

# Appraisal of Family Planning Commodities Management during the COVID-19 Crisis in Gandaki Province, Nepal

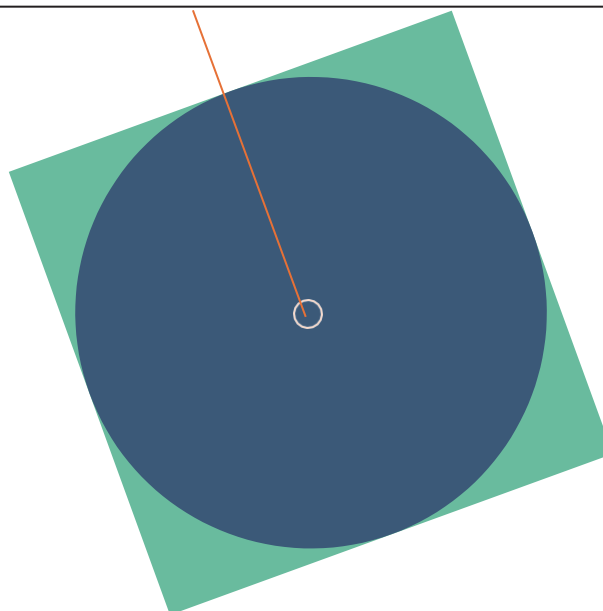
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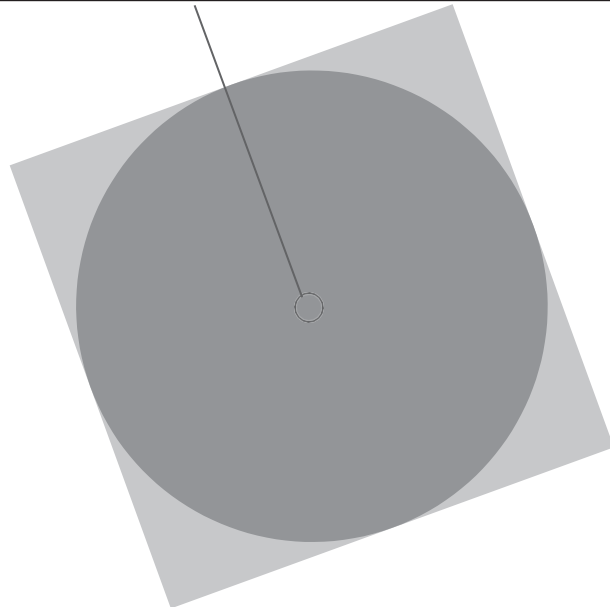
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## Abbreviations

ANM	auxiliary nurse midwife
COC	combined oral contraceptive (pills)
CRRT	community rapid response team
D4I	Data for Impact
FCHV	female community health volunteer
FP	family planning
FPS	family planning service
GoN	Government of Nepal
IUCD	intrauterine contraceptive device
KII	key informant interview
LMIS	Logistic Management Information System
mCPR	modern contraceptive prevalence rate
MoH	Ministry of Health
MoHP	Ministry of Health and Population
NHFS	Nepal Health Facility Survey
PHLMC	Provincial Health Logistic Management Centre
PPE	personal protective equipment
RRT	rapid response team
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

## Executive Summary

**Background:** Family planning (FP) is an integral part of the Government of Nepal's (GoN) national health strategy and Ministry of Health and Population (MoHP) programs. The MoHP's Family Health Division is committed to implementing targeted strategies and interventions that enable the country to continue to increase access to and use of rights-based, high-quality FP information and services, with a particular focus on serving the poor, vulnerable, and marginalized populations. However, the COVID-19 threats followed by a nationwide lockdown have weakened all aspects of Nepal's health system, including access to FP commodities and services.

**Study Objective:** The main objective of this study was to assess FP commodities procurement, supply chain and stock management at Gandaki Province and local levels during the COVID-19 pandemic emergency to determine if there were any variations in FP commodities procurement, supply chain, stock management, and service delivery.

**Methods:** The study was conducted in Gandaki Province, employing quantitative and qualitative methods. For the quantitative part of the study, we obtained secondary data from the Provincial Health Logistic Management Center (PHLMC) and Provincial Health Directorate for all 11 districts of the province on FP commodities and stock management from mid-January to mid-April 2020 (before the COVID-19 crisis) and mid-April to mid-July 2020 (during the COVID-19 crisis). We conducted 17 key informant interviews (KIIs) to obtain qualitative data from central, provincial, district, and local government health staff. We performed descriptive data analysis to assess FP procurement, supply chain, and stock management changes due to the COVID-19 crisis.

**Results:** The process of procuring FP commodities was the sole responsibility of the central level government. The commodities that were previously overstocked, such as male condoms, COCs, and injectables, were understocked during the pandemic. The most-preferred FP methods during the pandemic were short-acting methods like condoms and combined oral contraceptive pills (COCs) because of less personal interaction involved in accessing the methods. At the same time, there was a reduction in new users of modern methods (COCs, implant, intrauterine contraceptive device [IUCD], and permanent methods), aside from injectables, which had slightly increased. The quantity of male condoms supplied also decreased.

No specific strategies for FP commodities management were formulated at the provincial level. However, district-level governments attempted to address FP challenges caused by the pandemic by installing mobile and satellite clinics, augmenting human resources, sending FP commodities with the vehicles that transported COVID-19 safety commodities, and shifting the use of long-acting methods to short-acting methods. Professionals working in the FP sector felt the need to maintain a proper stock of FP commodities and strengthen their monitoring, documentation, and system management. The central level, with the U.S. Agency for International Development's (USAID) support, performed monitoring that helped the provinces keep track of the commodities supply and stock.

**Conclusion:** FP commodities management and service utilization were affected by the COVID-19 pandemic. Accessing difficult-to-reach places with FP commodities was coordinated via the supporting organizations in those areas. Regular rapid assessments and enforcement of remedial measures are needed for the health supply chain, procurement system, and stock management.

## Introduction

Family planning is regarded as one of the most significant public health successes of the past 50 years. FP has transformed and saved the lives of millions of women and children and has helped families break the cycle of poverty (World Health Organization [WHO], 2020). In Nepal, FP has been integral to the national health strategy and MoHP programs since 1959 (Pant & Pandey, 2018). The priority that the GoN places on FP is demonstrated by its prominence in the country's development plans and strategies, including the Second Long-Term Health Plan 1997–2017, the Population Perspective Plan 2010–2031, the Nepal Health Sector Strategy 2015–2020, and the National Family Planning Costed Implementation Plan 2015–2020.

The MoHP's Family Health Division is committed to implementing targeted strategies and interventions that enable the country to continue increasing access to and use of quality FP information and services, focusing on serving poor, vulnerable, and marginalized populations. The GoN aims to increase access to rights-based FP services to address the high level of unmet need for FP, provide women and men the opportunity to achieve their desired family size, and ensure healthy spacing between births. The Central Bureau of Statistics (2019) estimated that the percentage of women aged 15–49 years currently married or in union who had their need for FP satisfied with modern contraceptive methods was 61.9 in Nepal.

Family planning investments benefit communities in a variety of ways. According to the Family Planning Costed Implementation Plan, 2015–2020, the Family Health Division stated that a cumulative cost savings of an estimated 46,569.90 million Nepalese rupee may be achieved over the 2015–2030 period under an FP scale-up scenario. During this period, for every rupee spent on FP, Nepal is projected to save 3.1 rupees in primary education, child immunization, maternal health services, treatment of childhood pneumonia, and improved water sources if the FP scale-up scenario is achieved (GoN Family Planning Costed Implementation Plan, 2015–2020, p. XII).

The majority of married women aged 15–49 (53%) use FP in some form, with 43 percent using modern methods and 10 percent using traditional methods (Ministry of Health [Nepal] et al., 2017). Among modern methods, female sterilization accounts for 15 percent of users, followed by injectables (9%), male sterilization (6%), COCs (5%), male condom (4%), implants (3%), and IUCD (1%). Gandaki Province has the lowest use of modern methods at 37 percent, while Bagmati Province has the highest at 49 percent.

In December 2019, coronavirus (COVID-19), a newly discovered infectious disease, was first identified in Wuhan, China. On January 30, 2020, due to the erratic spread of COVID-19, the WHO confirmed it as a public health emergency of international concern. COVID-19 threats followed by a nationwide lockdown have weakened Nepal's health system (Sharma et al., 2021). The lockdown and other COVID-19-related disruptions were expected to interrupt services that prevented women in low- and middle-income countries from using modern contraceptives, leading to increased unintended pregnancies (United Nations, 2020).

## Rationale

Family planning methods differ in functionality, effectiveness, side effects, and mode of use. Their acceptability and desirability also differ among users. To address varying needs and demands for contraception, clients' needs are best served when facilities offer a wide range of FP methods. However, some variation is expected in the methods offered because of provider qualifications and training differences and the infrastructure required to safely provide specific methods.



The Female Community Health Volunteer (FCHV) Program in Nepal has made some progress in decentralizing FP commodities, but stock-outs commonly hinder continued contraceptive use. According to the 2014 FCHV National Survey Report, less than 60 percent of FCHVs had condoms (59%) or oral contraceptives (58%) available on the day of the survey (Family Health Division, 2014). Pant et al. (2019) found that the unmet need for modern FP in Nepal decreased by one percent in one decade, from 24.7 percent in 2006 to 23.7 percent in 2016. However, during that time, demand satisfied by modern FP decreased from 61 percent to 56 percent—an unexpected reverse scenario possibly attributable to poor commodity supply and limited method choice. Stock-outs of FP methods can put a woman at risk of unintended pregnancy. The 2015 Nepal Health Facility Survey (NHFS) highlighted that “Virtually all of the health facilities providing three temporary methods (male condoms, combined oral contraceptives, and progestin-only injectables) had the methods on hand on the day of the NHFS visit. However, 10 percent of facilities providing implants and IUCDs did not have these methods in stock on the day of the assessment” (MoH, et al., 2017, p.100–101).

Gandaki Province’s FP indicators are lower than the national average. According to Nepal's Annual Health Report 2017/18, the national-level modern contraceptive prevalence rate (mCPR) is 40 percent, while Gandaki Province’s mCPR is the lowest in the country at 32.7 percent (Department of Health Services [DoHS], 2018). Therefore, to achieve the Sustainable Development Goal target of an mCPR of 75 percent by 2030 and an unmet need for FP of 10 percent by 2030 (National Planning Commission, 2015), we need to focus extensively on the lowest-performing province in Nepal.

The COVID-19 pandemic has disrupted health systems around the world, dramatically affecting FP commodities procurement, supply chains, delivery of services, and sexual and reproductive health in general (United Nations, 2020). COVID-19 containment measures in Nepal including social distancing, a nationwide lockdown, and transportation restrictions affected the timely supply of FP commodities and movement restrictions, which limited the accessibility of FP services. Yet the need for FP persists despite disruptions. In addition to focusing on preventing and treating COVID-19, health systems must also protect access to FP services, allowing continuous safe access, providing guidance and information to providers and users, and guaranteeing a supply of contraceptives and other commodities to sustain service provision.

## **Research Objectives**

The primary objective of this study was to assess FP commodities procurement, supply chain, and stock management at Gandaki Province and local levels during the COVID-19 pandemic emergency. The research questions were as follows:

1. Compared to the normal situation, was there variation in FP commodities procurement, supply chain, and stock management in Gandaki Province and at the local level during this COVID-19 pandemic emergency?
2. How was FP commodities management during the COVID-19 pandemic affecting FP service delivery at the local level?
3. What strategies were formulated and adopted to ensure effective management of FP commodities during the pandemic?
4. What are the plans to ensure future uninterrupted FP commodities/services if similar health emergencies or other crises arise in the future?

## **Methods**

### **Study Design**

The research used quantitative and qualitative methods to arrive at relevant conclusions. A quantitative approach was applied to examine the impact of COVID-19 on the availability of FP commodities at national, provincial, and local levels. We collected secondary data retrospectively from multiple sources such as central, province, district, and health facility stores. Quantitative data were retrieved from the PHLMC. Data validation was completed at the health offices of randomly selected study districts.

A qualitative design was applied to explore FP procurement, supply chain, and stock management status. KIIs were performed at the national, provincial, district, and local levels with government representatives, including FCHVs, linked to the FP commodities management.

### **Study Area and Justification**

The study was conducted in Gandaki Province, one of the seven provinces comprising all ecological zones. It has 11 districts with two districts in the Himalayan region, eight in the Hilly region, and one in the Terai region. Moreover, Nepal's second-largest city, Pokhara, is in Gandaki Province. The province includes one metropolitan city, 26 municipalities, and 58 rural municipalities. Gandaki Province has an mCPR of 32.7, well below the national level (40.0) (DoHS, 2018).

### **Study Tools**

A record review format was prepared for collecting secondary data. We conducted a series of face-to-face consultations with the project advisors and focal person from the MoHP and District Health Office not selected for this study to obtain feedback on the review format and refined the data collection tool accordingly. For refining the KII questionnaire, face and content validity were explored via discussions and consultations with project advisors and relevant experts (see Appendix 4 for the study tools). Unique questionnaires were prepared for the informants at each level, from central to the local periphery. The tools were translated into local Nepali language and were back-translated into English for validation. The research assistants received an orientation prior to the data collection (see Appendix 5 for Orientation schedule and contents). The interviews were conducted in Nepali using translated study tools.

### **Sampling Procedure and Data Collection**

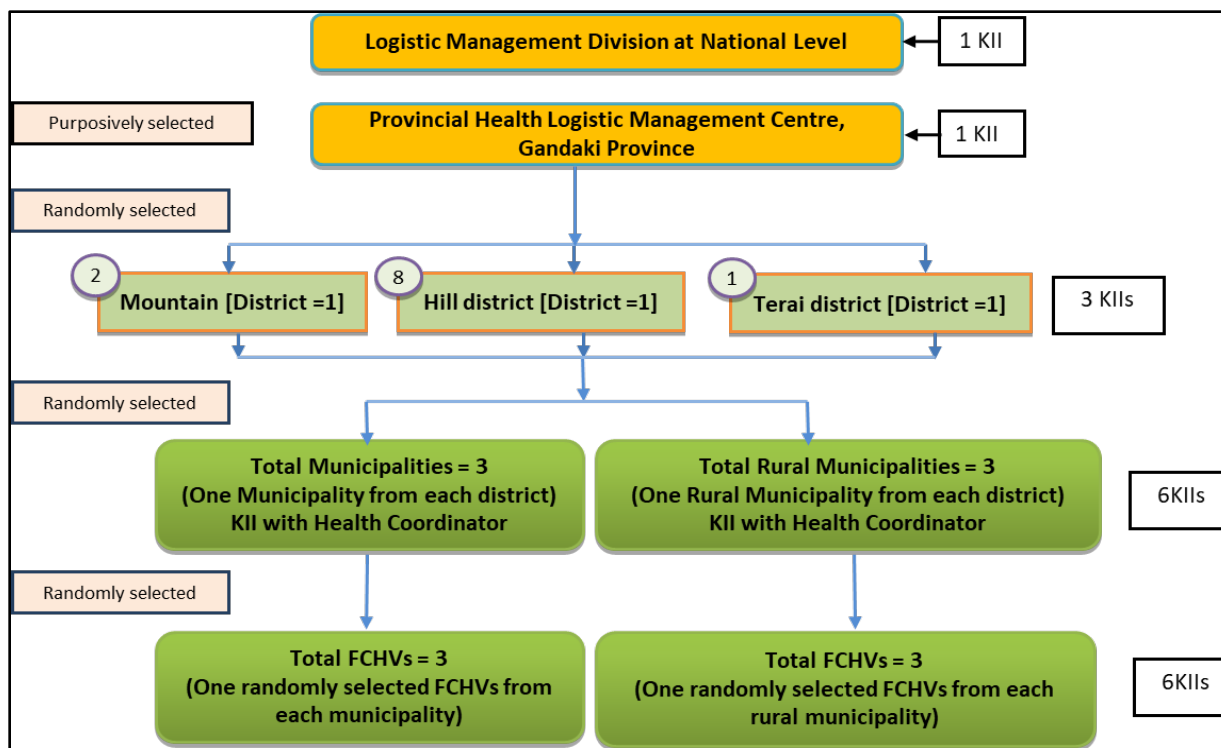
For quantitative data collection, FP commodities and stock management data from all 11 districts were obtained from the PHLMC and Provincial Health Directorate. The data was validated at the health offices of randomly selected districts. This study was designed framing data of the pre-COVID-19 period to immediately precede the COVID-19 emergency period to minimize the effects of non-pandemic related factors on contraceptive supply and management. The goal was to have the periods as close as possible, so it would be easier to identify changes in contraceptive supply and management due to COVID-19 lockdowns.

Since the recording and reporting of FP commodities is done in every three months, we reviewed two quarterly reports, prior to and during COVID-19 crisis, from the logistics management information system (LMIS): three months prior to the COVID-19 crisis (mid-January to mid-April, 2020) and three months during the COVID-19 crisis (mid-April to mid-July 2020).

Our qualitative data collection sample, which entailed 17 KIIs, represented the ecological zones from the purposely selected Gandaki Province (Figure 1). One KII was conducted at the national and provincial level, respectively, with the representatives from the PHLMC; one KII was conducted from

each study district level with the FP officer/supervisor; and 12 KIIs were conducted with the health coordinator and FCHV from each randomly selected municipality and rural municipality. Among the 17 KIIs conducted, 10 participants were male and seven were female. The KIIs were conducted from October 25–November 2, 2021.

**Figure 1. Geographic coverage of qualitative sampling**



## Data Analysis

We performed a descriptive analysis to assess FP commodities (short-acting and long-acting) procurement, supply chain, and stock management by the government considering the COVID-19 pandemic. We also assessed how the COVID-19 emergency affected FP service delivery and its associated factors related to commodities at the local level. For comparison, we analyzed data from available records at the central, provincial, and district levels before and during the COVID-19 crisis.

Average monthly consumption (AMC) refers to the average number of units used per month.

Authorized stock level (ASL) refers to the maximum number of stocks that can be issued. Emergency order point (EOP) is the level of stock that triggers an emergency order, regardless of the timing within the review period. Overstock occurs when the stock level of FP commodities exceeds the ASL. FP commodities are considered understocked when their stock level falls below EOP.

For the qualitative analysis, each KII was transcribed verbatim and then analyzed using a deductive approach. This included familiarizing, generating initial codes, reviewing and defining themes, identifying a thematic framework, indexing, charting, and interpretation. Main themes and categories were developed based on the research objectives, such as challenges with procuring FP commodities during the lockdown, and barriers in the supply chain. The transcripts were coded and sorted using NVivo (released in March 2020) (QSR International Pty Ltd., 2020).

## **Ethical Considerations**

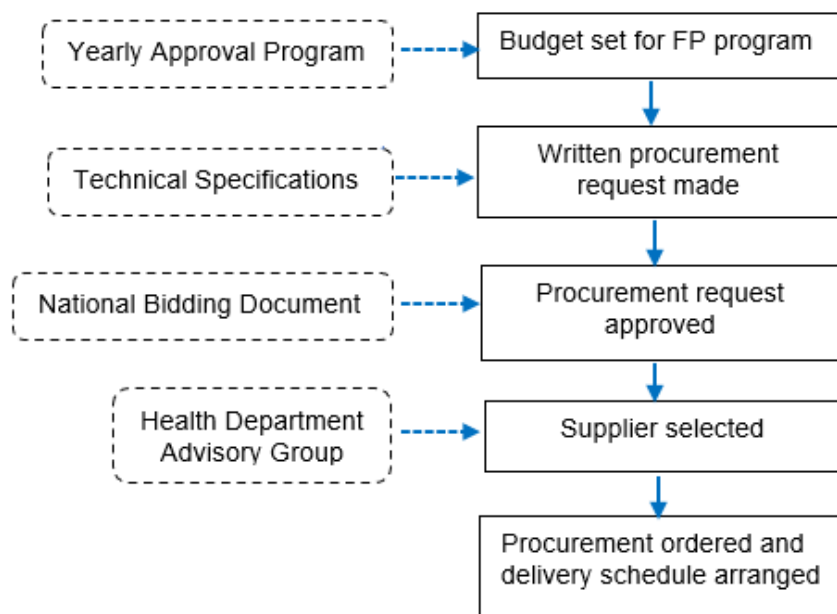
The study proposal was approved by Nepal Health Research Council (ERB Protocol Registration No. 38/2021) and was implemented accordingly. Permission was obtained from the Ministry of Social Development and MoH, Gandaki Province, district health offices, and relevant local authorities covered under the study area. Written consent was obtained from the officials of the Provincial Health Directorate, Provincial Health Logistic Management Center, health coordinators, and FCHVs who participated in the KIIs.

## Results

### FP Procurement and Supply Management

The key informant at the central level shared the overall procurement and supply management process, which is depicted with the help of the flow chart and description below.

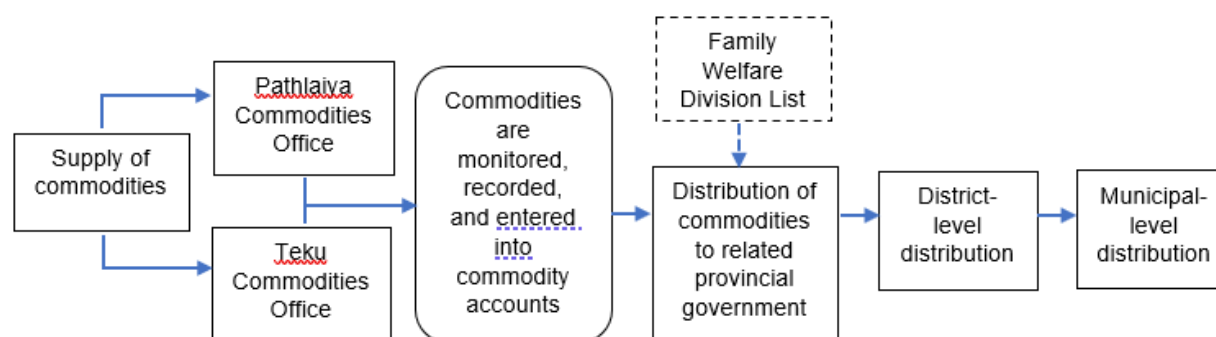
**Figure 2. FP Commodities Procurement Process**



The commodities procurement process began with coordinating the related departments during the yearly approval program, which sets a budget for each program, including FP. Commodities procurement is based on the budget allocated for each program. Per the program's annual approval, the technical specification (size, dose, pharmacopeia, etc.) for each commodity serves as the medium for procurement. Once a written request for procurement is made, including cost estimates, the respective department will approve and procure based on the National Bidding Document. The management and evaluation committee is responsible for choosing the most effective supplier, based on cost and quality, who meets their tender requirements and is approved by the Health Department Advisory Group under the DoHS. With the approval of the procurement request and the supplier selected, the delivery schedule for the required commodities is fixed and ordered accordingly.

After completing the procurement, the supply process is initiated from two major places at the central level: the Central Medical Store in Pathlaiya and Teku. The FP commodities have mainly been supplied to the center in Pathlaiya, while other commodities are supplied in Teku. The quality of goods is monitored, recorded, and entered in the respective Commodity Account, after which the expenditure procedure starts. Per the Family Welfare Division's list, the recorded commodities are distributed to the related provincial government, where they are distributed and supplied accordingly to district and local level. Figure 3 shows the supply chain process in Nepal after completing the procurement process.

**Figure 3: FP Commodities Supply Chain**



### Procurement, Supply and Stock Management before and during COVID-19

Due to health system priorities shifting towards the COVID-19 pandemic, less focus was afforded to the monitoring and documentation of FP commodities. Key informants noted poor monitoring of the FP supply chain because of incomplete record-keeping, particularly in Kaski District. The government-initiated lockdown negatively impacted the supply and stock of FP commodities. All the districts reported that the restrictions imposed had made it difficult for supply chain management of commodities. The municipality key informants shared that the lack of mobility was an important factor affecting their supply to the rural municipalities.

Table 1 shows that many commodities were overstocked before COVID-19 that were understocked during the COVID-19 crisis. The commodities that were overstocked before COVID-19 (mid-January to mid-April 2020) were male condoms, COCs, injectables (Depo Provera) and implants, while the IUCD (copper and hormonal) was understocked, findings that were echoed in the qualitative results. In contrast, the commodities that were understocked during the COVID-19 crisis (mid-April to mid-July 2020) were male condoms, COCs, and injectables. Implants stock level was at a normal limit (i.e., between EOP and ASL). IUCD stock level was overstocked during the COVID-19 crisis.

**Table 1: FP Commodities Stock – Gandaki Province**

FP Commodities Stock	Unit	Mid-Jan–Mid-April 2020	ASL	EOP	Mid-April – Mid-July 2020	ASL	EOP
Male condom	Pieces	643,000 <sup>b</sup>	450,000	250,000	417,000 <sup>a</sup>	1,014,003	563,335
COC pills	Cycle	155,248 <sup>b</sup>	54,432	30,240	59,650 <sup>a</sup>	170,613	94,785
Injectable	Dose/Vial	57,000 <sup>b</sup>	10,499	5,833	4,000 <sup>a</sup>	68,175	37,875
Implant	Set	7,700 <sup>b</sup>	3,897	2,165	4,400	6,903	3,835
IUCD	Set	695 <sup>a</sup>	6,777	3,765	19,958 <sup>b</sup>	4,509	2,505

<sup>a</sup>Understock; <sup>b</sup>Overstock

The data on the supply of male condoms and IUCDs (Copper-T) in Gandaki Province before the COVID-19 crisis were not accessible. The data on the supply of COCs, injectables, and implants in the province during the pandemic were also not accessible from PHLMC. All the FP commodities were supplied from the province to districts before and during the COVID-19 crisis (Table 2).

**Table 2. FP Commodities Supply – Gandaki Province**

FP Commodities Supply	Unit	Before COVID-19 Crisis (Mid-Jan – Mid-April 2020)		During COVID-19 Crisis (Mid-April – Mid-July 2020)	
		In	Out	In	Out
Male condom	Pieces	NA	84,000	300,000	496,000
COC pills	Cycle	75,000	14,112	NA	87,648
Injectable	Dose/vial	50,000	3,000	NA	57,000
Implant	Set	3,600	800	NA	3,200
IUCD	Set	NA	1,505	1,800	500

NA: Data not accessible

Table 3 shows FP commodities supply before and during the COVID-19 pandemic in three selected districts. All other mentioned FP commodities were supplied to Gorkha District before COVID-19 except COCs. Similarly, during the COVID-19 crisis, all commodities were supplied to Gorkha District except IUCDs. All the commodities were supplied to the local level in the district before and during the pandemic.

*No, no... there is no stockout. It is available in all health institutions in our municipality. Now, these important key commodities, in which the family planning is also one, we do not let it be stock out, we bring it in... we keep telling them to send it often to avoid the stock out. (KII, Professional, Municipality, Gorkha)*

In Kaski District, most manual data records from before the pandemic could not be accessed. During COVID, implants and IUCDs (Copper-T) were not supplied to Kaski District nor the local levels. However, according to one key informant, this did not seem to be problematic stating regular supply even during COVID-19 crisis.

*Commodities supply hasn't been affected and remains regular before and during the COVID-19 for family planning. We have been distributing it to the required institutions according to the time and need. (KII, Professional, Health Office, Kaski)*

In Nawalpur, all FP commodities were supplied from the province to the local level before the COVID-19 pandemic began. Some commodities, i.e., implants and IUCDs, were not supplied to the district during the pandemic. The district was able to supply the commodities to the local level even during COVID-19 despite the shortage.

*The supply chain has been affected. Before COVID, commodities that used to come from the province used to meet tentative requirements; however, due to COVID, whenever we demanded, it was always in shortage, especially the pills are always in shortage, it never came as per requirement. Before COVID, it was somehow okay, but then the shortage started, and we didn't receive it on time. If you went and asked any municipality or rural municipality, they would also state that pills are always in shortage and are supplied very minimally. (KII, Professional, Health Office, Nawalpur)*

**Table 3. FP commodities supply before and during the COVID- 19 crisis in selected districts**

Districts			FP Commodities Supply				
			Male condom	COC pills	Injectable	Implant	IUCD
			Pieces	Cycle	Dose/Vial	Set	Set
Gorkha	Before COVID	In	33,000	0	1,000	500	1,500
		Out	45,000	6,000	5,000	800	500
	During COVID	In	36,000	15,264	4,500	1,100	0
		Out	42,000	12,000	6,000	1,200	500
Kaski	Before	In	NA	NA	NA	NA	NA

Nawalpur	COVID	Out	NA	NA	NA	NA	NA
	During COVID	In	195,000	31,410	500	0	0
		Out	3,000	200	0	0	0
	Before COVID	In	63,000	9,000	500	250	110
		Out	42,000	9,000	400	200	500
	During COVID	In	126,000	7,200	300	0	0
Out		90,000	4,108	300	50	550	

NA: Data not accessible

We could not access the FP commodity stock and supply records in most districts (as noted in Table 2 and 3 with “NA”) as manual data entry was practiced until mid-January. Web-based data entry in the LMIS database was implemented in April 2020, in some districts of the province. In some selected districts, data from mid-January to mid-April 2020 were accessed through manual records from a ledger. But we could not access the manual records from PHLMC. Due to the transition from manual recording to web-based, many of the record ledger were not found and the records were not entered in the web-based version as well. Since the FP stock and supply management data for this period were not accessible for many districts of the province, we placed these data tables in the Appendixes. Data from three districts (Manang, Mustang, and Myagdi) were not accessible from PHLMC.

## FP Service Delivery

Figure 4 shows a distinct reduction in the number of new users of FP services, particularly long-acting methods in Gandaki Province. The majority of the key informants mentioned disruption of health camps and mobile clinics, which affected the FP service delivery. Common themes from the interviews included:

- Disruption of health camps and mobile clinics

*Now, the data for implants is recorded as 243 to 228, so we can say it has reduced. This might be because the implant users must be for a longer time, which is not always possible, so that's why. The second thing is that there is no service site for the implants everywhere. We couldn't do the satellite clinics, and health camps and implants were unavailable in all the service sites. As per the data in IUCD, there is a reduction almost the same as implants. When it's about the satellite camps, we collected the information about the people who needed permanent sterilization and then initiated the camps. However, during the COVID, there was a lockdown, people could not gather, and the health camps couldn't be conducted for permanent sterilization; thus, the number of clients has reduced. (KII, Professional, Health Office, Gorkha)*

*When COVID-19 started spreading, the health sector shifted its attention to controlling the pandemic situation. We couldn't conduct the camps and receive as many clients for family planning. (KII, Rural Municipality, Gorkha)*

*Umm, well, when talking about services, we used to have mobile camps to provide family planning services. But after Chaitra, we couldn't organize those camps with full satisfaction since all the focus was on COVID, not family planning. (KII, Professional, Urban Municipality, Kaski)*

- A shifting in preference for short-term FP methods requiring less personal interaction with providers to access



FP users preferred condoms and COCs during the COVID-19 pandemic due to the risk of COVID-19 transmission from personal interaction. The uncertain situation that COVID-19 emergencies created may have caused reconsideration of long-term FP options. The short-term methods were the most convenient, requiring minimal interaction.

*It was tough during COVID; let's say we couldn't go to people's houses to provide condoms for one person, they used to call us via cell phones, but we used to be scared to go to their houses and due to the fear of transmission everything kind of paused. (KII, FCHV, Rural Municipality, Gorkha)*

*The effect of COVID was so significant that it was not as common as it used to be. All the women had to stay indoors; it was not easy for us, they were uncomfortable and unsafe to talk to us, especially about family planning, and they had elderly parents [and] children in so many houses, so they didn't want to talk to us because we had to wander around in the community. We had to distribute condoms and pills outside the house rooms, through windows. (KII, FCHV, Municipality, Kaski)*

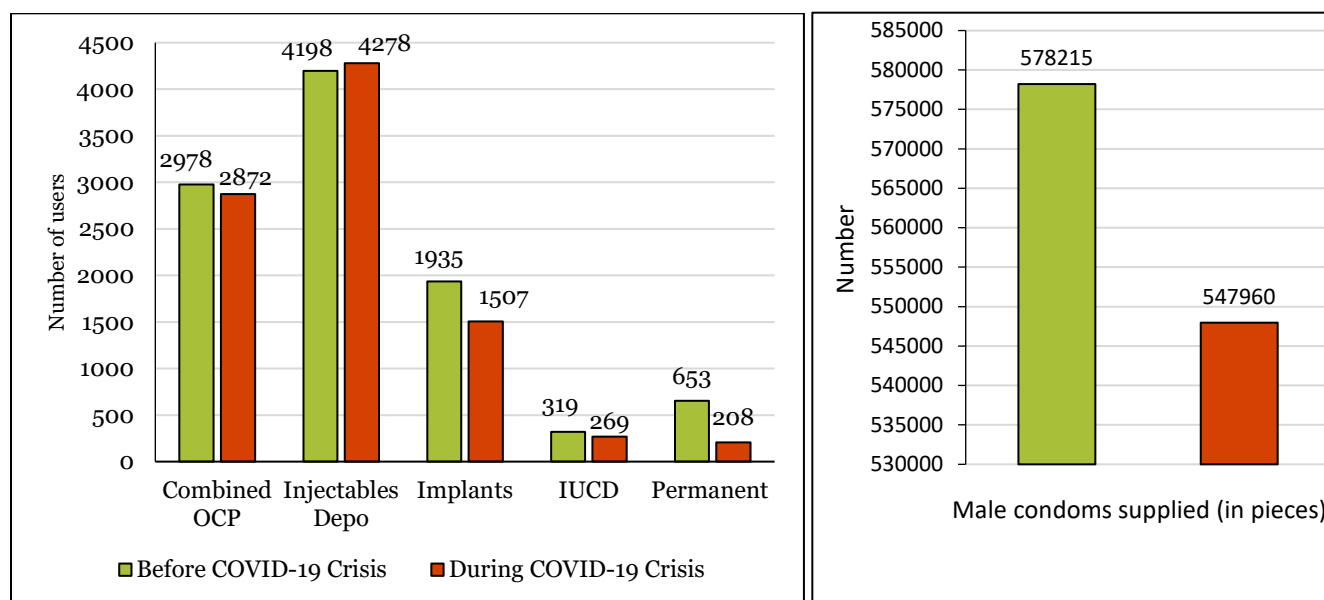
*Pills and condoms were the most used during the COVID. Due to the low number of pills, those who used to take pills had to use condoms. Likewise, the fear of transmission of corona also shifted its users from depo to condoms. (KII, FCHV, Rural Municipality, Nawalpur)*

*After the start of COVID, people were afraid to visit health institutions to seek health services. Not only that, even the health workers feared going and providing services. The three-month Depo program was also disturbed for a short period because people were initially afraid to contact others. We distributed pills as an alternative so family planning wouldn't be halted during that time. (KII, FCHV, Rural Municipality, Nawalpur)*

Nevertheless, figure 4 shows that the number of new users of short-acting methods such as male condoms has decreased since the number of condoms supplied have reduced, while injectables slightly increased during the COVID-19 crisis.

*During COVID, we didn't even run the village mobile clinics. There was fear all around at that time, but we have an ANM [Auxiliary Nurse Midwife] here, and she went to the homes of those who contacted her. And they got their Depo inserted. (KII, FCHV, Rural Municipality, Gorkha)*

**Figure 4. New FP users in Gandaki Province before and during the COVID-19 crisis**



Key informants highlighted inadequate technical personnel and restricted mobility that affected FP service delivery. This may have particularly affected the provision of long-term FP methods.

- Inadequate technical personnel

*Currently, the implant, which has been used for five years, is more in demand. But for that service, we haven't been able to provide trained health personnel. We haven't been able to provide the service providers in all the service sites. The implants have been available only from five health institutions till now. (KII, Professional, Municipality, Gorkha)*

*We used to organize these mobile clinics before COVID. It used to be comparatively easier for us to deliver the services with the help of the technical team for the implants, IUCD, and permanent sterilization. But during COVID, it was difficult even to organize these camps and arrange the technical team to provide the services. (KII, Professional, Health Office, Kaski)*

*We have people visiting us in our health post for various services like implants, IUCD, etc. Still, most people have to travel far to the health post, so we arranged a place in the school in the village where the people come and have the implants inserted even during the COVID. (KII, FCHV, Rural Municipality, Kaski)*

- Restricted mobility

*During the COVID, there was a lockdown, people could not gather, and the health camps couldn't be conducted for permanent sterilization; thus, the number of clients has reduced. (KII, Professional, Health Office, Gorkha)*

*Slowly, the inflow of clients in the health services started to go downhill. The public who needed IUCD and implants didn't show up at all. However, talking about pills and condoms, we maintained distance. We taught them to take pills and use condoms from a distance and provided them. But, there was a heavy downhill in service user rate for those*

who need depo, IUCD, and implants. (KII, Professional, Municipality, Nawalpur)

Table 4 shows FP methods' new and current users before and during the COVID-19 crisis. There was an increase in supply of male condoms in Gorkha and Nawalpur, but a drastic decrease in the number in Kaski district. The number of COCs, and injectables users were higher than users of implants, IUCDs, and permanent methods that show short-term FP preference.

**Table 4. Utilization of FP commodities by method, type of user, and district**

Districts			FP Commodities Supply					
			Male condom	COC pills	Injectable	Implant	IUCD	Permanent
			Pieces	Cycle	Dose/Vial	Set	Set	Procedure
Gorkha	Before COVID	New	73574	426	680	243	23	433
		Current		4057	12744	14174	1396	13491
	During COVID	New	78480	474	801	228	8	165
		Current		4959	13357	14902	1396	13915
Kaski	Before COVID	New	107379	464	687	447	97	105
		Current		4685	6373	21648	19677	31256
	During COVID	New	38529	429	593	205	49	32
		Current		4846	5944	21921	19677	31361
Nawalpur	Before COVID	New	47977	471	529	217	46	4
		Current		5624	7722	11153	9127	466
	During COVID	New	52826	356	439	54	13	6
		Current		5795	6172	10958	9127	470

\*Male condoms are recorded as supply in pieces; individual users are not recorded.

## Strategies and Areas for Improvement

### Central level

The key informant in the Logistic Management section under the DoHS at the central level in Kathmandu shared that since FP procurement, supply, and stock were not hampered due to the COVID-19 pandemic, they did not have specific strategies for improvements, but that the regular processes will be ensured. The key informant felt there should be increased collaboration with development partners like the United Nations Population Fund (UNFPA), WHO, the United Nations Children's Fund (UNICEF), USAID, and other donor agencies for the smooth functioning of FP services, even during the pandemic.

Similarly, the technical group focused on FP, which includes stakeholders from different divisions, is tasked with revising and monitoring the FP strategies, including commodities procurement, supply, and stock.

*We collaborate with UNFPA and other donor agencies on a regular basis. However, suppose we have a situation where we feel we don't have enough supplies, or we might have stock out. In that case, we sit for a meeting together to discuss with the stakeholders, including the UNFPA, WHO, UNICEF, USAID and other different development partners in a joint meeting to discuss the solution and avoid commodities being stocked out. Also, we have a separate technical group in the management division that looks after all the items and all the stocks and procurement situations. (KII, Public health inspector, DoHS)*

*Specifically targeting the emergencies, the key informant shared that they have a strategy*

*in development known as the Reserve Strategy, which ensures the stock of the commodities during such periods. (KII, Public health inspector, DoHS)*

*In the context of the pandemic, CCMC [Covid-19 Control and Management Center] has made a concept of reserve strategy that focuses on keeping a certain amount of the commodities in reserve exclusively for emergencies like the pandemic. And we also feel that we can go ahead effectively if we use this strategy in the family planning commodities. (KII, public health inspector, DoHS)*

The key informant shared that they would like to see an increase in stock capacity at the central level. They noticed an issue when there was lack of space to store the different health divisions' commodities and the COVID-19 commodities. There was also an observed lack of human resources to ensure the proper functioning of timely and smooth commodities and logistics management at the central level. Similarly, collaborating with stakeholders and development partners was a significant element in ensuring the proper processing of commodities procurement, supply, and stock.

*In a normal situation and a bit after an epidemic situation, it is difficult, no doubt. If we refer to the warehouse, whether in normal condition, in Pathlaiya, in the province or even in the central level itself, the capacity is just for the typical situation.*

*But when we have these types of epidemics and the donor agencies, supporting countries or nations will provide us commodities, and we will have a lack of storage capacity in the nation which I see should be strengthened.*

*Another thing is that we also have a bit of a problem in HR [human resources]. The situation demand is such that few people have to do much work due to a lack of human resources, causing many problems. (KII, Public Health Inspector, DoHS)*

### **Provincial Level**

There were no specific strategies formulated for FP commodities at the provincial level such as a provincial-level technical group for FP commodities and management. However, USAID assisted in monitoring FP programs, which helped the province keep track of the FP commodities supply and stock.

*A professional from USAID had come to monitor FP commodities for the monitoring part. He would issue a report every month. We would look at the report and discuss which districts have stock outs and which districts are in a suitable condition. He was responsible for making the monthly reports. If any commodity was in shortage, he would coordinate and order. He would also compute data on shortages in the districts and, accordingly, the commodities were supplied. (KII, Professional, PHLMC)*

Informants shared that maintaining and keeping FP stock records was crucial. Despite the pandemic, the need to focus equally on FP and COVID-19 commodities was an important lesson learned.

*There were no such plans made, but important learning for us was that it is integral to maintain the stocks and monitor them time and again. Not just of the family planning commodities but overall, every other commodity. (KII, Professional, PHLMC)*

*It's like this, even after our health offices would receive the family planning commodities, they didn't have any focus on FP. They only felt they got something only when they received COVID items. (KII, Professional, PHLMC)*

Some issues of inadequate stock were discovered in the province due to the central level's inability to procure the required commodities on time.

*We aren't receiving them even after making a demand to the central level. We cannot procure by ourselves, and they are not giving us what we have demanded. (KII, Professional, PHLMC)*

## **District Level**

### ***Kaski District***

Some of the challenges faced in Kaski District during COVID-19 were addressed by installing mobile clinics to serve as a source of health service provider involvement and income generation. Health providers were engaged in providing services with proper COVID-19 precautions. The health camps that were non-functional at the peak of COVID-19 were gradually reintroduced.

*We provided services throughout the satellite clinics in the municipality, which reaches the area that does not have access to services, those whose financial situation is poor, like the Dalit's. We provide the five types of temporary family planning commodities in such areas. During the time of COVID, we also went making mobile teams. We brought one team to our district. There we went to all the municipalities, one doctor, two nurses, three of us from our health office, and three helpers. We went to 11 places for almost 15 days with this team... We also organized multiple sessions in the centers in the municipalities for the health services. The service providers could also get involved and cover the daily expenses. (KII, Professional, Health Office, Kaski)*

*The main important thing was health care during that time, so we have tried our best to adopt public health measures. We also motivated the service providers by giving them incentives. As a result, they did show readiness towards the service and served well. We also regularly provide them with the required commodities from the district health office... We adopted different measures and disseminated awareness through our public representatives, FCHVs, etc., via the support of our gaupalika (rural municipality). As a result, people came to seek services, and we delivered them during those times. (KII, Professional, Rural Municipality, Kaski)*

The key informants said they managed the mobile services strategy cautiously and went door-to-door, providing Depo-Provera services with the help of the ANM, even if the health camps were nonfunctional.

*Some of those who came from abroad contacted us to get information on family planning services. We recommended that they follow home isolation and use emergency methods such as emergency pills. We further suggested that they go to health camps and facilities after this COVID situation normalizes. (KII, FCHV, Municipality, Kaski)*

*During COVID, we didn't even run the village mobile clinics. There was fear at that time, but we have an ANM here, and the ones who contacted her went to their homes and got their depo inserted. (KII, FCHV, Rural Municipality, Kaski)*

Several lessons were learned from the pandemic related to FP commodities and services in Kaski. The key informants shared that they realized the importance of maintaining a proper stock of FP commodities, especially since emergency situations like COVID-19 may arise at any time.

*There is a need to discuss with the Central Level about the supply and procurement process and the related problems. Especially when Kaski is still listed in the red zone, we have problems in being supplied the materials from the central level. (KII, Professional, Health Office, Kaski)*

*Umm, well, when talking about services, we used to have mobile camps to provide family planning services. But after Chaitra, we couldn't organize those camps with complete satisfaction since all the focus was on COVID, not family planning. (KII, Professional, Municipality, Kaski)*

*During the disasters and pandemic all the focus and priority of the people shifted towards that aspect... So, we need to be alert and not let the stock happen. We should not let it fall below the EOP. We need to keep the stock and avoid it from being stocked out. (KII, Professional, Rural Municipality, Kaski)*

The informants felt the need to pre-plan for emergency situations with better stock management and find alternative ways to monitor and record FP data. They also felt the need to increase FP promotion and awareness despite pandemics or emergencies and maintain health services with the necessary precautions.

*We used to get pills and condom stock sufficient for 10/15 days only, but now we know that it is better to take the adequate stock for about ½ month from the health posts. (KII, FCHV, Rural municipality Kaski)*

*During the initial time of COVID, we all stayed home too because we were scared. Later, we did not feel good about not working, so we decided to go and work despite the pandemics. Using safety equipment such as masks and gloves, we went back to work. (KII, FCHV, Rural municipality, Kaski)*

### **Gorkha District**

The problematic situations related to FP supply that arose during the pandemic were addressed through the district offices' and health institutions' coordination and planning actions. The key informants shared that they ensured uninterrupted delivery and supply of FP commodities in the different local areas by strategically sending the commodities with the vehicle transporting COVID-19 commodities. Furthermore, they could reach difficult-to-access locations with FP commodities by coordinating with local organizations that reached those places.

*We used to have the vehicle for the PCR tests, and we sent the supplies through that vehicle. In our district, there is only one Palika named Chunumre, which is a bit too far. We usually supply the commodities there by hiring the Khacchars to send in that area. The strength here is that some organizations like CAN Nepal, and Phase Nepal, are working in that area. So the places where there is no proper road access have been helped by donor agencies and supporting organizations in transportation and service delivery. Even during COVID, along with the COVID supplies, we also sent the Family Planning Commodities in that vehicle and managed it somehow. (KII, Professional, Health Office, Gorkha)*

Updated contingency plans were also being worked on, including the rapid response team (RRT). Community rapid response team (CRRT) plans that would help in the smooth running of health service delivery even during a crisis.

*For the COVID, there was a rapid response team; however, in our district, there is also the*

*CRRT. During the response, we do the RRT while the municipality has a community rapid response team and responds accordingly. We have been doing our best to work on it little by little. (KII, Professional, Health Office, Gorkha)*

Municipal-level staff created strategies to ensure that health services, including FP, are delivered even during a pandemic by applying necessary measures and precautions. They also shared that they had enhanced the health services and made them even more available.

*We kept the health services continued even during the holidays. We had a separate provision of the vehicle for the supplies during that time. Thus, we sent the necessary commodities to be supplied without any problem. We managed to allocate one separate vehicle for the Health Department itself just to distribute the necessary commodities. So we were able to supply well. (KII, Health Professional, Municipality, Gorkha)*

The strategies for balancing COVID-19 and FP services were implemented by managing social distancing, creating separate places for clients and patients (quarantine), and coordinating with the community.

*The municipality has coordinated with the Gorkha Hospital, which is 50 bedded and will have the oxygen supply soon. We believe that there will be no problems as such. We also have Rushmoor Council from the UK, which collaborates with the hospital. They provided us the PPE [personal protective equipment] in small quantities, and we still have the stock left from that for COVID. (KII, Health Professional, Municipality, Gorkha)*

*Social distancing was maintained during the COVID, and sanitizers and masks were all provided. In addition, we gave everyone safety materials in the health institution. In the times when COVID was at its peak, not just here, all over Nepal... We set up a fever clinic where the patients with the fever were sent to that place, and other diseases or illnesses were referred to other health institutions. So this had a positive impact. The ones who were with fever and COVID were separated, and all other services were functional as is... (KII, Health Professional, Rural Municipality, Gorkha)*

The FCHVs and local FP services and supplies were also assured by using phones to contact people, spread FP awareness, and provide information about the pandemic.

*We even went to the homes of ones infected with COVID, but we did put on masks, stayed at a distance and gave our suggestions. Even when all were scared of COVID, we spread awareness, including the other FCHVs and Ward Head. (KII, FCHV, Municipality, Gorkha)*

Key informants shared the need to consider the contingency plan and have an inter-sectoral collaboration strategy for working during a pandemic or other emergency. Response work undertaken by the CRRT and RRT should also be strengthened, and efforts should be made to include a reproductive health component in the planning.

*We have made contingency plans for health even in the district. Under this plan, we have the family planning commodities and safe delivery kits under the safe motherhood plans. There are always alternatives for the service provisions in health for those who cannot visit the facilities... There are also things about the different sectoral collaboration and coordination and the contingency plans for safe motherhood, nutrition, etc. There is also a response team and their work when there is a sudden disaster. (KII, Health Professional, Municipality, Gorkha)*

The need to have more trained FP personnel was seen as a priority to provide quality services to the service seekers.

*There are not many trained service providers here, but we are managing somehow until now, but we need more. We have put a demand for training. Let's see what happens. (KII, Health Professional, Municipality, Gorkha)*

Similarly, the findings from the rural areas of Gorkha revealed a focus on keeping FP commodities stocked and planning well for FP commodities during emergency crises.

*We have found places where we can monitor and make the services better. We have sent out to collect the information from the health institutions and see where analysis is required. We have updated information and records from the health institutions and have much-appreciated management in the Gandaki Province. (KII, Health Professional, Municipality, Gorkha)*

*Yes, the COVID isn't just the pandemic, and there may be more. During such disasters, we focus only on prioritizing to control the disaster. Still, we need to be alert about family planning as well. We must not let the stock drop below the emergency order point. (KII, Health Professional, Rural Municipality, Gorkha)*

The need to switch to alternative commodities management plans when there are stockouts and convince users to use these other methods was a lesson learned from the COVID-19 experience. The FCHVs expected to be compensated for the endless work done during the pandemic and other times when they had added workloads.

*If we talk about the FCHV, all say that we just have been doing nothing. With the rise in prices and such situations, my friends keep saying that Rs. 400 as compensation is not enough. (Laugh nervously) it would be good if it increased and such. When we get, we need to get compensated as per our work. (KII, FCHV, Rural Municipality, Gorkha)*

### **Nawalpur District**

The key informants replied that though they had not explicitly strategized how to manage FP commodities during the pandemic, they addressed the challenge by balancing FP service provision with COVID-related services and mitigation measures.

Key informants mentioned applying alternative ways to conduct FP counseling, such as using a digital medium. Using alternative FP commodities when one was unavailable was another strategy implemented in Nawalpur during COVID-19 and commodity shortages.

*The services that required physical touch were stopped entirely. Still, commodities like condoms and oral pills were given. People who needed other services were given counseling to use the alternate devices with social distancing. After that, we also made a work plan, which incorporated providing allowances to the service providers. Following all the public health parameters, we opened all the health services and gradually normalized all the services. (KII, Professional, Health Office, Nawalpur)*

*The rural municipality has hired one bus. We used to bring goods needed, whether from the district or province. After that, we used to distribute them continuously. In the beginning, when the health institutions were converted into isolation centers, it created misleading information that everyone was suffering from COVID. Later, we mobilized FCHV for*



*awareness of the importance of necessary services. (KII, Professional, Rural Municipality, Nawalpur)*

*We did have some effects of going home and delivering the services. However, we did keep in contact through the phones. (KII, FCHV, Rural Municipality, Nawalpur)*

*After the rumors of lockdown started, I had already collected condoms to keep in my stock... (pause)... devices like depo were stopped because people feared physical touch. Those who visited early got their hands on pills. The remaining took condoms because the pills were insufficient, even for 27 clients. However, I kept a high stock of condoms. (KII, FCHV, Rural Municipality, Nawalpur)*

One lesson learned in Nawalpur from the pandemic was the need to maintain stock and procure commodities to avoid shortages.

*To be safe from COVID, we started awareness campaigns through miking and the necessary provisions of PPE and sanitizers for health care workers in health institutions. We made PPE available [personal protective equipment] to health service providers. And regarding family planning services, we were committed to the continuous supply of family planning devices at any cost, so we started giving services with safety precautions. (KII, Professional, Health Office, Nawalpur)*

*Here, we sometimes receive commodities that we don't need and don't receive the required one, and there is no proper calculation. We still don't have the bottom-up approach to planning, so the central level provides us as they want. (KII, Professional, Municipality, Nawalpur)*

Key informants emphasized the need to develop and maintain a contingency plan and a proper budget allocation for emergencies. Similarly, key informants shared the need to strengthen their monitoring, documentation, and system management of FP commodities.

*The bottom-up planning and coordination between the province and local level are causing some problems in the commodities supply. The three tiers need to coordinate well to manage this, especially during crises. (KII, Professional, Health Office, Nawalpur)*

*At the moment, the local level is practicing things about all the new ways of federalism, including rules, regulations, and laws. So, at the moment, we don't have any disaster management plans or contingency plans. We had no idea of what to do when COVID first hit. The important thing is that we didn't have any references or documents for disaster management and recovery plans. On a municipality level, I believe none of them even exist. This year we have planned to prepare a disaster management plan and would budget for it likewise. (KII, Professional, Municipality, Nawalpur)*

The need for human resources was evident. Key informants recommended that the government fulfill vacant posts for health service providers and other trained health personnel.

*There is a lack of human resources needed for implants. There is still a push system for the commodities and logistics, whereas a pull system is required. (KII, Professional, Health Office, Nawalpur)*

## Discussion

The health system priority shift towards the COVID-19 pandemic resulted in less focus on FP commodity supply, stock, monitoring, and documentation. Respondents noted especially poor monitoring of FP commodities leading to incomplete data. The transition from manual recording to web-based data entry potentially hindered the accessibility of the records as the ledgers were not available during the time of data collection, and the records were not entered in the web-based version as well. All the districts reported that the lockdown restrictions made it difficult to manage the FP supply chain. Study participants from the municipality shared that the lack of mobility was an important factor that affected their FP supply to the rural municipalities.

The main impact on FP commodities shared by the study informants was risk of COVID-19 among service providers and service seekers due to personal interactions. This was a leading cause of the decrease in the provision of contraceptive commodities, which also complements the findings from other studies during the COVID-19 pandemic (Khowaja & Shalwani, 2021). Therefore, the number of new users of some long-acting FP methods—and even the number of new users of short-acting methods such as COCs and supply of male condoms—decreased, similar to the findings of one of the research in India, where the distribution of the COCs and male condoms were found to be reduced by 15% and 23% respectively (Vora et al., 2020).

The significant decrease in supply of male condoms may have been caused by the COVID-19 lockdown restricting access to health facilities and the inability of health service providers to distribute them. However, injectables (i.e., Depo-Provera) slightly increased during the COVID-19 crisis. Risk of COVID-19 transmission prevented health camps from functioning, causing a downward trend in sterilizations.

### Impacts on FP Commodities Management from the COVID-19 Crisis

We did not identify major challenges and issues related to the regular procurement of FP commodities prior to COVID-19. However, during the crisis, delays in procurement were determined as a shift in priority toward COVID-19 occurred. Some districts faced commodities stock problems and were forced to rely on other commodities because their procurement had not been filled, which affected clients' method choice.

Many key informants did not experience procurement issues that significantly impacted their FP commodity supply and stock. However, some key informants mentioned stockouts of pills that posed a threat to service provision. The shifting of injectables and implant users to condoms and pills due to fear of COVID-19 transmission from personal interaction, may have largely impacted the stocks of pills and condoms. Or, when pills and condoms were stocked out, providers may have suggested injectables. Stockouts of pills and condoms may have caused part of the shift in method use toward injectables leading to a slight increase in new users.

The lack of human resources to provide FP services was the most reported issue among the key informants. FP clients were impacted by a shortage of trained providers for methods like injectables and implants. The lack of trained providers and sufficient human resources for health service provision during the pandemic resulted in poor supply and distribution of FP commodities, including door-to-door services, similar to other research findings in similar country settings like Nepal (Kabagenyi et al., 2022). However, this study revealed the FCHVs' significant role in enabling access to short-acting FP commodities. Many FCHVs shared that they stocked up on easily accessible commodities such as pills and condoms to ensure an uninterrupted supply of contraceptives to those

in need. They also used digital communication strategies, such as phone calls and texts, to inquire about clients' needs and demands.

There was a problem with inadequate storage for housing FP commodities along with the new COVID-19 supplies and safety materials. Because of the pandemic, most districts were affected by the lack of storage capacity. Some of the districts' rural municipalities reported having issues due to their difficult-to-reach locations presenting challenges to obtaining the required commodities from the district, which have been generally a problematic concern (USAID | Deliver Project, Task Order 4, 2014). Nevertheless, with the support from donor agencies and supporting organizations that assisted with transportation and service delivery during the COVID-19 crisis, the health office provided FP commodities along with COVID-19 supplies.

### Strategies for Improving FP Commodities Management

This study highlighted the need for collaboration with the government, local non-governmental organizations, and international organizations for the proper and continuous supply of FP commodities (Mickler et al., 2021). Establishing these relationships was the key strategy for ensuring an uninterrupted supply of FP commodities during a pandemic. Donor organizations like UNFPA and USAID were found to be helping districts with monitoring their FP services.

Key informants urged better management of adequate FP and other health-related commodities. There needs to be a strategy based on stock reserves during a crisis or other emergency situation. This would ensure no stockout during emergencies and a backup plan in place in case of untimely procurement or supply.

Most district-level respondents shared that they sent the required amount of the FP supplies along with the vehicles transporting COVID-19 safety materials to service delivery points due to transportation constraints. Many FCHVs shared that they stocked up on easily accessible commodities such as pills and condoms to ensure an uninterrupted supply of contraceptives to those in need. They also used digital communication strategy, such as phone calls and texts, to inquire about clients' needs and demands.

**Table 5. Summary of the findings based on three selected districts in Gandaki Province**

Affected Areas	Findings	Reasons
Procurement, supply, and stock management	<ul style="list-style-type: none"> <li>Some commodities were overstocked.</li> </ul>	<ul style="list-style-type: none"> <li>Inability to provide services (e.g., IUCD)</li> </ul>
	<ul style="list-style-type: none"> <li>Stock registers were not updated, and some were not accessible.</li> </ul>	<ul style="list-style-type: none"> <li>Transitioning from paper documentation to web-based; online data entry in the LMIS database was implemented in April 2020, in some districts of the province.</li> </ul>
	<ul style="list-style-type: none"> <li>Procurement is done annually, and only from the central level.</li> </ul>	
FP service delivery	<ul style="list-style-type: none"> <li>Disruption of health camps and mobile clinics</li> </ul>	<ul style="list-style-type: none"> <li>Number of clients had reduced</li> <li>Shifted its attention to controlling the pandemic situation</li> <li>Risk of COVID-19 transmission due to personal interaction</li> </ul>
	<ul style="list-style-type: none"> <li>Preference for condoms and pills to avoid personal interaction</li> <li>Short-term methods were the most convenient, requiring minimal interaction</li> </ul>	<ul style="list-style-type: none"> <li>Risk of COVID-19 transmission due to personal interaction</li> </ul>

	<ul style="list-style-type: none"> <li>Inadequate technical personnel</li> </ul>	<ul style="list-style-type: none"> <li>Insufficiency of trained personnel to deliver long-term FP services</li> <li>Could not organize mobile clinics during lockdown and arrange the technical team to provide FP services</li> </ul>
	<ul style="list-style-type: none"> <li>Restricted mobility</li> </ul>	<ul style="list-style-type: none"> <li>Due to the lockdown, people could not reach health facilities for FP services, particularly long-term FP service.</li> </ul>
<b>Strategies for FP commodities management</b>	<p>No specific strategies (Central and Province)</p> <p>District:</p> <ul style="list-style-type: none"> <li>Adopt health measures during service delivery</li> <li>Providing allowances and incentives for motivating service providers during COVID-19</li> <li>Managing vehicles for health commodity supplies, including FP</li> <li>Consistent FP procurement and supply (Gorkha)</li> </ul>	<p>District:</p> <ul style="list-style-type: none"> <li>Use of PPE and safety measures enabled for protecting against the transmission of COVID-19</li> <li>Service providers and FCHVs were provided additional incentives for door-to-door service of FP services</li> <li>Lack of vehicles to supply commodities due to priority shift to COVID-19 commodities supply</li> </ul>
<b>Plan for future uninterrupted FP commodities/ services</b>	<p>Central level:</p> <ul style="list-style-type: none"> <li>Plan for strategy known as the Reserve Strategy, which ensures the stock of the commodities during crisis.</li> <li>Suggested an increase in stock and storage capacity</li> </ul> <p>Provincial: Specific plannings were not mentioned.</p> <p>District:</p> <ul style="list-style-type: none"> <li>Train the FP service providers</li> <li>Update contingency plans and CRRT (Gorkha)</li> <li>Prepare disaster management plans (Nawalpur)</li> </ul>	<ul style="list-style-type: none"> <li>Lack of space to store the different health divisions' commodities and the COVID-19 commodities</li> <li>Lack of trained service providers, FCHV to deliver FP services</li> <li>Lack of implementation of the contingency during crises</li> </ul>

## Strengths and Limitations

We explored the status of FP commodities management before and during the COVID-19 crisis by analyzing LMIS secondary data and gathering the perspectives of health professionals and FCHVs, thereby serving as a stepping-stone for the central and local governments to analyze and plan for future health crises. However, we could not access certain records from the PHLMC and districts because the records were unavailable. Web-based data entry in the LMIS database was implemented in April 2020 in some districts of Gandaki Province. The transition from manual recording to web-based data entry potentially hindered the accessibility of the records as the ledgers were not found during the time of data collection, nor were the records entered in the web-based version. Looking back at Nepal's LMIS progression timeline, web based LMIS and inventory management systems were implemented in all 75 districts in 2009 (USAID | Deliver Project, Task Order 4, 2014). This shows the implementation delay of the web version of LMIS in some districts, which requires further investigations.

## Recommendations

Improving the storage resources and capacity for FP supplies was the most common recommendation from all levels for strengthening FP commodities management, especially in preparation for a crisis where other stock is needed in addition to FP commodities. Other recommendations are as follows:

- Local, provincial, and central governments should increase human resources for FP service delivery. FP items should be regularly monitored through central and provincial levels. Actors at these levels should take timely action to avoid service delivery difficulties during emergencies like the COVID-19 pandemic.
- The insufficiency of trained human resources for the delivery of FP services at local and provincial levels should be fulfilled by local and provincial governments promptly.
- Since no contingency plans existed for FP commodities management, especially during emergencies like COVID-19 crisis, all three tiers of governments should develop and strengthen a contingency plan to ensure proper FP services.
- Incorporating and updating digital technologies into health systems and FP services by the provincial government may facilitate the data recording and reporting for decision-making. This will help to streamline logistics, reduce contraceptive stockouts, and increase provider-client capacity through contactless, on-demand FP information and referrals.
- Local governments should improve stock balance information in the LMIS to promote sharing or inter-regional and local transfers of overstocked contraceptives. Proper guidelines and strategies regarding mobility and transportation should be strengthened by central, provincial, and local governments.
- The central government should strengthen the storage capacity for FP commodities at the provincial and local levels.
- Integrating FP supply chains with those for other health commodities can enable adequate FP commodities supply and better service delivery. For example, synchronizing the transportation of FP commodities with immunization supplies can help service providers overcome the challenges associated with stockouts.
- Work with local administration and relevant municipality, district, or provincial authorities to continue mobile clinic services even during lockdowns.
- Orient staff and clients about how different diseases (e.g., COVID-19) are spread and how to protect themselves while seeking or providing FP services, e.g., wearing a mask, keeping a safe distance, and wearing PPE by providers. Ensure adequate PPEs for staff when they need to physically serve FP clients.

## Conclusions

This study concluded that FP service utilization, monitoring, and documentation were affected due to the COVID-19 crisis and the shift in focus to COVID-19 prevention and control management. The three study districts reported that mobility restrictions made managing the FP commodities supply chain challenging and affected the demand for FP. In Gandaki Province, the FP commodities that were overstocked before COVID-19 were understocked during the pandemic. Although there were supply chain issues from the central level to the province during the pandemic, the province supplied all required commodities to the districts.

There were no specific strategies formulated to improve FP commodities management at the provincial level. At the district level, the challenges that COVID-19 created were somewhat addressed by installing mobile and satellite clinics, adding human resources, sending FP commodities with the vehicles that transported COVID-19 commodities, shifting the use of long-acting contraceptive methods to short-acting methods like condoms and pills, and accessing geographically difficult places by coordinating with supporting organizations that traveled to those locations. The COVID-19 pandemic led professionals working in FP to realize the importance of maintaining a proper stock of FP commodities, especially in preparation for emergencies. Similarly, they felt the need to strengthen their monitoring, documentation, and systems management of FP commodities.

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## Appendix 1. FP service utilization in all Gandaki Province districts during the COVID-19 crisis

		FP Service Utilization in Gandaki Province (Mid-January – Mid-July 2020)											
		Male condoms supplied (in pieces)		COC pills		Injectables Depo		Implants		IUCD		Permanent	
		Mid-Jan. – Mid-April	Mid-April – Mid-July	Mid-Jan. – Mid-April	Mid-April – Mid-July	Mid-Jan. – Mid-April	Mid-April – Mid-July	Mid-Jan. – Mid-April	Mid-April to Mid-July	Mid-Jan. – Mid-April	Mid-April – Mid-July	Mid Jan. – Mid-April	Mid-April – Mid-July
Gorkha	New	73574	78480	426	474	680	801	243	228	23	8	433	165
	Current			4057	4959	12744	13357	14174	14902	1396	1396	13491	13915
Kaski	New	107379	38529	464	429	687	593	447	205	97	49	105	32
	Current			4685	4846	6373	5944	21648	21921	19677	19677	31256	31361
Nawalpur	New	47977	52826	471	356	529	439	217	54	46	13	4	6
	Current			5624	5795	7722	6172	11153	10958	9127	9127	466	470
Lamjung	New	55559	59793	125	191	245	264	107	106	56	64	69	0
	Current			2426	2381	4487	4539	4427	4779	3026	3026	5321	5679
Tanahu	New	50341	55724	444	349	533	546	263	130	33	10	22	0
	Current			4429	4114	6281	6532	11490	13659	9515	9515	37488	37557
Syangja	New	70819	75463	303	323	325	362	169	178	29	22	8	0
	Current			4447	4910	4524	5044	6109	6597	1636	1636	332	34708
Parbat	New	51008	59532	191	187	272	268	140	216	16	78	0	5
	Current			2314	2358	3759	3659	7673	7858	2319	2319	12763	13842
Baglung	New	77071	76747	363	351	530	544	182	128	11	7	0	0
	Current			4710	4597	6212	6620	10751	11049	3064	3064	718	10804
Manang	New	3690	4785	3	11	9	13	3	27	0	0	0	0
	Current			168	166	310	297	231	426	0	0	0	0
Mustang	New	5424	7552	20	32	27	60	18	19	0	0	0	0
	Current			199	237	456	644	579	708	43	43	0	0
Myagdi	New	35373	38529	168	169	361	388	146	216	8	18	12	0
	Current			1508	1711	4418	4662	7870	9725	4000	4000	73	93

\*Male condoms are recorded as supply in pieces. Individual users are not recorded.

## Appendix 2. FP commodities supply in other Gandaki Province districts during the COVID-19 crisis

S.N.	FP Commodity Supply	Unit	Magh to Chaitra 2076		Baishak to Asar 2077	
			Mid-January – Mid-April 2020		Mid-April – Mid-July 2020	
			In	Out	In	Out
<b>Gorkha</b>						
1	Male condom	Pieces	33,000	45,000	36,000	42,000
2	Combined oral contraceptive pills	Cycle	0	6,000	15,264	12,000
3	Injectables (Depo-provera)	Dose/vial	1,000	5,000	4,500	6,000
4	Implant	Set	500	800	1,100	1,200
5	Intrauterine contraceptive device (Copper-T)	Set	1,500	500	0	500
<b>Kaski</b>						
1	Male condom	Pieces	NA	NA	195,000	3,000
2	Combined oral contraceptive pills	Cycle	NA	NA	31,410	200
3	Injectables (Depo-provera)	Dose/vial	NA	NA	500	0
4	Implant	Set	NA	NA	0	0
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	0	0
<b>Nawalpur</b>						
1	Male condom	Pieces	63,000	42,000	126,000	90,000
2	Combined oral contraceptive pills	Cycle	9,000	9,000	7,200	4,108
3	Injectables (Depo-provera)	Dose/vial	500	400	300	300
4	Implant	Set	250	200	0	50
5	Intrauterine contraceptive device (Copper-T)	Set	110	500	0	550
<b>Syangja</b>						
1	Male condom	Pieces	NA	NA	15000	0
2	Combined oral contraceptive pills	Cycle	NA	NA	3600	0
3	Injectables (Depo-provera)	Dose/vial	NA	NA	10000	0
4	Implant	Set	NA	NA	100	0
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	0	0
<b>Tanahun</b>						
1	Male condom	Pieces	NA	NA	30000	0
2	Combined oral contraceptive pills	Cycle	NA	NA	6024	0
3	Injectables (Depo-provera)	Dose/vial	NA	NA	2000	0
4	Implant	Set	NA	NA	0	0
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	100	0
<b>Parbat</b>						
1	Male condom	Pieces	21000	NA	36000	0
2	Combined oral contraceptive pills	Cycle	3024	NA	7200	0
3	Injectables (Depo-provera)	Dose/vial	NA	NA	10000	0
4	Implant	Set	NA	NA	0	0
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	0	0
<b>Lamjung</b>						
1	Male condom	Pieces	30000	NA	45000	0

S.N.	FP Commodity Supply	Unit	Magh to Chaitra 2076		Baishak to Asar 2077	
			Mid-January – Mid-April 2020		Mid-April – Mid-July 2020	
			In	Out	In	Out
2	Combined oral contraceptive pills	Cycle	5040	NA	75000	0
3	Injectables (Depo-provera)	Dose/vial	0	NA	10000	0
4	Implant	Set	200	NA	1000	0
5	Intrauterine contraceptive device (Copper-T)	Set	0	NA	0	0
<b>Baglung</b>						
1	Male condom	Pieces	0	NA	30000	0
2	Combined oral contraceptive pills	Cycle	3024	NA	7200	0
3	Injectables (Depo-provera)	Dose/vial	1000	NA	0	0
4	Implant	Set	0	NA	700	0
5	Intrauterine contraceptive device (Copper-T)	Set	0	NA	300	0
<b>Manang</b>						
1	Male condom	Pieces	NA	NA	NA	NA
2	Combined oral contraceptive pills	Cycle	NA	NA	NA	NA
3	Injectables (Depo-provera)	Dose/vial	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	NA	NA
<b>Mustang</b>						
1	Male condom	Pieces	NA	NA	NA	NA
2	Combined oral contraceptive pills	Cycle	NA	NA	NA	NA
3	Injectables (Depo-provera)	Dose/vial	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	NA	NA
<b>Myagdi</b>						
1	Male condom	Pieces	NA	NA	NA	NA
2	Combined oral contraceptive pills	Cycle	NA	NA	NA	NA
3	Injectables (Depo-provera)	Dose/vial	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA
5	Intrauterine contraceptive device (Copper-T)	Set	NA	NA	NA	NA

NA: Data not accessible

### Appendix 3. FP commodities stock in other Gandaki Province districts during the COVID-19 crisis

S.N.	FP Commodities Stock	Unit	Mid-January – Mid-April 2020	ASL Mid-April – Mid- July 2020	EOP	Mid-April – Mid-July 2020	ASL Mid-April – Mid- July 2020	EOP
<b>Kaski</b>								
1	Male condom	Pieces	NA	-	-	28600 <sup>a</sup>	227970	136782
2	COC pills	Cycle	NA	-	-	4739 <sup>a</sup>	16655	9993
3	Depo-provera	Dose/Vial	NA	-	-	726	NA	NA
4	Implant	Set	NA	-	-	691 <sup>a</sup>	1500	900
5	IUCD (Copper and hormonal)	Set	NA	-	-	691 <sup>b</sup>	425	255
<b>Gorkha</b>								
1	Male condom	Pieces	52000 <sup>a</sup>	253525	152115	60000 <sup>a</sup>	253525	152115
2	COC pills	Cycle	7000 <sup>a</sup>	26090	15654	10000 <sup>a</sup>	26090	15654
3	Depo-provera	Dose/Vial	8000	11750	7050	8200	11750	7050
4	Implant	Set	1200	1495	897	1000	1495	897
5	IUCD (Copper and hormonal)	Set	1500 <sup>b</sup>	175	105	1800 <sup>b</sup>	175	105
<b>Nawalpur</b>								
1	Male condom	Pieces	NA	-	-	54000	NA	NA
2	COC pills	Cycle	NA	-	-	63	NA	NA
3	Depo-provera	Dose/Vial	NA	-	-	1000	NA	NA
4	Implant	Set	NA	-	-	350	NA	NA
5	IUCD (Copper and hormonal)	Set	NA	-	-	NA	NA	NA
<b>Syangja</b>								
1	Male condom	Pieces	NA	-	-	9000 <sup>a</sup>	144165	86499
2	COC pills	Cycle	NA	-	-	3322 <sup>a</sup>	18400	11040
3	Depo-provera	Dose/Vial	NA	-	-	5875 <sup>b</sup>	250	150
4	Implant	Set	NA	-	-	NA	-	-
5	IUCD (Copper and hormonal)	Set	NA	-	-	225 <sup>b</sup>	85	51
<b>Tanahun</b>								
1	Male condom	Pieces	NA	-	-	20400 <sup>a</sup>	141325	84795
2	COC pills	Cycle	NA	-	-	4438 <sup>a</sup>	18590	11154
3	Depo-provera	Dose/Vial	NA	-	-	1150 <sup>a</sup>	2500	1500
4	Implant	Set	NA	-	-	290 <sup>a</sup>	490	294
5	IUCD (Copper and hormonal)	Set	NA	-	-	160 <sup>a</sup>	315	189
<b>Parbat</b>								
1	Male condom	Pieces	NA	-	-	22700 <sup>a</sup>	105655	63399
2	COC pills	Cycle	NA	-	-	14500 <sup>b</sup>	7160	4296
3	Depo-provera	Dose/Vial	NA	-	-	5150	NA	NA
4	Implant	Set	NA	-	-	NA	NA	NA
5	IUCD (Copper and hormonal)	Set	NA	-	-	250 <sup>b</sup>	70	42
<b>Lamjung</b>								
1	Male condom	Pieces	NA	-	-	60700 <sup>a</sup>	200000	120000
2	COC pills	Cycle	NA	-	-	14428 <sup>a</sup>	55075	33045
3	Depo-provera	Dose/Vial	NA	-	-	19223 <sup>b</sup>	7130	4278
4	Implant	Set	NA	-	-	1208 <sup>b</sup>	860	516

S.N.	FP Commodities Stock	Unit	Mid-January – Mid-April 2020	ASL Mid-April – Mid- July 2020	EOP	Mid-April – Mid-July 2020	ASL Mid-April – Mid- July 2020	EOP
5	IUCD (Copper and hormonal)	Set	NA	-	-	24 <sup>a</sup>	305	183
<b>Baglung</b>								
1	Male condom	Pieces	NA	-	-	97600 <sup>b</sup>	80460	48276
2	COC pills	Cycle	NA	-	-	8166 <sup>a</sup>	24865	14919
3	Depo-provera	Dose/Vial	NA	-	-	7036	NA	NA
4	Implant	Set	NA	-	-	680 <sup>b</sup>	485	291
5	IUCD (Copper and hormonal)	Set	NA	-	-	550 <sup>b</sup>	75	45
<b>Manang</b>								
1	Male condom	Pieces	NA	NA	NA	NA	NA	NA
2	COC pills	Cycle	NA	NA	NA	NA	NA	NA
3	Depo-provera	Dose/Vial	NA	NA	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA	NA	NA
5	IUCD (Copper and hormonal)	Set	NA	NA	NA	NA	NA	NA
<b>Mustang</b>								
1	Male condom	Pieces	NA	NA	NA	NA	NA	NA
2	COC pills	Cycle	NA	NA	NA	NA	NA	NA
3	Depo-provera	Dose/Vial	NA	NA	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA	NA	NA
5	IUCD (Copper and hormonal)	Set	NA	NA	NA	NA	NA	NA
<b>Myagdi</b>								
1	Male condom	Pieces	NA	NA	NA	NA	NA	NA
2	COC pills	Cycle	NA	NA	NA	NA	NA	NA
3	Depo-provera	Dose/Vial	NA	NA	NA	NA	NA	NA
4	Implant	Set	NA	NA	NA	NA	NA	NA
5	IUCD (Copper and hormonal)	Set	NA	NA	NA	NA	NA	NA

NA: Data not accessible

## Appendix 4. Study Tools

### Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

#### Quantitative: Central Level

#### Consent Form

Namaste! My name is \_\_\_\_\_. We are conducting a study on “Appraisal on Family Planning commodities Management due to COVID-19 Crisis in Gandaki Province.” This is a study carried out by CiST College titled as “**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province.**” The study’s objective is to see study if any variation occurred in Gandaki province’s family planning commodities procurement, supply chain and stock management due to the COVID-19 pandemic, and if new strategies were adapted to address the changed context. Information collected during this study may be used by the researchers or organizations supporting family planning services to improve family planning services or conduct further studies. Neither your name, the name of the health facility, nor the names of any other health workers who participate in this study will be included in the dataset or in any report or other print materials. We request for your help in order to collect this information. This will be a totally a risk-free volunteer participation and there will be no direct benefit in terms of payment or reimbursement. It will take around 15–20 minutes to complete the interview. You may refuse to answer any question and you may choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation. May I begin the interview?

YES .....	1	NO .....	2	STOP .....	3
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Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
Name and address of Institution	
Duration of Interview (in min)	
Interview taken by	

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Date of Visit (dd/mm/yyyy):

1. FP commodities procurement\* during the period of 6 months (3months before COVID-19 Magh, Falgun, Chaitra 2076 [Mid-January – Mid-April 2020]) and 3 months (Baisakh, Jestha, Asar 2077 [Mid-April – Mid-July 2020]) during COVID-19:

S.N	FP Commodities Procurement	Unit	Magh to Chaitra, 2076 Mid-Jan. – Mid-April 2020	Baishak to Asar, 2077 Mid-April – Mid-July 2020
1	Male condom	Pieces		
2	COC pills	Cycle		
3	Injectables i. Depo-provera ii. Sayana press	Dose/Vial Piece		
5	Implant	Set		
6	IUCD (Copper-T)	Set		

\*at central level only

2. FP commodities stock\* during the period of 6 months (3months before COVID-19 Magh, Falgun, Chaitra [Mid-January – Mid-April 2020]) and 3months (Baisakh, Jestha, Asar [Mid-April – Mid-July 2020]) during COVID-19:

S.N	FP Commodities Stock	Unit	Magh to Chaitra	ASL (Magh-Chaitra)	EOP	Baishak to Asar, 2076	ASL (Baishak-Asar, 2077)	EOP
1	Male condom	Pieces						
2	COC pills	Cycle						
3	Injectables i. Depo-provera ii. Sayana press	Dose/ Vial Piece						
5	Implant	Set						
6	IUCD (Copper and hormonal)	Set						

\*stock at the end of Chaitra and Asar, ASL=Authorized Stock Level; EOP=Emergency Order Point Level

## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

(Qualitative)

### Key Informant Interview Guideline for Central Level

Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
Name and address of HF/Hospital	
Duration of service in the current facility	
Duration of Interview (in min)	
Interview taken by	

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Date of Visit (dd/mm/yyyy):

1. What was the situation with commodities procurement, supply chain and stock management
  - before COVID-19 pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])?  
*Probe for Stock out and overstock situation before COVID-19*
  - during COVID-19 (Baishak – Asar [Mid-April – Mid-July 2020])?  
*It will not allow them to know WHY. Questions could be incorporated to seek key informant opinions on the reasons for any impacts to services and commodities.*
2. How has COVID-19 crisis influenced family planning supply, stock and management of commodities?  
*If yes, probe for more answer for any improvement/declination on the status of commodities or supplies. Probe for the factors associated with improvement/declination family planning supply, stock, and management of commodities?*
3. What were the strategies formulated and adopted to ensure reliable or uninterrupted family planning commodities procurement, supply chain and stock management during the pandemic? *Probe for more answer for strategies for improvement/overcoming declination on the status of commodities or supplies. Probe for strategies during normal situation and during pandemic situation for comparison Ask what the activities were conducted as part of the strategies. This is to find out if the situation was out of inaction or due to COVID.*
4. What are the lessons learnt and your future plans to ensure uninterrupted FP commodities/services if there are similar health emergencies or other crises in the future? *This would help us to understand what lessons they've learned from the COVID-pandemic and how they plan to apply these for future preparedness. [We can also probe if the interviewee is aware of a new technical working group addressing contraceptive supplies and logistics, updated policies or practices regarding FP commodities, changes in accessibility to contraceptives, etc.]*
5. Do you have anything else you would like to share with us about the family planning stock, supply and management?



## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

### Quantitative: District Level

#### Consent Form

Namaste! My name is \_\_\_\_\_. We are conducting a study on “Appraisal on Family Planning commodities Management due to COVID-19 Crisis in Gandaki Province.” This is a study carried out by CiST College titled as “**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province.**” The study’s objective is to see study if any variation occurred in Gandaki province’s family planning commodities procurement, supply chain and stock management due to the COVID-19 pandemic, and if new strategies were adapted to address the changed context. Information collected during this study may be used by the researchers or organizations supporting family planning services to improve family planning services or conduct further studies. Neither your name, the name of the health facility, nor the names of any other health workers who participate in this study will be included in the dataset or in any report or other print materials. We request for your help to collect this information. This will be a totally a risk-free volunteer participation and there will be no direct benefit in terms of payment or reimbursement. It will take around 15–20 minutes to complete the interview. You may refuse to answer any question and you may choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation. May I begin the interview?

YES .....	1	NO .....	2	STOP .....	3
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Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
District	
Source of information collected (Name and address of Institution)	
Duration of Interview (in min)	
Interview taken by	

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Date of Visit (dd/mm/yyyy):

3. FP commodities stock\* during the period of 6 months (3months before COVID-19 Magh, Falgun, Chaitra [Mid-Jan. – Mid-April 2020]) and 3months (Baisakh, Jestha, Asar [Mid-April – Mid-July 2020]) during COVID-19:

S.N	FP Commodities Stock	Unit	Magh to Chaitra	ASL (Magh-Chaitra)	EOP	Baishak to Asar, 2076	ASL (Baishak-Asar, 2077)	EOP
1	Male condom	Pieces						
2	COC pills	Cycle						
3	Injectables i. Depo-provera ii. Sayana press	Dose/Vial Piece						
5	Implant	Set						
6	IUCD (Copper and hormonal)	Set						

\*stock at the end of Chaitra and Asar, ASL=Average Stock Level; EOP=Emergency Order Point Level

4. FP commodities supply

S.N	FP Commodities Supply	Unit	Magh to Chaitra 2076 [Mid-Jan – Mid-April 2020]		Baishakto Asar 2077 [Mid-April – Mid-July 2020]	
			In	Out	In	Out
1	Male condom	Pieces				
2	COC pills	Cycle				
3	Injectables (Depo-provera)	Dose/vial				
4	Sayana press	Piece				
5	Implant	Set				
6	IUCD (Copper-T)	Set				

5. Service coverage during the period of 6months (3months before COVID-19 (Magh, Falgun, Chaitra [Mid-Jan. – Mid-April 2020]) and 3months (Baisakh, Jestha, Asar [Mid-April – Mid-July 2020]) during COVID-19: (Temporary and Permanent Methods)

S.N	FP Commodities Utilization	Type of User	Magh to Chaitra, 2076 [Mid-Jan. – Mid-April 2020]	Baishakto Asar, 2077 [Mid-April – Mid-July 2020]
1	Male condoms	New		
		Current User		
2	COC pills	New		
		Current User		
3	Injectables i. Depo-provera ii. Sayana press	New		
		Current User		
		New		
		Current User		
5	Implant	New		
		Current User		
6	IUCD (Copper-T)	New		
		Current User		
7	Vasectomy	New		
8	Minilap	New		

## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

### Quantitative: Provincial Level

#### Consent Form

Namaste! My name is \_\_\_\_\_. We are conducting a study on “Appraisal on Family Planning commodities Management due to COVID-19 Crisis in Gandaki Province.” This is a study carried out by CiST College titled as “**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province.**” The study’s objective is to see study if any variation occurred in Gandaki province’s family planning commodities procurement, supply chain and stock management due to the COVID-19 pandemic, and if new strategies were adapted to address the changed context. Information collected during this study may be used by the researchers or organizations supporting family planning services to improve family planning services or conduct further studies. Neither your name, the name of the health facility, nor the names of any other health workers who participate in this study will be included in the dataset or in any report or other print materials. We request for your help to collect this information. This will be a totally a risk-free volunteer participation and there will be no direct benefit in terms of payment or reimbursement. It will take around 15–20 minutes to complete the interview. You may refuse to answer any question and you may choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation. May I begin the interview?

YES .....	1	NO .....	2	STOP .....	3
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Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
District/Overall	
Name and address of Institution	
Duration of Interview (in min)	
Interview taken by	

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Date of Visit (dd/mm/yyyy):

Districts within Gandaki Province	
<b>Kaski</b>	Myagdi
<b>Gorkha</b>	Manang
<b>Nawalpur</b>	Tanahu
Syangja	Parbat
Lamjung	Baglung
Mustang	Myagdi

6. FP commodities stock\* during the period of 6 months (3months before COVID-19 Magh, Falgun, Chaitra [Mid-January – Mid April 2020]) and 3 months (Baisakh, Jestha, Asar [Mid-April – Mid July 2020]) during COVID-19:

S.N	FP Commodities Stock	Unit	Magh to Chaitra	ASL (Magh-Chaitra)	EOP	Baishak to Asar, 2076	ASL (Baishak-Asar, 2077)	EOP
1	Male condom	Pieces						
2	COC pills	Cycle						
3	Injectables i. Depo-provera ii. Sayana press	Dose/ Vial Piece						
5	Implant	Set						
6	IUCD (Copper and hormonal)	Set						

\*stock at the end of Chaitra and Asar, ASL=Authorized Stock Level; EOP=Emergency Order Point Level

7. FP commodities supply

S.N	FP Commodities Supply	Unit	Magh to Chaitra 2076 [Mid-Jan. – Mid-April 2020]		Baishakto Asar 2077 [Mid-April – Mid-July 2020]	
			In	Out	In	Out
1	Male condom	Pieces				
2	COC pills	Cycle				
3	Injectables (Depo-provera)	Dose/vial				
4	Sayana press	Piece				
5	Implant	Set				
6	IUCD (Copper-T)	Set				

8. Service Coverage during the period of 6months (3months before COVID-19 (Magh, Falgun, Chaitra [Mid Jan. – Mid April 2020]) and 3months (Baisakh, Jestha, Asar [Mid-April – Mid July 2020]) during COVID-19: (Temporary and Permanent Methods)

S.N	FP Commodities Utilization	Type of User	Magh to Chaitra, 2076 [Mid-Jan – Mid-April 2020]	Baishakto Asar, 2077 [Mid-April – Mid-July 2020]
1	Male condoms	New		
		Current User		
2	COC pills	New		
		Current User		
3	Injectables i. Depo-provera ii. Sayana press	New		
		Current User		
		New		
		Current User		
5	Implant	New		
		Current User		
6	IUCD (Copper-T)	New		
		Current User		
7	Vasectomy	New		
8	Minilap	New		

## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

(Qualitative)

### Key Informant Interview Guideline for Provincial Level

Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
Name and address	
Duration of service in the current facility	
Duration of Interview (in min)	
Interview taken by	

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Date of Visit (dd/mm/yyyy):

6. What was the situation with commodities procurement, supply chain and stock management
  - before COVID-19 pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])? *Probe for Stock out and overstock situation before COVID-19*
  - during COVID-19 (Baishak – Asar [Mid-April – Mid-July 2020])? *It will not allow them to know WHY. Questions could be incorporated to seek key informant opinions on the reasons for any impacts to services and commodities.*
7. How has COVID-19 crisis influenced family planning supply, stock and management of commodities? *If yes, probe for more answer for any improvement/declination on the status of commodities or supplies. Probe for the factors associated with improvement/declination family planning supply, stock, and management of commodities?*
8. What were the strategies formulated and adopted to ensure reliable or uninterrupted family planning commodities procurement, supply chain and stock management during the pandemic? *Probe for more answer for strategies for improvement/overcoming declination on the status of commodities or supplies. Probe for strategies during normal situation and during pandemic situation for comparison Ask what the activities were conducted as part of the strategies. This is to find out if the situation was out of inaction or due to COVID.*
9. What are the lessons learnt and your future plans to ensure uninterrupted FP commodities/services if there are similar health emergencies or other crises in the future? *This would help us to understand what lessons they've learned from the COVID-pandemic and how they plan to apply these for future preparedness. [We can also probe if the interviewee is aware of a new technical working group addressing contraceptive supplies and logistics, updated policies or practices regarding FP commodities, changes in accessibility to contraceptives, etc.]*
10. Do you have anything else you would like to share with us about the family planning stock, supply and management?

**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province  
(Qualitative)**

**Key Informant Interview Guideline for District Level**

Interviewee Signature	
Designation	
Contact (add phone number/email id)	
Source of information collected (name and address of institution)	
Duration of service in the current facility	
Duration of Interview (in min)	
Interview taken by	

1. What is your opinion of the family planning services provided at District/Palika
  - a. before COVID-19 Pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])
  - b. during COVID-19 (Baishak – Asar [Mid-April – Mid-July 2020])?
  
2. What was the situation with commodities procurement, supply chain, stock management and service delivery:
  - before COVID-19 pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])?
  - during COVID-19 (Baishak – Asar [Mid-April – Mid-July 2020])?  
*It will not allow them to know WHY. Questions could be incorporated to seek key informant opinions on the reasons for any impacts to services and commodities.*
  
3. How has COVID-19 crisis influenced family planning supply, stock and management of commodities?  
*If yes, probe for more answer for any improvement/declination on the status of commodities or supplies. Probe for the factors associated with improvement/declination family planning supply, stock, and management of commodities?*
  
4. What were the strategies formulated and adopted to ensure reliable or uninterrupted family planning commodities procurement, supply chain and stock management during the pandemic situation? *Probe for more answer for strategies for improvement/overcoming declination on the status of commodities or supplies. Probe for strategies during normal situation and during pandemic situation for comparison.*
  
5. What are the lessons learnt and your future plans to ensure uninterrupted FP commodities/services if there are similar health emergencies or other crises in the future? *This would help us to understand what lessons they've learned from the COVID-pandemic and how they plan to apply these for future preparedness. [We can also probe if the interviewee is aware of a new technical working group addressing contraceptive supplies and logistics, updated policies or practices regarding FP commodities, changes in accessibility to contraceptives, etc.]*
  
6. Do you have anything else you would like to share with us about the family planning procurement, supply chain, stock management and services?

## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

### Qualitative: Local Level-Municipality/Rural Municipality

#### Consent Form

Namaste! My name is \_\_\_\_\_. We are conducting a study on “Appraisal on Family Planning commodities Management due to COVID-19 Crisis in Gandaki Province.” This is a study carried out by CiST College titled as “**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province.**” The study’s objective is to see study if any variation occurred in Gandaki province’s family planning commodities procurement, supply chain and stock management due to the COVID-19 pandemic, and if new strategies were adapted to address the changed context. Information collected during this study may be used by the researchers or organizations supporting family planning services to improve family planning services or conduct further studies. Neither your name, the name of the health facility, nor the names of any other health workers who participate in this study will be included in the dataset or in any report or other print materials. We request for your help to collect this information. This will be totally a risk-free volunteer participation and there will be no direct benefit in terms of payment or reimbursement. It will take around 15–20 minutes to complete the interview. You may refuse to answer any question and you may choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation. May I begin the interview?

YES .....	1	NO .....	2	STOP .....	3
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Date of Visit (dd/mm/yyyy):

#### ***Key Informant Interview Guideline for Local Level (Municipality/Rural Municipality)***

Interviewee Signature	
Designation	
Contact (phone number/email)	
Source of information collected (Name and address of Institution)	
Duration of service in the current facility	
Duration of Interview (in min)	
Interview taken by	

7. What is your opinion of the family planning services provided at District/Palika
  - a. before COVID-19 Pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])
  - b. during COVID-19 (Baishak – Asar [Mid-April – Mid July 2020])?
8. What was the situation with commodities procurement, supply chain, stock management and service delivery
  - before COVID-19 pandemic (Magh-Chaitra [Mid-January – Mid-April 2020])?
  - during COVID-19 (Baishak – Asar [Mid-April – Mid-July 2020])?

*It will not allow them to know WHY. Questions could be incorporated to seek key informant opinions on the reasons for any impacts to services and commodities.*
9. How has COVID-19 crisis influenced family planning supply, stock and management of commodities?
 

*If yes, probe for more answer for any improvement/declination on the status of commodities or supplies. Probe for the factors associated with improvement/declination family planning supply, stock, and management of commodities?*
10. What were the strategies formulated and adopted to ensure reliable or uninterrupted family planning commodities procurement, supply chain and stock management during the pandemic situation? *Probe for*

*more answer for strategies for improvement/overcoming declination on the status of commodities or supplies. Probe for strategies during normal situation and during pandemic situation for comparison.*

11. What are the lessons learnt and your future plans to ensure uninterrupted FP commodities/services if there are similar health emergencies or other crises in the future? *This would help us to understand what lessons they've learned from the COVID-pandemic and how they plan to apply these for future preparedness.*
12. Do you have anything else you would like to share with us about the family planning procurement, supply chain, stock management and services?



## Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province

### Qualitative: Local Level -FCHVs

#### Consent Form

Namaste! My name is \_\_\_\_\_. We are conducting a study on “Appraisal on Family Planning commodities Management due to COVID-19 Crisis in Gandaki Province.” This is a study carried out by CiST College titled as “**Appraisal on Family Planning Commodities Management due to COVID-19 Crisis in Gandaki Province.**” The study’s objective is to see study if any variation occurred in Gandaki province’s family planning commodities procurement, supply chain and stock management due to the COVID-19 pandemic, and if new strategies were adapted to address the changed context. Information collected during this study may be used by the researchers or organizations supporting family planning services to improve family planning services or conduct further studies. Neither your name, the name of the health facility, nor the names of any other health workers who participate in this study will be included in the dataset or in any report or other print materials. We request for your help to collect this information. This will be a totally a risk-free volunteer participation and there will be no direct benefit in terms of payment or reimbursement. It will take around 15–20 minutes to complete the interview. You may refuse to answer any question and you may choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation. May I begin the interview?

YES .....	1	NO .....	2	STOP .....	3
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Date of Visit (dd/mm/yyyy):

#### **Key Informant Interview Guideline for FCHV**

Interviewee Signature	
Designation	
Contact add (phone number/ email id)	
Source of information collected (Name and Address of Municipality/Rural Municipality)	
Duration of service in the current position	
Duration of Interview (in min)	
Interview taken by	

- What is your opinion of the family planning services provided at your local level?
  - before COVID-19 Pandemic (Magh-Chaitra [Mid-January – Mid April 2020])
  - during Covid-19 (Baishak- Asar [Mid-April – Mid July 2020])?
- What are the most popular modern family planning methods used by individuals and couples in this community? (*probe the demand before and during*)
- Do you think the COVID-19 crisis has affected family planning supply and services? If yes, how? (*Try to probe on stock, demand, timely supply, and distribution and user response*). *Find out their activities during the pandemic to ensure continued FP services and commodities.*
- Were there any new strategies adapted at your level for the FP supply and services in response to the COVID-19 pandemic context? (*try to explore use of natural FP method*)

5. What are the lessons learnt and your future plans to ensure uninterrupted FP commodities/services if there are similar health or other crises in the future? *This would help us to understand what lessons they've learned from the COVID-pandemic and how they plan to apply these for future preparedness*
6. Do you have anything else you would like to share with us about the family planning stock, supply and management?

## Appendix 5. Orientation Schedule

*Appraisal on Family Planning Commodities Management due to  
COVID-19 Crisis in Gandaki Province  
Orientation Schedule*

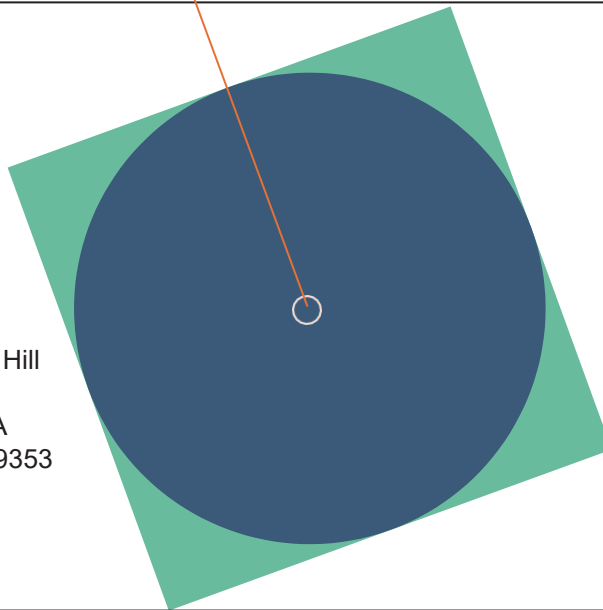
**Date: 5<sup>th</sup> October, 2021 (Tuesday)**

Activities	Topic	Time	Responsibility	Remarks
Registration		10:30 – 11:00 AM	Core Team	
Welcome		11: 00 – 11:15 AM	Prof. Naveen Shrestha/ Laxmi Adhikari	
Session 1	Overview of Project and Methodology	11: 15 – 11: 45 AM	Santosh Khadka	
Session 2	Working Procedure of USAID and effective data collection Procedure	11: 45 AM – 12: 45 PM	Er. Hare Ram Bhattarai	
Session 3	Orientation on Quantitative approach of data collection	12:45 – 1: 45 PM	Laxmi Adhikari	
<b>Break</b> <b>1:45 – 2:15 PM</b>				
Session 4	Orientation on Qualitative approach of data collection	2:15 – 3: 15 PM	Associate Prof. Maheshor Kafle	
Session 5	Discussion and Group Work	3:15 – 4:00 PM	Team and Participants	
Session 6	Administrative Briefing	4:00 – 4:15 PM		
Closing Remarks	Final Remarks and closing	4:15 – 4:30 PM	Prof. Naveen Shrestha/ Santosh Khadka	

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## Data for Impact (D4I)

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