in Lumbini Province

Name of Hospital (SSU)	FY 2076-77	FY 2077-78	FY 2078-79
Lumbini Provincial Hospital	5993	7445	10257
Gulmi Hospital	2038	1389	974
Bardiya Hospital	1222	1009	722
Pyuthan Hospital	150	969	1869
Rolpa Hospital	2294	856	2369
Kapilbastu Hospital	308	823	1028
Prithivi Chandra Hospital	314	753	1451
Arghakhanchi Hospital	223	605	654
Rapti Provincial	-	393	4349
Rampur Hospital	44	89	40
Palpa Hospital	8	76	274
Bhim Hospital	-	64	722
Total	**12594**	**14471**	**24709**

As shown in the table above, SSU provided free health care services to 24,709 ultra-poor, poor, senior citizens, disabled, victims of GBV, FCHVs, and others in fiscal year 2078-79. It is distinctly higher than in the preceding fiscal year in most hospitals. Lumbini Provincial Hospital has offered free services to the highest number of beneficiaries (10,257) from the SSU, whereas Bhim Hospital catered the least (40).

SSU services utilized by ultra-poor/poor citizens

Table 78: Utilization of SSU services by the ultra-poor or poor citizens

Hospital/SSU	FY 2076-77	FY2077-78	FY2078-79
Lumbini Provincial Hospital	1279	2475	3474
Bardiya Hospital	621	534	128
Kapilbastu Hospital	188	451	758
Prithivi Chandra Hospital	140	422	727
Arghakhanchi Hospital	128	285	271
Gulmi Hospital	146	280	280
Pyuthan Hospital	10	148	119
Rampur Hospital	20	79	36
Palpa Hospital	5	54	138
Rapti Provincial Hospital	0	49	673
Rolpa Hospital	9	39	105
Bhim Hospital	0	6	128
Total	**2546**	**4822**	**6837**

Table above demonstrates that, in comparison to FY 2077-78, the use of SSU services by poor or ultra-poor citizens has increased in almost all hospitals except Bardiya, Arghakhanchi, Pyuthan, Rampur and Gulmi Hospital in FY 2078-79. The SSU provided free services to 4822 ultra-poor and poor people in fiscal year 2077-78, which increased to 6837 in fiscal year 2078-79.

SSU services utilized by helpless people

Table 79: Utilization of SSU services by the helpless people

Hospital/SSU	FY 2076-77	FY 2077-78	FY 2078-79
Lumbini Provincial Hospital	100	273	298
Kapilbastu Hospital	55	74	22
Prithivi Chandra Hospital	5	38	37
Bardiya Hospital	66	37	38
Pyuthan Hospital	0	14	7
Gulmi Hospital	5	12	14
Arghakhanchi Hospital	3	11	46
Palpa Hospital	1	5	14
Rolpa Hospital	0	3	1
Rapti Provincial Hospital	0	1	35
Rampur Hospital	2	0	0
Bhim Hospital	0	0	38
Total	**237**	**468**	**550**

Table shows the trends in the use of SSU by the helpless. In FY 2078-79, the number of helpless persons using services increased in all majority hospitals when compared to FY 2077-78. SSU provided free services to 550 helpless people from 11 hospitals except Rampur.

SSU services utilized by persons with disability

Table 80: Utilization of SSU services by persons with disability

Hospital/SSU	FY 2076-77	FY 2077-78	FY 2078-79
Lumbini Provincial Hospital	342	204	175
Bardiya Hospital	25	97	14
Kapilbastu Hospital	9	80	13
Pyuthan Hospital	2	47	53
Arghakhanchi Hospital	14	34	52
Prithvi Chandra Hospital	15	25	35
Gulmi Hospital	28	22	12
Rolpa Hospital	37	18	75
Bhim Hospital	0	18	14
Rapti Provincial Hospital	0	13	148

Hospital/SSU	FY 2076-77	FY 2077-78	FY 2078-79
Palpa Hospital	0	2	13
Rampur Hospital	2	2	3
Total	**474**	**562**	**607**

Table above shows that health service utilization by persons with disabilities via SSU increased in almost 50% of the hospital in FY 2078-79 compared to FY 2077-78. However, the highest number of people with disabilities utilizing health care services via SSU was reported at Lumbini Provincial Hospital, while the lowest number was reported in Rampur hospitals.

SSU services utilized by senior citizens

Table 81: Utilization of SSU services by senior citizens

Hospital/SSU	FY 2076-77	FY 2077-78	FY 2078-79
Lumbini Provincial Hospital	4131	4086	6175
Gulmi Hospital	1805	1054	640
Rolpa Hospital	2217	778	2125
Pyuthan Hospital	38	733	1663
Rapti Provincial Hospital	0	323	3437
Prithvi Chandra Hospital	120	255	624
Arghakhanchi Hospital	68	242	214
Bardiya Hospital	270	117	267
Kapilvastu Hospital	50	61	50
Bhim Hospital	0	22	267
Palpa Hospital	1	9	77
Rampur Hospital	0	0	1
Total	**8700**	**7680**	**15540**

Table demonstrates that senior citizen's use of SSU services has increased in Lumbini Provincial Hospital, Rolpa Hospital, Pyuthan Hospital, Rapti Hospital, Prithvi Chandra Hospital, Bardiya Hospital, Bhim Hospital and Palpa Hospital between FY 2077-78 and FY 2078-79. In the fiscal year 2078-79, 15,540 elderly persons benefited from the social service units of 12 hospitals in Lumbini province. Lumbini Provincial Hospital served the greatest number of senior citizens (6,175) followed by Rapti Provincial Hospital (3,437) through its SSU unit.

SSU services utilized by senior citizens by survivors of GBV, FCHVs and Others

Table 82: Utilization of SSU services by senior citizens by survivors of GBV, FCHVs and Others

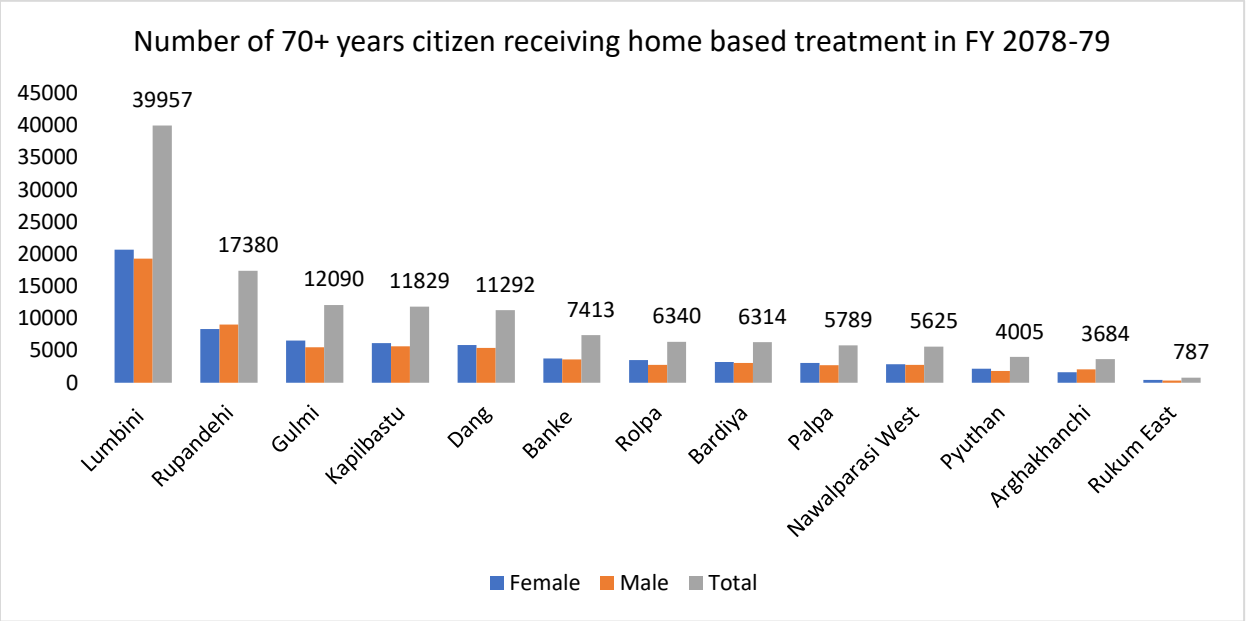
Name of Hospital	Gender Based Violence			FCHVs			Others		
	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79	FY 2076-77	FY 2077-78	FY 2078-79
Arghakhanchi Hospital	5	2	0	2	31	38	3	0	43
Bhim Hospital	0	18	269	0	0	5	0	0	1
Bardiya Hospital	128	133	0	15	7	5	97	84	273
Kapilbastu Hospital	0	97	70	6	60	7	0	0	108
Lumbini Provincial Hospital	21	7	0	60	52	20	60	82	114
Palpa Hospital	0	0	1	0	0	0	1	0	3
Prithivi Chandra Hospital	0	0	0	7	13	17	0	7	4
Pyuthan Hospital	1	6	9	0	18	8	1	2	10
Rampur Hospital	0	0	0	5	0	0	10	0	0
Rolpa Hospital	7	11	18	24	11	38	0	0	7
Gulmi Hospital	0	0	46	52	15	9	2	6	19
Rapti Provincial	0	3	10	0	3	34	0	1	12
Total	**162**	**277**	**423**	**171**	**210**	**181**	**174**	**182**	**594**

In Lumbini province, 423 survivors of gender-based violence used the SSU service in fiscal year 2078-79, which was higher than the previous fiscal year. In fiscal year 2078-79, 181 FCHVs and 594 in other categories received free SSU service.

5.3 Home Based Treatment to Citizens above 70 Years of Age

The provincial government of Lumbini has initiated its flagship program of providing home-based treatment for older citizens aged 84 and above from FY 2076-77. The age limit has been revised since FY 2077-78 for older citizens which reveals aged 70 years and above in the current context. In Lumbini province, a total of 39,957 citizen used the services in FY 2078-79. Rupandehi has the highest utilization (17,380), followed by Gulmi (12,090) while Rukum East account the lowest (787).

Figure 60: Number of 70+ years citizens receiving home-based treatment



5.4 Medical Treatment of Deprived Citizens (Bipanna Nagarik Kosh)

Bipanna Nagarik Kosh was started after the Janandolan of 2062 BS. With the country slowly recovering from the decade long armed conflict, this Kosh was established to provide some financial relief to people from difficult and costly diseases. Cardiovascular diseases, Renal failure, Stroke, Cancer, Head and Spinal injury, Sickle Cell Anaemia, Parkinson's disease and Alzheimer's disease are covered under this program. Services under this program are available at various health facilities and hospitals recognized and enlisted by the Ministry of Health. Any citizen who cannot bear the cost of medical treatment for diseases is eligible for the services under this program.

Table 83: Province run medical treatment for deprived citizen in FY 2078-79

Districts	Heart	Cancer	Head Injury	Spinal Injury	Sickel Cell Anemia	Parkinson	Alzeimer	Total
Nawalparasi	1	1	11	0	0	0	0	13
Rolpa	6	1	6	1	0	0	0	14
Pyuthan	3	1	18	0	0	0	0	22
Rukum East	3	6	15	0	1	0	0	25
Gulmi	2	9	19	0	0	0	0	30
Dang	6	9	15	0	1	5	0	36
Palpa	2	9	30	0	0	0	0	41
Kapilbastu	8	32	23	0	0	0	0	63
Bardiya	7	10	85	0	0	0	0	102
Arghakhanchi	43	63	18	0	0	0	0	124
Banke	14	20	79	1	1	0	0	115
Rupandehi	219	293	387	2	5	7	1	914
Total	**314**	**454**	**706**	**4**	**8**	**12**	**1**	**1499**

Under the category of medical treatment provided for deprived citizen in FY 2078-79, total of 1499 benefited with the financial relief. Majority of them belonged to having disease related to head injury (706) followed by cancer and heart disease. Majority of them were from Rupandehi (914) and least from Nawalparasi (13).

Issues, Constraints and Recommendations:

OCMC		
Issues and Constraints	**Recommendations**	**Responsibilities**
No medico legal training in Arghakhanchi hospital	Provide medico-legal training to OCMC staff in coordination with training centre	PHTC
Lack of human resource and inadequate budget in Bardiya hospital	Provision of adequate resource for OCMC management	HD
Inadequate human resource, not spacious room for service delivery, lack of training in Rapti Provincial Hospital	Human resource allocation, room allocation for service delivery, training arrangement	MoH/HD
Lack of physical infrastructures and no implementation of psychosocial counseling services in Gulmi Hospital	Allocate budget for physical infrastructure and initiation of psychosocial counseling	MoH/HD
Lack of human resource for 24 hours services in Prithvi Chandra Hospital, Nawalparasi district	Human resource management for 24 hours service operation	MoH/HD
Lack of physical infrastructures in Palpa Hospital and Pyuthan hospital	Allocation of budget for physical infrastructures	MoH/HD
Staff are not trained for GBV and no separate room for patients' checkup in Rukum East Hospital	Training requirements for GBV, specific room arrangement	MoH/HD/PHTC

SSU		
Issues and Constraints	**Recommendations**	**Responsibilities**
Insufficient budget in Arghakhanchi Hospital, Gulmi Hospital, Bardiya Hospital, Bhim Hospital, Prithvi Chandra Hospital to operate SSU effectively	Require adequate budget allocation in SSU program	MoH/HD
Inadequate human resource in Bardiya hospital and Prithvi Chandra Hospital, Nawalparasi district, Rapti Provincial Hospital	Deployment of Human Resources	MoH/HD
No spacious room for service delivery and lack of training in Rapti Provincial Hospital	Arrangement of spacious room and training provision	PHTC/Hospital Development Committee
Lack of physical infrastructures in Palpa Hospital, Pyuthan Hospital and Rukum East Hospital	Arrangement of physical infrastructures	MoH/HD

Chapter 6: Supporting Programs

6.1 Health Service Governance and Management

6.1.1 Health Budget Status

Table 84: Budget allocation for Health (FY 075/76 to 078/79) in Lumbini province (in NPR thousand)

Fiscal Year	Province Total budget	Province Health budget	Health budget %
075/76	28,090,300	1,439,847.35	5.1
076/77	36,416,800	3,069,509	8.4
077/78	36,352,500	3,674,986	10.1
078/79	40,959,700	4,098,429	10.0
079/80	42624772	4581659	10.75

Source: Redbook FY 075/76-079/80

As presented in the Table 84 and Figure 61, the budget size of Lumbini province is being increased with advancement of fiscal year along with increment in the share of health budget. While comparing health budget from FY 075/76 to 079/80, the budget is increased by two folds. The budget allocation describes that Provincial Government has prioritize the health sector which required for meeting needs of people to achieve Sustainable Development Goals and attain Universal Health Coverage.

Figure 61: Budget allocation (FY 075/76 to 078/79) in Lumbini province (in NPR thousand)

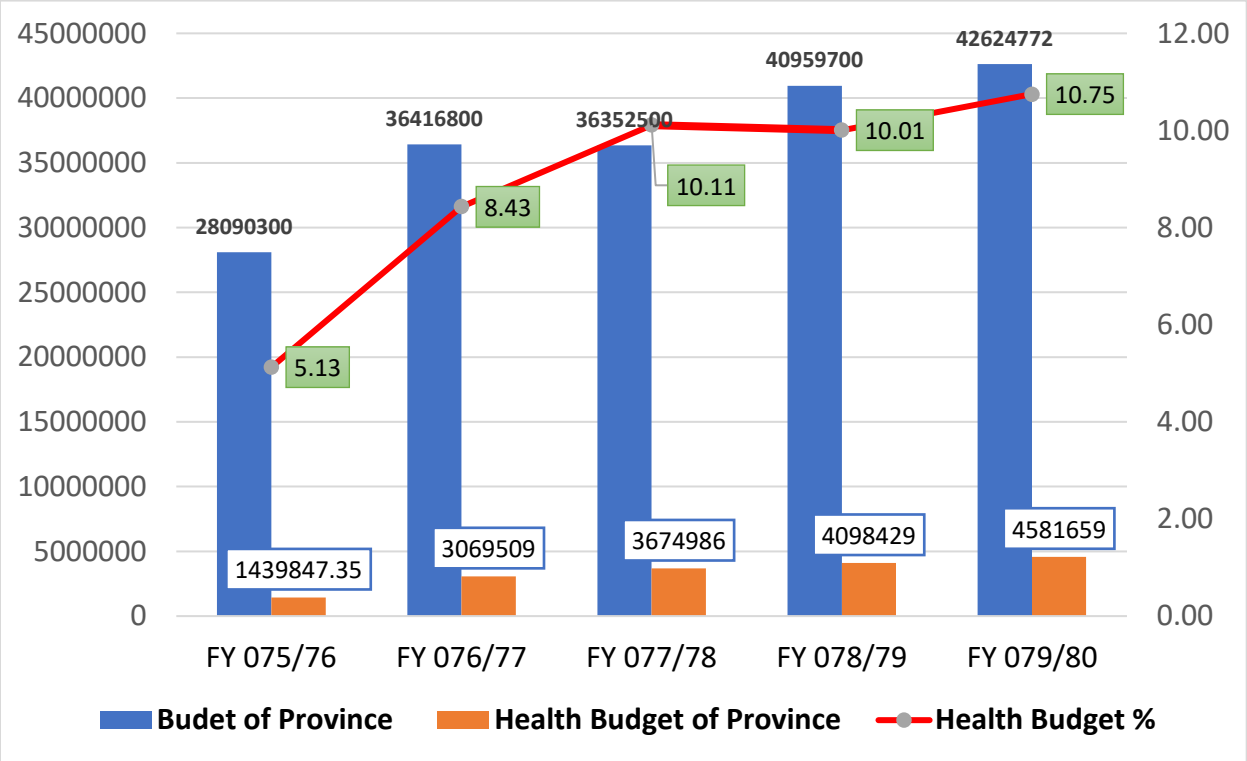


Table 85: Health budget (Capital & Recurrent) allocation trend of Lumbini province (in NPR thousand

Fiscal Year	Capital Budget	Capital Budget %	Current Budget	Current Budget %
075/76	367,192	25.50	1,072,655.35	74.5
076/77	896,375	29.20	2,173,134	70.8
077/78	1,040,655	28.32	2,634,331	71.7
078/79	1,109,328	35.81	2,989,101	64.2

Source: MOH, PLMBIS & Redbook FY 075/76-79/80

Table 85 shows that Lumbini province health current budget ratio seems bigger than capital. It might be most of the health Program are service deliver, so budget might be allocated accordingly.

Table 86: Recurrent & capital three years budget vs expenditure trend of health budget (Amount in NPR thousand)

Fiscal Year	Capital Expenditure	Recurrent Expenditure	Capital Expenditure %	Recurrent Expenditure %
075/76	283,924.4471	768,173.262	77.32	71.6
076/77	220,259.880	1,238,113.790	24.57	57.0
077/78	585,276	1,819,314	56.24	69.1
078/79	**1041599**	**2678044**	63.50	77

Source: MOH, PLMBIS & Redbook FY 075/76-078/79

Table 86 shows that, both capital & recurrent expenditure is below 78%. The trend of expenditure has steady increment from FY 076/077. The reason behind the growth in expenditure is development of provincial structure in FY 076/77 and subsequent development of pragmatic strategy and plan as well as its realistic implementation.

Table 87: Health Sector Provincial financial statement FY 078/79 (NPR thousand)

Category		Budget	Expenditure	Expenditure (%)
Province	Recurrent	2108748	1594942	76
	Capital	1098106	525099	48
	Total	3206854	2120041	66
Federal Conditional	Recurrent	1367948	1083102	79
	Capital	542098	516500	95
	Total	1910046	1599602	84
Total		5,11,69,00	3,71,96,43	73

Source: Redbook FY 078/79 & MOH

The above table shows that 73% expenditure has occurred in FY 077/789. While comparing the provincial & federal conditional budget expenditure, federal expenditure was 18% higher than provincial grant. The differences are visible while disaggregating grants. The current and capital expenditures of federal conditional grants were 3% and 47% higher than the respective provincial grants.

Table 88: Provincial health entities wise budget & financial progress as per initial allocated (Amount in NPR thousand)

क्र.स.	बजेट उपशीर्षक नं.	बजेट उपशीर्षक	बजेट रु हजारमा			खर्च रु हजारमा			खर्च प्रतिशत		
			चालु	पुँजीगत	जम्मा	चालु	पुँजीगत	जम्मा	चालु	पुँजीगत	जम्मा
१	३७०००११	स्वास्थ्य मन्त्रालय (तलव भत्ता तथा प्रशासनिक)	३२४०९	१६०००	४८४०९	२५२००	१५८८५	४१०८६	७७.७६	९९.२८	८४.८७
२	३७०००१२	एकीकृत स्वास्थ्य तथा सरसफाई कार्यक्रमहरु	३३१९६९	२२८४६७	५६०४३६	१९९१०९	११५०१४	३१४१२४	५९.९८	५०.३४	५६.०५
३	३७०००१३	प्रादेशिक अस्पताल सुदृढीकरण कार्यक्रम	६३७८७२	८२००७६	१४५७९४८	४६१४५७	३७७१९३	८३८६५०	७२.३४	४५.९९	५७.५२
४	३७००१०११	स्वास्थ्य निर्देशनालय (तलव भत्ता तथा प्रशासनिक)	२२२१६	५७५	२२७९१	१८१९४	४५५	१८६५०	८१.९	७९.२	८१.८३
५	३७००१०१२	प्रादेशिक अस्पतालहरु (तलव भत्ता तथा प्रशासनिक)	६६२४५०	३५३५	६६५९८५	६६२१०२	३३३९	६६५४४१	९९.९५	९४.४६	९९.९२
६	३७००१०१३	स्वास्थ्य कार्यालयहरु (तलव भत्ता तथा प्रशासनिक)	१४१९९४	३०००	१४४९९४	१२८४५१	२९४४	१३१३९५	९०.४६	९८.१४	९०.६२
७	३७००१०१४	आयुर्वेद स्वास्थ्य संस्थाह(तलव भत्ता तथा प्रशासनिक)	७४६००	२४७५	७७०७५	६८६५८	३५८०	७२२३८	९२.०३	१४४.६४	९३.७२
८	३७००२०११	स्वास्थ्य तालिम केन्द्र(तलव भत्ता तथा प्रशासनिक)	१२५४८	१४००	१३९४८	९६८२	३००	९९८२	७७.१६	२१.४३	७१.५७
९	३७००३०११	प्रदेश स्वास्थ्य आपूर्ति(तलव भत्ता तथा प्रशासनिक) व्यवस्थापन केन्द्र	१५७९४	७१००	२२८९४	१२२६१	४७२१	१६९८२	७७.६३	६६.४९	७४.१८
१०	३७००४०११	प्रदेश जनस्वास्थ्य प्रयोगशाला(तलव भत्ता तथा प्रशासनिक)	११५४९	१७००	१३२४९	९२६१	१६६६	१०९२७	८०.१९	९८.०१	८२.४७
११	३७०९११२०	क्षयरोग नियन्त्रण(संघ शसर्त अनुदान)	२६४००	२००००	४६४००	१९८२१	०	१९८२१	७५.०८	०	४२.७२
१२	३७०९११२१	एड्स तथा यौन रोग नियन्त्रण(संघ शसर्त अनुदान)	२९८००	०	२९८००	२०७६१	०	२०७६१	६९.६७		६९.६७
१३	३७०९११२२	एकीकृत महिला स्वास्थ्य तथा प्रजनन स्वास्थ्य कार्यक्रम(संघ शसर्त अनुदान)	६२७३००	५०००	६३२३००	५६८५००	५५२४	५७४०२३	९०.६३	११०.४७	९०.७८
१४	३७०९११२३	महामारी तथा रोग नियन्त्रण कार्यक्रम(संघ शसर्त अनुदान)	६३८००	०	६३८००	२३३१५८	५१०९७६	७४४१३५	३६५.४५		११६६.३६
१५	३७०९११२४	स्वास्थ्य ब्यवस्थापन कार्यक्रम(संघ शसर्त अनुदान)	३४०००	०	३४०००	२७९८४	०	२७९८४	८२.३१		८२.३१
१६	३७०९११२५	राष्ट्रिय स्वास्थ्य शिक्षा, सूचना तथा संचार केन्द्र(संघ शसर्त अनुदान)	७५००	०	७५००	२९६४	०	२९६४	३९.५३		३९.५३
१७	३७०९११२६	राष्ट्रिय तालिम कार्यक्रम(संघ शसर्त अनुदान)	५७००	०	५७००	१३७४	०	१३७४	२४.११		२४.११
१८	३७०९११२७	उपचारात्मक सेवा कार्यक्रम(संघ शसर्त अनुदान)	५८१००	०	५८१००	४१८७६	०	४१८७६	७२.०८		७२.०८
१९	३७०९११२८	नर्सिङ तथा सामाजकि सुरक्षा सेवा र्कायक्रम(संघ शसर्त अनुदान)	१०३५००	०	१०३५००	७७६४१	०	७७६४१	७५.०२		७५.०२
२०	३७०९११२९	आयुर्वेद सेवा कार्यक्रम(संघ शसर्त अनुदान)	८९६००	०	८९६००	८५९८९	०	८५९८९	९५.९७		९५.९७
कुल जम्मा			**२९८९१०१**	**११०९३२८**	**४०९८४२९**	**२६७४४४३**	**१०४१५९७**	**३७१६०४३**	**८९.४७**	**९३.८९**	**९०.६७**

Source: MOH, PLMBIS & Redbook FY 078/79

7.1.2 Formulation of policy documents at province level

Table 89: Status of policy documents at province level

SN	Documents	Status of policy documents
1	Provincial Health Policy, 2077	Full and effective implementation
2	Provincial Health Act	Final draft
3	Health Facility Establishment, Upgrading, Operation and Renewal Act, 2018	Full and effective implementation
4	Health Facility Establishment, Upgrading, Operation and Renewal Regulation 2019	Full and effective implementation
5	Sickle Cell Anemia and Thalassemia Disease Awareness Guideline 2019	Full and effective implementation
6	Birthing Centers upgrading, Equipment distribution and Skilled Birth Attendant Production Program Implementation Guideline, 2019	Full and effective implementation
7	Guideline on COPD treatment Subsidy for Poor People 2019	Full and effective implementation
8	Guideline on Home Based Health Service for Elderly People, 2019	Full and effective implementation
9	Province Health Training Guideline	Full and effective implementation
10	Isolation Center Guideline, 2077	Full and effective implementation
11	COVID 19 Response Plan	Approval
12	Provincial Health Sector Strategic Implementation Plan	Final Draft (ready for approval)
13	Operation and Management Guideline on Province Health Partnership, 2078	Full and effective implementation
14	Provincial Health Special Remedial Financial Support, 2078	Full and effective implementation
15	Operation Procedure on Specialist Doctor Mobilization of Provincial Hospital and Medical College ,2078	Full and effective implementation
16	Provincial Antimicrobial resistance Action Plan, 2078	Approval
17	Hospital Medical Equipment Assessment Guideline, 2078	Approval
18	Health Service Quality Improvement Strategy	Approval

6.2 Health Information Management

Introduction

Health information management is the systematic organization of health sector data to provide information for health care decisions involving institutional management, quality patient care, health care policies and planning and research. The major sources of health sector information in the Lumbini province include Health Management Information System (HMIS), Logistic

Management Information System (LMIS), Training Information Management System (TIMS), Early Warning and Reporting System (EWARS), Health Facility Registry Nepal, Maternal Perinatal Death Surveillance and Response (MPDSR), Minimum Service Standard (MSS), IMU Nepal application (COVID-19) and other disease surveillance and reporting systems.

7.2 1 Health Management Information System (HMIS)

Health Management Information System is a set of integrated components and procedures organized with an objective of generating routine information to improve healthcare management decisions at all levels of the health system. It monitors the performance of health program, health facilities and health workforce, provides monthly, quarterly, and annual reports. HMIS is only one component of a large program of monitoring and evaluation (M&E) within the health sector, which includes monitoring of selected indicators of the Sustainable Development Goal, Nepal Health Sector Strategy and Implementation Plan and the First Periodic Plan (2076/77-2080/81) of the Lumbini Province.

HMIS in DHIS2 Platform

District Health Information Software 2 (DHIS2) is an open-source, web-based platform and can be designed and upgraded according to users' needs on their own. DHIS2 is developed by the Health Information Systems Program (HISP) as an open and globally distributed process. The development is coordinated by the University of Oslo with support from NORAD and other donors. Nepal implemented this software nationally for HMIS online reporting system from FY 2073/74. Currently in Lumbini province (as of Ashad 2079), 1,259 reports are expected and of which 317 reports are submitted by parent organization, 855 reports are self-submitted, and 87 reports are unreported in DHIS2.

Data collection process in HMIS

FCHVs: FCHVs provide services at the ward level and maintain a pictorial register. Each month they are visited by the community health workers (AHW/ANM) who collect the FCHV reporting form (HMIS 9.1).

Community Health Workers (ANM/AHWs): Community health workers conduct PHC/ORC outreach clinics and EPI clinics. These workers submit a Reporting Form (HMIS 9.2) monthly to their assigned health facility. This collates data from the FCHV registers and their outreach services.

Community Health Units, Basic Health Service Centers and Urban Health Clinics: CHU, BHSC and UHCs either submit monthly report directly through DHIS2 platform or submit a hard copy to the health Post/PHC/local level (health section). Those facilities submitting reports in DHIS2 also submit a copy of monthly report to the health Post/PHC/local level (health section).

Health Post (HP) and Primary Health Care Centre (PHCC): HPs and PHCCs either submit monthly report (HMIS 9.3) through DHIS2 platform or submit the hard copy to the municipal

health section. Those facilities entering report in DHIS2 also submit a copy of report to municipal health section for monitoring and recording purpose.

Public Hospitals: Public Hospitals submit a reporting form (HMIS 9.4) in DHIS2 every month.

Non-public health facilities: These health facilities either submit report (HMIS 9.5) in DHIS2 or submit it to the municipal health section of the same geographic area for online reporting.

Health Office: Health Offices monitor and ensure the data received from all reporting units and provide feedback regularly.

Health Directorate: Health Directorate manages the information system at the province and local levels. Specifically, the Health Directorate works as a focal point to manage DHIS2. The HD also provides oversight to the overall information management, routinely reviews the health service data, and provides feedback to counterparts at province and local levels.

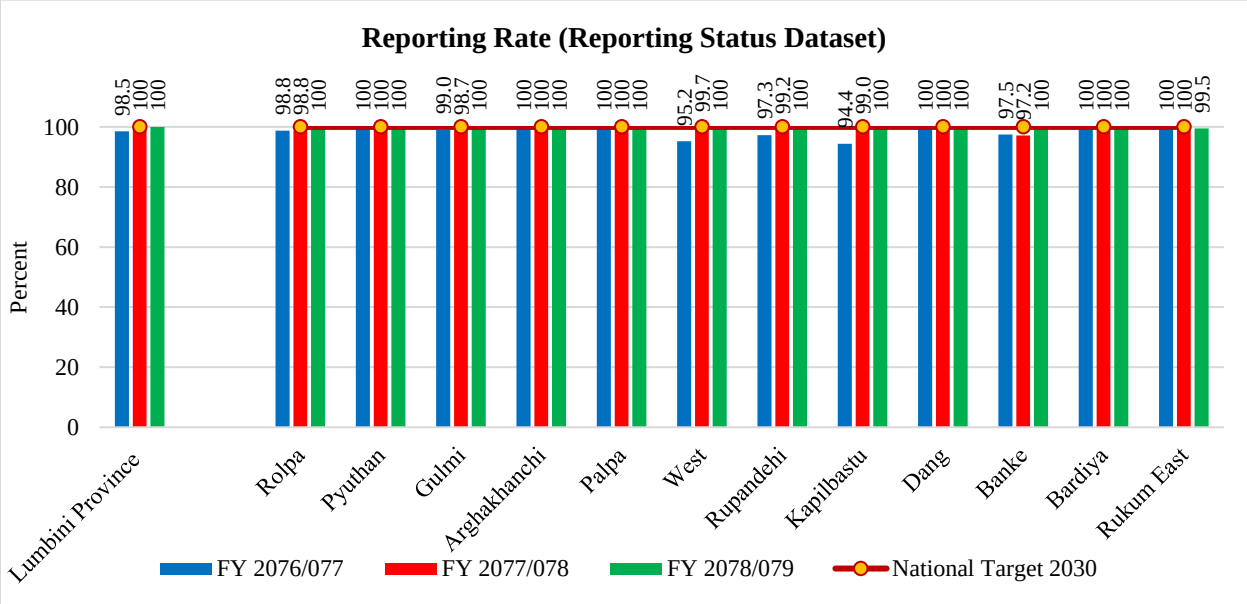
Integrated Health Management Information Section of Management Division under the Federal MoHP: Coordinate, collaborate and facilitate the federal, province and local levels for health care-related information management and implementation.

Reporting Status

DHIS2 Reporting Rate

The reporting rate is calculated against the expected number of reporting status dataset reports, and this is a proxy measure. Only the reporting rate of basic health facilities (PHC, HP, BHSC, CHU, UHC) are included in this measure, as the reporting rate of hospitals and private facilities are calculated based on hospital summary dataset.

Figure 62: DHIS2 reporting status by province and districts

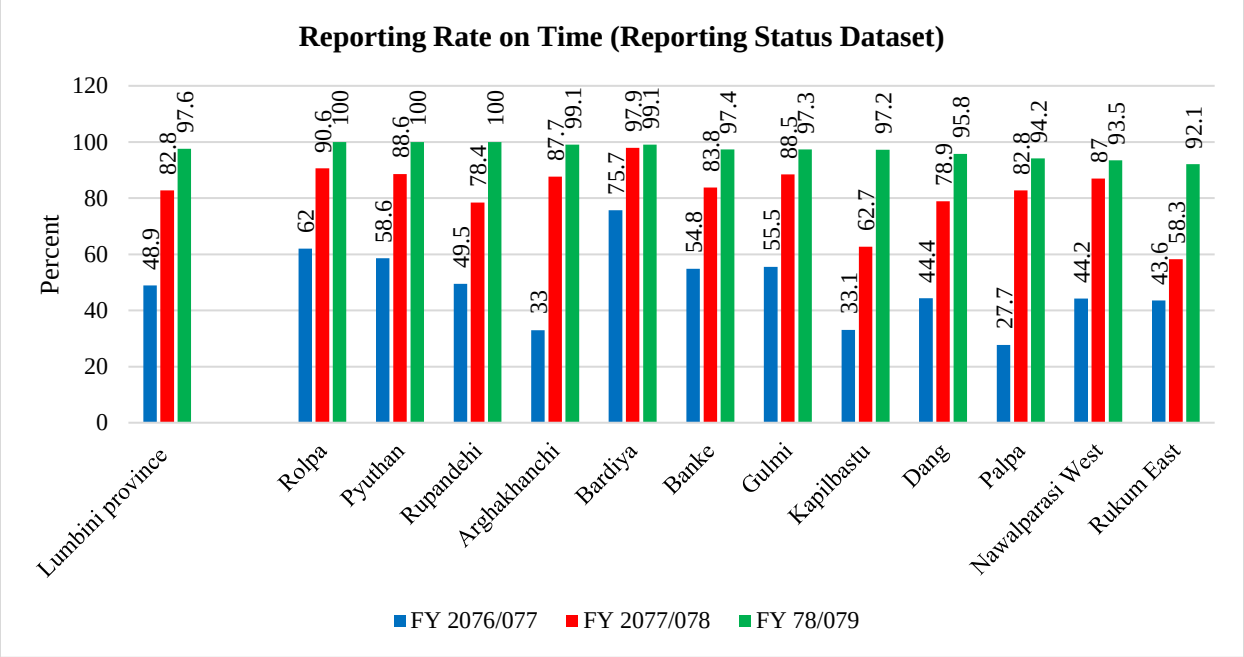


Overall, Lumbini Province achieved 100% reporting rate in last Fiscal Year. District-wise, 5 out of 12 districts achieved 100% reporting rate in last three Fiscal Years and consistently achieved the national target of 100% reporting by 2030 (Figure 62).

DHIS2 Reporting Rate on Time

The reporting timeliness is also calculated based on reporting status dataset and includes the timely reporting status of basic health facilities.

Figure 63: DHIS2 reporting rate on time



The Lumbini Province achieved 97.6% timely reporting in the last fiscal year, which is a significant improvement as compared with previous fiscal years. Key reasons behind this improvement are the practice of HMIS data review through Data management committees every month, implementation of a data review checklist for review and expansion of DHIS2 training and coaching/mentoring activities. Among the districts, 3 out of 12 districts have 100% reporting rate on time in the last Fiscal Year. Overall, the reporting timeliness of all districts in the last three years is on increasing trend (Figure 63).

Dataset Specific Reporting Rate of FY 2078/079

The Table below deficits the dataset-specific reporting status of the districts in FY 2078/079. The reporting rate of health facilities for the assigned datasets must be 100% in each month.

Table 90: Data-set specific reporting rate of FY 2077/078

Dataset	Lumbini Province	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya
Reporting Status	100	99.5	100	100	100	100	100	100	100	100	100	100	100
Immunization	100	100	100	99.8	100	100	99.5	100	100	100	100	100	100
CB-IMNCI	100	100	100	100	100	100	99.7	99.6	98.2	99.8	100	98.8	100
Nutrition Dataset - Newly Registered	100	99.6	100	100	100	100	99.8	100	99.3	99.3	100	99.8	100
FCHV	100	97.5	100	100	100	100	99.4	100	100	99.5	100	100	100
Safe Motherhood	100	100	100	100	100	100	99.3	100	99.4	99.8	100	98.2	100
Family Planning	100	100	100	100	100	100	100	100	99.8	99.8	100	99.7	100

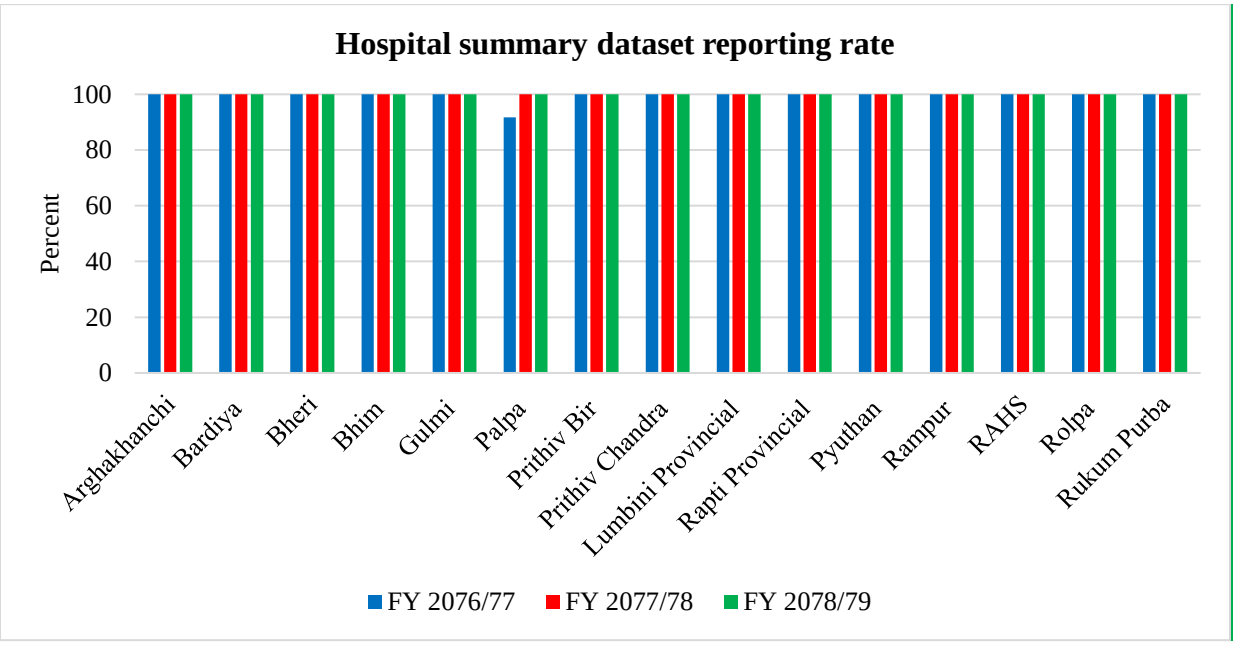
Dataset	Lumbini Province	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya
PHC-ORC	100	99.5	100	100	100	100	99.1	100	100	99.3	100	99.9	100
Leprosy	100	98.2	100	100	97.9	100	97.7	100	100	98.9	100	98.5	100
Tuberculosis	100	99.6	100	100	98.4	100	98.3	95.6	100	100	100	98.6	100
HIV Testing and Counseling	100	100	100	100	100	100	100	100	100	100	100	100	100
PMTCT	100	99.6	100	100	100	100	98.8	100	100	99.9	100	99.7	100
GESI	99.8	100	100	100	100	100	98.7	100	98.9	99.2	100	96.2	100
Outpatient Morbidity Page 4	99.5	99.1	100	100	100	100	98.6	100	99.1	98.1	100	95.3	100

District-wise, Bardiya, Dang, Arghakhanchi and Rolpa districts have 100% reporting rate of each of the selected datasets. Although the completeness of the selected datasets for other districts are more than 95%, health facilities need to focus on achieving 100% dataset-specific reporting rate in each month.

Reporting Status of Federal and Provincial Hospitals

There are three federal hospitals and 13 province-level hospitals in Lumbini Province. Excluding one federal hospital- Sushil Koirala Prakhar Cancer Hospital, 15 hospitals have been currently reporting in DHIS2 platform. So, there is a need to add Sushil Koirala Prakhar Cancer hospital in DHIS2 platform. Figure 64 shows the three years trend of reporting rate based on the hospital summary dataset in federal and provincial hospitals in Lumbini Province.

Figure 64: Three Years Reporting Status trend of hospitals

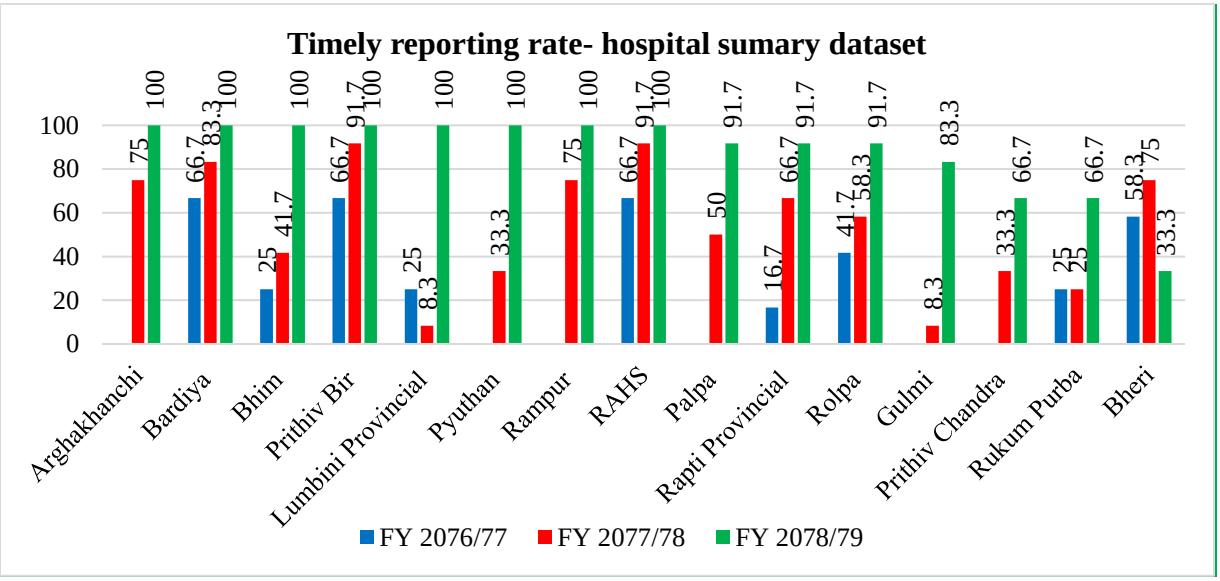


The reporting status of 15 hospitals in the last three fiscal years account for 100% excluding the Palpa hospital in FY 2076/77.

Timely Reporting Status of Hospital

The timely reporting status of hospitals is calculated based on the proxy measure- the number of expected versus actual number of hospital summary datasets reported on time.

Figure 65: Timely Reporting Status of Hospitals

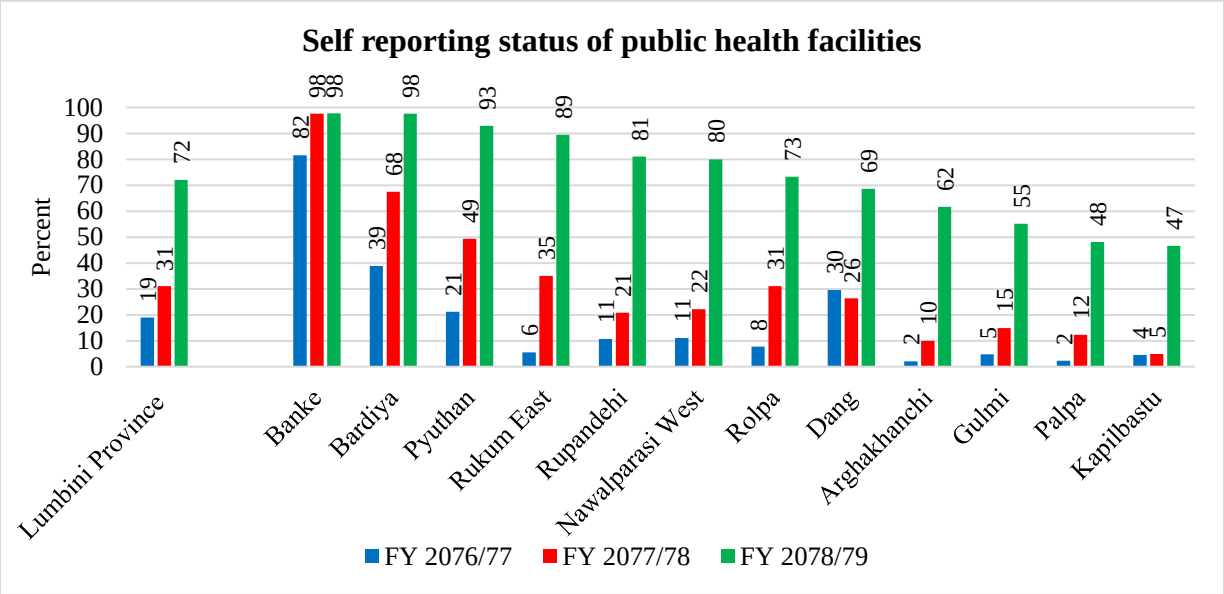


Out of 15 hospitals, 7 hospitals achieved 100% timely reporting in FY 2078/79. Overall, the timely reporting of all the hospitals is increasing significantly. Monthly reporting follow-up from Health Directorate, HMIS/DHIS2 training to hospital focal persons, periodic reviews with hospital chief and data focal person and organizing MSS routinely are the key interventions that contributed to improving the timely reporting of hospitals.

DHIS2 Self-reporting Status

Figure 66 deficits the DHIS2 self-reporting status of public health facilities in last three Fiscal Years (as of last month of three FY). As the Lumbini province has targeted to achieve 100% online reporting from the level of data generation, i.e., from health facilities, analyzing this indicator would be crucial to prioritize the upcoming DHIS2 training and follow-up interventions in near future.

Figure 66: DHIS2 self-reporting status



Overall, there is a significant improvement in the online reporting of HMIS reports from health facilities in all 12 districts. This increment was mainly due to the scale-up of DHIS2 in health facilities that have computer, internet, and adequate staff for the reporting. In FY 2078/79, the Health Directorate through an annual program, as well as through the support of USAID's Strengthening Systems for Better Health, provided training to almost 400 health facility staff as a part of DHIS2 scale-up to health facilities. Routine follow-up of the self-reporting status of DHIS2-trained health facilities and continued onsite coaching and mentoring activities also contributed to improving the self-reporting status.

Best practices in information management

- Formation of Data Management Committees at province and district level and monthly meetings for data review, analysis and feedback to LLGs
- The Health Directorate, jointly with USAID's Strengthening Systems for Better Health Activity, developed an innovative model to rollout the "DHIS2 Coaching and Mentoring Program". This program intended to develop a DHIS2 coach at district and local levels and organize a coach-led onsite coaching/mentoring at health facilities and municipalities to enhance knowledge and skills of DHIS2 core functions and promote the use of data at local levels. And a plan is to provide three days DHIS2 Coach Development Workshop to selected Health Office and local Level staff (based on pre-defined criteria), perform coach-lead onsite coaching to health facilities and group coaching regularly. This approach was implemented in the beginning of FY 2079/80 and prepared 24 DHIS2 coaches at local levels and they are organizing coaching and mentoring events independently.
- The Health Directorate requested the hospitals to nominate reporting focal person in each department. As per the provided list, the HD, jointly with support partners, provided

HMIS/DHIS2 training to selected hospital program focal person and medical records stationed in province-level hospitals.

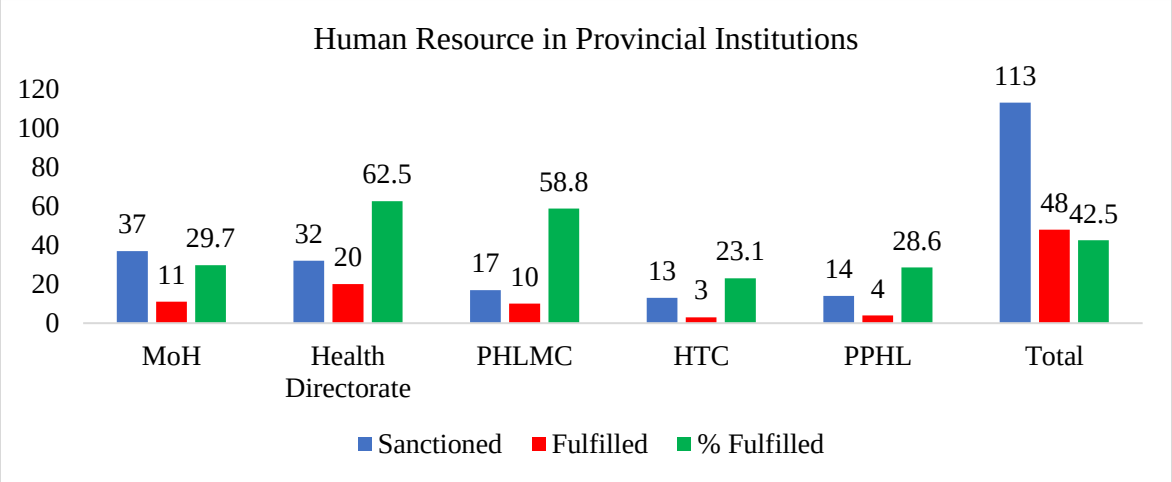
- In FY 2078/79, province was able to conduct 22 batches of DHIS2 training through collaborative partnership approach. the DHIS2 training of 6 terai districts were covered by the financial support of USAID's Strengthening Systems for Better Health and the training of other six districts were covered through the government's annual program (above 400 HR trained). As a result, the province is able to achieve 72% self-reporting rate in FY 2078/79 (as of Ashad 2079)

6.3 Human Resource for Health

6.3.1 Available Human Resource in provincial institutions:

In Lumbini province, almost 43% of human resources were fulfilled against the sanctioned positions in the provincial institutions- MoH, HD, PHLMC, HTC and PPHL.

Figure 67: Available Human Resource in provincial institutions



6.3.2 Available Human Resource at Health Offices

Health Office Gulmi ranked lowest staff fulfillment rate (against the sanctioned) compared with other Health Offices. The Health Office Banke, Rupandehi and Palpa however has 92% staff fulfillment against the sanctioned position (in each).

Table 91: Available HR at Health Offices

Health Office	Position (excluded support staff and driver)		Fulfilled %	Contract staff
	Sanctioned	Fulfilled		
Rukum	8	5	63	0
Pyuthan	8	5	63	0
Kapilbastu	12	10	83	1
Gulmi	11	4	36	1
Banke	12	11	92	2
Palpa	12	11	92	0
Bardiya	12	9	75	0
Dang	12	10	83	0
Nawalparasi	9	6	67	0
Rolpa	9	6	67	1
Rupandehi	12	11	92	0
Arghakhanchi	9	8	89	0

Source: FY 2078/79 annual review slides of Health Offices

6.3.3 Human Resources of Hospital under Lumbini Province

Staff fulfilled as per sanctioned position:

Only 22% of the consultant doctors are fulfilled against the sanction position while 6 hospitals are operating without the availability of consultants. This gap has been fulfilled by 63 consultants recruited in contract or through scholarship or other means. Of the 117 sanctioned position of medical doctors, 42 are available (36% fulfilled against the sanctioned), while four districts have no medical doctors recruited permanently.

Table 92: Staff fulfilled as per sanctioned position- Medical doctors

Hospital	Consultant Doctors						Medical Officers					
	Sanctioned	Fulfilled	% Fulfilled	Scholarship	Contract	Others	Sanctioned	Fulfilled	% Fulfilled	Scholarship	Contract	Others
Arghakhanchi Hospital	10	0	0	1	0	2	6	0	0	2	0	2
Gulmi Hospital	10	1	10	1	0	0	4	4	100	6	0	3
Palpa Hospital	10	0	0	0	0	0	6	3	50	1	1	0
Rampur Hospital	10	0	0	1	0	0	5	4	80	0	1	5
Bhim Hospital	6	1	17	7	2	1	7	4	57	4	1	1
Kapilbastu Hospital	10	1	10	1	3	0	7	0	0	2	7	2
Prthivchandra Hospital	9	1	11	0	1	0	5		0	2	3	0
Pyuthan Hospital	9	0	0	4	0	0	5	0	0	2	1	4
Rolpa Hospital	11	0	0	0	0	1	7	3	43	0	3	1
Bardiya Hospital	10	1	10	0	0	2	5	5	100	2	1	4
Rukum Purba Hospital	10	0	0	0	0	0	6	1	17	1	1	2
Lumbini Provincial Hospital	52	23	44	25	4	0	47	12	26	5	30	3
Rapti Provincial Hospital	14	10	71	7	0	0	7	6	86	3	1	0
Total	**171**	**38**	22	**47**	**10**	**6**	**117**	**42**	36	**30**	**50**	**27**

Source: FY 2078/79 annual review slides of Hospital

Almost 46% of paramedics and 47% of nursing staff are fulfilled against the sanctioned position. Staff fulfillment rate seems low in Rampur, Kapilbastu and Prithiv Chandra Hospital.

Table 93: Staff fulfilled as per sanctioned position- Medical doctors

Hospital	Paramedics						Nursing					
	Sanctioned	Fulfilled	Fulfilled %	Scholarship	Contract	others	Sanctioned	Fulfilled	Fulfilled %	Scholarship	Contract	others
Arghakhanchi Hospital	12	4	33	0	7	15	13	6	46	0	2	7
Gulmi Hospital	15	8	53	0	4	10	11	4	36	0	5	14
Palpa Hospital	12	4	33	1	5	5	13	8	62	1	3	0
Rampur Hospital	14	1	7	1	10	14	13	1	8	0	11	1
Bhim Hospital	13	5	38	1	1	11	16	8	50	1	4	12
Kapilbastu Hospital	15	3	20	0	12	1	16	2	13	0	14	6
Prthivchandra Hospital	14	3	21	0	10	9	12	3	25	0	5	12
Pyuthan Hospital	15	4	27	0	7	17	11	9	82	0	2	16
Rolpa Hospital	12	8	67	0	4	11	13	5	38	0	6	8
Bardiya Hospital	13	11	85	1	2	24	11	9	82	0	1	15
Rukum Purba Hospital	12	3	25	0	4	5	13	6	46	0	6	3
Lumbini Provincial Hospital	63	42	67	0	18	21	121	51	42	0	31	18
Rapti Provincial Hospital	11	6	55	0	4	19	24	22	92	1	16	5
Total	**221**	**102**	**46**	**4**	**88**	**162**	**287**	**134**	**47**	**3**	**106**	**117**

Source: FY 2078/79 annual review slides of Hospital *Staff fulfilled as per sanctioned position (fulfilled/sanctioned) **

6.3.4 Human Resource at Local Levels

Overall, almost 81% of the human resource in local levels are fulfilled against the sanctioned positions. Percentage of human resources fulfilled against the sanctioned position ranges from 57% to 106%, with highest fulfillment in the local levels of Banke district and lowest in Palpa.

District	No of LLG	Sanctioned position	Fulfilled Position	% Fulfilled	(permanent)
Rukum	3	87	67	77.0	53
Pyuthan	9	307	201	65.5	191
Kapilbastu	10	508	463	91.1	206
Arghakhanchi	6	247	183	74.1	122
Rolpa	10	267	166	62.2	186
Nawalparasi	7	341	228	66.9	101
Dang	10	325	292	89.8	215
Bardiya	8	230	222	96.5	192
Palpa	10	357	205	57.4	148
Gulmi	12	452	299	66.2	337
Rupandehi	16	576	576	100.0	224
Banke	8	339	359	105.9	177
Total	**109**	**4036**	**3261**	**80.8**	**2152**

Source: FY 2078/79 annual review slides of Health Offices

6.3.5 Issues and Recommendations

Issues and constraints	Recommendations	Responsibilities
Low staff fulfilment status in provincial institutions and selected local levels	Opening of the required positions Hiring of contract-based staff	PPSC, MoH
Consultant and medical recorder positions in hospitals are not fulfilled as required	Vacancy opening for the positions required at hospitals Staff fulfilment of the positions required at hospitals temporarily to operate current job and responsibilities	PPSC, MoH

6.4 Health Logistic Management

Province Health Logistic Management Center (PHLMC) is responsible to procure, store and distribute health commodities, vaccines, equipment, health diagnostic test kits and Ayurveda medicines for the hospitals under province government and health facilities under local levels through Health Offices in 12 districts. The PHLMC was established under the Ministry of Social Development, Province-5 on 13th Chaitra 2075 (FY 2075-76). PHLMC creates a network of federal, provincial and district medical stores as well as of medical stores at Local Levels and promotes evidence-based decision making based on the analysis of e/LMIS data and Inventory Management System. The PHLMC also involves in supporting basic health logistics management, support public procurement system for different levels, strengthening LMIS system, repair, and maintenance of bio-medical equipment, effective management of vaccine and cold chain equipment and instruments. Further, PHLMC works in preparing specification and technical document for the procurement of commodities.

Major activities

- Develop Annual Procurement Plan (APP) and Consolidated Procurement Plan (CAPP)
- Develop procurement plan and procedure
- Forecasting and quantification of health commodities
- Procurement, storage, distribution, re-distribution, transportation /reverse logistics of medicines, equipment of health commodities and Ayurvedic medicine and equipment.
- Safe disposal of health commodities
- Strengthen Logistics Management Information System (LMIS)
- Strengthen storage capacity and good storage practice

Major Achievements

1. Procurement of medicine and other essential commodities: Essential medicines including iron and folic acid, albendazole, NCD medicine, IMNCI medicine and Paustik Aahaar
2. Machinery & equipment procurement: Portable USG Machine, portable Digital X-ray, patient monitor, SNCU/NICU equipment, Minilap/ Vasectomy and NCD equipment
3. Storage: Warehouse building and walking cooler installation at vaccine Store at Tamnagar, Butwal, ensure good storage practices (13 storage guideline), store management, cold chain management, Effective Vaccine Management (EVM)
4. Forecasting and Quantification: PHLMC conducted consensus forecasting and quantification workshop with an objective to ensure the effective procurement and assurance of availability of the medicine. Key participant of the workshop included the representative of Ministry of Heath, Health Directorate, Health Training Centre and warehouse focal person from Health Offices. Three days program was effective as different method/ approach like consumption of medicine, morbidity, and allocation of medicine as per the health facility was done for forecasting and quantification exercises.
5. Distribution: Adopted four different approaches for medicine and logistics distribution- push system, pull system, mixed system and reverse logistics system
6. Logistics Management Information System (LMIS): This is a system of records and reports which might be paper-based or electronic. LMIS is used to aggregate, analyze, validate, and display data (from all levels of the logistics system) that can be used to make logistics decisions and manage the supply chain. LMIS data elements includes the stock on hand, demand, issue, adjustment and expiry information. It links the different level (i.e., central store, PHLMC, District store, LLG and health facility) through the information. Information provided by the LMIS helps perform role by each level. LMIS is considered as the heart of the supply chain cycle and acted as the most efficient tools in the procurement of the medicine and other commodity. In Lumbini Province, all 109 Local Levels and health facility of Nawalparasi West, Rupandehi, Banke and Bardiya submit the LMIS report electronically (eLMIS).
7. List of Activities:
   List contains major procurement which impacts on the program indicator on the availability of the product/ commodity to the service delivery sites. More than twenty-five procurements had been placed by the PHLMC in FY 2078/079.

Figure 68: Procurement list

S.N.	Procurement	Proc. Method	Procurement Status
1	Procurement of Albendazole	NCB	Completed
2	Procurement of OI Medicine	Direct Pro..	Completed
3	Procurement of Paustik Aahar (fortified flour)	Direct Pro..	Completed
4	Procurement of Iron with folic acid	NCB	Completed
5	Procurement of STI	NCB	Completed
6	Procurement of IMNCI	NCB	Completed
7	Procurement of Transportation	NCB	Completed
8	ECG Machine	NCB	Completed
9	Patient Monitor	NCB	Completed
10	Male Latex Condom	NCB	Completed
11	Ayurveda Medicine	NCB	Completed
12	Free Essential Medicine (General Items)	NCB	Completed
13	Free Essential (IV Fluid & Injectable Items)	NCB	Completed
14	Free Essential (Antibiotic)	NCB	Completed
15	Free Essential (Cream and Liquid)	NCB	Completed
16	NCD Medicine	NCB	Completed
17	SNCU/NICU	NCB	Completed
18	Portable USG Machine	NCB	Completed
19	IUD, implant NSV and Minilap Kit	NCB	Completed
20	X-ray Machine	NCB	Completed
21	NCD Equipment	NCB	Completed
22	Free Essential Medicine Surgical Items	NCB	Completed
23	Medicine for Motherhood Program (Oxytocin)	NCB	Completed
24	HMIS 3.5 tool	SQ	Completed
25	Supply, Delivery and Installation of Generator	SQ	Completed
26	Mental Health Medicine	NCB	Completed
27	Disaster Medicine	NCB	Completed
28	4WD Double cab pickup	NCB	Completed

Procurement of Portable USG, X-ray Procurement, ECG and patient monitor: All the major commodities have been supplied as per the demand and need of the respective institutions. The USG were supplied based on training provided by the province health training centre.

Table 94: Supply of ECG, Patient Monitor, Portable USG and X-ray Machine to Health Facilities

Health Facility	ECG	Patient monitor	Portable USG	Portable X-ray
Quantity Procure by PHLMC	33	34	34	32
Adguri Health Post			1	
Airawati Rural Municipality (PHC)	1	1		1
Balkot Primary Health Center		1		1
Bageshwori Primary Health Center	1	1		
Banakatawa Primary Health Center	1	1		1
Bangi Health Post			1	
Barbardiya Municipality			1	
Basantapur Primary Health Center	1	1		1
Birbas Health Post			1	
Bhingri Primary Health Center				1
Chisapani Hospital, Bardhaghat			1	
Damri Health Post			1	
Dhakdhai Primary Health Care Center		1		1
Dhurkot Primary Health Center		1	1	1
Ghartigaun Health Post			1	
Hansipur Health Post			1	
Haranampur Primary Health Center		1		1
Holeri Primary Health Center	1	1	1	
Johang Primary Health Center				1
Jagannathpur Primary Health Center		1		1
Janaki Rural Municipality			1	
Kapilbastu Hospital, Taulihawa			1	
Khajura Primary Health Center	1	1		
Khasauli		2		
Khalanga PHC				1
Lalmatiya Health Post	1	1		
Lamahi Hospital - Lamahi Dang			1	
Laxmanpur Primary Health Center	1	1		1
Lumbini Ayurvedic Chikitshalaya		1	1	
Lumbini Primary Health Center	1	1		1
Maharajganj Primary Health Center		1		
Motipur Primary Health Center	1	1		
Narikot Health Post			1	
Palhinandan Hospital	1			1
Patabhar Health Post			1	
Provincial Health Training Center, Butwal			6	
Putha Uttanganga Rural Municipality			1	
R.C-HOSPITAL_Barbardiya- 6		1		

Health Facility	ECG	Patient monitor	Portable USG	Portable X-ray
Rainadevi Chhahara Rural Municipality			1	
Rajapur Primary Health Center	1	1		
Rapti Provincial Hospital	2			
Rayapur Primary Health Center	1	1		1
Rignerah Health Post			1	
Ruru Rural Municipality (PHC)	1			1
Shantinagar Rural Municipality			1	
Shivaraj Hospital, Bahadurgunj			1	
Shreegaun Primary Health Center	1	1	1	1
Shringha Primary Health Center				1
Sikatahan Health Post			1	
Sorahawa Primary Health Center		1		
Sulichaur Primary Health Center	1	1		1
Susta Rural Municipality			1	
Syuja Primary Health Center	1	1		1
Tahu Primary Health center				1
Thabang Rural Municipality		1		
Thulo Lumpek Health Post			1	
Tulsipur Sub-Metropolitian City			1	
Yasodhara Basic Hospital	1	1	1	
Total supplied:	**20**	**28**	**31**	**24**
Stock on hand:	**17**	**9**	**19**	**8**

Supply of NCD equipment: Glucometer Device, Peak flow meter, Sphygmomanometer, weighing machine and urine strips were procured and supplied to the Health Offices as per the Number of LLGs planed based on need.

Table 95:supply of different NCD equipment to Health Offices

Health Office	Glucometer Device	Peak Expiratory Flow Meter	Sphygmomanometer	Urine Strips 3 Parameter
Quantity Procured	264	264	273	280
Arghakhanchi	17	17	17	17
Banke	21	21	21	21
Bardiya	22	25	22	22
Dang	25	25	25	33
Gulmi	26	25	26	26
Kapilbastu	25	25	25	25
Nawalparasi West	19	19	19	19
Palpa	11	22	22	22
Pyuthan	20	20	20	20
Rolpa	22	25	20	22

Health Office	Glucometer Device	Peak Expiratory Flow Meter	Sphygmomanometer	Urine Strips 3 Parameter
Rukum East	8	80	8	8
Rupandehi	37	37	37	40
Quantity supplied	253	341	262	275
Stock on hand	20	28	3	15

Procurement of Minilap/ Vasectomy set: Procured the IUCD insertion/ removal set, Implant insertion/removal set, Minilap set, and vasectomy set.

Table 96: Supply of family planning commodity to Health Offices

Health Facility	Implant insertion Set	Implant removal Set	IUCD insertion set	IUCD removal Set	Minilap set	Vasectomy set
Procured Quantity	**600**	**600**	**250**	**250**	**240**	**240**
Arghakhanchi	35	35	13	13	13	13
Banke	45	45	20	20	17	17
Bardiya	45	45	20	20	17	17
Dang	55	55	25	25	25	25
Gulmi	65	65	27	27	25	25
Palpa	55	55	21	21	21	21
Pyuthan	50	50	22	22	22	22
Rolpa	62	62	22	22	21	21
Rukum East	17	17	7	7	7	7
Rupandehi	71	71	25	25	34	33
Quantity supplied	500	500	202	202	202	201
Stock on hand	100	100	48	48	38	39

Procurement of Vitamin k1 Inj, oxytocin, Mag sulphate, Calcium Gluconate:

Table 97: supply of different RH related medicine to different institutions

Institutions	**Calcium Gluconate 10 ml Injection**	**Magnesium Sulphate 00mg/2ml Injection**	**Oxytocin 5 IU / ml Injection**	**Vitamin K 1 ml Injection**
Quantity Procured	1200	10000	120000	120000
Bhim Hospital	20	180	2100	2175
District Hospital - Pyuthan	30	250	2400	2700
District Hospital Rolpa	10	50		700
Health Office Arghakhanchi	50	350	4800	4050
Health Office Banke	100	750	9600	8100
Health Office Bardiya	100	850	8200	9450

Institutions	Calcium Gluconate 10 ml Injection	Magnesium Sulphate 00mg/2ml Injection	Oxytocin 5 IU / ml Injection	Vitamin K 1 ml Injection
Health Office Dang	150	1200	7200	13500
Health Office Gulmi	40	350	3400	4050
Health Office Kapilbastu	150	1250		14850
Health Office Nawalparasi West	40	400	5800	4400
Health Office Palpa	60	500	4800	5400
Health Office Pyuthan	40	200	3400	4050
Health Office Rolpa	60	550		6400
Health Office Rukum East	20	150		1350
Health Office Rupandehi	100	800	2846	9450
Lumbini Provincial Hospital			23400	5400
Prithvi Chandra Hospital Nawalparasi	20	300	2400	2700
Rampur Hospital	20			
Rapti Provincial Hospital	60	500	4800	5961
Tamghas Hospital	20	100	1400	1350
Grand total	1090	8730	86546	106036
Stock on hand	110	1270	48300	13964

Procurement of Defibrillator:

Table 98: Supply of Defibrillator to different district hospital

Health Facility	Defibrillator
Quantity Procured	10
Bardiya District Hospital	1
Bhim Hospital	1
Arghakhachi District Hospital	1
Palpa Hospital	1
Prithvi Chandra Hospital Nawalparasi	1
Gulmi District Hospital	1
District Hospital - Pyuthan	1
District Hospital Rolpa	1
Rampur Hospital,palpa	1
Rukum East District Hospital	1
Total	10
Stock on hand	0

Procurement of SNCU/NICU equipment to hospitals:

Table 99: supply of SNCU/NICU equipment to different hospital

Health Facility	Baby Warmer (Radiant Warmer with Trolley)	CPAP Machine	Electric Suction	Infusion Pump	Phototherapy Machine	Sphygmomanometer	Syringe Pump
Quantity Procured	12	4	6	6	6	9	6
Bardiya District Hospital				1	1	1	1
Bhim Hospital	2	1		1	1	1	1
District Hospital - Pyuthan			1			1	
District Hospital Rolpa	2		1	1	1	1	1
Lalmatiya Health Post	2	1		1	1	1	1
Palpa Hospital	4		2	4			2
Prithvi Chandra Hospital Nawalparasi	2	1	1	1		1	1
Rampur Hospital	2						
Rukum East-District Hospital			1			2	
Tamghas Hospital	2	1	1	1	1	1	1
Total	16	4	7	10	5	9	8
Stock on hand	0	0	0	3	0	0	0

Procurement of Iron and Albendazole:

Table 100: supply of Iron folic acid and albendazole to different district

Health Facility	**Albendazole**	**Iron and Folic Acid**
Quantity Procured	3565000	36000000
Health Office Arghakhanchi	303000	1190000
Health Office Banke	120000	4910000
Health Office Bardiya	186000	2960000
Health Office Dang	252000	2540000
Health Office Gulmi	314000	1350000
Health Office Kapilbastu	342000	2490000
Health Office Nawalparasi West	288000	3360000
Health Office Palpa	305000	2020000
Health Office Pyuthan	390000	2000000
Health Office Rolpa	300000	2100000
Health Office Rukum East	90000	880000
Health Office Rupandehi	360000	4700000
Total	3250000	30500000
Stock on hand	689500	6048500

Procurement of Condom: Around 14 lakh 60 thousand condom were procured and supplied to health office.

Procurement of essential Medicine: Essential medicine are supplied as per the demand and LMIS report of the health office and district hospital

Issues/Challenge & recommendation:

Issues/Challenges	Recommendations
• Inadequate storage space (dry commodities and cold chain commodities) • Old building for warehouse (penetration water from roof, no proper ventilation) • Vehicle not available for commodity supply • Lack of staff (staffs not fulfilled on sanctioned post) • Limited budget for essential and program commodities. • Non-functional eLMIS/LMIS in few hospitals, LLGs and SDPs • No clear demarcation on the procurement of program wise and essential medicine by different levels	• Budget provision for standard warehouse for effective storage of drug & vaccine. • Provision of sufficient budget for transportation of program commodities and monitoring • Human resource should be fulfilled as soon as possible • Required/ planned program budget from PHLMC should be approved on time • Capacitate the human resource of hospitals & municipalities to smoothly operate the eLMIS/LMIS recording and reporting system. • Should develop the proposed the list of medicine to be procured by LLGs, Province and federal government

6.5 Health Training

Provincial Health Training Centre (PHTC) was established in FY 2075/076 as the provincial body for coordination, planning and implementation of all training activities under Lumbini Province, Ministry of Health.

6.5.1 The main objective of the Provincial Health Training Center:

- Assess training requirements of health personnel and prepare training plans based on the program's requirement
- Plan, implement and train health workers as demanded by programs.
- Design, develop and refine teaching, learning materials to support implementation of training programs
- Develop/improve capacity of trainers to deliver quality training at provincial level
- Co-ordinate with all governmental and non-governmental organizations to avoid duplication of training and improve quality of training
- Supervise, monitor, follow-up and evaluate training programs
- Conduct operational studies to improve training efficiency and effectiveness etc.

7.5.2 PHTC accredited clinical training sites in Lumbini Province

PHTC has accredited 10 clinical training sites in Lumbini Province for different clinical trainings. Table 101 shows the list of accredited clinical training sites along with the approved training.

Table 101: List of clinical training sites in Lumbini Province

SN	Name of clinical training sites	Name of training
1	Bheri Hospital, Banke, Nepalgunj	ASRH, GBV, SBA, SAS
2	Rapti Institute of Health Science	SBA, Implant
3	Lumbini Provincial Hospital, Rupandehi, Butwal	SBA, SAS, GBV, Implant
4	Bhim Hospital, Rupandehi, Bhairahawa	SBA
5	AMDA Hospital, Rupandehi, Butwal	SBA, OTTM
6	FPAN branch, Rupandehi, Butwal	SAS, VIA, FP- LARC
7	FPAN branch, Dang	FP- LARC
8	MSS, Kapilbastu, Chandrauta	Implant, SAS
9	Lumbini Medical College, Palpa	SBA, Implant
10	Mission Hospital, Palpa	SBA, MLP

7.5.3 Major activities conducted

Provincial health Training Centre organizes various basic, competency and clinical based trainings for health workers in accredited training sites to enhance the knowledge and skill of health service providers in multiple clinical areas. In FY 2078/079, the PHTC delivered 25 types of training where 835 health workers were trained. Overall, the training center has achieved 77% training completion based on number of training batches targeted (target: 97 batch, conducted: 75 batch) in FY 2078/79 (Table 102).

Table 102: List of training provided through Training Centre

SN	Name of Activity	Target (Batch)	Achievement (Batch)	Participants
	Provincial hospital strengthening program			
1	Safe abortion training	10	8	40
2	Snakebite management training	4	4	85
3	42 days training to nurses working in OT	2	1	6
4	Minilap training for doctors	1	1	4
5	Training on medical legal for doctors	1	1	11
6	ToT training on nose, ear, eye, and oral health	1	1	20
7	Skill Lab training for PTC/BLS training	5	3	45
	Epidemic and Disease Control Program			
8	PEN training	10	5	125
9	Snake bite management training	2	2	50
	National Training Program			
10	Training to FCHVs	1	1	20
11	Basic IUCD training	4	4	16

SN	Name of Activity	Target (Batch)	Achievement (Batch)	Participants
12	Comprehensive Abortion Care (CAC) training	10	7	70
13	Implant training	10	6	24
14	ASRH training	3	1	16
Integrated Health and Sanitation Program				
15	7 days training on Panchakarama for ayurved doctors	1	1	11
16	7 days training on Panchakarama for ayurved health workers	1	1	20
17	Training on ayurved program operation and management for health workers	1	2	38
18	Training on epidemic and infection prevention control training for ayurved health workers	1	2	40
19	7 days training on ayurved doctors and health workers on therapeutic yoga	1	1	20
20	Skilled Birth Attendant (SBA) Training	8	6	72
21	IUCD training	1	1	4
22	Implant training	2	2	8
23	Mental health training	1	1	20
24	Medical abortion training	10	8	40
25	ROUSG training	6	5	30
	Total	**97**	**75**	**835**

6.5.4 Best Practices in Training Centre

1. Training Site Strengthening
   In FY 2078/079, the Provincial Health Training Centre approved Rapti Provincial Hospital for SBA and Implant training as well as Lumbini Provincial Hospital for Implant training. As a part of strengthening these training sites, USAID's Strengthening Systems for Better Health Activity provided logistics to operate both SBA and Implant training. The Biomedical Management Unit in Devdaha is constructed for capacity building of human resources well as maintenance service for biomedical equipment. Along with this, the training centre regularly reviews to ensure the availability of adequate physical facility and learning environment in each training sites within the province. At least one training was conducted in each training site for sustainability and strengthening the site.
2. Training Information Management System has been used to list out the participants who received training in specific time period.
3. Trainings are conducted based on quality and quantity of cases available in the site.

6.5.5 Issues, challenges and recommendations

Issues and bottlenecks	Recommendations	Responsibility
Limited human resource at provincial health training center	Proceed the staff recruitment process through Provincial Public Service Commission Recruit and place adequate technical skilled human resources in health training center	PSC, MoH
Training centre has no its own building	Coordinate with MoH for allocation of budget to construct the building	MOH
Training need assessment system hasn't been institutionalized	Develop criteria and initiate systematic training need assessment	MoH
Lack of training information due to multi-door training implementation approach	Establish one door accredited training system	NHTC, PHTC
Inconsistent budget expenditure norms in different trainings	Ensure uniform training related budget expenditure norms in all trainings	MoH, NHTC, PHTC
Problem on expansion of training site	Coordinate with NHTC and other support partners for site strengthening and ensuring the quality	NHTC
Legal issues of relevant professional organization on training like RoUSG, Dental Extraction	Advocacy with professional organizations on the depth of issue on public health and HR distribution	MOH, PHTC
Inadequate coordination among provincial and federal department / division regarding training conduction and certification	Meaningful coordination with PHTC	MOHP, MOH, NHTC, HD, PPHL

6.6 Public Health Laboratory

Provincial Public Health Laboratory was established in FY 2075/076 as a provincial government reference and monitoring laboratory. However, its official inauguration was held on 16th of Magh, 2076 (30th of January 2020). The main aim and objective of PPHL is to fulfill and undertake organizational, administrative, and co-operative responsibilities for the laboratory services in both government as well as private sectors throughout the province. National External Quality Assurance Scheme (NEQAS) monitoring, supervision, empowering the laboratory personals, licensing, conducting research in diagnostic field are some key functions of PPHL. The PPHL has the facility of biosafety level II (BSL- II) laboratory with real-time PCR (RT-PCR) which is intensively being used for COVID-19 testing. The process of constructing well-equipped, sophisticated & scientific laboratory building under progress in Butwal Sub-Metropolitan ward no. 12, Tamnagar.

6.6.1 The vision, mission, goal of Province Public Health Laboratory

Vision

To develop PPHL as an art-of-state lab which will be the center of excellence in diagnostic and research.

Mission

To ensure and facilitate the quality lab services to the citizen of Lumbini Province, being premier government monitoring, administrative reference lab, through different government and non-government laboratories.

Goal

- To extend desired lab services in all hospitals and health care organizations up to health post levels throughout the province
- To develop a reference lab and quality-assuring lab for diagnostic and public health services, and upgrade accordingly
- To address and manage the diagnosis of newly emerging diseases
- To organize appropriate training for lab personnel

6.6.2 Major activities of PPHL

PPHL has accomplished following activities in FY 2078/79.

a. Laboratory based surveillance of Influenza
b. Supported for outbreak investigation of Cholera and assessment survey of Kala-azar
c. Conduction of RT-PCR test, in which 3494 samples were examined for diagnosis of SARS CoV2, among them 750 were positive
d. RT-PCR integrated test for influenza A & B, and SARS CoV2
e. Quality control of microscopic TB

The following table depicts the status of TB External Quality Assessment (EQA) program. Among 184 microscopic sites for quality control (QC) of microscopic examination of TB, 131 sites participated in the EQA. The health office at district collects the microscopic QC slides quarterly from peripheral health facilities where TB cases are diagnosed through microscopic examination. These slides are tested based on Lot Quality Assurance Sampling. All the microscopic center of Rolpa, Pyuthan, Palpa, Agrakhanchi, Nawalparasi West, Bardiya participated for Quality Control while 20% of microscopic centre of Rukum East participated for QC. There was inadequate human resource and microscope in the MC sites of Rukum East. The average agreement rate of QC slides between QC assessor and microscopic center was 98.45%. All the discordant slides between QC assessor and microscopic centers are sent to NTC for confirmation. Thereafter, final QC feedback reports are dispatched. Ultimately, PPHL conducts onsite coaching and supervision to microscopic centers from where false slides are reported. In FY 2078/79, a total of 13898 slides were examined for quality control. Among them, 36 false positive and 36 negative slides were detected.

Table 103: District wise participation of Microscopic Centers (MC) for TB Quality Control

SN	District	MC in district	MC participated for QC	MC participated for QC (%)
1	Rukum East	5	1	20
2	Rolpa	8	8	100
3	Pyuthan	13	13	100
4	Gulmi	13	8	62
5	Arghakhanchi	4	4	100
6	Palpa	8	8	100
7	Nawalparasi West	9	9	100
8	Rupandehi	36	24	67
9	Kapilvastu	12	10	83
10	Dang	38	17	45
11	Banke	20	11	55
12	Bardiya	18	18	100
Total		184	131	71

f. HIV Dried Tube Specimen (DTS) in External Quality Assessment System (EQAS) Program

HIV Dried Tube Specimen panel comprised of 5 blinded samples (for each site) are sent from NPHL to PPHL for EQAS program across the province. PPHL distributes the PT sample to HIV testing sites. Thereafter, testing sites examine the samples and report the result to PPHL. PPHL compiles the report and send them to NPHL, where NPHL compares results of each sample in the panel with pre-determined results. Finally, results to each individual participating sites are dispatched from NPHL with feedback and recommendations through PPHL. Onsite coaching and supervision visit are undertaken by PPHL to sites scoring less than 90%.

Table 104: HIV DTS EQAS Program summary

S.No.	Particulars	Status
1	No. of sites participated in HIV DTS EQA Program	26
2	No. of sites reporting all three-layer testing	21
3	No. of sites reporting determine result only	5
4	Average DTS QC score	92.11 %
5	No. of site scoring less than 90%	5

g. **Training**

- Conducted 2 batches of basic TB microscopic training and TB refresher training,
- Conducted 1 batch of GeneXpert operation and maintenance training, orientation on Malaria RDT testing, Biosafety and Biosecurity training, Laboratory Quality Management System
- Conduction of regular onsite coaching & supervision to Laboratories
- Provided technical support to conduct CLT training of HIV in co-operation with Save the Children
- Provided technical support to conduct Gene-Xpert & TB microscopic refresher training in co-operation with BNMT in Pyuthan & Bardiya district.

h. Laboratory reagents (TB, Malaria) supply & equipment distribution to health facilities

6.6.4 Best practices of PPHL

PPHL installed microscopic examination center in hard-to-reach rural municipalities of Rukum East and Rolpa. Health workers were provided hand on site coaching in the field even they had completed basic training in microscopic examination.

6.6.5 Issues, challenges and recommendations

Issues and bottlenecks	Recommendations	Responsibility
Inadequate human resource sanctioned for PPHL	Advocate with MoH, PPSC for allocation of required HR	MoH, PPHL, PPSC
Delay transportation of TB QC slide to PPHL due to inadequate budget	Coordinate with MoH for required budget Cost sharing with district Health Offices and local level	MoH, PPHL, Health Offices, Local levels
Inadequate laboratory equipment	Coordinate with MOH for budget for required equipment	MoH, PPHL
Quality of microscope in use at some of the MCs are of low quality	MCs should be supplied with microscope suitable for TB and malaria testing	PPHL
District and province health authorities have inadequate data on different categories of laboratories	The laboratories established by government and private sector should align with PPHL for quality control.	MOH, HD, PPHL, HO

Chapter 7: Ayurveda and Alternative Medicine

7.1 Background

'Ayurveda' literally means "Science of Life". Ayurvedic medicine is one of the world's oldest holistic healing systems which works through simple and therapeutic measures along with promotive, preventive, curative and rehabilitative health of people. The sources of Ayurvedic medicine are medicinal herbs, minerals and animal products. Ayurveda health services are being delivered through one Central Ayurveda Hospital (Nardevi), one Provincial Hospital (Dang), 14 Zonal Ayurveda Dispensaries, 61 District Ayurveda Health Centers and 305 Ayurveda dispensaries across the country. The Ayurveda and Alternative Medicine unit in the Ministry of Health & population (MoHP) is responsible for formulating policies and guidelines for Ayurveda and other traditional medical system.

Fifteenth periodic plan of Government of Nepal (2019/20-2023/24) has guided the government to develop and expand Ayurvedic, natural medicine and other complementary medicines in planned way. More specifically, it says: i) Institutional mechanism will be developed for identification, collection, preservation and promotion of locally available medicinal herbs and minerals; ii) Health tourism will be promoted by establishing service center for Ayurveda and other complementary medicine at national level.

7.2 Ayurvedic Health facilities of Lumbini Province

Ayurved health services are delivered by one provincial hospital, 2 Ayurved Chikitshalaya, 10 Ayurved Swasthya Kendra, 45 Ayurved Aushadhalaya, 42 Nagarik Aarogya Kendra and 2 Bishtarit Sewa Kendra in Lumbini Province.

Table 105: Ayurvedic Health facilities of Lumbini Province

SN	Districts	Provincial Ayurved Hospital	Ayurved Chikitshalaya	Ayurved Swasthya Kendra	Ayurved Aushadhalaya	Nararik Aarogya Kendra	Bistarit Sewa Kendra
1.	Rupandehi	-	1	-	6	3	-
2.	Kapilvastu	-	-	1	4	5	-
3.	Pyuthan	-	-	1	3	4	1
4.	Dang	1	1	-	4	6	-
5.	Arghakhanchi	-	-	1	2	4	-
6.	Palpa	-	-	1	7	3	-
7.	Gulmi	-	-	1	5	5	1
8.	Banke	-	-	1	5	4	-
9.	Bardiya	-	-	1	5	4	-
10.	Rolpa	-	-	1	2	4	-
11.	Nawalparasi W	-	-	1	2	-	-
12.	Rukum East	-	-	1	-	-	-
Total		1	2	10	45	42	2

7.3 Significant Initiative in Ayurvedic and Alternative medicine

- Establishment of Ayurveda Service Center in Rukum East and Nawalparasi West
- Panchakarma service is available in 10 districts
- Development of yoga manual for teachers and Ayurvedic health workers
- Development of Panchakarma Manual
- Establishment of basic lab in all ayurvedic center of Lumbini province
- Geriatrics and *Stanpaie* services are expanded to all 12 districts
- *Initiated Mero Swasthya Mero Jimmewari* program in the province

7.4 Service statistics of Ayurveda health facilities

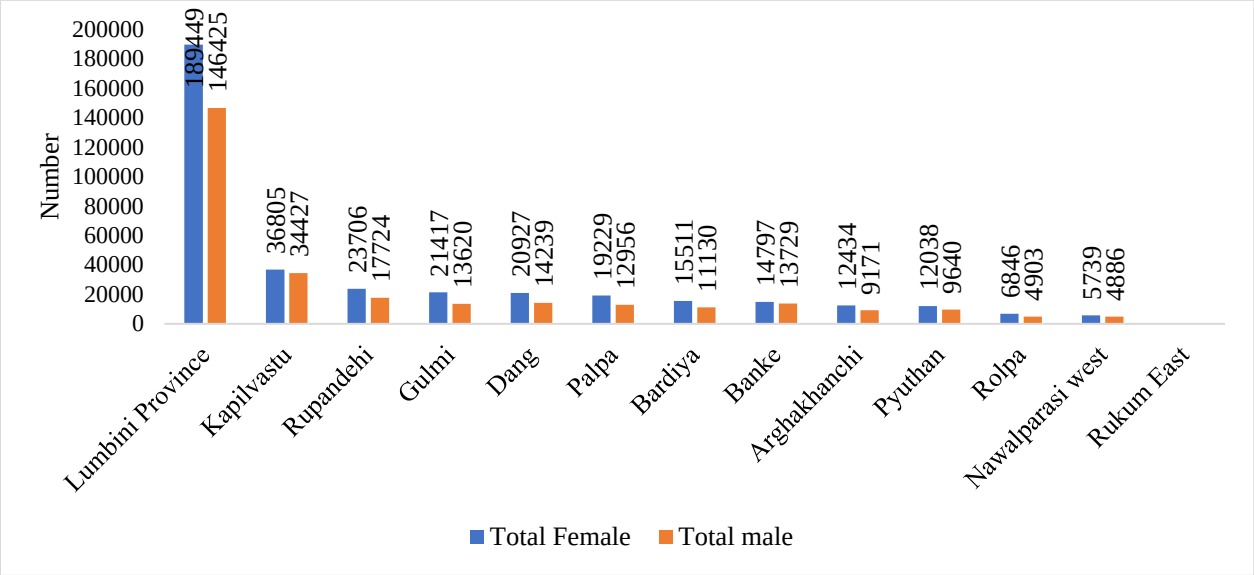
Table 106:Age wise distribution of new client in ayurvedic health facilities

District	0-6 month	6 -11 month	1-4yrs	5-16 yrs	17-59yrs	> = 60 yrs	Total
Kapilvastu	39	122	376	1585	41002	9524	52648
Rupandehi	1	40	510	1605	29979	9267	41402
Dang	53	204	675	2290	23591	7414	34227
Banke	26	68	298	951	19282	6963	27588
Palpa	18	55	369	1490	18158	6482	26572
Gulmi	19	129	631	5393	17982	6431	30585
Bardiya	45	112	364	1753	18635	6082	26991
Arghakhanchi	1	17	145	560	13537	4197	18457
Nawalparasi West	0	9	79	705	5948	3060	9801
Rolpa	3	47	186	1248	6586	2285	10355
Pyuthan	1	24	202	431	12264	2025	14947
Rukum East	0	0	0	0	0	0	0
Lumbini Province	206	827	3835	18011	206964	63730	293573

Table above shows the age wise distribution of client receiving services from ayurvedic health facilities in fiscal year 2078/079. In Lumbini province, the highest number of new clients receiving ayurvedic health facilities are in the age group of 17-59 years.

7.5 Total new OPD visit in Ayurvedic health facilities

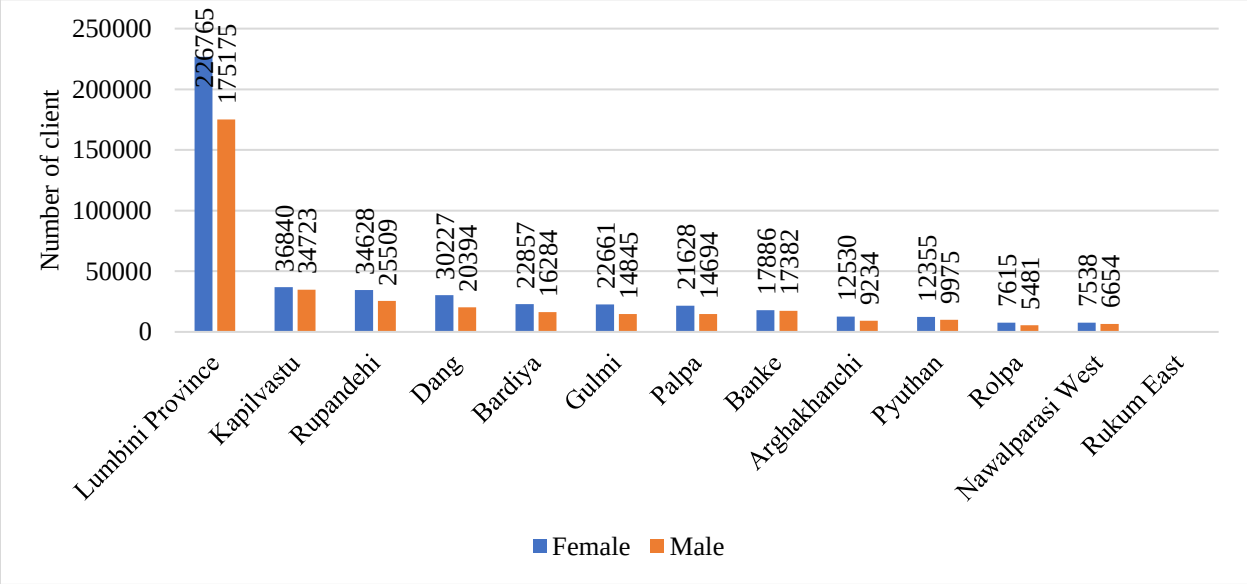
Figure 69:Total new OPD visit in Ayurvedic health facilities



Above figure shows the total new OPD visit in Ayurvedic Health facilities. Data shows that in compared to male (1,46,425) there are more female (1,89,449), visiting OPD to receive ayurvedic health services.

7.6 Total client served from ayurvedic health facilities

Figure 70:Total client served from ayurvedic health facilities



Above figure shows the total client served from Ayurvedic health facilities. Data shows that in compared to male (175175) there are more female (226765), served from ayurvedic health facilities.

Table 107: Status of availability of infrastructure and equipment in Ayurveda health Service centres in Lumbini province

S.N.	Instrument/ Equipment	Provincial Ayurved Chikitsalaya, Dang	Rapti Ayu Chi, Dang	Lumbini Ayu Chi, Butwal	Palpa A.H.C	Gulmi A.H.C.	Argha khanchi	Kapil bastu A.H.C	Pyuthan A.H.C.	Rolpa A.H.C.	Banke A.H.C.	Bardia A.H.C.
1	Microscope	1	1	1	1	1	1	1	1	1	1	1
2	Clorimeter	1	1	1	1	1	1	1	1	1	1	1
3	Sentrifuge	1	1	1	1	1	1	1	1	1	1	1
4	Fridge	1	1	1	1	1	1	1	1	1	1	1
5	Hot air oven	1	1	1	1	1	1	1	1	1	1	1
6	Autoclave	1	2	1	1	6	1	1	1	1	1	1
7	Micro Pipate	1	2	5	1	1	1	1	1	1	1	1
8	Dry-bath	1	1	1	1	1	1	1	1	1	1	1
9	Semi-Auto Analizer	1	1	1	1	1	1	1	1	1	1	1
10	Sirodhara table	1	1	1	1	1	1	1	1	-	1	1
11	E.N.T. set	2	1	1	1	4	1	1	1	1	1	1
12	B.P. set	10	1	3	2	3	2	3	3	1	1	2
13	Weight machine	3	1	2	2	1	1	1	2	1	1	1
14	Baby weight machine	1	1	2	1	-	-	-	1	-	-	-
15	Steam–box sitting	1	1	3	1	3	2	2	1	2	3	3
16	Desk top computer	2	2	2	2	1	2	2	1	2	1	1
17	Laptop	4	1	1	1	3	1	2	2	1	1	1
18	Printer	2	1	1	2	2	1	1	1	2	1	2
19	Nadi-swedan yantra	1	1	1	1	-	-	-	1	1	-	-
20	Grinder – machine	1	1	1	-	1	-	-	1	-	1	1
21	Gluco meter	1	1	1	2	-	-	1	1	-	-	-
22	Steam- box Laying	1	1	1	1	-	1	1	1	-	-	1
23	Power back-up	2	1	1	1	1	1	1	1	1	1	1
24	Inverter	1	1	1	1	-	need	-	1	1	-	-
25	Projector	1	1	need	1	need	need	need	1	1	1	1
26	U.S.G machine	1	-	-	-	-	-	-	-	-	-	-
27	X-ray machine	1	-	-	-	-	-	-	-	-	-	-
28	Solar heater	1	-	-	1	-	-	-	-	-	-	-
29	Washing machine	1	-	-	-	-	-	-	-	-	-	-
30	Deluxe bed	7	-	-	-	-	-	-	-	-	-	-

7.7 Issues and recommendations

Table 108: Issues and recommendations in Ayurveda and Alternative Medicine

Key Issues	Recommendation	Responsibility
Inadequate human resources for Ayurveda services	Review the organogram and recruit staff through PPSC Deliver service by recruiting staff on contract	PPSC, MoH/ HD
Lack of appropriate recording and reporting system	Development and Implementation of Ayurveda Information Management System (AHIMS) Training on AHIMS for Ayurveda personnel	MoH/ HD, F-MoHP
Low priority for Ayurveda programs	Allocate adequate program and budget for the Ayurveda health activities	MoH/ HD F-MoHP
No Minimum Service Standard (MSS) in Ayurveda health facilities	Development of MSS and its implementation by provincial authorities (MoH/HD) in Ayurveda health facilities	MoH/HD, F-MoHP
No Standard Treatment Guidelines for Ayurveda health facilities	Develop standard treatment protocol for curative Ayurveda services and provide orientation to Ayurved staff	MoH F-MoHP

Chapter 8: Performance Evaluation

Background

The Ministry of Health and Health Directorate conducted routine monitoring and supervision visits of health programs in different health service delivery outlets (hospitals, health offices/ municipalities/ health facilities and Ayurveda health centers) to strengthen the ongoing health service delivery activities through regular feedback mechanism. The Health Directorate has formed a five-member evaluation committee in leadership of Senior Public Health Administrator to prepare a criterion to examine different aspects of health system functionality and ranking of health offices, hospitals and Ayurveda health facilities based on the annual service delivery and management status. In FY 2078/079, the Health Directorate continued the annual performance evaluation of provincial authorities based on the pre-defined criteria.

The major criteria undertaken for hospital evaluation were MSS score, reporting rate, reporting rate on time, OPD reporting, IPD reporting, financial affairs, remoteness, annual report preparation, health directorate evaluation of FY 2078-79. For health office, major criteria undertaken for evaluation were achievements of national programs- National Immunization, Nutrition program, Community based integrated management of neonatal and childhood illness, Family Planning program, Safe motherhood program, Female Community health volunteers, Primary Health care outreach clinics, Tuberculosis control program, Malaria control program, Reporting Status of HMIS, Physical and Financial Progress, District Annual Health Report, Remoteness and Achievement status, Financial Management and Evaluation by Health Directorate. Similarly, the criteria undertaken for Ayurveda health facilities were based on health service provided in FY 2078/79 relating to reporting rate on DHIS2, total clients served, purbakarma and panchakarma, financial and physical progress, irregularity clearance, annual report preparation, innovative work and remoteness.

Detail criteria for hospital performance evaluation

S.N	Indicators	Marking
1	Minimum Service Standard (MSS) evaluation	50
2	Reporting rate	5
3	Reporting rate on time	5
4	OPD service reported	5
5	IPD service reported	5
6	Financial score (absorption and irregularity clearance)	10
7	Remoteness	5
8	Hospital annual report	5
9	Health directorate evaluation	10
	Total	

Detail criteria for Health Office performance evaluation:

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
National Immunization Program (10)				
Dropout Rate of Penta 1st vs MR II	Number of children under one year who received Penta Ist-MR II vaccine	100	5	Below 10% dropout rate equals 5, otherwise decreases proportionately
% of measles/rubella II	Number of children under one year immunized with II dose of measles/ rubella	100	5	100% coverage equals 5, otherwise decreases proportionately
Nutrition Program (5)				
% of new growth monitoring (U2)	Number of new visits under 24 months for growth monitoring	100	5	100% coverage equals 5, otherwise decreases proportionately
Community Based Integrated Management of Neonatal & Childhood Illness (CBIMNCI, 5)				
% of severe pneumonia among new cases	Number of new cases of children under five years with ARI Suffering very/severe pneumonia (facility, outreach & community)	100	2.5	2.5 for coverage ≤1%, otherwise decreases proportionately
% of diarrheal cases treated with zinc and ORS	Number of children under five years with Diarrhea treated with ORS and zinc (facility, outreach and community	100	2.5	100% coverage equals 2.5, otherwise decreases proportionately
Family Planning Program (10)				
Contraceptive prevalence rate of modern temporary methods as % of MWRA	Total number of MWRA currently using modern methods of family planning	100	5	5 for CPR ≥65%, otherwise decreases proportionately
% of sterilization camps conducted against the annual target	Total number of sterilization camps conducted in a year	100	5	100% coverage equals 5, otherwise decreases proportionately
Safe motherhood program (10)				
% of pregnant women who had four ANC checkup as per protocol (4th, 6th, 8th and 9th month) among expected pregnancy	Number of pregnant women aged 15-49 years who had four ANC checkups as per protocol (4th, 6th, 8th and 9th month)	100	5	5 for coverage ≥80%, otherwise decreases proportionately
% of institutional delivery	Number of deliveries conducted in health facilities	100	5	5 for coverage ≥65%, otherwise decreases proportionately
Female Community Health Volunteers (FCHV, 5)				
% of mothers group meetings held	Number of mothers group meetings held	100	5	100% equals 5, otherwise decreases proportionately
Primary Health Care Outreach Clinics (PHCORC, 5)				

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
% of planned Primary Health Care-Outreach Clinics (PHC/ORC) conducted	Number of primary health care outreach clinics conducted	100	5	100% equals 5, otherwise decreases proportionately
Tuberculosis Control Program (5)				
Case notification rate (PBC and relapse) (%)	New bacteriologically confirmed pulmonary cases registered in NTP in defined time and area	100	2.5	100% equals 2.5, otherwise decreases proportionately
Treatment success rate (%)	[(Number of new positive cases (bacteriologically confirmed who got smear negative result in the last month of treatment and on at least one previous occasion) + (number of new positive cases registered who completed treatment but did not meet the criteria for cure or failure)]	100	2.5	2.5 for coverage ≥90%, otherwise decreases proportionately
Malaria Control Program (5)				
% of blood slide collected and examined	Total number of blood slides examined (microscopic, RDT, both)	100	5	100% coverage equals 5, otherwise decreases proportionately
Reporting status of HMIS, physical and financial progress (10)				
Reporting rate of Health Management Information System (HMIS)	Number of health facilities reported their HMIS report completely	100	5	5 for 100% reporting, otherwise decreases proportionately
Complete & timely Reporting	NA	NA	5	5 for complete & timely reporting otherwise decreases proportionately
District Annual Health Report (5)				
District Annual Health Report	NA	NA	5	5 for excellent, otherwise decreases accordingly

Remoteness (5)		
Indicator	Weight	Evaluation Criteria
Remoteness	5	5 for Rukum Purba, 4 for Rolpa, Pyuthan, Gulmi, Arghakhanchi & 3 for Palpa, Nawasprasi, Kapilvastu, Bardiya and 2 for Dang, Banke, Rupendehi
Achievement Status (3)		
Achievement uniformity	5	5 for CV ≤ excluding negative indicators and Evaluation by HDs, Otherwise decreases proportionately
Financial Management (5)		
Budget absorption capacity	2.5	2.5 for 100% expenditure, otherwise decreases proportionately

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
Irregularities Settlement (IS)	2.5			2.5 for IS ≥50%, otherwise decreases proportionately
Evaluation by Health Directorates (10)				
Evaluation by Health Directorate	10			Retention of HO at district=1, District health program management=5 [staff mobilization=1, work plan=1, planning=1, monitoring =1, evaluation=1], attendance and participation of HO level meeting workshop =1, local level resource mobilization=1 and innovative activities=1

Detail criteria for Ayurveda performance evaluation:

S.N	Indicators	Marking
1	Reporting rate on DHIS2	10
2	Total Client served	10
3	Total OPD served	10
4	Total Purbakarma and Panchakarma	10
5	Financial/Physical Progress	10
6	Irregularity Clearance	10
7	Annual Report	10
8	Innovative work	10
9	Remoteness	10
10	Response to MoH/HD	10
	Total	100

Ranking of Hospital performance evaluation:

Hospitals	Marks obtained	Rank of this year	Rank of last year
Kapilvastu Hospital	86.14	1	2
Bardiya Hospital	85.19	2	1
Gulmi Hospital	80.9	3	5
Lumbini Provincial Hospital	75.77	4	12
Arghakhanchi Hospital	75.43	5	7
Pyuthan Hospital	72.55	6	8
Rapti Provincial Hospital	70.54	7	3
Prithvi Chandra Hospital	70.48	8	6
Rolpa Hospital	70.1	9	4
Bhim Hospital	61.94	10	11
Rampur Hospital	59.8	11	9
Palpa Hospital	57.32	12	10
Rukum East Hospital	44.31	13	13

Ranking of Health Office performance evaluation:

Health Office	Marks obtained	Rank of this year	Rank of last year
Rupandehi	80.71	1	6
Bardiya	79	2	2
Pyuthan	78.7	3	1
Nawalparasi	77.62	4	4
Gulmi	77.1	5	7
Rolpa	76.8	6	3
Kapilvastu	73.5	7	11
Palpa	73	8	5
Dang	72.7	9	9
Arghakhanchi	72.5	10	8
Banke	70.5	11	10
Rukum East	69	12	12

Ranking of Ayurveda performance evaluation:

Organization	Marks obtained	Rank of this year	Rank of last year
Kapilvastu Ayurved health center	49.441	1	1
Bardiya Ayurved health center	46.309	2	8
Rapti Ayurved Chikitsalaya Dang	45.992	3	4
Arghakhanchi Ayurved Health Center	45.968	4	5
Palpa Ayurved Health Center	44.495	5	2
Gulmi Ayurved Health Center	44.435	6	10
Pyuthan Ayurved Health Center	43.642	7	11
Banke Ayurved Health Center	41.676	8	7
Lumbini Ayurved Chikitsalaya	36.274	9	6
Rolpa Ayuved Health Center	30.225	10	9
Rukum Ayurved Health Center	29.224	11	0
Nawalparasi Ayurved Health Center	23	12	0

Table no: 109 Indicator wise achievement of district and its ranking:

District	Drop out Penta 1st Vs MR2	% of measles/rubella 2	% of children aged 0-23 months registered for growth monitoring	% of severe Pneumonia among new cases	% of children under five years with diarrhea treated with zinc and ORS	CPR	Vasectomy	% of pregnant women who had four ANC checkups as per protocol (4th, 6th, 8th and 9th month)	3 PNC	% of institutional deliveries	% of Mother groups meeting held	% of Reporting Status (PHCORC)	TB - Case notification rate (New and Relapse cases)	TB - Treatment Success Rate	Percentage of blood slide collected that were examined and tested positive	01-1 Reporting Status Dataset Reporting rate	01-1 Reporting Status Dataset Reporting rate on time	Annual Report	budget Iregularity	Uniformity	HD	Remoteness	Budget	Total Marks	Rank of this fiscal year 2078/79	Rank of last fiscal year 2077/78
RUKUM EAST	2.20	4.51	4.33	1.85	2.35	1.64	0.90	1.81	1.47	2.34	4.73	4.70	2.27	2.50	5.00	4.98	4.61	3.00	0.03	2.35	2.50	5.00	3.95	68.97	12	12
ROLPA	5.00	4.58	4.54	2.23	2.50	2.05	2.30	1.83	1.52	2.29	4.84	4.80	2.36	2.50	5.00	5.00	5.00	3.00	0.00	2.62	4.50	4.00	4.37	76.81	6	3
PYUTHAN	4.40	4.51	4.34	2.38	2.50	2.65	1.00	1.72	1.25	2.50	4.85	4.74	2.29	2.50	4.75	5.00	5.00	3.50	2.48	2.94	5.00	4.00	4.42	78.70	3	1
GULMI	5.00	5.00	5.00	2.40	2.48	1.12	1.38	2.48	1.74	2.38	4.88	4.73	2.13	2.37	5.00	5.00	4.87	3.50	0.10	2.48	5.00	4.00	4.05	77.06	5	7
ARGHAKHANCHI	2.10	5.00	5.00	2.48	2.47	1.94	1.10	2.22	1.51	1.81	4.98	4.84	2.29	2.50	5.00	5.00	4.96	3.50	0.00	2.38	3.00	4.00	4.45	72.51	10	8
PALPA	5.00	4.58	4.02	2.18	2.48	1.84	0.00	2.93	1.45	2.50	4.74	4.87	2.22	2.46	4.42	5.00	4.71	3.50	2.50	2.77	2.50	3.00	3.40	73.05	8	5
NAWALPARASI WEST	5.00	5.00	4.85	2.35	2.44	1.43	5.00	2.46	1.18	1.88	4.86	4.75	2.15	2.39	4.80	5.00	4.68	4.00	0.08	2.59	5.00	3.00	2.75	77.62	4	4
RUPANDEHI	5.00	5.00	5.00	2.45	2.50	1.47	4.35	3.68	1.64	2.50	4.79	4.48	2.28	2.50	4.96	5.00	5.00	3.50	0.03	2.80	5.00	2.00	4.80	80.71	1	6
KAPILBASTU	3.85	4.69	3.79	2.33	2.31	1.38	4.70	1.92	0.76	2.28	4.59	3.67	2.24	2.48	4.96	5.00	4.86	3.00	0.85	2.72	5.00	3.00	3.15	73.50	7	11
DANG	5.00	5.00	4.95	2.40	2.50	1.42	1.95	2.05	1.24	2.50	4.77	3.87	2.32	2.50	4.77	5.00	4.79	2.50	0.00	2.50	5.00	2.00	3.65	72.67	9	9
BANKE	0.00	4.77	4.03	2.48	2.50	1.01	2.55	2.63	1.66	2.50	4.65	4.53	2.28	2.50	4.92	5.00	4.87	3.00	2.50	2.66	3.00	2.00	4.50	70.52	11	10
BARDIYA	5.00	5.00	3.72	2.45	2.48	2.31	4.00	2.16	1.20	2.22	4.53	4.70	2.34	2.50	4.71	5.00	4.96	4.50	0.43	2.85	5.00	3.00	4.00	79.04	2	2
Full Marks	**5**	**5**	**5**	**3**	**3**	**5**	**5**	**3**	**3**	**3**	**5**	**5**	**3**	**3**	**5**	**5**	**5**	**5**	**3**	**5**	**10**	**5**	**5**	**100**		

Table no: 110 Indicator wise achievement of Hospitals and its ranking:

Hospital Name	Minimum service Standard (Score: 50%)	Reporting Rate(Score=5): 5 for 100% then decrease accordingly	Reporting Rate on time (Score=5): 5 for 100% then decrease accordingly	IPD Reporting (Score=5): 5 for 100% then decrease accordingly	OPD Reporting (Score=5): 5 for 100% then decrease accordingly	Budget Utilization (Score=5): 5 for 100% then decrease accordingly	Irregularity Clearance (Score=5	Remoteness	HD	Annual Report	Total Marks	Rank	Last year Rank
Lumbini Provincial Hospital	37.00	5.00	5.00	5.00	4.15	4.85	4.25	2.00	6.02	2.50	75.77	4	12
Rapti Provincial Hospital	35.50	5.00	4.59	4.59	5.00	3.73	0.10	2.00	7.05	3.00	70.54	7	3
Bhim Hospital	28.00	5.00	5.00	3.34	5.00	3.89	0.10	2.00	6.12	3.50	61.94	10	11
Prithibi Chandra Hospital	36.50	5.00	3.34	3.75	4.90	4.80	0.00	3.00	6.19	3.00	70.48	8	6
Kapilbastu Hospital	43.50	5.00	5.00	5.00	5.00	4.90	5.00	3.00	6.74	3.00	86.14	1	2
Palpa Hospital	25.50	5.00	4.59	4.59	5.00	4.15	0.00	3.00	3.00	2.50	57.32	12	10
Rampur Hospital	27.00	5.00	5.00	5.00	4.90	3.90	0.00	4.00	2.00	3.00	59.80	11	9
Arghakhanchi Hospital	35.00	5.00	5.00	5.00	5.00	4.40	5.00	4.00	3.03	4.00	75.43	5	7
Gulmi Hospital	43.00	5.00	4.17	4.59	5.00	4.25	1.30	4.00	6.10	3.50	80.90	3	5
Rolpa Hospital	32.50	5.00	4.59	5.00	5.00	4.50	0.00	4.00	5.02	4.50	70.10	9	4
Pyuthan Hospital	37.00	5.00	5.00	5.00	5.00	4.50	0.05	4.00	4.00	3.00	72.55	6	8
Rukum Purba Hospital	12.50	5.00	3.34	3.34	5.00	4.10	0.00	5.00	3.04	3.00	44.31	13	13
Bardiya Hospital	43.00	5.00	5.00	5.00	5.00	4.90	4.60	3.00	6.69	3.00	85.19	2	1
Full Marks	50	5	5	5	5	5	5	5	10	5	100.00		

Table no: 111 Indicator wise achievement of Provincial Ayurveda Health facility and its ranking:

Ayurveda Health facility	Financial progress	Reporting rate	Total Client	OPD Visit	Purbakarma/panchakarma	Beruju clearing	Annual Report	Innovative works	Remoteness	Response and coordination with HD/MOHP	Total Marks	Rank of this fiscal year 2078/79	Rank of last fiscal year 2077/78
रुकुम आयुर्वेद स्वास्थ्य केन्द्र	0.00	5.00	0.16	0.07	0.00	10.00	4.50		5.00	4.50	29.22	11	0
रोल्पा आयुर्वेद स्वास्थ्य केन्द्र	6.15	10.00	0.41	0.41	0.26	0.00	4.50		4.00	4.50	30.22	10	9
प्युठान आयुर्वेद स्वास्थ्य केन्द्र	9.50	8.33	0.69	0.91	0.22	10.00	5.00		4.00	5.00	43.64	7	11
गुल्मी आयुर्वेद स्वास्थ्य केन्द्र	9.69	10.00	0.63	0.92	0.19	10.00	4.50		4.00	4.50	44.43	6	10
अर्घाखाँची आयुर्वेद स्वास्थ्य केन्द्र	9.95	10.00	0.75	0.90	0.37	10.00	5.00		4.00	5.00	45.97	4	5
पाल्पा आयुर्वेद स्वास्थ्य केन्द्र	9.51	10.00	0.61	0.78	0.60	10.00	5.00		3.00	5.00	44.49	5	2
नवलपरासी आयुर्वेद स्वास्थ्य केन्द्र	0.00	0.00	0.00	0.00	0.00	10.00	5.00		3.00	5.00	23.00	12	0
लुम्विनी आयुर्वर्द चिकित्सालय	9.15	10.00	1.19	0.87	3.06	0.00	5.00		2.00	5.00	36.27	9	6
कपिलबस्तु आयुर्वेद स्वास्थ्य केन्द्र	10.00	10.00	2.26	2.50	1.68	10.00	5.00		3.00	5.00	49.44	1	1
राप्ती आयुर्वेद चिकित्सालय दाङ	9.90	10.00	1.16	0.95	1.98	10.00	5.00		2.00	5.00	45.99	3	4
बाँके आयुर्वेद स्वास्थ्य केन्द्र	9.90	10.00	1.17	0.89	0.12	7.60	5.00		2.00	5.00	41.68	8	7
बर्दिया आयुर्वेद स्वास्थ्य केन्द्र	10.00	10.00	0.98	0.81	1.52	10.00	5.00		3.00	5.00	46.31	2	8
Full Marks	10	10	10	10	10	10	10	10	10	10			

Chapter 9: Health Development Partners

Constitutional essence of Coordination, Collaboration and Co-existance among the Health Development Partners and Government counterparts have been adopted effectively in Lumbini province. Hierarchy of results discussed in the previous sections are common product of consolidated efforts of government and development partners. Ministry of Health, Health Directorate, Provincial Health Logistic Management Center, Health Training Center and Provincial Public Health Laboratory acknowledge the partnership with EDPs and their large contribution in Provincial health sector. This chapter attempts to highlight the major thematic area and scope of activities, geographical coverage and key immediate results achieved during the year of FY 2078/79.

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
World Health Organization (WHO)	Health systems strengthening, Immunization/Covid Vaccination, Disease control and surveillance and Health Emergency Sexual and Reproductive Health and Right	Province and 12 districts	• Provincial policies, strategies, guidelines, plan, Health Information system/HF registry • Data Management, Capacity building, Monitoring & Surveillance, coordination, Resource mapping, Technical Assistance, Outbreak Investigation, IHR related activities, Hospital & Disaster Preparedness • Introduction of new and underused vaccine (sustaining Polio free status, NNT Control and JE & Rubella Control; achieving Measles and Rubella Elimination and Full Immunization Goals) Capacity Building: Immunization, VPD surveillance, AEFI investigation and outbreak investigation. • Strengthening SRHR program (monitoring, listing and certification of new SAS sites and providers, forecasting, supply chain and logistics management, Medical Abortion (MA) drugs and other SRHR commodities, Inservice training need assessment) • NCD and Mental health program strengthening (PEN training, Mental health training)	Pragati Joshi, SRHR Officer (SRHRO), 9843610182 prjoshi@who.int Shankhuk Bhatta-PHO, 9849321269, bhattas@who.int Mona Pradhan (FMO) 9849179380 pradhanm@who.int Poshan Neupane ,NCD and Mental health officer 9849662430 neupanep@who.int
United Nations Population Fund (UNFPA)	Sexual and Reproductive Health Supply chain management Health Emergency	Province and Rukum East, Rolpa, Pyuthan, Argakhachi, Kapilvastu	• Upstream policy support at the province and local levels: Ending Child Marriage Strategy, • Gender Equality Policy, DDPRP, Local-level periodic plan • Technical & HR Support in FP, SRHR, • Supply Chain Management, GBV PR • Total 11 human resources supported: SRH Coordinator, Supply Chain Officer, Technical Officer on Health Response to GBV, Sign Language Interpreter, Psychosocial counselors	Ram Thapa, Chief of Sub-national Office, rthapa@unfpa.org 9802522101

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
			• Reaching the unreached: Advanced initiatives to promote inclusive SRHR for persons with disabilities, migrant population, minorities (Khushal Pariwar Approach) and microplanning • Strengthening of ASRH through approaches like AFS certification; integration of CSE in school curriculum; supported to establish and strengthen 30 Adolescent Friendly Information Corners (Kapilvastu and Rukum-East) • Technical assistance and support in strengthening supply chain management • Humanitarian Support: supported >50 RH kits & >2000 dignity Kits & >1200 adolescent kits, DDPRPs updated in three districts; > 150 district stakeholders oriented on MISP	Rasmita Paudel, Family planning advisor paudel@unfpa.org 9841690800
UNICEF	Child Health, COVID19 response/Vaccination Communication/ Risk Communication Nutrition	12 districts	• Routine Immunization Strengthened (data verification, FI declaration) • Immunization Supply Chain Strengthened • Cold Chain inventory updated (69 Cold Chain equipment installed, Wireless temperature monitoring: Tamnagar, • MSNP program scaled up in all 12 districts -109 LLGs • Technical support for the HR capacity development in Immunization, Cold Chain management, CNSI, MSNP • Community engagements increased for Immunization, Nutrition and COVID-19 • Conducted Cold Chain Inventory Gap Analysis and equipment supplied through Cold Chain Equipment Optimization Platform plan	Riddhi Sharma- Chief, risharma@unicef.org, 9857017269 Meena Thapa, Nutrition Officer methapa@unicef.org 9857017258 Yangzi Sherpa, Health Officer ysherpa@unicef.org Mob: 9857017260
USAID's Strengthening System for Better Health Activity **(SSBH)**	Maternal, Neonatal & Child Health and Family Planning Health Systems and Governance Generation and Use of Health Information	6 Tarai districts - Nawalparasi, Rupendehi, Kapilvastu, Dang, Banke and Bardiya)	• Supported in the process of formulation of Province Health Sector Strategic Implementation Plan, Programmatic Implementation Guidelines, among others. • Supported to conduct Provincial annual health reviews, annual health report preparation and developing e-provincial health profile, • Establishment and Strengthening of Clinical Training Sites. • Supported to strengthen HIS through establishing Data Management Committee introducing DHIS2 Coach Development approach, RDQA training, HMIS/DHIS2 training, data review • Supported in formulation of Health Policies in 26 & Health Act in 21 Municipalities • All 6 Districts and municipalities supported during Annual health Review meetings • Supported to conduct preplanning meetings at municipal level to strengthen evidence-based planning system	Nila Kantha Gautam, Program Coordinator 9858751001 nila_gautam@ssbhnepal.org Keshab Sanjel Technical Coordinator- HIS 9851228317 Keshab_sanjel@ssbhnepal.org

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
			• Supported in roll-out and follow-up of HPMSS in 106 Health facilities • Supported to conduct Social Audit in 6 districts- 18 HFs • 987 Health Workers trained (SBA-37, IUCD-20, implant-32, MNH update- 579, management of childhood illness- 284, CoFP- 35) • 1366 Health Workers trained on Information System and Logistic (e/LMIS-103, DHIS2-407, HMIS-774, RDQA-82) • 109 SDC member and 242 HFOMC members oriented, 1232 locally elected members oriented on GESI	
	COVID-19 Health Emergency Response and Management	6 districts- Nawalparasi, Rupendehi, Kapilvastu, Dang, Banke and Bardiya)	• 167 Health posts equipped with HP waste management supplies (Autoclave, colored waste bins, gloves, needle cutter, among others) • Fully automatic RNA extraction, Biosafety Cabinet, Vortex, -80 freezer, power back-up • Support in Vaccination cards, registers, safety box, vaccine transportation • COVID-19 data management on regular/ daily basis and generate situation reports • Assessment of availability, utilization and functionality of medical equipment • Community engagement (review meetings and FCHV mobilization) to increase vaccination coverage • Human resource support by field medical officers, nursing officers, laboratory technologists at hospitals and lab • IPC, HCWM, Adult and Pediatric Essential Critical Care Trainings, onsite coaching on case management • COVID-19 and vaccination related Information management (IMU/DHIS-2, QR code verification, CICT) • COVID-19 vaccination (Pfizer, vaccinators training)	
SUAAHARA II	Nutrition Child health Sexual and Reproductive Health Health Education and Communication (IEC/BCC)	109 Municipalities of 12 districts	• Household, Community level nutrition promotion, Advocacy with ward and LLG, Capacity building of 1000 days, FCHV, Health worker, Policy formation support to LLG, SAM/MAM identify and refer. • Support and engagement for implementation of Multisector nutrition plan • Ensure of commodity in facility level, awareness raising in HH and Community level, training capacity building on IUCD and Implant • SBCC Campaign for promotion of integrated nutrition and health behaviour - Regular radio, television program, jingles, BCC materials production air and circulation province, LLG, community level.	Bharat Sharma, Program Coordinator, Provincial Focal Point Mobile: 9852025948, bsharma@hki.org

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
	GESI Health Emergency		• Awareness raising in community and local level on CBIMNCI, IMAM, IYCF, referral and Adolescents health and nutrition program. • HR support in Province, Health Office, PoE, Local level for Covid-19 prevention • Logistics support PPE items to PHLMC, Health Office, LLG and FCHVs. • Training and capacity building-Health worker, FCHV and community people. • Intensive support for vaccination against Covid-19 campaign - Transportation, Training, awareness campaign and ward, LLG and district declaration program.	
United Nations Development Program	Health systems and governance	Selected Municipalities of 12 districts	Supported on digitization of COVID-19 Immunization Campaign in Butwal Sub-Metropolitan City	Sudip Aryal, 9851131921, Sudip.aryal@undp.org
World Food Program	Supply Chain Management/ Public Procurement	12 districts	Supported on transportation and storage support during emergency	Panna Lal Maharjan-PC, 9852030308
IOM	Health Emergency focusing Point of Entry	Banke, Kapilbastu, Rupandehi	• Covid19 response, PoE trainings/orientation (both government and security), Logistic support at Health desk at 3 PoE Risk communication, Health Training package development	Prakash Magar, 9841294362 pbmagar@iom.int
UNOPS	Health systems and governance	Rupandehi	• Supported to installation the O2 plant in Lumbini Provincial Hospital, Butwal	Santosh Khatiwoda, 9801229455, santoshk@unops.org
Nepal Health Sector Support Program (NHSSP)	Leadership and Governance Health Services Delivery/ Quality and Coverage GESI Health Infrastructure Data for Decision Making	Province and selected Municipalities	• Developed policies, acts, program implementation guideline and action plan at local and provincial level. • Strengthen HMIS/DHIS-2, Improve quality of data, Conducted RDQA, Improved Health Facility Registration • Conducted MSS, Training and orientations on BHS-STP, Developed training sites (LARC)-2 • Disability inclusive health assessment report of Lumbini province, capacity development of SSU, Medico-legal training	Sarashwati Giri C&Q Provincial Coordinator, NHSSP sarashwati@nhssp.org.np 9841721705

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
Save the Children	HIV & AIDS Program Tuberculosis Program Malaria Program	Selected Municipalities of 11 districts through local partner organizations	HIV Program: 104,368 KPs Reach through BCC Package, 86,748 HIV Testing done, 145 Reactive and link to treatment, 2729 PLHIVs Receiving Care & Support Service, 273 CLHIVs receiving Cash support TB Program: 4073 new TB case finding (All forms) contributed to overall TB case finding in the province, 871 TB cases referred from Pharmacy Referral+P4P under PPM, 233 <5 aged children received TPT, 35 newly RR cases detected Malariya Program: 155 Malaria case reported and investigated as per 1-3-7 principle, 19 Foci follow up done, 1897 LLIN Distribution Regular support: Uninterrupted supply of TB, HIV and Malaria commodities, Quality service delivery from SDP level, TB, HIV and Malaria reporting rate is near about 100%, TB, HIV and Malaria data error is < 3%, Private sector's engagement is increasing trend	Mim Bahadur Singh, ,9843435559 mim.singh@savethechildren.org Dr. Garima Tripathi 9849149391
FAIRMED	Health systems and governance, Disease control, GESI, Health Information System, Health Infrastructure Child health Health Emergency	18 Municipalities of 3 districts (Nawalparasi, Rupandehi and Kapilvastu)	• Basic NTDs training to 262 health workers • Basic NTDs lab Training of 21 lab personnel • Snake Bite Management training to 20 health workers • Tot on HFOMC in 2 districts and HFOMC training to 30 HFs • HP_MSS Program in 29 HFs and 3 batch of HMIS Trainings • Self-care training to 317 NTDs affected people from 17 self-help groups • NTDs Training Manual Developed for health workers and FCHVs • Establishment of NTDs unit at Lumbini Provincial Hospital	Shashi Kumar Lal Karna, Project Coordinator, Mob: 9860699743, email: 198hashi.karna@fairmed.ch
Nick Simons Institute (NSI)	Curative support service program (CSSP), Hospital Strengthening program (HSP) Research, Advocacy and Monitoring (RAM)	18 hospitals of Lumbini Province (14 Provincial and 4 Local Level Hospitals)	Continue support for MDGP, consultants, and other clinical HR management in Seven Hospitals. • Clinical equipment and Quarter management support. • Continue Supported for MSS unit at Health directorate, Provided technical and financial support in MSS implementation. MSS resource person training, • Trainings supports (ASBA, SBA, OTTM, MLP, PEC, CTS, and Critical care), • Support to establish Biomedical workshop	Suraj Shrestha Mob.: 9860104056 | 545 1978 surajshrestha@nsi.edu.np | nsi@nsi.edu.np
WaterAid	Child health (Hygiene Behavior change)	12 districts	Hygiene promotion through Routine immunization program support, Facilitation of Immunization and hygiene promotion Training, Micro planning, FID sustainability,	Manoj Nepal 9851017373 Manubabu14@gmail.com

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
			Monitoring, onsite coaching at EPI clinic, technical support on immunization section at PHD	
INF	Neglected Tropical Diseases	Dang, Rolpa, Banke, Kapilvastu	• Leprosy Diagnosis and Treatment (INF Nepal Shining Hospital Banke) • Community Health and Development • COVID Preparedness and Response	Dhakaram Budha Magar 9856083025 dhaka.magar@nepal.inf.org
Population Services International (PSI)	Family Planning and Safe Abortion	Selected Municipalities of Banke, Bardiya Dang, Pyuthan Kapilbastu Rupandehi	• 20 private HFs has been certified as Adolescent Youth Friendly Health Services (AYFHS) through local government. • 12 Private HFs has been listed as a Medical Abortion site from local government/Province. • 15 Private HFs has been linked with government for FP and MA service cost reimbursement. • 209094 were reached through different Community Awareness activities. • 18891 Short term FP method, 2792 LARC and 499 MA services were provided in this fiscal year through private OK network HFs. • Establish Digital recording reporting system in 35 Private Health facilities • Support in operationalization of safe abortion and AFS guideline and for MA listing facilities/providers and AFS certification.	Santosh Mahto, Program Coordinator, Nepaljung, Mobile: 9858034324, santoshmahto@psi.org.np
GIZ	Health systems and governance	Nepalgunj SMC, Lumbini Provincial hospital, RAHS,Bheri hospital	• Healthcare waste management with dedicated staff, equipment (Autoclave) started at Bheri Hospital, Lumbini Provincial Hospital and Rapti Academy of Health Science • The central treatment facility for HCWM established at Nepalgunj SMC for managing all the healthcare waste within municipalities with two 400 ltr fully automated autoclave machines. • The formal and informal waste (315 family workers and (300 family) farmers enrolled in national health insurance program • The first dose of Td vaccine provided to 357 informal & formal waste workers in coordination with Banke health office. • Waste workers supervisors trained on first aid through NRCS with certification. • The scrap association at Banke is formally registered at DAO.	Suvash Nepal 9843765932 suvash.nepal@giz.de
AHF Nepal	Health care delivery/Quality of care	Lumbini Provincial Hospital, Kapilvastu	HIV Testing - 17932 (b) HIV Positive identified- 83 (c) ART Initiated- 97 (d) no. of condom distribution- 38750	Dharma Bhattarai 9857060137 Dharma.Bhattarai@aidshealth.org

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
		Hospital and Bheri Hospital		
United Mission to Nepal	Mental Health (MH)-3 districts COVID Response-3 districts MCH-3 districts ASRH, FP, WASH-Nawalparasi	Nawalparasiand Rukum East Kapilbastu (COVID-19 Response only)	• Integration of MH services from 6 local level in 3 districts and started mental health treatment and counseling services including school and community mental health program • Just initiated AFHS from 13 local HF of Nawalparasi (need to certify) (ASRH complete packages school Peer Educator and AFHS) • Expansion of implant services site (8 site in Nawalparasi), also provided SBA, COFP, Implant and UP treatment related training • Supported 3 district in COVID response and vaccination work (H&S material, equipment, mobilization and training)	Ishwar KC, Program Manager, Bardhaghat, Nawalparasi, 9845204640, Ishwar.kc@umn.org.np
FHI360 (USAID-PEPFAR-Epic Nepal	HIV Prevention, Care, Support and Treatment COVID-19 Response	Nawalparasi , Rupandehi, Palpa, Kapilbastu, Banke, Dang, Bardiya, Gulmi. PPHL	• 5,950 key populations and priority populations reached for HIV prevention • 669,255 condoms and 236,601 lubricants distributed (Pieces) • 3,264 individuals who received HIV Testing and Counseling (HTC) services for HIV and received their test results, found 304 positive • 668 individuals newly enrolled on (oral) antiretroviral PrEP to prevent HIV infection • 476 adults and children newly enrolled on antiretroviral therapy (ART) • 578 individuals who diagnosed and treated for STI • 3,088 PLHIV received Community care & support service	Ram Saran Sedai (Program Officer), 9846086101, ramsedai@fhi360.org
ASCEND	Disease control and surveillance	All Municipalities as per the gap	• VL assessment survey completed in 3 districts (Rupandehi, Arghakhanchi and Gulmi) • 23 case base surveillance (ACD) in different District of Lumbini Province. • Supported Province and local government for supply chain management of VL commodities. • Supported PHD Lumbini Province for NTDs related planning & review meetings. • TA Supported to PHD Lumbini Province on MDA activity implementation in different District.	Nirmala BM, Provincial NTD Coordinator, 9802301310 Nirmala.Budhamagar@ascend.crownagents.co
Plan International	Health Emergency	3 Municipalities of Bardiya district	• 1587 parent education sessions and 878 dialogue sessions completed • Men's participation in childcare has increased • During the lockdown, the FCHV informed the parents about COVID-19 by giving the door-to-door card	Chaudhary, Pratibha 9858424422 Pratibha.Chaudhary@plan-international.org

Organization	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2078/79	Contact Details
			• From the request letter of Thakurbaba municipality, 28% of the COVID in their municipality were missed from the second dose so that we mobilized FCHV and successfully reached 99%. • 39 health mother groups conducted regular meetings to discuss health issues. • 134 FCHVs trained on childcare • During lockdown, conducted regular childcare sessions with 2200 parents by phone	
Family Planning Association Nepal	Sexual and Reproductive Health	12 districts	• Implemented integrated SRH services, especially family planning, safe abortion, maternal health services, HIV test & counselling, support to PLHIV	Mohan Basyal, 9857037614, fpanrupandehi@fpan.org.np
BNMT Nepal	Tuberculosis Program COVID 19 Emergency Response and Coronavirus sequencing surveillance	Banke, Bardiya and Pyuthan	• 348 new PBC finding • 24 persons enrolled in treatment • 47 lab personnel trained • Six months nutrition support to TB case of 150 household • Seven lab technical person supported to Bheri hospital	Ganga Ram Budhathoki, Program coordinator, Nepalgunj, 9858023810, ganga@bnmt.org.np

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