Global Fund COVID-19 Response Mechanism (C19RM)
Funding Request Form

Date Created: 6 April 2021
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Summary Information

Country (or multicountry)	**NEPAL**		
Principal Recipient(s), grant name(s) and Implementation Period(s)	**PR:** Save the Children International **Grant Name:** C19RM Full Funding Request **Period:** 1 July 2021- 31 Dec 2023		
Planned start and end dates of the C19RM activities by grant	Start Date: 1 July 2021 End Date: 31 Dec 2023		
Currency	USD		
C19RM Base Allocation amount	**Submission type**	**Amount (US$/EUR)**	**Submission date**
	C19RM Fast-track Funding Request[1]	USD 5,098,263.	3 May 2021
	C19RM Full Funding Request	USD 2,647,604.	1 June 2021
	Total:	USD 7,745,867.	
C19RM remaining Base Allocation amount and Above Base Allocation amount[2]	**Submission type**	**Amount (US$/EUR)**	**Submission date**
	C19RM Full Funding Request	USD 21,317,670.	First submission: 1 June 2021 Revised submissions: 23 June 2021 29 June 2021
	Total: (Base+Above Base)	USD 23,965,227.	

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[1] PPE, diagnostics and therapeutics and costs relating to the effective deployment of such health products.
[2] This is only relevant for the full submission.

Section 2. C19RM Full Funding Request

2.1 Context

2.1.1 Briefly describe the critical elements of the **country context** that informed the development of this funding request by summarizing the:

Country Context

Nepal is a landlocked country with Himalayas bordering China on the north and surrounded by porous borders with India on the other three sides. Nepal succeeded in slowing down spread of COVID-19 in the first five months of 2020 (Ref. 1). The country saw a delayed first surge of COVID-19 between August and December 2020 (Fig. 1). This surge coincided with the local festive season and relaxation of initial restrictions. The number of new cases started declining from a peak of over 4000 per day to less than 1000 in December 2020. The daily new cases remained below 200 per day between February and April 2021 (Ref. 2, 3).

As the COVID-19 cases and South Asia escalated, Nepal also experienced similar trends with rapid surge in new cases. As at June 17, 2021, Nepal recorded over 615,984 PCR positive cases of COVID-19 and over 8,597 deaths (Ref. 3). Cases of COVID-19 have been reported from all seven provinces and 77 districts of Nepal. Highest number of cases are in Kathmandu Valley where the largest population reside, and in the districts bordering India (Fig. 2). A rapid surge in cases has added more burden on already strained health system and the cases have continued to rise over past few weeks (Table-1). Nepal's hospitals are greatly in need of additional beds, supply of lifesaving oxygen and oxygen delivery devices, and drugs for COVID-19 treatment. Healthcare workers are increasingly becoming exhausted with the increased patient loads, long working hours, and psychosocial stressors. Despite massive expansion of molecular testing capability over past year, the country's labs are unable to meet the demand for PCR testing for COVID-19. The current COVID-19 PCR test positivity rate is over 21% in Nepal. Additionally, COVID-19 antigen tests are currently used for screening purposes including for migrants at international borders.

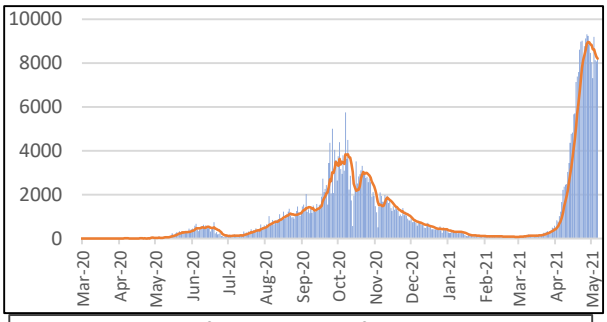

Fig. 1. Daily confirmed cases of COVID-19 in Nepal (Source: MoHP/EDCD/WHO, 23May2021)

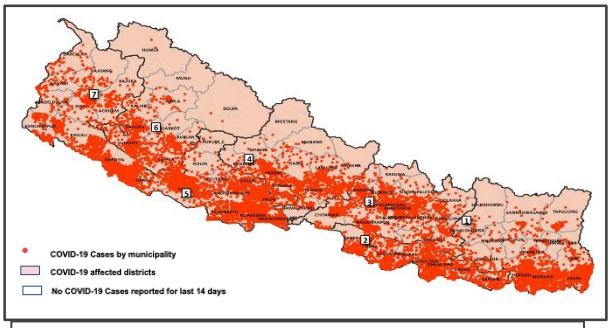

Fig. 2. Distribution of COVID-19 cases in Nepal (Source: MoHP/EDCD/WHO, 23 May 2021)

On January 27th, 2021, Nepal rolled out its immunization program against SARS CoV-2 and over 2.1 million people (around 7% of population) have received at least one dose of vaccine against COVID-19. Of the two vaccines approved under emergency use authorization (EUA) in Nepal, Covishield (Oxford/Astra Zeneca, Serum Institute, India) was administered to the frontline workers and over 65 age group, and Sinopharm COVID-19 vaccine (Sinopharm, China) was given to those between 18-59 years old since the latter was not approved for over 60 years age group. Over 426,000 individuals including frontline workers have received second dose of vaccine so far. The government of Nepal (GoN) aims to immunize 72% of the population against COVID-19 when vaccine becomes available (Ref. 4). The vaccines are planned to be procured through the COVAX facility as well as through bilateral procurement using domestic resources. In addition, Nepal has accepted vaccines as donations from other countries. While the country waits for a new supply of vaccines, the majority of Nepal's 30 million population remains unprotected and vulnerable. In addition to the availability of vaccines, effective immunization strategies, campaign to improve vaccine acceptance, and preparation for transport of vaccines maintaining cold chain will also be necessary to conduct a successful immunization program.

Province-wise distribution of Isolation, I.C.U & Ventilator details *(Date: 19 May 2021)*

Province	Home Isolation	Institutional Isolation	Patient in I.C.U	Patient in ventilators
Province 1	11,173	886	208	26
Province 2	7,031	810	212	55
Bagmati	45,814	2,360	801	235
Gandaki	8,615	271	133	34
Lumbini	21,856	1,174	153	15
Karnali	4,767	397	68	8
Sudurpaschim	7,655	1,549	43	8
Total	**106,911**	**7,447**	**1,618**	**381**

Table 1. Province wise distribution of isolation, ICU and ventilators in use (Source: MoHP, 19 May 2021)

In response to COVID-19 pandemic, the Ministry of Health and Population (MoHP) expanded molecular testing to 86 labs in Nepal including 50 public and 36 private lab facilities (Ref. 4). Similarly, capacity of hospitals at the local levels have been expanded along with addition of high dependency units (HDUs) and intensive care units (ICU) at referral hospitals. The MoHP expanded logistics and ensured supply of devices and drugs necessary for patient management in these hospitals. The government of Nepal and MoHP have prepared guidelines, protocols, and standards, and communicated through a unified channel to manage the infodemic. Community level surveys demonstrated that majority of people had at least some knowledge about COVID-19 prevention. Additional guidance has been published to educate public about home quarantine and home isolation. Healthcare workers are encouraged by the government through the provision of incentives such as life insurance, hazard allowance and training programs (Ref. 4).

New variants of concern (VoC) of SARS CoV-2, B.1.1.7 (first detected in the UK) and B.1.617 (aka "double mutant", first identified in India), which are known to be more transmissible strains, have been reported in Nepal (Ref. 5). Younger age groups between 20-50 years have been affected more than other age groups during this surge (Fig. 3). Over 37% of the infected population is female (Fig. 4). Initially, the government made effort to prevent and control transmission of the virus without enforcing extreme measures to avoid economic and social disruptions. However, the country started experiencing a massive surge in cases increasing nationwide demand for diagnostics, hospitalizations, and therapeutic interventions. The hospitals started to fill up quickly leading to shortage of beds, ICUs, oxygen, and ventilators. The government was compelled to impose restrictions in movement except for essential activities especially in districts reporting surge in cases. The country's stockpiles of necessary medical supplies, such as personal protective equipment (PPE), diagnostic kits and reagents, therapeutics agents and oxygen are being rapidly consumed. With the COVID-19 situation in India still being critical, supplies from India including oxygen cylinders, liquid oxygen, and certain drugs have been delayed with negative impact on the medical supply chain in Nepal.

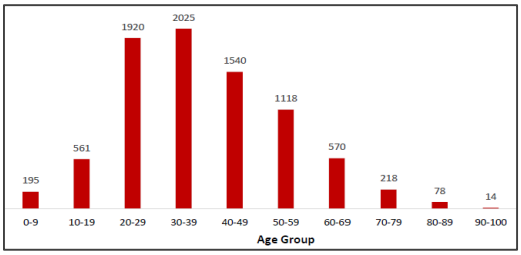

Fig. 3. Age distribution of COVID-19 cases (Source: MoHP, 8 May 2021)

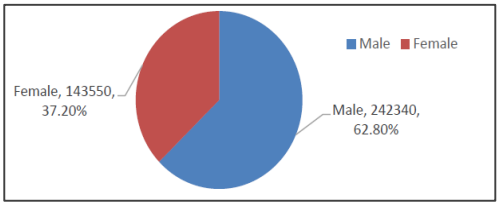

Fig. 4. Gender distribution of COVID-19 cases (Source: MoHP, 8 May 2021)

The World Health Organization (WHO) and Ministry of Health and Population, Epidemiology and Disease Control Division (MoHP/EDCD) have projected total new cases to be 338,700 in the 16 weeks period between 10 April and 1 August 2021. Of these, 50,800 (15%) are expected to be hospitalized with severe infection including 16,900 (5%) critically ill patients requiring ICU admissions. Most of Nepal's estimated 60-day stockpile of supplies is not expected to last for the planned duration with the rapid surge in cases. Therefore, based on the risk assessments, the lifesaving and essential medical supplies need to be positioned timely at national and subnational levels, to prevent, mitigate, and respond to any surge in caseload and to avoid catastrophic human cost in terms of both morbidity and mortality.

During the COVID-19 response in 2020, several challenges were identified. One of the major challenges was implementing the prevention and control measures at the community level and improving community engagement. Gatherings at social functions, religious places, and political meetings have proved to be critical drivers of outbreaks. The introduction of new variants of concern (VOC) of COVID-19 with greater transmissibility has added challenges in controlling the spread of the virus while continuing regular social and economic activities. Vaccine procurement has been difficult, and vaccine transport and delivery to the most affected groups and vulnerable population maintaining cold chain impose additional challenges given the geographical terrain of Nepal. Impact of COVID-19 on country's economy has made it more difficult in financing the response (Ref: 6). With the second surge of COVID-19, the country is facing shortages of oxygen and delivery devices, essential drugs, supply of PPEs for the frontline workers, and trained healthcare manpower, among many other essential services. The Government of Nepal has secured sufficient supply of PPEs for frontline COVID-19 workers from its domestic resources and through international partners and donors. Similarly, the government has also secured oxygen cylinders and concentrators in sufficient quantities with the help of TGF Fast Track, domestic resource, and international partners and donors. The government is in the process of installing oxygen plants in all provinces to meet its current and future needs.

As the pandemic is evolving the needs created by the pandemic are also evolving. The emergence of new variants of SARS CoV-2 and lack of vaccines for children are causing increased threat to the younger population. Younger children, particularly infants under 12 months old, are at a higher risk for severe or critical COVID-19 infection requiring oxygen therapy, ventilator, and ICU management (Ref. 7). COVID-19 can cause severe lung disease as well as autoimmune complications such as MIS-C in young adults and children needing critical care management. A survey done in Nepal revealed that there are only 93 total pediatric ICU (PICU) beds (7% of all pediatric beds) in 18 pediatric facilities, resulting in 1 bed for every 125,000 pediatric population of Nepal. Overall, 60% of these stand-alone units are within central Nepal and 44% in Kathmandu valley. Most of the PICUs (over 70%) had only 1-2 mechanical ventilators and trained manpower to use these ventilators were lacking in all of the units (Ref. 8). In preparation for COVID-19 epidemic in children, the MoHP plans to expand PICU facilities and increase the oxygen delivery devices including pediatric ventilators.

The COVID-19 pandemic caused disruptions in routine services to the country's HIV, TB and malaria programs. The pandemic has impacted antiretroviral (ART) and other drug delivery services secondary to the lockdowns and restrictions in transportation in 2020 and is expected in this surge as well. Similarly, TB screening, testing and treatment services were interrupted or delayed by travel restrictions, lockdowns, and use of GeneXpert for COVID-19 testing. Up to 40% of residents in DR-TB (Drug-resistant TB) hostels have been reported to be positive for COVID-19. Malaria elimination effort has been significantly impacted by the interruption and delayed testing & treatment services. COVID-19 pandemic and lockdowns have created impediment for continuing malaria services, case-based investigations, and foci investigations and response. (More disease specific details are provided in respective subsections of section 2.3)

As per Nepal's COVID-19 Health Sector Rapid Response Plan (Feb-July 2021), prevention and mitigation of adverse health impacts have been the central focus structured around the following six pillars: immunization against COVID-19, infection prevention and control (IPC), diagnosis and treatment, supply management, monitoring and evaluation, and risk and immunization communication. The rapid response plan was prepared in consultation with WHO and other external development partners (EDP). These plans under six pillars are summarized below:

1. Immunization against COVID-19: Goal to immunize 6 million people against COVID-19 by the end of this period (Feb-July 2021). Surveillance and monitoring activities related to the vaccine.
2. Infection prevention and control (IPC): Intensive case investigation, contact tracing, lab testing, quarantine, and epidemiological investigation for new variants. Collaboration and capacity building for new variant identification.
3. Diagnosis and treatment: Continuation of provision of free treatment COVID-19 at assigned hospitals maintaining quality standards. Expansion of high dependency units (HDU) and intensive care units (ICU).
4. Supply management: Ensuring procurement of necessary supplies for COVID-19 response for the next five months including cold chain for vaccine distribution.
5. Monitoring, evaluation, and communication: Making monitoring and evaluation system more effective. Improving capacity of information management unit (IMU), HMIS (Health Management Information System) and other communication systems.
6. Risk and immunization communication: Increasing risk communication and vaccine related awareness programs to the target groups using various media including social networks.

The interventions and activities have been selected and prioritized based on these six pillars of Nepal's COVID-19 Rapid Response Plan, COVID-19 mitigation strategies for TB, HIV and Malaria programs, WHO's nine pillars for COVID-19, and extensive consultations, country dialogues and multiple prioritization meetings.

Role of civil society in the country's overall COVID-19 response:

Civil society organizations (CSOs) have been integral part of the health and social system in Nepal, mainly contributing to local governance in delivering basic services to the poorest and most marginalized communities. Nepal provides active and vibrant civil society spaces composed of CSOs, nongovernmental organizations (NGOs), community-based organizations, advocacy and watchdog groups, public policy and research groups, issue-based movements, and other large range of informal associations and groups. The CSOs have played prominent role during the COVID-19 pandemic. These organizations actively complimented the efforts of the GoN in delivering essential relief packages and improving access to essential health services. The major engagement of CSOs has been in providing relief packages, transportation services, improving access to essential health and social services

and volunteer mobilization. To accelerate the COVID-19 response, Social Welfare Council (SWC) started coordination with CSOs and developed fast-track project approval for COVID-19. A high-level joint monitoring mechanism with members from include National Human Rights Commission, NGO Federation of Nepal, Nepal Bar Association and Federation of Nepali Journalists was also formed for harmonizing and monitoring COVID-19 response.

With the second surge of COVID-19 in the region, Nepal faced difficulties in managing sudden influx of migrants, particularly from India. It was compounded by a sharp increase in number of people in vulnerable socioeconomic situations from widespread job loss. The CSOs worked with Nepal government in setting-up quarantine and isolation centers, managing travel from the borders to the quarantine centers and isolation centers. CSOs stepped-in to supply personal protective equipment to the migrants. CSOs also provided meals for the stranded migrants and jobless daily wage workers and advocated for their rental support. Cases of gender-based violence erupted during the lock-down and a number of CSOs advocated for the female-led quarantine centers to enable access to gender-friendly spaces. CSOs were also active in developing messages and disseminating through different media platforms. Further, CSOs such as Accountability Lab Nepal promoted multi-way communication to fill the information gaps and debunking rumors during pandemic.

Additionally, Global Fund and other partners are working closely with key populations. The pandemic posed an additional challenge for accessing health services including access to anti-retroviral therapy for people living with HIV (PLHIV) and Prevention of mother-to-child transmission (PMTCT) services. People who use Injecting drugs (PWIDs) faced challenge in receiving harm-reduction services including Opioid Substitution Therapies (OST). Other Key Populations- MSM/TG, Migrant population, female sex workers and prisoners are also facing the similar problems. In-reach services were impeded by travel restrictions and the fear of COVID-19 in the health facilities. CSOs and networks mobilized in-reach workers and volunteers for the home delivery of ARVs. A few NGOs also distributed sanitary pads to their community to ensure menstrual hygiene and safety. In summary, CSOs have contributed meaningfully to raising awareness and improving access to essential health and social services particularly focusing the most vulnerable and marginalized population during the pandemic.

2.1.2 Summarize which stakeholders have been engaged in the development and decision-making for this Funding Request, including the national HIV, TB and malaria programs, central medical stores (or equivalent), laboratory systems, **civil society and key and vulnerable populations** (including both CCM members and non-CCM community representatives), and communities most severely affected by COVID-19.

This funding request has been developed through a transparent country dialogue and consultations with the government entities, external development partners, clinicians, community-based organizations (CBO), and networks of people living with HIV (PLHIV), TB survivors, and key populations (KPs). Multiple meetings were held with the government stakeholders including National Centre for AIDS and STD Control (NCASC), National TB Control Centre (NTCC), and Epidemiology and Disease Control Centre (EDCD) and its malaria control program. A separate consultation meeting was held with Department of Health Services (DoHS), Curative Service Division, Family Welfare Division, Provincial Health Directorates (PHD), Nepal Health Research Council (NHRC), and National Public Health Laboratory (NPHL). Separate consultation meetings were held with implementing partners for TB and HIV Programs (both Global fund-supported and other partners) to understand the implementation challenges and possible mitigation measures. Additional network consultation meeting was organized to understand the issues and challenges faced by PLHIV and Key population. NAPN (National Association of PLHIV in Nepal) shared the recommendation by the networks. Similarly, recommendations from social dialogue with TB communities in Nepal were also received after a series of online consultations with TB survivor groups, community health providers, TB focal persons, and community members. Clinicians and medical doctors who are engaged in the direct management of the COVID-19 cases were also consulted to understand the critical needs.

Further discussion was undertaken with organization working in areas of gender-based violence (GBV) and human rights to understand the impact of COVID-19 on gender-based violence and human rights.
All the recommendations and priority interventions identified during these meetings were noted and consolidated. External development partners were also consulted including UNICEF, DFID, GIZ, WHO, USAID, World-Bank, and ADB to understand priority areas that the partners are already working and to identify critical areas where The Global Fund could complement. Separate discussions were undertaken with the NCASC, EDCD and NTCC leadership, and their teams to prioritize the issues and needs identified by the civil society and key population. The

final prioritization meetings also included representatives of EDPs and civil society members. Separate prioritization meeting was held with the MoHP and COVID-19 control leadership for prioritization of items related to the COVID-19 control and health system strengthening. Meeting minutes of these consultations and a complete list of needs identified through various consultation meetings are attached as Other Supporting Documents. Almost all meetings were held virtually amid the pandemic which may have enabled a greater participation.

After the first round of full funding submission, the GF country team sent feedback on the application with advice to make a more ambitious application with special focus on safeguarding the national HIV, TB and malaria program activities and increasing interventions for communities to ensure that key populations are reached and that they can access health services. Based on the GF recommendations, separate consultations with KPs, including HIV Networks, YKAP and FSGMN, were done. Additional consultations and meetings with MoHP leaderships, EDCD, NTCC, NPHL, NCASC and CCM core committee were organized. The proposal has been revised and expanded based on the recommendations from these consultations and meetings.

2.1.3 Indicate how the **national COVID-19 response coordinating bodies** have been consulted in the development of this request and will be involved in implementation of the proposed C19RM activities.

The country coordinating mechanism (CCM) involved the national COVID-19 response coordinating authorities from the outset. The CCM is chaired by the secretary of health. Consultation meeting was held with the Ministry of Health and Population's (MoHP) Incident Command System (ICS) which included the honorable Health Minister, Health Secretary, and the executive officers of the MoHP's divisions and departments. This meeting decided on the allocation for the three main categories of funding. The ICS is the main national COVID-19 coordinating body of Nepal that is also responsible for endorsement of the funding request. The ICS identified the needs for COVID-19 response, prioritized the activities and budget, and recommended the measures for control. The funding request consultants worked closely with the MoHP, ICS and Health Emergency Operation Center (HEOC) during the proposal development. The EDCD, Department of Health Logistics, National Public Health Laboratory (NPHL), Immunization Section, and Curative Service Department as well as NTCC (National TB Control Center) and NCASC will be responsible for implementation of the programs under the direction of MoHP, ICS, and HEOC.

2.2 Implementation of C19RM 2020 award (if applicable)

2.2.1 Indicate how much of the previously awarded C19RM funding has been spent and committed and explain how it helped achieve set objectives.

NA

2.2.2 Summarize any issues regarding implementation arrangements, innovations or bottlenecks in service delivery. Please also explain how the C19RM Full Funding Request will address any lessons learned from the implementation of the C19RM 2020 award.

NA

2.3 Funding Request and prioritization

2.3.1 Provide information on disruption of **HIV services** (**particularly for key and vulnerable populations)** and describe how identified gaps, challenges and needs are being/will be addressed by the C19RM Full Funding Request and/or through other funding sources (including Global Fund grant funds). *(Where relevant).*

HIV Services

The first wave of COVID-19 pandemic and subsequent lockdown in Nepal had hugely disrupted HIV prevention, treatment care and support services in 2020. There was 40% decrease in new PLHIV on ART (April-June 2020) compared months before lockdown. As the lockdown gradually eased (July 2020 onwards), the HIV program slowly revived back to almost normal by Jan 2021. However, the ongoing second wave which started to engulf the country from mid-April 2021 has again severely disrupted the national HIV program.

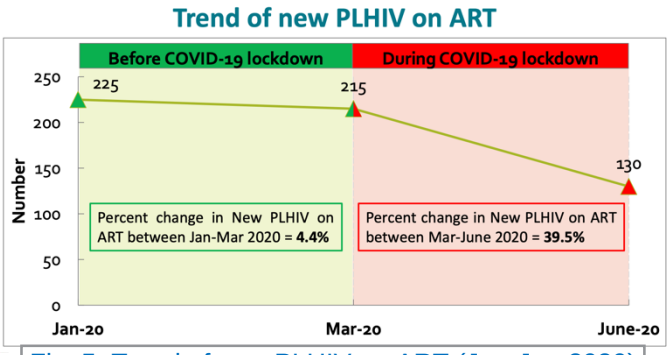

Fig. 5: Trend of new PLHIV on ART (Jan-Jun 2020)

The migrant program was affected the most, as it had just started in Feb 2020. The achievement against target for behavioral change communication (BCC) reach and HIV testing were 6% and 2%, respectively, (Mar-June 2020) for the migrant program. There was a significant decrease in New PLHIV on ART between December 2019 and June 2020 (Fig. 6). There was a 40% decrease in new PLHIV on ART (Mar-June 2020). The Prevention of Mother to Child Transmission (PMTCT), Early Infant diagnosis (EID) and Viral load testing services were severely affected. PMTCT testing declined significantly (fig. 7). EID almost reduced from 81 to 29 within the first three months of lockdown.

Around 3% decrease in "Ever enrolled" on ART was observed between Dec 2019 (33702) and June 2020 (34822). Similarly, around 2.5% decrease in "currently" on ART was observed between Dec 2019 (18628) and June 2020 (19085).

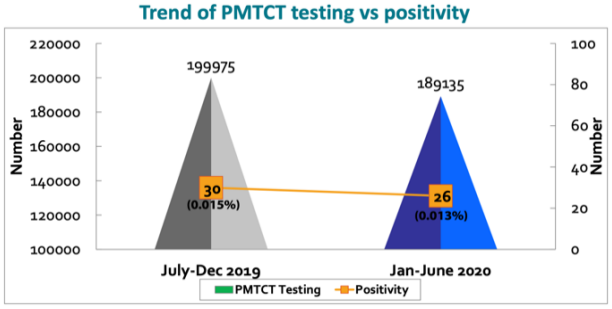

Fig. 6: Trend of PMTCT vs test positivity

There was a significant impact on harm reduction services last year coinciding with the first wave of COVID-19 surge. There was a substantial decline in HIV testing and needle and syringe distribution services in April-May 2020, followed by gradual recovery (Ref: 9). The statistics on extent of disruption of HIV program during the second surge has yet to come, however, it can be easily predicted that the disruption would be larger than last year, given the severity of the second wave and its impact on the health system. To address the challenges imposed by the pandemic, the NCASC has prepared the Interim Guidance for Continuing HIV Program Service Delivery During Covid-19 Pandemic (Ref. 10).

As of mid-May, the movement of the outreach workers (ORWs) of both HIV prevention program (IRWs) and, care and support program are completely restricted in high-risk areas. ART centers and Community care centers (CCC) are partially functional. Because of the restrictions on movement (complete or partial) and risk of COVID-19 transmission, it is not possible to run the prevention program for KPs in conventional way. Distance counselling through virtual platforms need to be maximized. Only needy and high-risk clients should be physically met to provide the commodities (condom, lubes needle/syringe) and HIV testing services. HIV self-testing which is currently being scaled-up should be promoted to reduce the COVID-19 transmission risk. Community and home-based care (community outreach) workers need to provide home-delivery of ARV drugs to PLHIV. Safety of ORWs should be of utmost priority. Adequate PPE items (mask, gloves, face shield, sanitizer) should be provided for ORWs and other staffs at ART sites, OST sites and sub-recipients (SRs) implementing HIV programs. Provision of communication and transportation allowance for ORWs will encourage them to provide essential HIV related services staying in the front-line during these risky and difficult situations. Further the outreach workers are also in the priority list for the vaccination program.

The nationwide restrictions due to COVID-19 has hampered the livelihood of the PLHIV and KPs. Apart from HIV related services, it is also important to provide them the relief packages (particularly nutritional support), income-generation support and also psycho-social interventions to curb the mental health problems arising from COVID-19 secondary to restricted movements.

The community outreach team will be encouraged to strongly follow female PLHIV and their current pregnancy status to avoid HIV transmission among infant and promotion of hospital. To support the PMTCT program, adequate HIV test kits will be required at all levels and innovative approach like scaling up HIV screening to all ANC clinics run at local level through Provincial government support and getting the report and linkage of HIV reactive cases to confirm the status and further treatment enrolment will be done. Viral load testing service has been hampered as the PCR platforms and lab staff are being involved in COVID-19 testing. To support treatment monitoring and continue HIV VL testing for PLHIV on treatment, additional lab staff to support the HIV VL testing will be provisioned with this funding request. Similarly, provision of additional GeneXpert machines will be essential to avoid disruption in VL testing. To tackle to difficulties posed by the pandemic and travel restriction, multi-month dispensing will be promoted as outlined in the interim guideline. This also necessitate strengthening procurement and supply chain management (PSM) and maintaining the ARV stock of 18 months aligning with the regular Global fund program.

To overcome the economic hardship brought-about by the COVID-19, we propose relief packages including nutrition support, dignity and hygiene kits support for ultra-poor KPs. The risk of food insecurity is looming around due to the widespread loss of jobs, closure of businesses, restriction of mobility and the consequent loss of income generation opportunities. During the community consultation, need of relief packages was stressed as one of the critical needs.

Provision of COVID-19 antigen testing along with HIV testing and at POEs will help to increase the uptake of HIV testing among migrant population. We propose a total of 3 staff (1 Lab and 2 health-care workers/out-reach workers) for each of the 13 PoEs and 7 holding centers for integrated screening and testing of COVID-19, TB, Malaria, and HIV. Before deployment at the PoEs, the staff will receive training on the integrated management of all four conditions. The HIV-risk screening questionnaire will be administered at the PoEs together with the screening questionnaire for TB and Malaria. However, since a private space for HIV counselling may not be available at all PoE sites, onsite HIV pre-test information, HIV screening test (through Determine test kit), and post-test counselling services will be offered only in certain PoEs where such private space exist to ensure confidentiality of clients. For confirmatory HIV testing and further linkage to treatment services, the client will be linked to the nearby HIV testing site with the help of existing outreach worker of HIV program. The GoN is planning to expand and upgrade the existing infrastructures to accommodate it. Where the private space is not available, individuals identified to be at risk for HIV and opting-in for HIV testing will be referred by the PoE staff and will link them. The information, education and communication (IEC) /BCC materials are also required for all components of HIV program (Prevention, treatment, care, and support) which should include contents such as HIV and COVID-19 prevention, association between HIV and COVID-19, and importance of HIV testing. Provision of COVID-19 antigen testing through the existing lab staff will optimise the HIV, COVID-19 and TB screening among migrant population. One-day training will be provided to the existing lab staff in 20 migrant districts. The inflow of migrants will be an opportunity to enhance COVID-19, HIV and TB screening services targeting migrant population. Migrants are currently facing stigma and discrimination and regarded as the source of infection. There is need to collaborate with local government for ensuring COVID-19 and HIV services for migrant population. Isolation homes are currently being run through the GoN and the sensitization and advocacy activities along with emergency treatment cost is targeted to ensure the migrant population have access to those COVID-19 services.

Young key population and young PLHIV have distinct needs mainly in terms of services and information access. These young population who are technology friendly should be reached through the e-platforms and virtual activities which we have planned in the proposal.

Research and surveillance on PLHIV and KPs infected with COVID-19 and related socio-economic and clinical issues are lacking in Nepal. Such activities will help to strengthen the COVID-19 response in national HIV program. Recent studies have shown the increased vulnerability of PLHIV to COVID-19 infection, particularly those who are not on ART and have unsuppressed viral load. Therefore, advocacy related activities to enlist PLHIV on vaccine priority groups have been initiated and will need further advocacy for implementation.

2.3.2 Provide information on disruption of **TB services** (**particularly for key and vulnerable populations**) and describe how identified gaps, challenges and needs, including decline in TB/DR-TB notification, are being/will be addressed by the C19RM Full Funding Request and/or through other funding sources (including Global Fund grant funds). *(Where relevant).*

TB is a major Public Health problem in Nepal with an estimated 68,000 incident TB cases reported annually (incidence rate of 245 per 100000). Of them, 58% of cases have pulmonary TB (Ref. 11). Early evidence shows that TB increases susceptibility to COVID-19 as well as contribute to the worsening of its symptoms (Ref. 12). The socio-economic vulnerabilities also exacerbate the risk of both TB and COVID-19 in Nepal. Similar to the other health services, National TB Program has also been affected by the COVID-19 pandemic. The NTCC has been working in coordination with the provincial health departments for continuation of service delivery to the TB patients. As the country is currently dealing with a larger second wave of the pandemic, the NTCC is undertaking different alternative measures for continuation of services to its patients. The NTCC has prepared an "Interim Guidance for Management of Essential Services for TB During COVID-19 Pandemic" to mitigate the impact of COVID-19 on TB program. (Ref. 13).

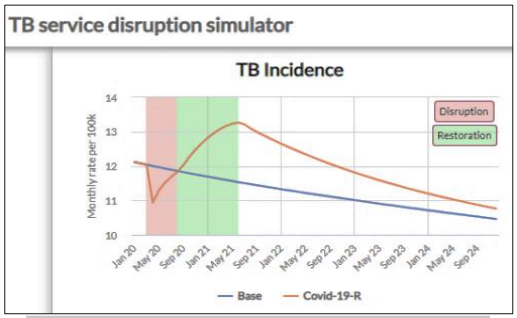

Fig. 7. TB Case Finding Rate Decline

The TB screening program has been impeded by the COVID-19 pandemic and restrictions imposed for control of COVID-19. Similarly, COVID-19 has also disrupted the community programs for TB services such as community screening and contact tracing for TB secondary to the restrictions in travel and overburdened health system. Case notification rate has declined from 109 to 93 per 100,000 population. The rapid assessment by NTCC reported 67%, 45%, and 42% decline in the mean number of sputum collection and transportation, enrollment, and follow-up of TB patients during the early three months of lockdown with partial disruption of reporting TB data (Ref. 14). This decline is in both presumptive as well as confirmed cases of TB by GeneXpert, and decreased utilization of outpatient services during the pandemic. The presumptive examination decreased from 207,964 in FY 2075/76 to 155,371 in FY 2076/77. In the same year, GeneXpert test declined substantially from 70,749 to 47,879 with the GeneXpert utilization rate of just 19% (NTCC factsheet 2076/77). These all culminated to the decrease in the treatment success rate in FY 2076/77 to 89 % after consecutively maintaining 91% over last three years. Nepal aims to reduce the incidence of TB by 21% by 2021 compared to 2015, however, COVID-19 poses a significant challenge in reaching the target set out in End TB strategy. The simulation based on the early data indicates the increase in the incidence of TB due to the COVID-19 pandemic (Fig. 8).

The TB laboratory services have also been interrupted because of diversion of GeneXpert machines and lab staff for COVID-19 testing. Additional GeneXpert machines and incentives for staff to run the machines after working hours will help to provide appropriate diagnostic services to the TB patients. The laboratory should be strengthened to enable prompt diagnosis and case findings. Besides additional PPEs, these laboratories should be capacitated through the provision of biosafety cabinets, viral transport media (VTM), and rapid-diagnostic kits. The shortfall in the current testing could be improved through rapid antigen testing. A person infected with COVID-19 could present with symptoms similar to TB such as fever and cough of a more acute in nature. An integrated of COVID-19 and TB targeting vulnerable population at specific sites will help to identify more TB patients. The GoN is planning to expand health desks to 13 PoEs between India and Nepal where arrangements for testing both TB and COVID-19 can be done at the same time. Testing for COVID-19, Malaria will be initiated at all PoEs and for all presumptive TB cases sputum will be collected and linked with existing sputum collection and transportation mechanism. Sputum testing for TB is offered at PoEs and any new TB cases will be linked to the existing DOTS centers and are followed-up by the existing SR. The health care workers at PoEs keep details of the clients and will be responsible to contact the service providers for referral for treatment of TB. Further, feasibility and effectiveness of community-based sputum collection and transport for TB testing and diagnosis needs to be explored.

Appropriate training for infection control and safety measures, and provision of PPE will allow resumption and continuity of these services. Besides diagnosis, treatment services experienced a major setback. Direct observation of treatment is impeded by travel restrictions and overwhelmed health facilities/health workers. As an interim alternative, patients are allowed for a month's take-away doses. However, ensuring treatment adherence and regular monitoring is a challenge.

One way to tackle the decline in case detection and treatment interruptions is to bring services closer to the community by mobilizing community outreach workers. This will require continued follow-up and support to the patients both virtually and physically. The regular public transport service has been restricted but outreach workers

can obtain travel permits in coordination with the District Administration Office. Considering the need to hire vehicles and increased phone communications and contacts, we propose to provide communication and travel cost along with insurance package to motivate outreach workers for uninterrupted services to the TB patients. Further community-based sputum collection and transport also need to be strengthened targeting most vulnerable population. Home delivery of medications, home-based/phone-based counselling, and adherence support are critical in ensuring that the patients are receiving the treatment and support.

One of the major concerns is the COVID-19 co-infection among the inmates of DR-TB hostels. The close proximity and limited quarantine spaces within the hostels have led to an increased COVID-19 co-infection among the DR-TB patients. One of the sites run by TB-Nepal in Nepalgunj reported around 28 cases of COVID-19 Infection at a DR-TB hostel. The NTCC studied COVID-19 coinfection among DS and DR-TB patients residing in Hostels. This study examined 420 DS-TB and 65 DR-TB patients who lived in a hostel. The study found that 12% DS-TB patients and 40% DR-TB patients tested positive for COVID-19. The COVID-19 positivity rate among the DR-TB patients was twice as much compared to the rate for DS-TB (Ref. 12). This study identified and recommended the following important points: 1. Continuation of essential services for TB; 2. COVID-19 prevention for DR-TB patients in the hostels and treatment centers; 3. Screening all TB patients for COVID-19; and 4. Ensuring appropriate management of COVID-19 infection among DR-TB patients. Considering this challenge, one of the priority interventions proposed is the infection control at the DR-TB Hostel and Provincial TB Treatment, Referral and Management Centers. It is imperative to supply adequate PPEs, maintain spacing, ensure water and sanitation facilities along with the provision for the health care waste management at these TB hostels to disrupt the transmission chain. Proper spacing and separation of COVID-19 infected and non-infected residents is critical. Equipment and supplies such as washing machines, PPEs, autoclaves, soaps and other hygiene items along with disinfectants are essential at such hostels to minimize the risk of transmission.

Other important interventions planned in this proposal include risk communication and messaging, community-led monitoring and follow-up, and community-led stigma and discrimination reduction activities. National Health Education information and Communication Centre (NHEICC) is currently developing targeted messages integrating TB, HIV and Malaria with COVID-19. We propose dissemination of such IEC materials for risk communication. Further, community-based intensified case-findings will be promoted through risk communication and community engagement combined with community-led monitoring and follow up. Communication materials will address integrated testing and identifying the symptoms of TB and COVID-19. These messages will stress on encouraging community to adopt safe behaviors such as use of mask, hand hygiene and physical distancing along with the need to seek diagnostic services. Stigma and discrimination are pervasive against TB patients. The community engagement and sensitization are essential in combating discrimination against COVID-19 and TB.

2.3.3 Provide information on disruption of **malaria services** (case management, vector control and chemoprevention; particularly for key and vulnerable populations) and describe how identified gaps, challenges and needs are being/will be addressed by the C19RM Full Funding Request and/or through other funding sources (including Global Fund grant funds). Specifically, indicate if there is a malaria campaign during this period (IRS, ITN and/or SMC). If so, specify if the relevant PPE and adaptations are part of this funding request or if these are covered through Global Fund grant funds and/or other funding sources, or if there is insufficient funding. *(Where relevant).*

Malaria Services

Nepal slowed down the first wave of COVID-19 pandemic in 2020, but there were substantial disruptions to health services, due to overburdened health system, fear among the people and health care workers and response measures to contain the pandemic limiting national program activities. There was around 29% mean decline in malaria testing, but 100% treatment of the confirmed malaria patients was achieved and no death was attributed to malaria during the ten months period of 2020 as compared to 2019. In addition, malaria testing during the peak malaria transmission months declined by around 70% during July- August 2020 (during COVID-19 pandemic) as compared to same months in 2019 (pre-COVID-19) (Ref. 16).There were disruptions in distribution of Insecticide-

treated bed nets (ITNs), only 6 % of targeted mass ITNs distribution was accomplished in 2020 and only 25% of continuous ITNs distribution was achieved in July – Dec 2020 compared to 87% achievement during the same period in 2019 (Ref. 17). Modified case-based surveillance and foci investigation and response were conducted during the lockdown period as per the interim malaria guidelines. It is to be noted that there was a slight reduction in case investigations within 3 days and additional case findings was limited within the index case household only during the lockdown period (Mar-Jun 2020). There was partial disruption of malaria data reporting and malaria diagnostics. Drug stocks and supply were maintained despite the lock down in the healthcare facilities (HFs) in the targeted high and moderate risk wards, but supply disruptions was reported in HFs in low risk wards. However, the implementations of interim malaria guidelines from May 2020 and a "Catch up plan" from Aug 2020 may have partially mitigated the impact of COVID-19 pandemic on continuing malaria services even amid the pandemic (Ref-18, 19). The "Catch Up" plan was implemented from mid-August to Dec 2020. Malaria testing increased from around 33% in July 2020 as compared to the same month in 2019 to 50% in August 2020, and progressively increased in subsequent months as compared to same months in 2019.

In response to the worsening second wave of COVID-19 pandemic, extended restrictions have been imposed, which is likely to cause disruptions in malaria testing & treatment, surveillance, and continuation of malaria services. This limitation in mobility will impact access to health care, people will be scared to seek care in health facilities, health care system will be overburdened with COVID-19 cases, and activities will be limited.

A large number of Nepalese populations migrate outside the country in search of better opportunities to malaria endemic states of India. Imported malaria through the returning workforce contributes to the changes in epidemiological patterns and trends and continues to pose threat in terms of high importation of cases. This might lead to outbreak when case detection and investigation is not optimal. Imported malaria contributes to around 80% of total burden of malaria in the country and as countries move towards malaria elimination, imported infections become increasingly significant as they often represent majority of the cases, can sustain transmission, cause resurgences, and lead to mortality (Ref-17). Despite the lockdown, the returning migrants continued to bring in the imported malaria cases across the border. High malariogenic potential (receptivity and vulnerability), high rate of malaria importation, pose risk of maintaining the local transmission. Building on the experiences and the lessons learnt during the first wave of COVID-19 pandemic in 2020, an updated interim Malaria Guidelines has been implemented to mitigate the impacts on continuing malaria services (Ref-17).

National Malaria Program requests the funding to strengthen surveillance along the border to address the increased vulnerability in the community as a result of return of large number of migrants from malaria endemic country. Resource is requested for a period of 6 months for recruitment, training, and PPEs for dedicated health workers in 13 PoEs to test for malaria in symptomatic patients. The staff deputed at PoEs (1 lab and 2 HCWs/ORWs) will be undertaking integrated screening and testing of the COVID-19, TB, Malaria, and HIV. A brief questionnaire will be developed for screening all four diseases. Malaria testing will be offered at PoEs, and the health care worker who will also be serving as outreach worker is positioned to treat malaria if a new case is identified. These cases are followed-up by the case investigation team/officer. Additionally, the interventions target testing malaria in patients tested for COVID-19, and disseminate and distribute targeted messages on early health care seeking and prevention for malaria, TB, HIV, and COVID-19.

Resource is requested for a period of 3 months for recruitment, training, and PPEs for dedicated health workers to conduct testing for malaria, in symptomatic patients & patients tested for COVID-19 in the seven holding centers (1 holding center per province). Targeted messages will be disseminated and focused on early health care seeking and prevention for malaria, TB, HIV, and COVID-19 by the health workers.

The funding is requested to ensure access to testing and treatment in the community since mobility is limited, people are in fear of accessing care in HFs and may seek improper care or only seek care late in the course of the disease with complications. The EDCD has taken steps to ensure community testing in 10 potential malaria risk wards based on increased vulnerability (Ref. 17). Resource is requested for FCHVs training, movement, and PPEs. The National Malaria Program also plans to implement Malaria Mobile Clinic (MMC) in 5 districts targeting high risk and vulnerable population groups such as mobile populations & migrants. MMC teams that have conducted the activity last year will be selected and monitoring will be conducted by district and local body. PPEs for MMCs team is also requested.

Funding is also requested to continue malaria services utilizing adaptive models to continue distribution of ITNs and conduct Indoor residual spraying (IRS). Resource is also requested to implement modified mass ITNs distribution model as per Interim Malaria Guideline taking into consideration the gap in local government budget as a result of prioritization of budget to respond to COVID-19 pandemic. Communication costs for staffs in ANC to facilitate continuous ITNs distribution to pregnant women living in high & moderate risk wards, and adjoining wards. Resource is requested to continue IRS campaign in 30 targeted moderate risk wards as per the Interim Malaria Guidelines. This will cover the budget deficit in local government as a result of prioritization of their budget to respond to COVID-19 pandemic. IRS costs and monitoring costs are included in the request. Insecticide has been procured by the GoN.

Resource is requested to implement community management of malaria in 100 malaria risk wards. Community management of malaria is a key strategy in the Updated national Malaria Strategic Plan (NMSP 2014-2025) and a critical intervention in the community to accelerate towards elimination. In 2021, community management of malaria is being rolled out in 55 risk wards with New Funding Model 3 (NFM 3) grant and by 2022, it will be expanded to additional 100 risk wards with the government funds. However, with the onset of COVID-19 pandemic, resource limitations, and the budget ceiling; EDCD is unlikely to have the resource to implement the activity. Besides, service delivery in the community is likely to ensure community engagement and ownership of malaria elimination. Request is to scale up community testing & treatment, as planned but which is likely to be delayed without adequate resource. The delay in testing and treatment as well as inability to distribute ITNs may significantly impact the achievement of Elimination 2025 (E 2025) achievement. For example, there were disruptions in Long-Lasting Insecticidal Nets (LLINs) distribution and only 6% of targeted mass LLINs distribution was accomplished in 2020 and only 25% of continuous LLINs distribution was achieved in July–Dec 2020 compared to 87% achievement during the same period in 2019. Only 1 in 4 pregnant women in the targeted risk wards received LLIN in 2020.

Resource is requested for development of integrated targeted messages for malaria, TB, HIV, and COVID-19 with a focus on early health seeking behavior and prevention in coordination with DoHS/ National Health Education, Information and Communication Center (NHEICC) involving malaria, TB & HIV and COVID-19 entities and other partners. The request will cover the costs of developing, pilot testing and implementation of the activity in all local bodies through FM and audio media for at least 6 months. Resource is requested for a National technical assistant (TA) for development of a costed COVID-19 mitigation plan for malaria with a focus on meeting the E 2025 timeline.

2.3.4 Describe the impact of COVID-19 on **gender-based violence and human rights.** If the C19RM Full Funding Request does not include interventions to respond to identified community, rights and gender (CRG) gaps, challenges and needs, please include details of how they are being separately addressed.

Gender-based violence and human rights

International human rights law guarantees everyone the right to the highest attainable standard of health and obligates governments to take steps to prevent threats to public health and to provide medical care to those who need it. Human rights law also recognizes that in the context of serious public health threats and public emergencies threatening the life of the nation, restrictions on some rights can be justified when they have a legal basis, are strictly necessary, based on scientific evidence and neither arbitrary nor discriminatory in application, of limited duration, respectful of human dignity, subject to review, and proportionate to achieve the objective.

The scale and severity of the COVID-19 pandemic clearly rises to the level of a public health threat that could justify restrictions on certain rights, such as those that result from the imposition of quarantine or isolation limiting freedom of movement. At the same time, careful attention to human rights such as non-discrimination and human rights principles such as transparency and respect for human dignity can foster an effective response amidst the turmoil and disruption that inevitably results in times of crisis and limit the harms that can come from the imposition of overly broad measures that do not meet the above criteria.

Humanitarian emergency, post-disaster situations, and unrest are a difficult time for people increasing their vulnerability from all aspect. People's lives in Nepal have been drastically worsened by the COVID-19 pandemic. As per the reports of many rapid assessments conducted during the pandemic to assess the impacts of COVID-19

unraveled a highly distressing humanitarian situation, with more severe consequences being borne by women, children, vulnerable and excluded groups such as lesbians, gay bisexual, transgender, intersex and queer (LGBTIQ), female sex worker (FSW), people who inject drugs (PWID), and other KPs with an increase in gender-based violence (GBV) and stigma and discrimination. COVID-19 is causing a tremendous impact on the world's economy, and these vulnerable groups are facing higher risk. The fear and uncertainty caused due to the COVID-19 pandemic have intensified various inequalities against them, resulting in violence.

Issues about housing, an imperative for human survival, have erupted in various manifestations, partly spurred by the massive return of migrant workers. Slum dwellers were unable to practice physical distancing in cramped abodes with no electricity and digital means to access life-saving information and support. Returned women migrants had to stay in women's shelters as stigma and discrimination stifle their attempts to rent a domicile. Sex workers faced eviction due to unpaid dwelling rents and women with disability had been mercilessly abandoned in the streets. Psychological stress was pervasive. Violence linked to caste, religion, race, gender and health status have been reportedly on the rise.

This funding request (FR) proposal includes request to support for response to human rights and gender related barriers to services. Training for community groups on understanding and managing Gender-based violence (GBV) in the COVID-19 outbreaks, and coordination with entry points (HIV, TB and Malaria) to disseminate the information on GBV will help to bring awareness and timely appropriate help and support. Referral services and awareness programs will help to provide psychosocial support to the vulnerable target groups and key populations including women and youth groups group, LGBTIQ, PLHIV, TB survivors, PWID, sex workers (FSW), and prisoners.

Further, the proposal mainstreams gender as a cross-cutting agenda and ensures participation of Women, young people and LGBTIQ in all relief activities. Further, it builds up on sensitizing health staff and outreach workers on GBV and human rights. Activities such as orientation on GBV to staff and outreach workers will not only make them gender-sensitive but also enable in identifying the most vulnerable population. Further, we have planned coordination activities with local and provincial government to engage them and advocate for services including shelter support for the survivors of GBV. To enable that the survivors of GBV access essential services including health, legal and other services, we have proposed transportation and communication cost for needy survivors of GBV. Another critical intervention is the documentation of such cases that will enable us to understand the intensity of the problem, identify gaps and further support design of interventions to prevent respond and reduce the cases of gender-based violence. Further our intervention is targeted to gender and sexual minorities (MSM, TG, and MSW), FSWs, female PLHIV and female prisoners and the program monitoring will include gender disaggregated data to understand and ensure reach of women, children, young population and sexual minorities.

2.3.5 Describe the approach used for the **prioritization of interventions** and activities and link the C19RM Full Funding Request to the pillars of the NSPRP.

The interventions and activities were selected and prioritized based on the six pillars of Nepal's COVID-19 Rapid Response Plan, COVID-19 mitigation strategies for TB, HIV and Malaria programs, WHO's ten pillars of the COVID-19 Strategic Preparedness and Response Plan 2021, and extensive consultations, country dialogues and multiple prioritization meetings. The proposed interventions and activities are supported by available scientific evidence, WHO and country guidelines, and in-country data.

The prioritization of interventions and activities for this C19RM funding request was done in a systematic and transparent way that involved assessments of needs with entities, country dialogue, and consultations with government entities, external development partners, clinicians, community-based organizations (CBOs), and networks of PLHIV, TB communities, and key populations. In the consultation meeting with the ICS in the presence of the honorable minister of MoHP and the Secretary of MoHP along with the executive officers of MoHP's various divisions and departments' allocations for the three main categories was decided.

A long list of interventions and activities were generated in a series of consultation meetings as noted in above section 2.1.2. Each list of activities was further discussed with the respective departmental team for initial prioritization. TB, HIV and malaria prioritization lists were reviewed, prioritized, and quantification and costing were done with the help of NTCC, NCASC and National Malaria Program team of EDCD. These activities were selected

based on national COVID-19 mitigation plan for each disease program. These prioritization lists were also discussed with EDPs to avoid duplication and to get their input. The organizations working in areas of gender-based violence (GBV) and human rights helped to identify and prioritize interventions and activities related to gender-based violence and human rights.

Separate prioritization meetings were held with the MoHP and the leadership overseeing COVID-19 control for the items related to COVID-19 control and health system strengthening. Additional meetings included government stakeholders from Department of Health Services (DoHS), Family Welfare Division, Epidemiology and Disease Control Division (EDCD), Provincial Health Directorates (PHD), Nepal Health Research Council (NHRC), and National Public Health Laboratory (NPHL). Hospital directors and clinicians involved in management of the COVID-19 patients were also consulted to identify their needs for COVID-19 management. WHO, USAID, and other EDPs provided regular inputs and assistance during this process. The selected interventions and activities were matched with the Nepal Government's COVID-19 Rapid Response Health Work Plan (Ref. 4). The final prioritization meeting involved the representatives from the PLHIV, migrants, and PWIDs and TB survivor groups along with the representatives from NCASC, NTCC and EDPs. These interventions and activities are supported by the current scientific literature, WHO and national guidelines, and country data and experience. The final prioritization list of interventions and activities for COVID-19 control and containment as well as for health system and community system strengthening was discussed with MoHP officials and ICS members before endorsement by the CCM and ICS.
After receiving the GF country team's feedback on the original proposal, this FR proposal was revised extensively. The GF CT advised to submit a more ambitious proposal with special focus on safeguarding the national HIV, TB and malaria program activities and increasing interventions for communities to ensure that key populations are reached and that they can access health services. This revision was done after online consultations with KPs, including HIV Networks, YKAP and FSGMN. Additional consultations and prioritization meetings were organized with MoHP leaderships, EDCD, NTCC, NPHL, NCASC and CCM core committee. The proposal has been revised, expanded, and prioritized based on the recommendations from these consultation meetings.

2.3.6 Based on the COVID-19 Modular Framework (link forthcoming), provide a brief description/justification for the proposed interventions and key activities in the **C19RM Base Allocation** portion of the C19RM Full Funding Request, including expected outcomes of these interventions and how these interventions will support grant targets. These should be in line with the C19RM Technical Information Notes and Guidelines[3], applicable WHO guidance (including on COVID-19) and the NSPRP.

a. COVID-19 control and containment interventions	
Intervention & Key activities	**A. Case management, clinical operations, and therapeutics** 1. Training for adult and pediatric ICU and ventilator care for physicians and staff in hospitals where critical care and anesthesia trained manpower is lacking. 2. Oxygen delivery and oxygen delivery devices including non-invasive ventilators (Bi-Pap), high-flow nasal cannula HFNC and RAM cannulas for children 3. PPE for malaria, TB and HIV programs: Personal Protective Equipment (PPE): N-95 mask, surgical mask, face shield, disposable gloves, disposable gown, coverall ppe set, hand sanitizer (alcohol based), disinfectant (sodium hypochlorite 5% solution).
Rationale	During the pandemic, Nepal expanded intensive care units (ICU) and ventilator facilities in the hospitals. However, it was later realized that there was shortage of ICU trained physicians and nursing staff as well as skilled HCWs to run the ventilators in these hospitals. Management of ventilators requires critical care or anesthesia trained physicians along with respiratory therapist and nursing staff trained to run the ventilators. Provision of on-site hands-on training for ventilator care and onsite training for critical care will be helpful to fulfill the acute needs. Conduction of such training programs in all provinces is included in this funding request. Formal trainings for critical care specialists, anesthetist, respiratory therapists, and ICU trained nurses will be needed in the long term.

[3] Link forthcoming

	As the pandemic has evolved and the virus continues to mutate with the introduction of new variants of SARS CoV-2, symptomatic cases of COVID-19 are increasingly being seen in younger population. Children are more vulnerable because of the lack of approved COVID-19 vaccines for under 12 year's old and limited availability of COVID-19 vaccine for 12-18 years old. Children are likely to develop COVID-19 as well as its severe complication of multisystem inflammatory syndrome in children (MIS-C) requiring ICU care. Nepal has only limited number of pediatric ICU facilities at present. MoHP plans to install ventilators and other required devices for oxygen delivery in preparation for handling severe complications of COVID-19 in pediatric age groups. Adequate supply of PPEs for TB/HIV/Malaria program to ensure safety of frontline staff and ORWs will improve service delivery to the affected population which includes TB screening at community level, ART delivery for HIV infected patients, and other routine service deliveries. Although the GoN has secured enough PPEs for hospitals and its other regular healthcare delivery programs, the TB/HIV/Malaria programs are currently affected because of the lack of enough PPE. The PPE need for 2021-2022 are requested under the base allocations whereas that for following 2 years are requested under the above base allocation.
Expected Outcome	Improving ICU and ventilator management will result in better patient outcomes. Expansion and preparation of ventilator equipped pediatric facilities will enable better ICU management of children with complications of COVID-19. Safety of frontline staff and ORWs will be ensured with PPEs.
Expected Investment	**USD 795,099** (Part of the budget for this intervention is included in the Above Base allocation)

Intervention & Key activities	**B. Surveillance- Epidemiological investigation and contact tracing** 1. Strengthen and expand contact tracing, active case finding, isolation/quarantine, cluster investigation, and testing at the community and institutional levels. 2. Screening of migrants at border as well as at the community level - Integrated HIV, TB, Malaria and COVID-19 screening and testing at PoEs, and holding sites, 3. Salary, training, and supervision for temporary staff supporting the above at provincial, local and community levels.
Rationale	Learning from various studies and last years' experience, early identification of cases, isolation of infected patients, contact tracing and cluster investigations are the most important measures for COVID-19 control. Surveillance of new cases in the communities will help to take appropriate measures in case of future outbreaks of COVID-19 and other future epidemics. An early and prompt contact investigation and contact tracing (CICT) at local levels for contacts in areas with identified cases will help to control outbreaks. Additionally, there is a plan for strengthening and expanding screening health desks at the border entry points between India and Nepal. This investment will strengthen ongoing COVID response activities as well as it will become an investment for future outbreaks and epidemics. Related activities will include: - Disease Surveillance, outbreak investigation for COVID-19 and other communicable diseases - Community level screening, testing, isolation, contact tracing and referral. - Simple epidemiological survey for disease burden, adherence and impact evaluation of control and prevention activities and identification of barriers. A total of 3 staff (1 Lab and 2 health-care workers/out-reach workers) have been proposed for each of the 13 PoEs and 7 holding center for the integrated screening and testing of the COVID-19, TB, Malaria, and HIV. There is a plan to increase their number in the future. A brief questionnaire will be developed for screening all four diseases. Before deployment at the PoEs, the staff will receive training on the integrated management of all 4 conditions. This is one of the critical training to initiate integrated screening and testing of COVID-19, TB, HIV and Malaria at PoEs.

	The HIV-risk screening questionnaire will be administered at the PoEs. However, since a private space for HIV counselling may not be available at all PoE sites, onsite HIV pre-test information, HIV screening test (through Determine test kit), and post-test counselling services will be offered only in certain PoEs where such private space exist to ensure confidentiality of clients. For confirmatory HIV testing and further linkage to treatment services, the client will be linked to the nearby HIV testing site with the help of existing outreach worker of HIV program. The GoN is planning to expand and upgrade the existing infrastructures to accommodate it. Where the private space is not available, individuals identified to be at risk for HIV and opting-in for HIV testing will be referred by the PoE staff and will link them to the existing outreach worker of HIV program for further testing and treatment.
Expected Outcome	Early identification and control of outbreaks at the outset will help to prevent widespread epidemics; screening and better surveillance over imported cases at strategic border points and communities with high flow of migrants.
Expected Investment	**USD 722,747**

b. COVID-19-related risk mitigation measures for programs to fight HIV/AIDS, tuberculosis, and malaria	
Intervention & Key activities	**A. Mitigation for <u>HIV</u> programs** 1. Additional lab staff in Viral load testing sites as existing staffs are involved in COVID testing. 2. Integrated HIV, TB, Malaria and COVID-19 screening and testing at PoEs (<u>budget covered above in 2.3.6.a.B</u>)
Rationale	Viral load testing service has been hampered as the PCR platforms and lab staff are being involved in COVID-19 testing. Additional lab staff to support the HIV VL testing will be provisioned with this funding request. Provision of additional GeneXpert machines will avoid disruption in VL testing. Around 600,000 migrants are expected to return from neighbouring country because of the COVID-19 epidemic. These migrants will be reached for HIV testing. Migrants are one of the key populations for HIV and integrated HIV and COVID-19 testing is expected to improve the current gaps in testing services.
Expected Outcome	HIV VL testing services will be provided without interruption. The HIV testing at PoEs and holding sites will help to identify and to make appropriate referrals on timely manner.
Expected Investment	**USD 21,870**

Intervention & Key activities	**Mitigation for <u>HIV</u> programs** *- Support to CBO-led entities for provision of additional services.* 3. Communication and transportation cost for outreach workers- CHBC, CCC, ART staff, peer navigators and district facilitators (for all HIV related components) for one year 4. Recommended PPE items for the outreach workers and other staffs (<u>budget included under "COVID-19 Control" interventions</u>) 5. Health insurance for outreach workers 6. Relief package including Nutrition support for PLHIV and KP communities (25<u>% covered in base allocation</u>)
Rationale	The movement of the ORWs of both HIV prevention program (IRWs) and care and support program (community outreach workers) are restricted in high-risk areas. ART centers and community care centers (CCC) are partially functional. It is not possible to run the prevention program for KPs in conventional way. Provision of communication

	and transportation cost and risk/hazard allowance during the pandemic period for ORWs will encourage them to provide essential HIV related services. PPEs are necessary for safety of community outreach workers (ORWs) to provide home-delivery of ARV drugs to PLHIV. Safety of ORWs should be of utmost priority. Adequate PPE items (mask, gloves, face shield, sanitizer) will be provided for ORWs and other staffs at ART sites, OST cites and SRs implementing HIV programs for another 2.5 years. Considering the risk of the 3rd wave in the country, the proposed PPEs are also targeted to cover for the out-reach workers and staff working in the GF supported 20 migrant districts. Currently, GF is the only partner working with migrant population in Nepal for the proposed interventions. As USAID/PEPFAR have already planned for the PPEs for their implementing partners for FSWs and MSM TG and MSW program, PPE proposed in this FR is planned for non-USAID/PEPFAR program. This request will ensure that all the HIV outreach workers and health workers throughout the country will have access to PPEs. Health insurance for health workers and staff implementing MSM, TG, MSW and FSW is planned through USAID/PEPFAR. This FR includes health insurance for ORWs and SR staff not covered with above. Large proportion of PLHIV and KPs are pushed to economic hardship due to lock-down and loss of jobs. One of the critical problems posed by COVID-19 and lockdown is the risk of food insecurity. Majority of KPs are engaged in informal entertainment sector which is completely halted because of COVID-19. Further, the restriction of movement and economic activities pushed KPs to extreme hardships. Therefore, nutrition package is planned to tackle extreme food insecurity and nutritional need for the ultra-poor KPs. Nutritional support will enable to meet the nutritional needs of poor and vulnerable PLHIV. This FR plans to meet the need of an estimated 10% of KPs (PWIDs, FSWs, MSM, TG, MSWs) and around 2% of migrants who are expected to fall in the poor and vulnerable group. Further, nutrition support is planned for all CLHIV (1300) and CABA (75) along with most vulnerable Key young population and Young PLHIV.
Expected Outcome	This will support in resumption and continuation of the services through close to client approach. The proposed activity will reach PLHIV currently on ART. The nutrition program will support PLHIV (includes YPLHIV), KPs, and CLHIV/ CABA.
Expected Investment	**USD 187,325** (second part of these interventions are included in Above Base allocation)

Intervention & Key activities	**Mitigation for <u>HIV</u> programs** 7. Online psychological and other clinical consultation support and counselling for PLHIVs, KPs and staffs
Rationale	The pandemic and lockdowns have caused psychological stress, anxiety, and depression among PLHIV and KPs. Fear of contracting COVID-19, forced restrictive social measures, and economic hardship are causing mental problems. The PLHIV and KPs are already coping with other psychosocial stressors. To support their mental well-being, bringing awareness, establishing referral mechanism along with clinical consultation support, online psychological and other clinical consultation support through provision of trained psychological counsellor and clinicians is requested through this fund. This will also be linked to the hotline services for integrated support on TB, HIV, COVID-19 and GBV.
Expected Outcome	At least, 900 needy PLHIV and KPs (PWID, Migrants, MSM, TG, MSW and FSW), youth and survivors of GBV who are in most dire needs for psychosocial support will be reached through this intervention. Stress level of PLHIV and KPs will be reduced, thus preventing bad coping mechanism.
Expected Investment	**USD 12,839**

Intervention & Key activities	**B. Mitigation for <u>TB</u> programs** TB diagnosis: Strengthen integrated screening and testing for TB and COVID-19 1. Integrated HIV, TB, Malaria and COVID-19 screening and testing at PoEs (<u>budget covered above in 2.3.6.a.B</u>) 2. Training to dedicated Health workers on integrated screening and testing of HIV, TB, Malaria and COVID-19 at PoEs (<u>covered above in 2.3.6.a.B</u>) 3. Strengthening TB laboratories with test-kits, biosafety cabinets, and viral transport media (VTM)
Rationale	The case-notification has declined significantly from 103 per 100,000 last year to 93 Per 100,000 this year despite the reported surge in the TB incidence. National Tuberculosis Programme also reported a decline in the presumptive examination and total GeneXpert testing during the pandemic. The presumptive examination decreased from 207,964 in 2019 to 155,371 in 2020. In the same year GeneXpert test declined substantially from 70,749 to 47,879 with the GeneXpert utilization rate of just 19% (Ref. 20). The proposed program focuses on intensified active TB case findings through lab strengthening and targeting vulnerable population at Points of Entry (PoE). Government of Nepal is in process of expanding 13 health-desks at the PoE. All presumptive TB cases sputum will be collected and linked with existing sputum collection and transportation mechanism. Any new TB cases will be linked to the existing DOTS canters and are followed-up by the existing SR. Around 600,000 migrants are expected to return from neighbouring country due to the COVID-19 epidemic and they will be reached for TB testing. Nepalese migrant workers are identified as high-risk populations for TB with third highest prevalence of TB (12.7%), and thus, testing at POEs will enable to catch-up the KPs. It is essential to catch-up the missed cases to meet the targets set out by End TB strategy. This activity is targeted at optimising the resources through integrating screening of TB among migrants, testing of identified presumptive cases to ensure enrolment in treatment, and capacitating the designated outreach workers. Further, to ensure all DR patients are being screening for COVID-19, DR TB centres' laboratories will be strengthened through provision of essential lab supplies and consumables.
Expected Outcome	The proposed activity is expected to intensify current diagnostic capacity and improve case-notification rate. Symptomatic cases, especially at the PoEs, will be promptly diagnosed and referred for treatment, thus limiting the chances of further transmission.
Expected Investment	**USD 107,616**

Intervention & Key activities	**Mitigation for <u>TB</u> programs** 4. Infection prevention and control targeted at DR-TB Treatment centres (WASH, HCWM, IP guidelines, and PPEs) and establish follow up monitoring for adherence support of DR TB patients; autoclaves for sterilization 5. PPEs for health workers at TB and DR-TB sites 6. Oxygen Concentrators for DR referral Centres and hostels 7. Oximeter and ECG-digital monitor 8. Training/Orientation to DR centres/subcentre/hostels/Outreach workers/TB focal persons – TB
Rationale	DR-TB treatment centres including hostel facility are at high-risk of TB and COVID-19 co-infection. The proximity and limited quarantine spaces within the hostel led to an increased COVID-19 co-infection among the DR-resistant TB patients. Currently, there are 22 DR-TB Treatment centres and six of them have hostel facilities. Annually there are an estimated 1500 (0.84-2.4%) MDR TB cases in Nepal. In a survey among TB patients, 12% DS-TB patients and 40% DR-TB patients residing in hostel were positive for COVID-19 infection indicating high vulnerability of co-infection among MDR patients.

	One of the sub-recipients (TB-Nepal) reported around 28 cases of COVID-19 co-infection in Nepalgunj based DR-TB hostel including 2 deaths among co-infected, thus, infection prevention is critical challenge in DR settings. Funds from the C19RM will be utilised in ensuring PPEs, WASH items such as water, soap, and sanitiser; health care waste management items such autoclaves, washing machines, PPEs and infection control guidelines and training. DR TB centres are also managing DR TB patients coinfected with the mild to moderate COVID-19 at their centres. Through this funding those DR centres will be strengthened to manage coinfected cases by providing necessary equipment such as oxygen concentrators, pulse oximeters, and digital ECG monitors. As per the interim guidance, only one month supply of anti-TB drugs is dispensed to the DR TB patients in ambulatory care. Therefore, regular follow up of these patients is necessary to ensure they are adherent to the medicine and to identify any side effects. Therefore, this FR includes establishment of a digital follow up mechanism to ensure adherence and timely identification of side effects. During COVID-19 surge, it is difficult to get emergency and inpatient services at the over-crowded hospitals. DR-TB patients with symptomatic but non-severe COVID-19 coinfection can be monitored and managed in the DR-TB treatment centers/ hostels. Basic devices and equipment such as pulse oximeter, oxygen concentrators and ECG monitors will enable better management of these patients in the DR-TB centers.
Expected Outcome	An improved infection prevention service to ensure safety of health workers and TB patients, and a reduction in transmission of TB and COVID-19 in DR-TB hostels. Early identification and appropriate management of symptomatic COVID-19 coinfected DR-TB patients.
Expected Investment	**USD 247,696**

Intervention & Key activities	**Mitigation for <u>TB</u> programs** 9. Communication cost for digital monitoring 10. Insurance for outreach workers
Rationale	TB patients have been disproportionately affected by COVID-19 and continuing the TB treatment services has been a major challenge. Communication and digital monitoring cost for the outreach workers will facilitate the patient monitoring at homes. Like the rest, most outreach workers are in a situation of anxiety and their work has been limited because of the fear of COVID-19 infection. Communication allowance and insurance package will facilitate frontline health workers to deliver medications at their homes, support DOTS monitoring, and offer phone-based counselling.
Expected Outcome	This activity will facilitate uninterrupted delivery of TB-drugs and services and ensure monitoring of DOTS program.
Expected Investment	**USD 40,001**

Intervention & Key activities	**Mitigation for <u>TB</u> programs** Risk communication and Community engagement 11. Risk communication and messaging 12. Printing of BCC materials
Rationale	The shortfall in the current TB testing can be recovered through massive risk communication and messaging promoting TB awareness and testing. TB and COVID-19 manifest similar symptoms and the messaging platforms should be integrated to disseminate COVID-19 and TB messages. Multiplier effect can be achieved if we

	implement activities to combat stigma and discrimination attached with TB and COVID-19. Community engagement in risk communication and messaging as well as community led monitoring and follow up are important activities to ensure social accountability and also to understand the barriers faced by TB patients and develop action-plan accordingly.
Expected Outcome	Improved awareness on TB and COVID-19, and increased case notification, monitoring and follow ups through active community engagement activities.
Expected Investment	**USD 37,632**

Intervention & Key activities	**C. Mitigation for <u>Malaria</u> programs** 1. Integrated HIV, TB, Malaria and COVID-19 screening and testing at PoEs - Dissemination of targeted messages (<u>budget covered under 2.3.6.a.B</u>) 2. Conduct integrated testing for malaria, TB, and HIV in symptomatic patients with history of exposure in quarantine and holding centers. 3. Expand community management of malaria in at least 10 potential malaria risk wards *<u>(a second part of this intervention for 190 additional wards is requested in Above-Base Allocation)</u>*
Rationale	In 2021, large numbers of migrant workers returned from neighboring malaria endemic country as a result of worsening COVID-19 pandemic situations. This has increased vulnerability and potential risk of malaria transmission in Nepal, and even posed threat of outbreaks in the receptive areas. Imported malaria has contributed to around 80% of total burden of malaria in the country for past few years. Early diagnosis and prompt, effective treatment is a key strategy for controlling malaria as noted in the updated Nepal Malaria Strategic Plan (2014-2025). Testing and treatment of Malaria will be initiated at all PoEs and the new cases will be followed-up by the case investigation team/officer. Community management of malaria is a key strategy in the updated NMSP (2014-2025) and a critical intervention in the community to accelerate towards malaria elimination. In 2021, community management of malaria is being rolled out in 55 risk wards with NFM 3 grant and by 2022. It was planned to be expanded to additional 100 risk wards with the government funds. However, with the onset of COVID-19 pandemic, resources have become scarce, and budget have hit the ceiling. The program is unlikely to have the resource to implement the activity. Besides, service delivery in the community is likely to ensure community engagement and ownership of malaria elimination. This request includes support to scale up community testing & treatment as planned in the updated NMSP. The delay may impact on Elimination 2025 (E 2025) achievement.
Expected Outcome	Symptomatic patients will be tested early and promptly treated minimizing the onward transmission in the community. Returnees will be made aware of available health services and counselled for seeking early health care and prevention by sleeping under ITNs every night. Community engagement and community ownership may be rewarding with community level activities. Community management of malaria scaled up in the high risk wards as planned and in line with E 2025 timeline.
Expected Investment	**USD 34,846** (Part of the budget for this intervention is included under Above Base allocation)

Intervention & Key activities	**Mitigation for <u>Malaria</u> programs** 4. Conduct IRS activity 5. Conduct Malaria Mobile Clinics (MMCs)
Rationale	ITNs coverage has decreased during the pandemic secondary to non-realization of government commitments to ITNs procurement. The healthcare budget has been re-

	allocated to respond to COVID-19 pandemic. Universal coverage of high and moderate risk wards is a key strategy to reduce transmission in updated Nepal Malaria Strategic Plan (2014-2025) and IRS spraying is planned in 2021. However, the local bodies have prioritized their budget for COVID-19 response and gaps in operational costs for IRS spraying is likely. Request is to support operational costs to 30 local bodies to continue IRS spraying. Many migrants and mobile population bypass the screening at PoEs and the quarantine requirements, and enter into the country through open, porous border during the COVID-19 pandemic. Vulnerability has increased because of a large number of people entering the receptive areas from malaria endemic neighboring country. Based on the mapping of influx of migrants and mobile population, MMCs will be conducted across 5 districts with high burden of imported malaria. Mapping, site selection, and monitoring will be conducted by district and local body. In addition to malaria testing & treatment, targeted messages will be disseminated encouraging early help seeking in local health facilities (HFs) and prevention.
Expected Outcome	Universal coverage of people living in high and moderate risk wards. Symptomatic patients will be tested early and promptly treated in the community minimizing onward transmission.
Expected Investment	**USD 68,356**.

Intervention & Key activities	**Mitigation for <u>Malaria</u> programs** 6. Development of a costed COVID-19 mitigation plans for malaria focused on E2025
Rationale	Nepal missed E 2020 but is focused on meeting E 2025. COVID-19 has impacted malaria program and mitigation plans to achieve Elimination by 2025 is required. Resource is requested for a National TA for development of a costed COVID-19 mitigation plans for malaria with a focus on meeting the E 2025 timeline.
Expected Outcome	Costed Mitigation Operational Plan focused on E 2025
Expected Investment	**USD 6,942**

c. Expanded reinforcement of key aspects of health systems and community-led response systems	
Intervention & Key activities	**A. Respond to human rights and gender related barriers to services** Training on understanding and managing with increased Gender-based violence (GBV) in the COVID-19 outbreak 1. Orientation to staff and management committee at holding centers 2. Development, printing and distribution of IEC materials integrating with TB, HIV and Malaria Program 3. Transportation cost and immediate response
Rationale	GBV will increase during the COVID-19 response, and we can be prepared by training first responders/ community mobilizers on how to handle disclosure of GBV. Information about available GBV hotlines and other support mechanisms must be made available across all settings. Holding centers are one of the most potent areas to reach out large number of migrants. Further, there are reported cases of sexual abuse in the quarantine centers, reflecting the vulnerability to gender-based violence at PoEs and holding centers. Therefore, orientation/sensitization is needed at these sites to aware staff on the vulnerability and developing plans to make the holding centers gender sensitive and free from violence.

	We also propose to develop IEC materials including information on the vulnerability of women and KPs to GBV and available service sites and contact details for seeking support and services. These IEC materials will be distributed at PoEs and holding sites to the returnees integrating with COVID-19, HIV, TB and Malaria messaging. Engaging existing groups including Women's group, young PLHIV, transgenders, patient advocacy group and key populations including PWID, sex workers (FSW), LGBTIQ, and prisoners as well as PLHIV and TB networks to support connectivity and vital information flow.
Expected Outcome	Trained and capable community mobilizer and outreach worker for identifying, handling, and managing GBV cases.
Expected Investment	**USD 50,514**

Intervention & Key activities	**B. Surveillance systems** 1. Technical assistance and procurement of the kits and necessary supply for SARS-CoV-2 sequencing 2. Payment of fees for sequencing including necessary supplies and skilled manpower
Rationale	With the recent introduction and outbreaks of new variants of SARS CoV-2 including B.1.117 and B.1.617 in Nepal, it has become more important to identify the new mutants and variants of SARS CoV-2 for a better implementation of control measures and treatment plans. Some of the mutants in other countries have also been reported to be vaccine resistant or drug resistant. Their early identification by genetic sequencing and other available measures on timely fashion have become more important. National Public Health Lab (NPHL) and other labs in the countries are capable of performing gene sequencing to identify these variants of SARS CoV-2.
Expected Outcome	Gene sequencing will allow to identify the circulating SARS CoV-2 variants helping to plan more effective strategies and control measures.
Expected Investment	**USD 314,120** (*part of the budget included in Above-Base allocation*)

2.3.7 Provide a brief description/justification for the **high priority** interventions and key activities in the **C19RM Above Base Allocation Request**, including expected outcomes of these interventions and how these will support in achieving grant targets. These interventions and key activities should be in line with C19RM Technical Information Notes and Guidelines[4], applicable WHO guidance (including on COVID-19) and the NSPRP.

a. COVID-19 control and containment interventions	
Intervention & Key activities	**A. Case management, clinical operations, and therapeutics** Additional pediatric ventilators for oxygen delivery and oxygen delivery devices including HFNC and RAM cannulas for children ***(60% of total requested items are included in the base allocation)***
Rationale	During the pandemic, Nepal expanded its adult intensive care units (ICU), high dependency units and ventilator facilities in the hospitals. As the pandemic has evolved and the virus continues to mutate with the introduction of new variants of SARS CoV-2, symptomatic cases of COVID-19 are increasingly being seen in younger population. Children are more vulnerable because of the lack of approved COVID-19 vaccines for under 12 years old and limited availability of COVID-19 vaccine for 12-18 years old. Children are likely to develop COVID-19 as well as its severe complication of MIS-C requiring ICU care. Nepal has only limited number of pediatric ICU facilities at present.

[4] Link forthcoming

	MoHP plans to install ventilators, non-invasive oxygen delivery devices, monitors, and other required devices for oxygen delivery in preparation for handling severe complications of COVID-19 in pediatric age groups.
Expected Outcome	Improving pediatric ICU and ventilator management will result in better patient outcomes. Expansion and preparation of ventilator equipped pediatric facilities will enable better ICU management of children with complications of COVID-19.
Expected Investment	**USD 1,700,723**

Intervention & Key activities	**B. Surveillance- Epidemiological investigation and contact tracing** 1. Sero-epidemiological surveillance 2. Community surveys that monitor adherence to public health and social measures (PHSM) and COVID-19-induced barriers to accessing health services and socio-economic impacts 3. Seroprevalence studies to measure vaccine effectiveness in immunized target groups
Rationale	Sero-surveillance studies to study prevalence of both symptomatic and asymptomatic COVID-19 cases will help in planning for future outbreaks. Sero-epidemiological surveillance with antibody tests (SARS CoV-2 nucleocapsid-containing antibody assay) that can differentiate natural infection will help to identify the population at risk and to plan targeted preventive measures such as immunization. These activities at community and local levels will be combined with epidemiological surveys and monitoring for adherence and identification of healthcare barriers created by COVID-19. Effectiveness of immunization program will be assessed with measurements of post-immunization antibody titer (against SARS CoV-2 spike protein) to determine vaccine effectiveness in immunized target groups. These studies are felt to be important for making policies and planning future programs.
Expected Outcome	Identification of population at risk will help to plan effective control measures aimed at target population. Epidemiological surveys including natural immunity and post-immunization immunogenicity will help in planning and developing targeted strategies and implementing effective control measures.
Expected Investment	**USD 422,520**

Intervention & Key activities	**C. COVID-19 Diagnostics and testing** 1. Procurement of SARS-CoV-2 molecular assays including conventional and GeneXpert testing kits and supplies. 2. Strengthen the quality assurance mechanisms for testing methodology, including point-of-care testing.
Rationale	Currently 91 public and private labs in Nepal are performing over 20,000 PCR tests per day for SARS CoV-2. Acknowledge the Global Fund for approval of C19RMFT that will help to procure 100,000 PCR and extraction kits, and 200,000 rapid antigen test kits. This funding request includes request for additional COVID-19 test kits and extraction kits (100,000 kits each). VTM (viral transport media), pipetters, and pipetter tips are other essential supplies for the molecular diagnostic labs. GeneXpert cartridge for SARS CoV-2 will be used to expand the testing capacity. Currently the National TB Reference Laboratory (NTRL) and NPHL have sufficient GeneXpert cartridges in their stock which they plan to use with procurement of additional GeneXpert equipment. The additional need for rapid antigen test kits will be fulfilled by other external developmental partners, and therefore, not included in this FR. Quality assurance (QA) of both PCR and antigen test kits and procedures are vital to get accurate results. The QA and lab monitoring functions are currently performed by the NPHL for all labs in the country.
Expected Outcome	Strengthen the capacity for early and timely diagnosis of COVID-19 in all seven provinces of Nepal. Timely diagnosis will help to identify cases for isolation, contact tracing, and timely management of cases.

Expected Investment	**USD 1,482,767**

Intervention & Key activities	**D. Infection prevention and control and protection of the health workforce** 1. Personal Protective Equipment (PPE): N-95 mask, surgical mask, face shield, disposable gloves, disposable gown, coverall PPE set, hand sanitizer, sodium hypochlorite 5% solution (disinfectant). 2. Training to health workers, community level frontline and essential staff and volunteers on COVID-19 related IPC measures, isolation and quarantine measures, and rational use of PPE. 3. Dissemination and implementation of COVID-19 IPC guidelines for health care settings, community level providers and frontline staff 4. Monitor and evaluate IPC guidance dissemination, implementation, and impact.
Rationale	Infection prevention and control is a key measure for the control of COVID-19 transmission. Ensuring adequate supply of PPE for TB/HIV/Malaria program staff will improve service delivery to the affected population which includes TB screening at community level, ART delivery for HIV infected patients, and other routine service deliveries. These programs are currently affected because of the lack of enough PPE and lack of training about how to safely take care of patients with during COVID-19 pandemic. The GoN has secured enough PPEs for regular hospitals and its other regular healthcare delivery programs. Trainings and awareness campaigns for effective IPC measures for the HIV/TB/Malaria programs at all levels including frontline workers and volunteers will help to protect the HCWs. Surveys and monitoring of effectiveness and impact evaluation of such programs are necessary to evaluate the outcome results. The PPE need for 2021-2022 are requested under the base allocations whereas that for following 2 years is requested under Above-Base.
Expected Outcome	Improved infection prevention and protection of HCWs as well as COVID-19 infected patients and families.
Expected Investment	**USD 2,081,157**

Intervention & Key activities	**E. Infection prevention and control and protection of the health workforce** 1. Public Health inspectors (PHI) for supervision and monitoring of infection control practices, case investigation and contact tracing (CICT), screening, isolation, quarantine, and other COVID-19 related public health activities at local and community levels.
Rationale	Empowered by the COVID-19 containment ordinance 2021, PHIs at all Palikas have been envisioned. MoHP currently foresees the importance of engaging PHI to act as local level public health focal person who helps in enhancing the preventive measures of diarrheal diseases, TB, HIV, Malaria, and continuity of WASH services. This initiative is considered as a significant departure in institutionalizing the public health interventions at community level. The infection control and CICT activities at local level is currently left to the local level government and HCWs. Most of these frontline workers are not well trained and there is a lack of proper monitoring of their activities. There is also lack of monitoring and supervision of infection control activities and compliance by local businesses and offices. The MoHP plans to train and deploy public health inspectors (PHI) at local levels to monitor and enforce these activities. However, in the absence of any previous experience the government may not accept this proposition. Therefore, the MoHP is requesting to support a pilot program to establish 154 health inspectors (HI) at local levels for 24-months. Depending on the population size, 1-5 PHIs will be deployed in rural and urban municipalities with high-level COVID-19 activities. If the pilot program is successful, the MoHP plans to expand the number to 1077 PHIs to be deployed in all rural and urban municipalities of the country. This will be a major undertaking for the country in preparation for any future outbreaks of COVID-19 or similar other illnesses

	as well as monitoring and supervision of routine public health services for malaria, HIV and TB as well as other infectious and non-infectious diseases. The PHI will coordinate with local level and district level health offices for supervision and monitoring of CICT related activities, health screening, health desk, isolation and quarantine, and treatment. The PHI will also monitor, enforce and regulate public health and infection control measures at the local level, and prepare report on implementation and performance. The PHI will act as a liaison between the MoHP and the local level government, local leadership and community organizations.
Expected Outcome	More effective implementation, organization and management of COVID-19 control and prevention as well as other public health activities at the local and community levels, and an empowered community health system. More importantly, a critical position to connect the TB, HIV and Malarial intervention with communities.
Expected Investment	**USD 2,263,610**

Intervention & Key activities	**F. Risk communication** 1. Update national COVID-19 RCCE (Risk Communication and Community Engagement) guidelines and action plans. 2. Identification and mapping the most marginalized and vulnerable populations of COVID-19 pandemic and HIV, TB and malaria at risk populations including women, elderly, adolescents, youth, and children, persons with disabilities, indigenous populations, refugees, migrants, and ethnic minorities, GBV survivors, PLHIV, TB survivors, LGBTIQ communities, FSW, and prisoners. 3. Strengthening risk communication, developing specific platforms to engage with the most marginalized groups and vulnerable communities and enhance their involvement in tailoring local community engagement interventions for specific geographical regions as well as tailoring risk communication messages and interventions for gender, local language and local socio-culture context thus, improving the communities' uptake with risk communications and interventions. 4. Community mobilization activities that involve affected communities, key and vulnerable populations, women and girls, LGBTIQ communities, FSW or target populations (PLHIV, TB affected population) in the development of Information, Communication and Education (ICE)/BCC materials on COVID-19. 5. Capacity building and engagement of communities in support of longer-term preparedness and emergency risk management functions.
Rationale	Risk communication has been done through the mass media at the national level. These activities need further strengthening by involvement of communities and paying more attention to the marginalized communities, at-risk populations and people living in the remote parts of the countries who do not have access to information on a regular basis. Additionally, it is very important to design, train and involve communities for disaster response and emergency response preparedness. Similarly, more grass root level public health intervention can be achieved by involvement of local level healthcare workers and community members and volunteers. Community leaders have felt a need for long term planning and disaster preparedness are essential for future epidemics, pandemics, or other emergencies. Integrated district level and community level awareness and disaster training programs have been identified as major needs. This includes orientation and training programs for District COVID-19 Control and Management Centers (DCCMC) and local level committees throughout the country. Trainings will include appropriate management of quarantine and isolation facilities, home isolation counselling, and psychosocial training support.
Expected Outcome	Improved communication and community engagement will prepare community leaders, district level response committees, and local level leaders for future disaster and emergency management.
Expected Investment	**USD 107,455**

Intervention & Key activities	**G. Case management, clinical operations, and therapeutics** 1. To help with the current and any future medical surge, set up call centers for screening, triaging and dispatching ambulances and coordinate with health care facilities for acceptance and reception of patients transported by the ambulance 2. Provide salary, training and supervision for staff supporting the above
Rationale	The MoHP Health Emergency Operation Center (HEOC) plans to establish Call Centers in all seven provinces in order to take calls from COVID-19 patients and their families who are seeking emergency services. The call center staff will consist of health assistants, nurse, or CMA level HCWs. They will triage the calls, provide needed counselling, and when necessary, call ambulance for patients who need to be transported to the nearby hospitals. There are only a few ambulance dispatch centers in Nepal at present and they are working on temporary bases. Lumbini province has started a call center. Dhulikhel Hospital has locally started to provide ambulance service through its own call center for nearby 3 districts. Similarly, Kathmandu valley Nepal Ambulance Service has a dispatch center which has been serving locally. However, other provinces do not have an established call center so far. The MoHP plans to establish a central call center in Kathmandu and one provincial call center in each of the 7 provinces which will provide province-wide services. The dispatchers will be trained to remotely provide support and life-saving advices to the patient families, ambulance drivers and helpers. They will help the patients and their family to locate ambulance and connect them with the receiving hospitals while they are enroute. GPS tracking will be used to locate the nearby ambulance for quick transportation of patients. The proposed funding request to the GF includes support for the dispatcher salaries, necessary equipment for the call center (such as computer hardware and software, GPS device, phones, and headphones, etc), and one time office establishment cost. The GoN will provide support ambulance operation and trainings to the ambulance drivers, helpers, community, and dispatchers. GPS installation and other support staff will be covered by the GoN.
Expected Outcome	Well organized patient counselling, triaging and transportation services will help direct patients and connect them with the hospitals ready to accept them during medical surge; patients and families will get triage and counselling services by trained staff
Expected Investment	**USD 1,019,578**

Intervention & Key activities	**H. Surveillance- Epidemiological investigation and contact tracing** 1. Multisectoral household or community surveys that monitor adherence to PHSM, socio-economic impacts, and COVID-19-induced barriers to basic needs including health: Evaluation of impact of COVID-19 and lockdowns on building blocks of health systems and socio-economic status of people in Nepal, 2. Field supervision and monitoring of implementation of interventions and activities 3. Technical Assistance to Government Procurement System strengthening
Rationale	The impact of COVID-19 on socioeconomic aspect and healthcare of the country has not been assessed in Nepal. Evaluation of impact of COVID-19 and lockdowns on building blocks of health systems and socio-economic status of people in Nepal is important to understand the effect on overall well-being of the country and to prepare for any future policies and programs to prevent such hardships in the future. Impact evaluation of COVID-19 on healthcare, social and economic aspects as well as impact of programs to control COVID-19 are included in this FR. These evaluations are felt to be important for making policies and planning future programs. Field visits for supervision and monitoring of program activities is planned by the MoHP to ensure program quality and to assess results. This will include quarterly supervision and monitoring field visits in all 7 provinces.

	Since the procurement system faces challenges from time to time to deliver supplies and equipment on timely manner, support for technical assistance to strengthening MoHP's procurement system has also been requested in this FR.
Expected Outcome	Impact evaluation will help to plan develop targeted strategies and implement effective control measures. Implementation standards of interventions and activities are ensured.
Expected Investment	**USD 404,537**

b. COVID-19-related risk mitigation measures for programs to fight HIV/AIDS, tuberculosis, and malaria	
Intervention & Key activities	**Mitigation for <u>HIV</u> programs** *Support to CBO-led entities for provision of additional services.* 1. Communication and transportation cost for outreach workers (for all HIV related components) – to cover years two and three (2022/23) 2. Covid antigen testing by existing lab staff of HIV-Migrant program in 20 districts: One-day training is planned with an assumption that the antigen test kits will be provided by GoN 3. Relief package including Nutrition support for PLHIV and KP communities - 34,700 PLHIV and KPs (PWID, Migrants, MSM, TG, MSW and FSW), youth and GBV survivors (75% included in Above Base) *<u>(First Part of these interventions are included in the Base Allocation)</u>*
Rationale	PPEs are necessary for safety of ORWs to provide home-delivery of ARV drugs to PLHIV. Safety of ORWs should be of utmost priority. Adequate PPE items (mask, gloves, face shield, sanitizer) will be provided for ORWs and other staffs at ART sites, OST sites and SRs running HIV programs. The movement of the ORWs of both HIV prevention program (IRWs) and care and support program (CHBC workers) are restricted in high-risk areas. ART centers and Community care centers (CCC) are partially functional. It is not possible to run the prevention program for KPs in conventional way. Provision of communication and transportation cost and risk/hazard allowance during the pandemic period for ORWs will encourage them to provide essential HIV related services. To expand the COVID-19 antigen testing for key population, especially targeting migrant population, existing lab staff will be trained on COVID-19 antigen testing. After the training, COVID-19 Antigen testing and screening and linking of presumptive TB cases to the SRs managing TB cases along with HIV services in 20 migrant districts. With the current procurement plan of the GoN, it is assumed that the test kits will be provided by the GoN. Nutritional support is a key demand from the community because of the escalated vulnerability of key population during COVID-19 pandemic and subsequent lockdowns. Widespread loss of jobs, restricted movement and fear of disease have led to extreme economic hardships among PLHIV, key population including migrants, MSM, TG, MSW and FSWs. To address this dire need especially focusing the most poor and vulnerable KPs, this FR includes relief package including nutrition support for 34,700 vulnerable persons.
Expected Outcome	This will support in resumption and continuation of the services through close to client approach. The proposed activity will reach at least 21,388 PLHIV currently on ART. Further KPs will be reached for prevention and harm reduction services. The nutrition program will address the urgent needs of most poor and vulnerable KPs and prevent food insecurity among KPs.
Expected Investment	USD 806,086

Intervention & Key activities	**Mitigation for <u>HIV</u> programs**

	- Development and scaling of electronic information and behavior change communication and virtual and social media platforms, Digital health platforms. 4. Strengthening e-reach for KPs and PLHIV through virtual platforms 5. Digital M&E: Biometric device/android tablet for verification users (additional to be planned in national grant for outreach workers)
Rationale	A rapid proliferation of mobile use in Nepal makes the e-platform a viable option. The mobile use is around 131% with smart phone penetration of 60%. Internet penetration is 36.7% and 44.2% use social media such as Facebook (source: Digital 2021 report). The current travel restriction and fear of COVID-19 along with high mobile and internet penetration presents an opportunity to test and scale e-health strategies and platforms. Among KPs, more than 50 percent of the clients will be reached through mobile and other virtual platforms for prevention services as well as referral for testing and treatment services. An activity "Strengthening e-reach for KPs and PLHIV through virtual platforms" is proposed in this FR. This activity is to further strengthen the e-health activity proposed in the regular HIV grant (NFM 3). This activity is based on integrated "Online to Offline" (O2O) approach to increase the uptake of BCC reach and HIV testing services for hard-to- reach and hidden clients among key populations such as PWIDs and, migrants and their spouses. In this approach, the clients will register online for the service (through mobile app or browser-based weblink), then they will be connected to respective service provider in their area. Sponsored social media promotion will be necessary to disseminate the information on the app or browser-based weblink. The ongoing COVID situation has highlighted the need of such virtual platforms to increase the uptake of HIV service delivery, as movements of outreach workers are being restricted. This virtual platform will also be used to disseminate the information on COVID-19 and HIV to PLHIV and KPs.
Expected Outcome	The HIV service delivery among KPs and PLHIV will be back in track with adaptations during COVID-10 context. This will help to achieve both national and Global Fund program targets (depending upon the level of disruptions).
Expected Investment	**USD 51,951**

Intervention & Key activities	**Mitigation for <u>HIV</u> programs** *- Communication about COVID-19 to HIV communities* 6. IEC/ BCC materials focusing on COVID-19 and HIV 7. Local municipalities level orientation programs; COVID-19 orientation for prison health workers in 15 prisons 8. COVID-19 sensitization to prisoners at 15 prisons 9. Research and surveillance of COVID-19 among PLHIV/KPs 10. Advocacy to enlist PLHIV/KP on COVID-19 vaccine priority groups 11. Mental Health Survey among LGBTIQ community 12. Sensitization and advocacy focusing on mental health targeting young FSW 13. Sensitization and advocacy stigma reduction on COVID-19 in 20 migrant districts 14. Communication and community mobilization for vaccine management 15. Advocacy for designated beds and isolation
Rationale	Provision of COVID-19 antigen testing along with HIV testing at POEs will enable uptake of HIV testing among migrant population. Provision of antigen testing for PLHIV at ART centers will be helpful to isolate infected and reduce transmission. Similarly, antigen testing will help to identify COVID-19 infection among HCWs who are exposed to other infected persons. Prisoners are among the most vulnerable groups for COVID-19 and HIV. Therefore, orientations to prison health workers and sensitization in 15 prisons are planned along with the provision of PPEs that would support reduction of COVID-19 transmission in prison. Women prisoners will be prioritized for the sensitization program in prisons. Girls in Bal Sudhar (Child Improvement Centers) will be reached for the hygiene and

	dignity kits. Advocacy to enlist PLHIV on vaccine priority groups is important to reduce infection. Research and surveillance of PLHIV and KPs infected with COVID-19, and related socio-economic and clinical issues are lacking are important for future response. It is also important to orient local government on COVID-19 and HIV to garner support from the local government and engage them in stigma and discrimination reduction interventions. Research and surveillance of PLHIV and KPs infected with COVID-19, and related socio-economic and clinical issues are lacking are important for future response. Female PLHIV need close follow up during their pregnancy to avoid HIV transmission to their infants. Adequate HIV test kits will be required to support the PMTCT program. Scaling up HIV screening in ANC clinics will help to confirm the status and timely treatment. The cases of suicide surged among LGBTIQ community with an anecdotal evidence of 22 suicides within the community. This calls for a mental health survey among LGBTIQ community. Integrated messaging will multiply the effect and reach of the messaging. Further nutritional support is essential as part of social support to maintain immunity and lessen the opportunistic infections among PLHIV. Additionally, food insecurity among PLHIV need to be tackled through food and nutrition package support. The pandemic pushed large proportion of the KPs into economic hardships and food insecurity with widespread loss of jobs. KPs are already vulnerable groups, and this was exacerbated by the pandemic. There is widespread fear among the general population and KPs regarding COVID-19. Vaccines are gradually being rolled out by the GoN and it is essential to communicate about the vaccine, busting myths about the vaccine and improving access to vaccine for KPs. The MoHP has been made aware and reassurance has been received for taking actions to include KPs in vaccine priority group and to ensure beds for PLHIV and KPs who may need hospital admission.
Expected Outcome	Integrated messaging will synergize the effect and reach of the messaging. Further nutritional support is essential as part of social support to maintain immunity and lessen the opportunistic infections among PLHIV. Additionally, vulnerable PLHIV, PWIDs, transgender, CABA, survivors of GBV, and migrants will be reached through nutrition support intervention.
Expected Investment	**USD 180,557**

Intervention & Key activities	**Mitigation for <u>HIV</u> programs** Support to CBO-led entities for provision of additional services 16. Home isolation kits for beneficiaries (8,450 beneficiaries) 17. Hygiene kits and dignity kits (33,800) 18. Economic support to the infected health workers (emergency funds) 19. Transportation and communication cost for YKP and YPLHIV 21. Online capacity building for YKP and YPLHIV (quarterly training- 4 events per year) 22. Referral cost for FP and SRH services including abortion for YKP and YPLHIV 23. Access to treatment care and support for most poor returnees infected with COVID 24. Supply chain management cost for MSM, TG, FSW 25. Weekly social media boosting and posting 26. Virtual self-help groups and workshops for YKP 27. Social media campaign led by YKP 28. Treatment access and social support for differently able Key Population 29. Economic support for emergency support for KPs 30. Education support to CABA and CLHIV (Tablets for CABA and CLHIV to support online education) 32. Internet cost for CABA and CLHIV 500 per month for 1375 31. Additional outreach workers to accelerate the program (after COVID situation normalizes) 32.Nutrition support to CABA children (60) 33.Insurance for district coordinators (Board member) /outreach workers 34. Livelihood and income generation support activities
Rationale	As PLHIV and KPs are increasingly being infected by COVID-19. Further, the health facilities are currently overwhelmed and home isolation is recommended for less severe cases. Home isolation kits including essential items like thermometer, pulse oximeters and IEC materials will be useful for isolating PLHIV and KPs. Further, hygiene kits and dignity kits will be provided to 34700 PLHIV and KPs (PWID, Migrants, MSM, TG, MSW and FSWs, YKP, GBV survivors) and GBV survivors to enable them to maintain regular hand hygiene and menstrual hygiene. KPs are already vulnerable groups, and this was exacerbated by the pandemic. There is widespread fear of COVID-19 among the general population and the KPs. Setting up emergency funds to provide economic support for the infected HCWs will also provide them more confidence while performing high-risk frontline work. The COVID-19 pandemic and nationwide restrictions have hampered the livelihood of the PLHIV and KPs. Apart from HIV related services, it is also important to provide them the relief packages and income-generation support along with home isolation kits and hygiene kits to most marginalized and vulnerable population.
Expected Outcome	These measures will enable reaching out to the most vulnerable population co-infected with HIV and COVID-19. At least 16000 PLHIV and KPs (PWID, Migrants, MSM, TG, MSW and FSWs, Prisoners, CABA and young key population and GBV survivors infected with COVID-19 will be reached through the isolation kits. At least 34,700 PLHIV, KPs (PWID, Migrants, MSM, TG, MSW and FSWs, Prisoners, survivors of GBV, CABA and YKP) will be reached through hygiene and dignity kits.
Expected Investment	**USD 1,882,099**

Intervention & Key activities	**B. Mitigation for <u>TB</u> programs** **TB treatment and Support** 1. Hotline services for TB, HIV and malaria (budgeted in the GBV and HR) - Development of web/based smartphones platform - TB applications development and testing software/app

	- Finalizing and annual maintenance including cyber security of the application and data 2. Digital monitoring and adherence support (desktop, laptop, telephone) 3. Community-led monitoring and follow-up (covered under HSS)
Rationale	The COVID-19 pandemic and subsequent movement restrictions have resulted in difficulty for TB patients to access health services. The hotline services will support TB patients by making available counselling services for their health conditions. Patients will receive timely advice to avoid any further complications. Considering the current difficulty for in-person monitoring, this FR proposes strengthening digital monitoring and reporting through the provision of computers (desktops and laptops) along with telephone sets.
Expected Outcome	Uninterrupted critical treatment and care support will be ensured
Expected Investment	**USD 294,089**

Intervention & Key activities	**Mitigation for TB programs** 4. Nutritional support to TB patients
Rationale	Considering the vulnerability of TB patients and to tackle the food insecurity among the most poor and marginalised TB patients, nutritional support is important, particularly for those in the hostels. This intervention will enable to fulfill the dietary needs of TB patients particularly the most marginalized and poor patients. A study in Pokhara by Gurung, et al, revealed that about one-fifth of TB patients did not consume sufficient calories as per RDA and one-third of patients were underweight during the time of registration (Ref. 21). Assuming the pandemic may continue for next 2-3 years, nearly 50-60% of DR TB patients will be in isolation, quarantine, or lockdowns from time to time during the period. An estimated over 80% of DR TB patients will be in DR-TB hostels for few initial days and most of them will not be able to work for a few to several months (average 6 months) during the anti-TB treatment and recovery. At least this population should be provided adequate nutritional support for better outcome. For residents in DR TB hostels, this proposal includes support for nearly 350 patients per year for patients on average 12-months DR-TB treatment regimen (including SSTR or longer regimen).
Expected Outcome	At least 350 most vulnerable patients at DR-TB hostels will be reached through this intervention for nutritional support
Expected Investment	**USD 502,045**

Intervention & Key activities	**Mitigation for TB programs** 5. Seroprevalence survey of COVID among TB patients
Rationale	A separate sero-surveillance for general population has also been planned and proposed to the GF through the same C19FR. Given the vulnerability of TB patients to COVID-19 and need for specific interventions targeting this high-risk group to mitigate the impact of COVID-19, a seroprevalence survey has been deemed as a high-priority intervention by Nepal TB program. Further, there is only limited data on the effect of COVID-19 on TB in low- and middle-income settings. This targeted sero-surveillance study in Nepal will help to establish a relationship between COVID-19 and TB in similar settings. This activity was already planned by the National Tuberculosis Control Centre (NTCC) but it was not undertaken because of the lack of budget. This survey mainly focuses on the DR-TB patients (NTCC has the contact details of all the clients). Similar survey was conducted during the last year's COVID-19 surge, and thus, it is feasible even during the COVID-19 surge. The NTCC plans to conduct the sero-surveillance as soon as the resources become available. It is important to understand the exposure of TB patients to COVID-19 infection and the true prevalence of the infection. The enhanced surveillance mechanism proposed here intends to ascertain the true extent of infection with SARS-CoV2 thorough serological surveillance. The evidence will also provide valuable information to global

	communities as most countries do not consider TB as their vulnerable population for COVID-19 immunization.
Expected Outcome	Enhanced case notification of TB and improved ability to identify and isolate COVID-19 infected patients. Seroprevalence survey will help to identify and plan to immunize TB patients at risk for COVID-19.
Expected Investment	**USD 37,500**

Intervention & Key activities	**Mitigation for TB programs** 6. Community based TB case finding in hotspot areas of Local Level (LL)
Rationale	It has been well established that accumulation of undetected TB cases due to COVID-19 pandemic will drive the wave of excess TB burden globally as well as in Nepal. Since arrival of COVID-19 pandemic, TB burden has been affected adversely by service disruptions during the lockdowns. Missed opportunities for diagnosis and treatment initiation gave rise to a rapidly growing pool of undetected and unreported TB. When the lockdowns are relaxed, normal TB services cannot reduce this expanded pool rapidly to pre-lockdown levels, and thus, they will continue to contribute to TB transmission for years to come. Therefore, in addition to the restoration of normal TB services, supplementary measures will be required with a focus on reducing the prevalent TB pool. So, intensive community engagement, maintaining awareness of the importance of TB services while emerging from the COVID-19 response, and ramped-up active case-finding will be necessary and are being planned in this request for: - Local Level where high number of TB cases were identified before the COVID-19 lockdown but decreased due to pandemic - Active case finding in those hot spot Local Level will be planned in coordination with local levels. - In coordination with LL, 5 volunteers will be identified in each hotspot and will be trained on infection prevention and TB screening. Those volunteers will be mobilized for a week and will cover on an average 210 household per hotspot. - Once the volunteers conduct the screening and identify presumptive TB cases, screening camps will be conducted in each hotspot in coordination with LL by mobilizing health care workers and laboratory personnel. - Sputum of presumptive TB cases will be collected on site and sent for GeneXpert testing.
Expected Outcome	The proposed activity is expected to intensify current diagnostic capacity and improve TB case-notification rate. Symptomatic cases, especially at the community, will be promptly diagnosed and referred for treatment.
Expected Investment	**USD 301,380**

Intervention & Key activities	**Mitigation for TB programs** 7. Strengthening TB Lab services and diagnosis through procurement of GeneXpert Machine, AC, Xpert XDR Cartridges, and power-back up
Rationale	Drug-resistant *Mycobacterium tuberculosis* remains a significant threat to national TB. Phenotypic drug susceptibility testing, the current gold standard for identifying drug resistance in *M. tuberculosis*, takes 6 to 8 weeks to provide definitive results and poses a bio-hazard risk for laboratory personnel, especially when working with XDR strains. Thus, additional tests that identify resistance to INH, FLQs and SLIDs equally rapidly in similar point of care settings are also necessary. Likewise without easy access to INH-resistant testing, country also needs to invest in rapid DST to identify HrTB. Therefore, genotypic testing approach Xpert XDR assay will reduce manual steps and near patient care. Hence, request for five GeneXpert machines (10 colour) with Xpert XDR cartridge is included in this FR which will be placed in one NTRL and four TRLs. This will also help decentralize DST coverage in country. Additional equipment needed include BSL-3 cabinets and autoclaves for sterilization.

Expected Outcome	This will enhance access to DST of INH, FQ and increase identification of HrTB as well as pre-XDR cases to provide appropriate treatment to patients.
Expected Investment	**USD 436,608**

Intervention & Key activities	**Mitigation for TB programs** 8. Introduce Automated chest X-ray reading system in seven major hospitals screening and treating high Covid-19 cases**.**
Rationale	Tuberculosis and COVID-19 are infectious diseases which primarily attack the lungs. They present with similar symptoms of cough, fever and difficulty breathing, although TB disease has a longer incubation period and a slower onset of disease. The prevalence of TB among COVID-19 patients has been found to be 0.37 – 4.47% in different studies. There has been an overall decline in TB notification rates during the COVID-19 pandemic. Studies have shown that history of active as well as latent TB is an important risk factor for SARS-CoV-2 infection. This does not only result in increased susceptibility, but also rapid and severe symptom development and disease progression with poor outcomes. TB is associated with a 2.1-fold increased risk of severe COVID- 19 disease. In addition, TB patients also tend to have co-morbid or living conditions (malnutrition, diabetes, smoking, HIV, etc) that increase their vulnerability. To address this dual morbidity of TB and COVID-19, the following activities will be carried out: • TB screening of Covid-19 positive patients • TB screening for ILI cases • TB screening for SARI cases Screening CXR will be used as a primary screening tool for above-mentioned cases as chest X-rays are the most sensitive and cost-efficient way to screen for TB. However, there are not enough qualified physicians to interpret every chest X-ray on time - leading to delays in TB diagnosis. Therefore, artificial intelligence system programmed to detect not only classic primary pulmonary TB, but also atypical manifestations will be used to read CXR in 7 major hospitals, one in each province for screening and treating COVID-19 and TB cases.
Expected Outcome	With this activity TB will be screened among COVID-19 cases, ILI cases and SARI cases with more sensitive screening tools i.e. X-ray and will be read by AI system with higher sensitivity. This will help increase facility-based TB cases diagnosis and have overall impact on TB case notification.
Expected Investment	**USD 204, 308**

Intervention & Key activities	**Mitigation for TB programs** **Strengthening TB Labs services and diagnosis** 9. Genomic Sequence for National TB Reference Lab (NTRL)
Rationale	The phenotypic or conventional drug susceptibility testing (DST) using mycobacterial culture method poses challenges secondary to slow growth rate of *M. tuberculosis* in culture, the high-level biosafety infrastructure required for DST, poor reproducibility of results, and some uncertainties around the proposed critical concentrations for some drugs. The NTRL plans to perform gene sequencing for drug susceptibility testing and epidemiological investigation of tuberculosis. This will help to overcome challenges of phenotyping DST which is felt most acutely in resource-limited settings.
Expected Outcome	Genomic analysis of DR-TB will help identification of extensively drug-resistant (XDR) TB rendering appropriate treatment of cases.
Expected Investment	**USD 349,400**

Intervention & Key activities	**Mitigation for TB programs** 10. Vehicle to intensify Supportive supervision, strengthen aDSM and infection control at DR TB centres 11. Data analyst for strengthening M&E system for TB mitigation activities

Rationale	During the first wave of COVID-19 pandemic 12% DS TB and 40% of DR TB patients were infected with COVID-19. DR TB patients who were residing in hostels were mostly affected by COVID-19. These places need improved infection control by strengthening the capacity of staffs, providing logistics, onsite coaching, and supportive supervision. Strengthening aDSM is also very crucial to increase the patient adherence to treatment. So, a dedicated vehicle is necessary to intensify the response to manage DR TB patients during the pandemic. A data analyst for evaluation and monitoring of TB mitigation activities has been included in the request.
Expected Outcome	This activity is expected to improve infection control, and aDSM mechanism of DR TB centres will be strengthen
Expected Investment	**USD 60,431**

Intervention & Key activities	**C. Mitigation for <u>Malaria</u> programs** 1. Expand community Management of Malaria in 200 malaria risk wards (10 wards included in Base allocation and 190 in Above-Base allocation)
Rationale	Community management of malaria is a key strategy in the updated NMSP (2014-2025) and a critical intervention in the community to accelerate towards malaria elimination. In 2021, community management of malaria is being rolled out in 55 risk wards with NFM 3 grant, and it was planned to be expanded in 2022 to additional 100 risk wards with the government funds. However, with the onset of COVID-19 pandemic, resources have become scarce, and budget have hit the ceiling. The program is unlikely to have the resources to implement the activity. Besides, service delivery in the community is likely to ensure community engagement and ownership of malaria elimination. This request is for support to scale up community testing & treatment as planned in the updated NMSP. The delay may impact on Elimination 2025 (E 2025) achievement.
Expected Outcome	Community management of malaria scaled up to a total of 200 risk wards as planned and in line with E2025 timeline.
Expected Investment	**USD 2,342,331** (budget for 10 wards included in the Base and 190 in Above-Base allocation)

Intervention & Key activities	**Mitigation for <u>Malaria</u> programs** 2. Symptomatic Screening for malaria in 13 Point of Entry (PoEs) and dissemination of targeted messages **3.** Conduct integrated testing for malaria, TB, and HIV in symptomatic patients with history of exposure in quarantine and holding centers. *(Part of this funding request is included in Base Allocation)*
Rationale	In 2021, large numbers of migrant workers have been returned from neighboring malaria endemic country as a result of worsening COVID-19 pandemic situations. This has increased vulnerability and potential risk of malaria transmission in Nepal, and even posed threat of outbreaks in the receptive areas. Imported malaria has contributed to around 80 % of total burden of malaria in the country for past few years. Early diagnosis and prompt, effective treatment is a key strategy for controlling malaria as noted in the updated Nepal Malaria Strategic Plan (2014-2025).
Expected Outcome	Symptomatic patients will be tested early and promptly treated minimizing the onward transmission in the community. Returnees will be made aware of available health services and counselled for seeking early health care and prevention by sleeping under ITNs every night. Community engagement and community ownership may be rewarding with community level activities.
Expected Investment	**USD 447,662** (part of this funding is included in the Base Allocation)

Intervention & Key activities	**Mitigation for <u>Malaria</u> programs** 4. Mass ITNs distribution in high, moderate, and active foci & promote continuous distribution by mobilizing female community health volunteers (FCHVs)
Rationale	In 2020, mass & continuous distribution of ITNs during the pandemic declined to around 6% and 25%, respectively. Modified mass ITNs distribution model will be implemented as per Interim Malaria Guideline to continue malaria services. Since the local bodies have prioritized the budget to respond to COVID-19 pandemic, budget for ITNs distribution will not be available. This funding request will help to continue ITN distribution to pregnant women living in high & moderate risk wards and adjoining wards. Ante-natal care uptake has been low since the pregnant women fear visiting health facilities and mobility has been limited by the lockdown further impeding access to service. Under this funding request, ANC staff will seek support of female community health volunteers by contacting and advocating with them to motivate pregnant women from their area to seek ante-natal care. This will help to increase ante-natal care uptake and thereby provide opportunities for continuous ITN distribution.
Expected Outcome	Target coverage of ITNs through mass and continuous distributions will be accomplished.
Expected Investment	**USD 17,681**

Intervention & Key activities	**Mitigation for <u>Malaria</u> programs** 5. Development and implementation of integrated targeted messages for malaria, TB & HIV and Covid -19 Resource is requested for development of integrated targeted messages for Malaria, TB & HIV and Covid -19 Pilot test and roll out in all local bodies and in PoEs through FM and audio for at least 6 months.
Rationale	Malaria was already a "lost" priority as a result of very low morbidity and no mortality over last few years. In addition to this, the COVID-19 pandemic has further sidelined the disease targeted for elimination by 2025. Besides, with the return of large number of migrant workers from malaria endemic country, the potential for transmission in the community, even a threat of an outbreak is real. The goal of targeted messages will be to bring awareness of threat of malaria within Nepal even during the COVID-19 pandemic, encourage to seek for early care for malaria, and deliver preventive messages such as use of bed nets every night.
Expected Outcome	Targeted messages will motivate people to seek health care early and promote the consistent use of nets.
Expected Investment	**USD 54,030**

c. Expanded reinforcement of key aspects of health systems and community-led response systems	
Intervention & Key activities	**A. Health products and waste management systems** 1. Risk assessment and development of sustainable, safe and environmentally friendly interventions for the management and disposal of specific health products (e.g. PPE, diagnostics, lab material, vaccines, etc.) as well as non-health products as part of the national waste management system. 2. Infrastructure and equipment for the collection, transport, treatment, and disposal of health care waste to ensure compliance with standards.
Rationale	Healthcare waste produced from the laboratories and COVID wards have exceeded the current capacity of waste management system and disposal of infected waste is not generally acceptable to people living in the neighborhood. A better

	environment friendly waste management need further exploration, assessment, and technical assistance for further capacity building. Infrastructure to handle these waste materials including collection, transport, treatment, and disposal are needed. Equipment such as shredders can reduce the bulk of waste making it easier to collect and transport.
Expected Outcome	A better waste management system which will be environment friendly and safe for healthcare workers facilitating infection prevention and control.
Expected Investment	**USD 753,077**

Intervention & Key activities	**Respond to human rights and gender related barriers to services** **B. Coordinating with entry points (HIV, TB and Malaria) to disseminate the information on GBV** 1. One day training to SR on WHO LIVES Approach 2. Coordination and Linkage with local government to ensure health and legal services to the survivors of GBV 3. Documentation of the cases of GBV
Rationale	By coordinating with entry points of 3 diseases, important information about services that are locally available (e.g., hotlines, shelters, counselling) for survivors can be shared. This information will include opening hours, contact details, whether these can be offered remotely, and established referral linkages. This will help to make community members aware of the increased risk of violence against women and provide them contact information and details about services they can seek if subjected to violence.
Expected Outcome	Community awareness of their rights and knowledge about how to access services related to GBV
Expected Investment	**USD 125,777**

Intervention & Key activities	**Respond to human rights and gender related barriers to services** **C. Piloting of LGBTIQ friendly critical care center & Addressing the need of Young Population** 1. Social media content development and media boosting 2. Sensitization of Mental aspects that MHM. Group education and counselling 3. Formation of social support group, Monthly coordination meeting 4. Launch of online competitions related to Mental Health 5. Motivational Videos by Influential People. Publish op-eds 6. Virtual group meeting and support groups - RP **D. Psychosocial support** 1. Set referral mechanism with psychosocial support service providers 2. Hot-line services for referral and counselling services 3. Development of web/based smartphones platform TB applications development of software/app, testing, finalizing and also annual maintenance including cyber security of the application and data 4. Development of phone based, text and voice automation to reach to TB patients, testing, finalizing and annual maintenance
Rationale	Psychological stress, anxiety and depression are affecting not only COVID-19 patients but also health professionals, and general population. Fear of contracting COVID-19, forced restrictive social measures, and economic hardship are causing mental trauma. If these are not dealt on time will have lasting effect on people's mental wellbeing. Our key population is already vulnerable from all aspect, therefore, to ensure their mental wellbeing is very crucial. Bringing awareness, establishing referral mechanisms and

	provision of hotline services will help to provide psychosocial support to the vulnerable groups.
Expected Outcome	Stress level of community people and targeted population is reduced, thus preventing bad coping mechanism.
Expected Investment	**USD 161,429**

Intervention & Key activities	**E. Surveillance System** Health management information system (HMIS): 1. Strengthening integrated reporting of HIV, TB and Malaria to the HMIS on District Health Information System 2 (DHIS2) platform through data customization and Interoperability for data exchange 2. Investments for HIV, TB, malaria and/or or cross-cutting/integrated data systems for routine reporting and surveillance that require more funds than originally funded in the grants due to COVID-19. For example: - Update assessment, review, or situational analysis of M&E systems/ HMIS focusing on HIV, TB and Malaria reporting 3. Setting up supportive supervision as well as coaching and coordination mechanism in the context of COVID-19 pandemic thus, enhancing capacity development of sub-national levels and improving data quality, timeliness and completeness 4. Activities to ensure data availability and use of disaggregated COVID-19 data at all levels for planning and programmatic decision making 5. In collaboration with key stakeholders and implementing partners, advocate and strengthen the evidence-based programmatic analysis and data-driven planning and decision-making on a real-time manner at all levels to safeguard the continuity of HIV, TB and Malaria services
Rationale	Good data reporting system plays a vital role in surveillance of cases, monitoring activities and evaluation of programs. Nepal's HMIS has been managing health service information from community to the DoHS through predefined process and procedure for past two decades. This system has been converted into an integrated HMIS (IHMIS) and provides base for planning, monitoring and evaluation of health care services at all levels of health systems. The system needs further strengthening and improvement in data integration, customization, and data exchange. Similarly, more staff support, training and supervision will improve timely data entry, improved data quality, and completeness.
Expected Outcome	Improved IHMIS will support a more accurate and effective surveillance and monitoring of data in the current and future health emergencies.
Expected Investment	**USD 67,694**

Intervention & Key activities	**F. Health products and waste management systems** Electronic Logistic Management Information System (eLMIS): 1. Strengthening systematic and targeted scale-up of eLMIS/mSupply linking with health facilities, central and provincial stores to timely collect and distribute logistic data to attain a well-defined supply chain strategy for COVID-19 responses and HIV, TB and malaria services 2. Comprehensive and sustainable approach for HR deployment for eLMIS interventions at the sub-national levels and Strengthening capacity building including regular stock monitoring and planning at the targeted levels and timely escalating the requirements to take actions 3. Advocate and promote the practice of supply chain data use for both operational and strategic decision making at all levels of the in-country supply chain as well as planning for procurement

	4. Setting up of regular oversight and coordination mechanism for eLMIS/mSupply interventions to ensure the continuity of essential medicines and commodities supply at all levels
Rationale	A well-functioning and reliable eLMIS system is an essential tool for responding effectively to the pandemic, as well as future health emergencies. This includes: a. the availability of real time or near-real time 'end to end' visibility of on the stock status, needs and the overall movements of COVID related- or other commodities; b. the capability of the system to effectively manage the transactions of the supply chains that manage the COVID related commodities cited above; c. the capability of the system to provide actionable dashboards at all levels of decision making and inform actions that keep the supply chains running like clockwork; d. the integration of the eLMIS system with the DHIS 2 system to create a one stop shop linking patient related information with supply chain data in a meaningful and actionable way. The activities proposed in this proposal will contribute to the above either directly or indirectly. They will help the MoHP to create a strong backbone that will support a robust response to this and future health emergencies. For activity (1), workshop at the central level and 7 workshops at each Province will be done bi-annually during project timeline (July 2021- Dec 2023). For activity (2), there is plan for recruitment of 1 HR at the central level and 7 HR for each Province to perform above tasks. Activities 3&4 will be covered within this cost. The existing information technology and Infrastructure will be used for the purpose.
Expected Outcome	Improved eLMIS that will support a stronger response for data and logistics managements for the current and future health emergencies.
Expected Investment	**USD 855,161**

Intervention & Key activities	**G. Surveillance- Epidemiological investigation and contact tracing** Field Epidemiology Training Program (FETP) to enhance the skills and knowledge of health workforce at all levels of Nepal, especially district and local levels, to investigate and respond to public health events of importance
Rationale	The "Public Health Act 2075" of Nepal has preparedness plan for Rapid Response Team and Emergency Medical team at Central, Provincial and Local level which should be implemented by forming an Emergency Health plan. However, it is not functional at all levels and the workforce is not fully capacitated to detect, investigate and response to diseases and events of public health importance or international concern. The Field Epidemiology Training Program's (FETP) frontline tier is designed to improve fundamental epidemiological skills of MoHP staffs at all levels including provincial and local levels. It is a competency-based mentored workforce development program to improve the field epidemiology knowledge, skills, and competencies to prevent, detect and respond to public health priority issues which in turn can contribute to improving the public's health. It is learning by doing training approach where trainees are embedded within their national health system. This project has goals to improve country's capacity in the following areas: - Indicator and event-based surveillance (data collection and analysis, interpretation and communication) - Capacity to investigate and respond to public health events of importance - Sharing and dissemination of health information - Prepare and implement preparedness, mitigation, response and rehabilitation activities
Expected Outcome	A better preparedness with trained rapid response team and emergency medical teams at all levels
Expected Investment	**USD 75,440**

2.4 Implementation arrangements

2.4.1 Describe the proposed **implementation arrangements** and how these will ensure efficient program delivery. Please elaborate on:

a. **Health products management:** planned mechanisms for the procurement of COVID-19 health products. Describe entities responsible for forecasting/quantification, procurement, storage and distribution and monitoring of supply availability and delivery of COVID-19 specific health products to beneficiaries and service delivery sites (and clarify if these are different from current service delivery points for HIV, TB and malaria. Please include a summary of any foreseen in-country supply chain risks, including any regulatory barriers.

Implementation Arrangement

Save the Children International (SCI) will serve as the Principal Recipient (PR). SCI has several years of experience in the Global Fund grant management in Nepal for TB, HIV and Malaria programs as well as implementing COVID-19 response related activities since March 2020. SCI will manage the grant through its existing structure with additional human resources who will be primarily responsible for the activities related to the C19RM funding for COVID-19. The PR will work in collaboration and coordination with MoHP, CCM, DoHS, EDCD, NTCC, NCASC, and in collaboration with technical partners including WHO, to provide programmatic and technical guidance and to support implementation of the grant. After approval of the funding by the Global Fund, the PR will organize a meeting with civil society communities to discuss implementation plan. If necessary, new SRs will be recruited to assist with additional activities such as relief package distribution and other new activities. A dedicated team at Save the Children USA that manages the Global Fund portfolio of awards will provide assistance with technical and financial management. The Account Management team based at SC US HQ will provide overall coordination and guidance and facilitate linkage with the GF Secretariat. Award Managers will provide oversight of management, compliance and operational aspects of the GF grants, and support start-up and closeout. They will also serve to facilitate and track project technical assistance needs and work with the GF account management Technical Advisors to provide focused technical support. The Technical Advisors are responsible for monitoring technical quality and impact, in collaboration with the PR.

Measures to ensure efficient program delivery

To ensure efficient program delivery, the PR will set up a competent team of technical and programmatic experts in various areas who will work closely with the concerned agencies of MoHP for procurement and logistics management, monitoring and evaluation, and administration. A COVID-19 procurement team will be formed to track each step of the procurement process. The team will conduct regular meetings and get updates from the government and stakeholders. The assigned team will support in planning, provision of technical support, quality monitoring and oversight functions. A widespread COVID-19 in neighboring countries is likely to cause shortage of commodities and delay in delivery. The PR will work closely with Nepal Government, MoHP, WHO and other concerned agencies to overcome the situation and to ensure supply from alternative sources.

Health products management

The COVID-19 related forecasting and quantification is done by the MoHP in association with the WHO country team. For TB, HIV and malaria programs, the NTC, NCASC and EDCD's Malaria Program identified their national and programmatic needs based on their COVID-19 mitigation plans. The PR team will ensure uninterrupted and timely supply by establishing an effective and fast procurement and logistics management system. As per GF's recommendations, Wambo will be utilized for procurement of commodities available through the system. For other commodities not available on Wambo, procurement will be through Save the Children Procurement sourcing method. All procurement will follow the Global Fund's stringent quality assurance policy. MoHP's Management Division will supply the National COVID-19 response commodities to the provinces and local levels. Each disease entity and PR is responsible for supplying the products vertically to the service delivery sites for program continuation. Supervision and assistance will be provided by a procurement expert assigned by the PR. The eLMIS will be used for logistics management. There are currently 1007 eLMIS sites in Nepal and eLMIS is the only source of logistic management data for all tiers of Supply Chain in Nepal.

In the pandemic, the risk lies over the unavailability of regular international flights for transport which may hinder the smooth supply chain process. Therefore, coordination with other External Development Partners will be crucial.

b. **Financial flows**: When funding is received by the Principal Recipient, indicate which other local entities/government departments (if any) will also receive funding for the interventions proposed. Please include a summary of funds flow and internal control risks foreseen (if any).

Funds will be disbursed to Save the Children US in US bank account mentioned in grant agreement between Save the Children US and The Global Fund. Based on the forecasting, it will be transferred to Save the Children Nepal dedicated bank account maintained for Global fund grant. According to MOU between Ministry of Health and Population (MOHP) and Save the Children International Nepal (SCI), fund will be disbursed to MOHP as per approved workplan and budget. Similarly, fund will be disbursed as per Sub- Award grant agreement (Including workplan and budget) between Sub recipient (SR) and SCI. Funds are managed by SCI Nepal with the similar arrangements to global fund national grants. As an International NGO, SCI has strong internal control mechanism for funds flow and implementation up to the SRs level. PR reviews the monthly financial reports, analyze the expense and periodic closing funds before the fund disbursement to SRs.

c. **Data flows**: The flow of information and reporting from service delivery points. Which entity in the country is responsible for collecting, collating and reporting on national COVID-19 response related programmatic indicators? What mechanisms are in place for the Principal Recipient to engage with this entity and report COVID-19 related data from service delivery sites? Please include a summary of indicators reported, data availability and reporting completeness and data quality risks foreseen (if any).

In the current system, the HMIS, HEOC and EDCD are responsible for data collection, compilation, analysis, and presentation at central level. Data collected from the community, hospitals and primary health centers are reported directly to HMIS, EDCD and HEOC at central level. Similarly, lab data are collected by the NPHL and reported to HEOC, HMIS and EDCD. Additional data from community such as antigen-based RDT results and community deaths are collected and reported by the municipalities, military and police. These data are reviewed daily for accuracy and to avoid duplications. The data include COVID-19 PCR and antigen test positive cases, hospitalization, ICU admission, cases on ventilator, fatalities, hospital discharge, patients on isolation and quarantine at home or institutions, and immunization. These data are released daily to the public using various methods including TV, radio, prints, social networks, and direct messaging. The PR can obtain these data directly from HMIS, EDCD or HEOC at regular basis. Although most of the data collection process includes both electronic reporting, some data are reported from community and other sources may be manual. This can lead to delay in reporting as well as duplication of data. The HMIS verify these data for accuracy. Strengthening of HMIS, information management unit (IMU) and lab reporting system will help to improve accuracy and timely data collection and reporting.

d. **Coordination and oversight**: The supervision and oversight mechanisms in place for the national COVID-19 response, including for quantification or needs assessment, procurement, storage and distribution of COVID-19 products. Which type of periodic reporting and monitoring (including community-led monitoring) will be done at each of the following levels: locally, regionally, to the national COVID-19 response taskforce and to the Principal Recipient? How will the CCM and Principal Recipient follow up on progress to implement the planned activities? Please include a summary of the governance and oversight risks foreseen (if any).

The ICS, chaired by the secretary of MoHP, is centrally responsible for overall supervision and oversight of the COVID-19 response. Various departments and divisions of the ministry are represented in the ICS including EDCD, Department of Health services, division of quality assurance, National Public Health Lab and Nepal Health Research Council, among several others. The Health Emergency Operation Center (HEOC) serves as a secretariat of MoHP during the health emergencies and disasters. The HEOC coordinates with the National Disaster Management Center under Ministry of Home Affairs, various divisions and departments of MoHP, WHO, and other national and international organizations. The HEOC works as a central coordinating and communication body with the provincial and local level governments, health entities, and hospital networks to facilitate services during the pandemic and other health emergencies. The data collection and monitoring activities are done through the HEOC and various respective departments of MoHP including NPHL, EDCD, and provincial health departments. All the data collected by hospitals, PHCs, local health offices and provincial health departments are collected and reported by EDCD to the HEOC who centrally collect and report data to the MoHP as well as to the public. Pandemic forecast, need assessments and quantification are done by the MoHP with the help of HEOC, EDCD and WHO. Currently the reporting is done on a daily basis. The PR will follow up and collect reports from the HEOC, EDCD and NPHL in addition to the individual disease programs including NTCC, NCASC and malaria programs. These reports will also be shared with the CCM and ultimately with the Global Fund.

Since the C19RM grant will cover a broad range of activities involving multiple departments at federal, provincial, and local levels, there will be challenges in distribution, oversight, data collection and impact evaluation of the program. Since the PR has been working with NTCC, NCASC and National Malaria Program under EDCD, PR will be able to implement programs through these entities and collect the data from them through already established channels. Most of the programs for COVID-19 control will be implemented through HEOC, EDCD, NPHL, logistic management, and provincial health departments. The PR has established working relationship with these departments over the years and will continue to work closely in implementation and monitoring of the programs. PR will deploy a team at federal level and assign personnel at provincial level for this purpose.
Additionally, this proposal includes budget for monitoring and evaluation, field supervisions, and impact evaluation, which are proposed for a better coordination and oversight of program implementation and assessment of overall impact.

2.4.2 Describe the role that **community-based organizations** (CBOs) will play under the implementation arrangements. Please also indicate whether there are opportunities to reinforce the role and effectiveness of CBOs in the national COVID-19 response, including through supporting the most vulnerable communities, community tracing, supported isolation and addressing vaccine hesitancy.

The activities targeted towards the most vulnerable communities in this proposal were planned from the wider consultations with the communities, people affected and living with diseases (including TB survivors and PLHIV), and service providers to human rights and GBV, TB, Malaria and HIV. These interventions will have an increased focus on addressing the specific and overlapping vulnerabilities faced by the key population, people living with the diseases, women, gender minorities and young people. The interventions and activities also aim for empowering communities to play a more central role in program implementation and making community-based monitoring a central platform for making community themselves and health care providers more accountable.

The following activities related to the HIV, TB and Malaria services and the community system strengthening will be implemented through the existing Global Fund implementing partners as per their expertise, geographic coverage, and capacity in consultation with the CCM and the disease entities.

- Community-led monitoring of HIV, TB, Malaria and COVID services
- Awareness raising interventions on mental health and wellbeing to the target key population
- Community mobilization activities that involve affected communities, key and vulnerable populations, women and girls, LGBTIQ communities, MSM, FSW, or target populations (PLHIV, TB affected population) in the development of Information, Communication and Education (ICE) materials on COVID-19.
- Capacity building and engagement of communities in support of longer-term preparedness and emergency risk management functions
- Strengthening e-reach for KPs and PLHIV through virtual platforms
- Advocacy for COVID vaccination of KP, PLHIV and HCW in HIV program
- Community-based and community-led activities for stigma and discrimination reduction
- Mass ITNs distribution in high, moderate, and active foci & Promote Continuous distribution by mobilizing FCHVs

2.5 Funding landscape, efficiency and sustainability

2.5.1 Based on the analysis in the C19RM Funding Landscape Table, describe the funding need and available funding from domestic resources, loans, and donor grants for the different components of the health sector response to COVID-19, highlighting major funding gaps. Also, describe how national authorities will work to secure additional funding or new sources of funding for the COVID-19 health response, including any new applications to development banks and other donors that the applicant intends to submit or is pending approval.

In response to the pandemic COVID-19, the government of Nepal (GoN) decided to provide free services for COVID-19 diagnosis and treatment at the government hospitals. These services were extended to the private hospitals during both surges to enable access to care for all COVID-19 infected patients needing admission. These services have been provided by mobilization of internal resources as well as external support. The GoN established a "COVID-19 Prevention, Control and Treatment Funds" for this purpose. In order to prepare for the challenges posed by the pandemic, the Health Cluster for COVID-19 was activated under joint leadership of the MoHP and WHO, the latter representing the global partners. The health cluster consists of representatives from more than 52 agencies, 200 partners, and all seven provincial health administrations. The health clusters have 11 key areas and tasks for which the partners have been extending their support.

In the National Rapid Response Plan for COVID-19, the GoN plans to spend USD 128,111,764. The source of this budget will be internal resources, external donations and loans, and the global funds. The details of external sources and domestic sources are not available at present. The external partners have provided or are in the process of providing many useful health products for COVID-19 response. These include ventilators, CPAP, oxygen plants and cylinders, PCR and antigen detection kits, drugs such as dexamethasone, PPEs and sanitizers, dead body bags, etc.

Table 2 shows the budget from Feb 16th to July 15th 2021 for COVID-19 response by the 10 pillars of WHO. A summary of the country's total funding needs, available funds from domestic and external resources, estimated funding gap, and the GF contributions for the current period is presented on Table-3 below. Details are provided on a separate Funding Landscape database. Actual national funding gap could not be calculated because of unavailability national response plan and budget details for 2021-2022.

COVID-19 Strategic Preparedness and Response Plan Pillars	**National Budget for 2/16/2021-7/15/2021 (USD)**
1. Coordination, planning, financing, and monitoring	163,807
2. Risk communication, community engagement (RCCE) and infodemic management	1,167,454
3. Surveillance, epidemiological investigation, contact tracing, and adjustment of public health and social measures	933,632
4. Points of entry, international travel and transport, and mass gatherings	278,914
5. Laboratories and diagnostics	6,546,962
6. Infection prevention and control, and protection of the health workforce	109,359
7. Case management, clinical operations, and therapeutics	90,916,984
8. Operational support and logistics, and supply chains	-
9. Maintaining essential health services and systems	885,441
10. Vaccine deliver supplies	27,109,211
Total	**128,111,764**

Table 2. National COVID-19 Rapid Response Budget for 2/16/2021-7/15/2021

Funding Items	**Funding Needs in USD**
Total country need for COVID-19 Response (2/16/2021-7/15/2021)	128,111,764
Total domestic resources: GoN	66,618,117
Total ext. resources (non-GF)	2,562,235
Total funding gap (estimated)	58,931,412
GF Funding request for 2021-23 C19RM Base Allocations (includes both FT and Full funding)	7,745,867
GF Funding request for 2021-23 C19RM Above Base Allocations	23,965,274

Table 3. Funding needs per National Rapid Response Plan of MoHP Nepal

2.5.2 Briefly describe how the current government budget and medium-term health budget incorporates additional funding to mitigate the impact of the COVID-19 pandemic, with specific reference to measures taken to ensure that government commitments and plans for domestic financing of HIV, TB and malaria are not adversely impacted.

The Ministry of Health and Population (MoHP) has disbursed funding to 72 different institutions to execute activities for the prevention and control of COVID-19. The funds have been allocated for infrastructure development, human resources support, medicine and instrument purchase, capacity development, as well as to run prevention and control programs and other miscellaneous activities (Ref. 9).
The GoN has provided all COVID-19 related services free of cost at all government hospitals including drugs approved in Nepal for the treatment of COVID-19. During the COVID-19 surge, the government expanded COVID-19 treatment coverage to the private hospitals and paid them at the government rates to ensure all COVID-19 infected patients have access to the medical services including ICU care. As per Nepal's COVID-19 Health Sector Rapid Response Plan (Feb-July 2021), prevention and mitigation of adverse health impacts have been the central focus structured around the following six pillars:
1. Immunization against COVID-19: Goal to immunize 6 million people against COVID-19 by the end of this period (Feb-July 2021). Surveillance and monitoring activities related to the vaccine. All COVID-19 vaccine distributions will be provided free of cost.
2. Infection prevention and control (IPC): Intensive case investigation, contact tracing, lab testing, quarantine, and epidemiological investigation for new variants. Collaboration and capacity building for new variant identification.
3. Diagnosis and treatment: Continuation of provision of free treatment COVID-19 at assigned hospitals maintaining quality standards. Expansion of high dependency units (HDU) and intensive care units (ICU).
4. Supply management: Ensuring procurement of necessary supplies for COVID-19 response for the next five months including cold chain for vaccine distribution.
5. Monitoring, evaluation, and communication: Making monitoring and evaluation system more effective. Improving capacity of information management unit (IMU), HMIS (Health Management Information System) and other communication systems.
6. Risk and immunization communication: Increasing risk communication and vaccine related awareness programs to the target groups using various media including social networks

The rapid response plan was prepared in consultation with WHO and other external development partners (EDP). Majority of the planned activities until mid-July 2021 will be supported by the MoHP budget as outlined on the Rapid Response Plan (Ref 4). Additional support for equipment such as ventilators, oxygen plant and storage systems, oxygen cylinders, and vaccines are being supported by the EDP including WHO, USAIDS, other UN agencies, and other various national and international organizations. Many other equipment and supplies have also been secured through direct GTG contacts.

Similarly, the three disease programs, viz. TB, HIV and malaria, have planned their strategies for mitigation of effect of COVID-19 on their individual programs and worked closely with the MoHP to obtain support to ensure continuation of all three programs during the pandemic. Many of these issues will be addressed by this funds requested in this proposal.

2.5.3 Explain how the C19RM Full Funding Request reflects value for money, including specifying how the lowest costs of quality inputs required for COVID-19 response will be ensured, how the limited resources will be allocated and utilized strategically to maximize impact and how recurrent costs of Global Fund C19RM capital and system investments will be subsequently sustained by domestic funding.

While developing this C19RM FR, key dimensions of VfM as per the GF's guidelines have been followed as guiding principles, including economy, effectiveness, efficiency, equity, and sustainability. The PR (SCI) and the key implementing entities including NTCC, EDCD and NCASC participate in the procurement process as per the budget allocated from the GF and Government of Nepal, respectively. The procurement process is done with efforts to minimize the cost without compromising quality. As per GF's recommendations, Wambo will be utilized for procurement of commodities available through the system. For other commodities not available on Wambo,

procurement will be through Save the Children Procurement sourcing method (Pro-Save). All procurement will follow the Global Fund's stringent quality assurance policy.

While confirming that the quality-assured health products are selected and secured, they are budgeted at the lowest sustainable costs. All procurement from the GoN budget is done as per the Procurement Act and Regulations. Both national competitive bidding (NCB) and international competitive bidding (ICB) methods including e-bidding processes are followed in case of GoN budget. In the case of the GF budget, Pooled Procurement Mechanism (PPM), including Wambo, will be used for the procurement purpose.

A dedicated Procurement and Supply Chain Management (PSM) Team that will be responsible for quantification, monitoring of the stock status, supporting procurement, and coordinating re-supply logistics downstream. All types of commodities, laboratory supply and equipment, therapeutics, and consultancy services are procured following the standard procurement methods mentioned above. Logistic Management Information System (LMIS) reports from facilities are aggregated at the district level and transmitted to the province and eventually to MoHP and respective entities through eLMIS. The Global Health Supply Chain (GHSC) program has rolled out the eLMIS in Nepal. There is a target to extend eLMIS to facilities at all levels and streamline all reports through this system.

To improve efficiency and maximize outputs, outcomes and impact for a given level of resources, several feasibility and sustainability considerations have been applied. For example, while proposing further expansion of pediatric ICU to additional health facilities, potential case load by province and appropriate geographic location for the machines have been taken into consideration so that the patients do not have travel long distance to get to such facilities. Similarly, additional GeneXpert machines and antigen testing kits will allow to maximize COVID-19 testing locally and decrease the result time for COVID-19 test results which may take up to 3-5 days in peripheral districts of Nepal. Similarly, expanding health desks and local community level programs for screening, awareness programs as well as supporting the outreach workers will maximize the efficiency of health care services. Similarly, these services will also address the equity and human rights issues by reaching out and improving access to the lower socioeconomic groups (including "Dalits" or "lower caste"), women and girls, GBV sufferers, LGBTQI, PWID, MSM, FSW, migrants, prisoners, and other key populations. Many of the issues brought up during country dialogue with human rights and GBV group and TB and HIV communities have been addressed in this proposal with a goal to benefit these key populations.

All COVID-19 related services including testing and treatment are provided free of cost at all government hospitals including drugs approved in Nepal for the treatment of COVID-19. During the COVID-19 surge, the government expanded COVID-19 treatment coverage to the private hospitals and paid them at the government rates to ensure all COVID-19 infected patients have access to the medical services including ICU care. Similarly, all COVID-19 vaccine distributions have been provided free of cost.

2.6 Attachments supporting the C19RM Full Funding Request

Use the list below to verify the completeness of your application package:

☒	C19RM Funding Request Form
☒	C19RM Consolidated Budget (including C19RM Above Base Allocation Request)
☒	Quantification or needs assessment for COVID-19 health products (including contribution and projected pipeline from domestic and other sources of funding) (any format suitable to the applicant)
☒	COVID-19 National Testing Strategy, where available
☒	C19RM Health Product Management Template (HPMT) per grant
☒	C19RM Funding Landscape Table
☒	CCM Endorsement of the C19RM Full Funding Request[5]
☒	Endorsement by the national COVID-19 response coordinating body of the COVID-19 control and containment interventions of the C19RM Full Funding Request (where relevant)
☒	National Strategic Preparedness and Response Plan for COVID-19 and budget (ideally for 2021)
☒	HIV, TB and malaria program mitigation plans (where relevant)
☒	List of Civil Society suggestions for inclusion in the C19RM Full Funding Request
	Additional Documents:
☒	List of Abbreviations
☒	References

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