### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
<th>Project Name</th>
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<tbody>
<tr>
<td>Comoros</td>
<td>P175840</td>
<td></td>
<td>Support to COVID-19 Vaccine Purchase and Health System Strengthening (P175840)</td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Government of the Union of Comoros</td>
<td>Ministry of Health</td>
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#### Proposed Development Objective(s)

This Project’s Development Objective is to support the Government of Comoros to acquire and deploy COVID-19 vaccines, to strengthen its immunization capacity and health system.

### PROJECT FINANCING DATA (US$, Millions)

#### SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (US$ Millions)</th>
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<tr>
<td>Total Project Cost</td>
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</tr>
<tr>
<td>Total Financing</td>
<td>21.00</td>
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<tr>
<td>of which IBRD/IDA</td>
<td>20.00</td>
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<tr>
<td>Financing Gap</td>
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#### DETAILS

**World Bank Group Financing**

- International Development Association (IDA) 20.00
- IDA Credit 10.00
- IDA Grant 10.00

**Non-World Bank Group Financing**
B. Introduction and Context

Country Context

1. **The Union of Comoros is a small volcanic archipelago off the coasts of Mozambique and Madagascar.** Home to the second most diverse coral reefs in the world after Indonesia, Comoros has about 1,800 square kilometers of land and a maritime Exclusive Economic Zone 70 times the size of its land area. About half of its 887,929 population live on Ngazidja, the largest island, where the capital city Moroni is located. While the country is prone to natural disasters (tsunami, cyclones, seismic and volcanic activities), its capacity to respond to emergencies remains weak.

2. **Comoros’ development has been shaped by three defining characteristics.** First, like other small and remote islands, the country faces the challenges of diseconomies of scale, highly concentrated markets, lack of competition and high costs of living. Second, Comoros is classified as a country affected by fragility, conflict, and violence (FCV)

3. **Human development in Comoros remains low.** The Human Capital Index (HCI) 2020 value for Comoros is 0.40, meaning a child born in Comoros today will be 40 percent as productive when s/he grows up as s/he could be if s/he enjoyed complete education and full health. Not only is this value lower than the average for lower-middle-income countries, it also places Comoros at the lower end of the global distribution (145th ranking out of 175 countries). The HCI has slightly declined since 2017 (0.41).

Impact of the COVID-19 pandemic

4. **Trajectory of COVID-19 in Comoros.** The first confirmed case of COVID-19 in Comoros was on April 30, 2020, and by May 4th the first death was announced. The first wave of COVID-19 was contained, with only seven deaths reported by the authorities at the end of 2020. Since January 2021, the number of COVID infections and deaths has risen sharply, likely due to the arrival of the virus strain first seen in South Africa. As of April 28th, out of a population of 887,929, the

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1 Comoros is on the World Bank’s 2019 Harmonized List of Fragile Situations.
cumulative number of cases reached 3,833: 2,626 in Grande Comore, 700 in Anjouan and 507 in Mohéli. The authorities have reported 146 deaths so far.

5. Transmission channels to the economy. The earlier expectation of a positive impact on economic activity from the reconstruction efforts after Cyclone Kenneth (April 2019) was offset by the COVID-19 crisis. Pre-COVID-19 growth forecast for 2020 was 4.4 percent, but instead the economy shrunk to an estimated of -0.5 percent. The pandemic is hurting Comoros’ economic growth via two main channels. First, through the direct impact of the outbreak as it decreases temporarily labor supply and weakens economic activity due to social distancing. Second, through demand and supply effects related to external trade and the disruption of international travel. Contrary to what it was previously expected, remittances from the diaspora have proven to be resilient despite the slowdown of economic growth in Europe (France in particular).

6. Impact on poverty and potential deepening of fragility. Job destruction and decline in labor earnings are affecting those working in trade, tourism and transport, in a context characterized by already high levels of unemployment (especially among the youth) and informality. Further disruptions of service delivery could have adverse effects on health and education, particularly on the poor who already have limited access to basic services such as water, sanitation, and electricity. A large reduction in household incomes could increase the possibility of social unrest. This could play out in different ways across the islands, given the heavy reliance of communities in Grande Comore on remittances, and of communities in Anjouan and Mohéli on trade, particularly between the islands. Comoros has been exposed to risks stemming from the tense relations between the Union Government and the islands Governments. Even though these tensions have since gone down, especially after the 2019 elections (that gave President Azali a clear five-year term in office) the socioeconomic impacts and hardships of the health and economic crisis could feed into frustration, undermine an already fragile social cohesion, and fuel unrest. In light of the spatial inequalities between the islands, a delayed or uneven response by the government, or particularly pronounced effects of the crisis on one island, could also increase the risk of frustrations tipping over into a renewed cycle of political instability and anger toward the central state.

7. Short-term growth prospects. In 2021, economic recovery is expected to be delayed to at least the second part of the year due to the tightening social distancing measures, following the new and stronger COVID-19 wave and the significant challenges to vaccine acquisition and distribution. In addition, the decision of the French government to close its borders prevents the Comorian diaspora from France from visiting the country, which would decrease tourism receipts. Expansive fiscal policy and resilient remittances inflows would support growth (estimated at 0 percent for 2021).

8. Debt sustainability. The World Bank (WB)/International Monetary Fund (IMF) Debt Sustainability Analysis (DSA) update (April 2020), found that Comoros’ risk of external debt distress remains “moderate”, with limited fiscal space to absorb shocks. As in the previous DSA (December 2019 Article IV), all debt and debt service indicators remain below their respective thresholds but exhibit an upward trend over the long run. Also, buffers to high-risk territory are now forecast to erode quicker compared to the pre-COVID-19 DSA because of weaker export growth, lower GDP growth and additional take-up of debt in the near term. However, because most of the crisis-related additional expenditure

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3 The leisure, hospitality, and travel sectors have been severely impacted. Tourist arrivals have effectively stopped since mid-March 2020 with the closure of the borders, weighing on the activity in the service sector. Key businesses in Comoros such as restaurants and hotels have seen their activity strongly reduced with most of the employees in temporary unemployment. Those working in agriculture (more than half of jobs and almost all export of goods earnings) felt the repercussions of the crisis brought on by the pandemic because of limited selling opportunities in local markets (including trade between islands because of restrictions on the movement of people by sea) and on the international market for export crops. Banking institutions working with foreign money transfers have seen their operations decrease markedly since the beginning of the COVID-19 crisis and domestic credit to the private sector has contracted.
is expected to be financed by grants and concessional loans, the risk of debt distress remains unchanged. A new DSA update (under preparation) will likely place Comoros into high risk of debt distress due to slower than expected recovery from the pandemic and a recent contracted large Public-Private Partnership PPP (that includes payment obligations amounting to about four percent of GDP over five years).

**Sectoral and Institutional Context**

9. **The Union of the Comoros is facing a major health emergency with the global COVID-19 pandemic.** An outbreak of COVID-19 caused by the 2019 novel coronavirus (SARS-CoV-2) has been spreading rapidly across the world since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province, China. On March 11, 2020, the World Health Organization (WHO) declared a global pandemic as the coronavirus rapidly spread across the world. The WHO Coronavirus dashboard reports that as of April 30, 2021, the outbreak had resulted in an estimated 150,751,023 cases and 3,170,271 deaths in 188 countries. The estimated number of fully vaccinated persons is 39.31 million. COVID-19 is one of several emerging infectious disease outbreaks in recent decades that have emerged from animals in contact with humans, resulting in a major pandemic with significant public health and economic impacts.

10. **Since the declaration of the first COVID-19 case in Comoros, the speed and extent of disease transmission has varied across the territory.** The first case of COVID-19 was reported on April 30, 2020. As of April 28, 2021, 3,833 cases and 146 deaths have been reported. COVID-19 was relatively well contained until late December 2020; however, the number of cases surged in early January 2021, and reached a peak on January 28, 2021 (975). The number of new daily cases was at its highest value on February 3, 2021 (128). There has been a downward trend since then, and on April 28, 2021, the number of active cases was 18. The number of daily deaths is fluctuating; however, the trend is decreasing.

11. **Despite improvements made prior to the COVID-19 crisis, Comoros still lags behind on key health outcomes.** Prior to the COVID-19 crisis, health outcomes in Comoros had improved since 2000, generally surpassing Sub-Saharan Africa (SSA) averages for all except three child health indicators (infant and neonatal mortality rates and severe wasting), while still significantly lagging behind when compared to lower-middle-income countries. These gaps are even larger when Comoros is compared to its aspirational peers, namely Mauritius, Cape Verde, Samoa and Fiji.

12. **Communicable diseases and child health conditions (including malnutrition) continue to dominate Comoros’s burden of diseases, in addition to the significant surge in non-communicable diseases (NCDs).** These account for nine of the top 10 causes of premature deaths. More specifically, Comoros has a high prevalence of diarrheal diseases and acute respiratory infections among children under five. In addition, undernutrition among under five children remains high with 17 percent underweight and 32 percent stunted. Undernutrition is concentrated among the worse-off households while other child health outcomes are relatively similar across different socioeconomic categories. Key underlying determinants of undernutrition are early childbearing, low female secondary education enrolment (47 percent) and low sanitation coverage (34 percent). NCDs now account for 41 percent of deaths in the country, compared to 28 percent in SSA. Between 2005 and 2016, ischemic heart disease gained 6 places in the ranking of top causes of premature death and 30.3 percent increase in terms of disease burden. Overweight is very high among women at 32.7 percent.

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4 https://covid19.who.int
5 Demographic Health Survey (DHS)-MICS 2012 and WBG Report, Comoros Action Plan for Targeting and UHC, 2017, Comoros
7 World Health Organization (WHO), Comoros STEP Wise report, 2011
13. Progress has been made over the last few years, but important challenges in both demand and supply of quality healthcare services are still to be addressed for better health outcomes. At 82 percent, skilled birth attendance is significantly higher than both SSA average (55.3 percent) and lower-middle-income countries’ average (71.4 percent). However, less than half (48.9 percent) of pregnant women receive full antenatal care. In addition, the preliminary results of 2020 HHFA-SDI (Harmonized health facility assessment-Service Delivery Indicators) survey revealed that healthcare providers capacity is very low with only 38 percent of healthcare providers being able to correctly diagnose the four tracer conditions (diarrhea with severe dehydration, pneumonia, diabetes and hypertension) and 12 percent being able to correctly manage maternal and neonatal complications.

14. Although the country is prone to disease outbreaks including cholera and arbovirus, its level of pandemic preparedness is low. The 2017 Joint External Evaluation (JEE) of the implementation of the International Health Regulations (IHR) recorded that the country’s capacity in prevention, detection and response to public health events remains very limited. Out of 47 indicators used in the assessment, Comoros received a rating of 1 (no capacity) for 24 indicators and 2 (low capacity) for 18 indicators. The JEE particularly noted the lack of (i) a multisectoral coordination mechanism for IHR implementation; (ii) a risk communication strategy; (iii) a national action plan to address antimicrobial resistance; (iv) a national action for infection prevention and control; and (v) a Public Health Emergency Operations Center. The capacity of the National Public Health laboratory was also found to be low.

**Government response to COVID-19 crisis and WB support**

15. The Government of Comoros has acted swiftly in response to the COVID-19 crisis to mitigate its economic and social impact. The Government developed the health sector national COVID-19 preparedness and response plan, following WHO guidelines, with the support of development partners (DP). This preliminary plan was finalized and adopted on February 13, 2020. Its total cost was estimated at US$7.8 million, with US$2.3 million mobilized from the country budget and development partners. This budget will be re-evaluated and adjusted periodically as the pandemic evolves. A National Coordination Committee (NCC) was established to respond to and monitor the impact of the health crisis and adjust the policy response as needed. The NCC is supported by an economic sub-committee comprised of the Central Bank of Comoros (Banque Centrale des Comores BCC), the National Institute of Statistics and Economic and Demographic Studies (Institut Nationale de la Statistique et des Etudes Economiques et Démographiques INSEED) and the Ministry of Foreign Affairs. The Union of Commerce, Industry and Agriculture Chambers (Union des Chambres de Commerce, d’Industrie et d’Agriculture UCCIA, an independent association representing the private sector, has also created a committee to identify the difficulties encountered by private actors in the face of the pandemic and produces briefing notes to the Government on the development of the economic situation. WHO is a member of the scientific, management, communication and logistic sub-committees.

16. In response to the rapid increase of new COVID-19 cases, since the beginning of 2021, the Government announced new measures to contain the second wave of the pandemic. Measures include a curfew from 8pm to 5am, the closure of mosques, the prohibition of religious and cultural gatherings or festivities and the suspension of regular court hearings. Schools and universities also remain closed until further notice. Domestic commercial flights are limited to one flight per day from Grande Comore and three per week from Anjouan. All passengers are required to hold a negative PCR test. Marine travel with Mayotte has also been suspended. The Government also announced on January 13th, 2021 a New Management and Coordination Framework to deal with this second and stronger COVID-19 wave. The new framework is composed of two national bodies: the high Inter-ministerial Council and the Coordination Committee – and Islands Units. The high Inter-ministerial Council, consists of the President of Comoros, Ministers, and other government representatives, meets once a week and is in charge of defining policy and mobilizing resources during the pandemic. The Coordination Committee consists of the Ministry of Health (MOH) and health sector
specialists, is charged with operationalizing COVID-19 measures, strategic interventions, planification of the vaccination strategy, among others. Some of those measures have been alleviated since April 12, 2021 following the drop in the number of new cases and deaths since early February.

17. **The World Bank is supporting the Comoros Government in the COVID-19 response.** As a contribution to the health sector national COVID-19 preparedness and response plan, US$5 million was mobilized through the Contingent Emergency Response Component (CERC) of the Comprehensive Approach to Health System Strengthening (COMPASS) Project (US$30M, P166013), which was activated on April 29, 2020. The CERC supports the (i) procurement of specific COVID-19 equipment, medicalized ambulances, and incinerators for medical waste management, (ii) training of frontline service providers, (iii) COVID-19 response related communications activities, and (iv) monitoring, supervision and coordination mechanisms. The World Bank is supporting the Project Implementation Unit (PIU) of the COMPASS Project on the procurement process through Hands-on Expanded Implementation Support (HEIS) under the World Bank’s procurement framework. As of April 10, 2021, 65 percent of the CERC had been disbursed.

**Relationship to CPF**

18. **The FY20-FY24 Country Partnership Framework (CPF) for the Union of Comoros focuses on building resilience, strengthening human capital and fostering inclusive growth, as well as addressing the urgent need arising from the impacts of COVID-19.** Coming less than one year after Cyclone Kenneth, COVID-19 is expected to further drive economic growth down to -1.4 percent in 2020. The economic slowdown, impact of social distancing measures as well as sharp drops in remittances and diaspora-based tourism are all expected to contribute to an increase in poverty. The CPF thus incorporates an important COVID-19 response, by reallocating and reorienting the existing portfolio and planned pipeline. The project is therefore framed in the first focus of the CPF: crisis response and building resilience, which will include investing in human capital, disaster recovery and disaster risk management.

19. **World Bank country program’s health response to COVID-19 is as follows:**

   (i) The CERC of the COMPASS Project (US$30M, P166013), activated in April 2020 in the amount of US$5 million, was replenished by Additional Financing (P174227) in August 2020, as requested by the Government.

   (ii) Restructuring of the E-government sub-component of the Regional Communications Infrastructure Program (P118213) to ensure basic government functioning through increased virtual connections.

20. In addition to supporting the health response, the World Bank country program has been adjusted to focus on:

   (i) **Protecting the poor and vulnerable: Existing Social Safety Net Project (P150754)** – the scope of the existing Additional Financing (US$18 million, P171633), geared to bring economic recovery and resilience to the poorest families who were hit by the Cyclone Kenneth, will be expanded to include the poorest urban households hit by negative economic effects of COVID-19 as well as containment measures as requested by the Government. Unconditional cash transfers related to COVID-19 under the Social Safety Net Project are planned at US$6 million. Restructuring of the project was carried out in June 2020 and the replenishment has been done during FY21.

by supporting longer term structural measures. The program is organized around three pillars. The first pillar (“Protecting the Poor & Vulnerable”) aims to facilitate cross-border trade and reduce the price of medical supplies and essential food products and to enhance the coordination of safety net programs and rapid implementation of future interventions. The second pillar (“Ensuring Sustainable Business Growth & Job Creation”) seeks to support the economic recovery by granting tax deferrals to Micro, Small, and Medium Enterprise (MSMEs) and self-employed (e.g., lawyers, notaries and doctors) and facilitate mobile banking and mobile payments to incentivize financial development and inclusion. The third pillar (“Strengthening Policies, Institutions and Investments for Rebuilding Better”) includes measures to improve debt transparency and a first step in the restructuring process of a systemic bank.

C. Proposed Development Objective(s)

This Project’s Development Objective is to support the Government of Comoros to acquire and deploy COVID-19 vaccines, to strengthen its immunization capacity and health system.

Key Results (From PCN)

a. Percentage of targeted population fully vaccinated, based on the targets defined in national plan, by gender;

D. Concept Description

21. This project is being proposed at a crucial juncture in the Government of Comoros response to COVID-19. A critically important change in the state of science since the early stages of the pandemic has been the emergence of new therapies and the potential production of COVID-19 vaccines. COVID-19 vaccination commenced in many high-income countries in December 2020. Published results show that they are safe and produce desired immune responses. The global economy will not recover fully until people feel they can live, socialize, work, and travel with confidence. Given the centrality of limiting the spread of COVID-19 to both health and economic recovery, providing access to COVID-19 vaccines will be critical to accelerate economic and social recovery in Comoros. This project will enable affordable and equitable access to vaccines and play a critical role in further strengthening the health system.

22. The project would support the costs of activities under the COVID-19 Strategic Preparedness and Response Plan (SPRP) using the Multiphase Programmatic Approach (MPA), approved by the Board on April 2, 2020, and the Additional Financing to the SPRP approved on October 13, 2020. The primary objectives of the project are to enable affordable and equitable access to COVID vaccines and help ensure effective vaccine deployment in Comoros through enhanced vaccination system strengthening.

23. Geographical scope: Country-wide


10 The Bank approved a US$12 billion WBG Fast Track COVID-19 Facility (FTCF or “the Facility”) to assist IBRD and IDA countries in addressing the global pandemic and its impacts. Of this amount, US$6 billion came from IBRD/IDA (“the Bank”) and US$6 billion from the International Finance Corporation (IFC). The IFC subsequently increased its contribution to US$8 billion, bringing the FTCF total to US$14 billion. The Additional Financing of US$12 billion (IBRD/IDA) was approved on October 13, 2020 to support the purchase and deployment of vaccines as well as strengthening the related immunization and health care delivery system.
Project beneficiaries: The expected project beneficiaries, in the long-term, will be the population at large (887,929 people, 447,230 men, 440,699 women), who will benefit from decreased risk of contracting COVID-19 and other vaccine-preventable diseases, through deployment of the COVID-19 vaccine and strengthened routine immunization systems. The project will aim to support covering 60 percent of the population, which represents the priority groups, i.e. the most vulnerable to the virus (patients with comorbidities aged 19-65 and other most at risk groups: travelers, border control and security staff, occupational risks) and the population in the areas most exposed to the virus. The initial phase of the vaccine roll-out will prioritize first the frontline health and social care workers and the population aged 65 and above. Combined, those two priority groups represent close to 4 percent of the population. Phase 1 of the vaccine roll out will then cover adults over the age of 60, people with chronic conditions and other most at-risk groups, bringing total coverage to 20 percent of the population. The second phase of the vaccine roll out will cover the rest of the adult population, with efforts being prioritized by areas with a high attack rate. Special attention will be given to women.

Table 1: Priority groups

<table>
<thead>
<tr>
<th>Phase</th>
<th>Ranking of vulnerable groups</th>
<th>Priority groups</th>
<th>Population estimates</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1a</td>
<td>Front-line Health and social care workers</td>
<td>3 224</td>
<td>0,35%</td>
</tr>
<tr>
<td></td>
<td>1b</td>
<td>Population over the age of 65</td>
<td>30 397</td>
<td>3,30%</td>
</tr>
<tr>
<td></td>
<td>1c</td>
<td>Population aged 60-65</td>
<td>16 580</td>
<td>1,80%</td>
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<tr>
<td></td>
<td>1d</td>
<td>Patients with comorbidities aged 19-65 and other most at-risk groups (travelers, border control and security staff, occupational risks)</td>
<td>141 394</td>
<td>15,35%</td>
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<tr>
<td>Phase 2</td>
<td>2a</td>
<td>Population aged 18-60.</td>
<td>368 453</td>
<td>40%</td>
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</table>

Vaccine roll-out will prioritize areas with a high attack rate. The strategy will aim to constitute protective belts to contain disease outbreaks. Prioritization of vaccinations in phase 2 will be decided according to the epidemiological evolution and the availability of vaccines.

24. The Government of Comoros has completed a rapid assessment of its readiness to roll out the COVID-19 vaccination program. The combined Vaccine Readiness Assessment Framework (VRAF) and Vaccine Introduction Readiness Assessment Tool (VIRAT) (VIRAT-VIRAF 2.0) was used to conduct a comprehensive assessment of country readiness under leadership of the MOH with support from various partners including WHO, World Bank, UNICEF..... Table in Annex 4 provides details on the key pillars of the vaccine readiness. The assessment has shown that Comoros has made progress in putting in place all important elements needed for COVID-19 vaccine rollout. The VIRAT-VIRAF 2.0 assessment will be regularly updated as more information becomes available. The national vaccine deployment plan approved in February 2021 further details country needs and will inform a coordinated effort for mobilization of both domestic and donor financing.

25. The Government of Comoros’ vaccine coverage and purchase plan is a central part of its national vaccination readiness. Comoros’s vaccine strategy is to vaccinate at least 60 percent of its population. This proposed project will support the purchase and deployment of vaccines to achieve this 60 percent coverage as indicated in the National
 Deployment and Vaccination Plan [See table 1 for prioritization]. Error! Reference source not found. presents the estimated cost of purchasing vaccines through each of the available sources. These estimates account for vaccine procurement (including wastage), supply chains in-country (including climate-sensitive cold chain investments), and service delivery. The assumptions used are consistent with estimates communicated by the COVAX Unit Cost Working group.

26. While the regulatory threshold for eligibility for IBRD/IDA resources for vaccine purchase is outlined in paragraph 34 of the Additional Financing to the COVID-19 Strategic Preparedness and Response Program (SPRP) Utilizing the Multiphase Programmatic Approach (MPA) Framework Paper approved by the Board on October 13, 2020. The Bank will accept as threshold for eligibility of IBRD/IDA resources in COVID-19 vaccine acquisition and/or deployment under all Bank-financed projects: (i) the vaccine has received regular or emergency licensure or authorization from at least one of the SRAs identified by WHO for vaccines procured and/or supplied under the COVAX Facility, as may be amended from time to time by WHO; or (ii) the vaccine has received WHO Prequalification (PQ) or WHO Emergency Use Listing (EUL).

Table 2: National vaccine coverage and purchase plan

| Source of financing (including if grant/loan, and other key terms) | Target coverage of population | # of people actually covered (after 3% wastage) | Vaccine(s) | Estimated cost per vaccine dose ($) | Estimate cost per dose for deployment12 ($) | # of doses | Estimated total cost to Government ($ millions) | Estimated cumulative cost to Government ($ millions) | Vaccine sourcing (if known) | Approval standard | Contract status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COVAX grant and IDA credit | 20% | 169,230 | TBC (2 doses) | 0.0012 | 2.95 | 2 | 1.05 | 1.05 | COVAX | World Bank VAC | Official request submitted to COVAX; initial confirmation received. |
| COVAX grant and IDA credit | 5% | 42,307 | TBC (2 doses) | 7.00 | 2.95 | 2 | 0.88 | 1.93 | COVAX | World Bank VAC | Additional doses not requested yet to COVAX |

11 Cost of shipping is included in the cost per dose for all sources of vaccines presented in Table 2.
12 As of January 2021, donor-subsidized doses will cover 20% of the population. However, it is not guaranteed that all 20% will be available up front due to funding constraints – some doses purchased through co-pay may be available before the final tranche of the 20%
27. Deployment costs include freight and transport to country, syringes and safety boxes, in-country supply chain costs (including cold chain equipment, vehicles and fuel, transport overheads), in-country service delivery costs (including program management, training, social mobilization, disease surveillance), and climate friendly cold chain investment requirements. The above dose prices include the cost of freight and transportation, and syringes and safety boxes, an assumption that is taken from COVAX. Estimates of costs of supply chain and service delivery were calculated by Immunization Costing Action Network and are country specific.\(^{14}\) The cost of investment in climate friendly cold chain equipment and infrastructure has been estimated by the Energy Sector Management Assistance Program (ESMAP) at 20 percent of total deployment costs, and is included in supply chain costs in

28.
29.
30. \textit{Table 1}.

31. Figure 2 presents a breakdown of the costs involved in vaccinating one person through COVAX.

32.
33.
34. \textit{Table 1} presents the estimated breakdown of total cost under each coverage scenario, and the cost per person vaccinated. We estimate that the financing gap for phase 1 is US$1.9 million, and US$ 7.7 million for phase 2. Additional funds may be necessary if the procured vaccines require ultra-cold chain systems and if re-vaccination is needed, depending on the duration of acquired immunity.\(^{15}\)

\textit{Figure 2: Estimated cost of vaccinating one person through COVAX}

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13 Based on public information; agreements between the AU and manufacturers are not yet finalized and may be subject to change
15 There may be a need to periodically vaccinate individuals against COVID-19, akin to influenza.
The World Bank
Support to COVID-19 vaccine purchase and health system strengthening (P175840)

Table 1: Coverage scenario and costing estimates

<table>
<thead>
<tr>
<th></th>
<th>Fully subsidized vaccines</th>
<th>Further 5% through COVAX</th>
<th>14.0% through African Union</th>
<th>24.5% through bilateral deals</th>
<th>Total</th>
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<tbody>
<tr>
<td>Target population coverage</td>
<td>20% population (CY21)</td>
<td>5% population (CY21)</td>
<td>14.0% population (CY22)</td>
<td>24.5% population (CY22)</td>
<td>63% population (CY22)</td>
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<tr>
<td>Effective population covered</td>
<td>19.0%</td>
<td>4.5%</td>
<td>13.3%</td>
<td>23.4%</td>
<td>60%</td>
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<td>Recommended estimate</td>
<td>1.0 US$ M</td>
<td>0.9 US$ M</td>
<td>1.7 US$ M</td>
<td>6.0 US$ M</td>
<td>9.7 US$ M</td>
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</table>

Cost components

A) Vaccines purchase and transport to country
   - 0.0 US$ M
   - 0.6 US$ M
   - 1.2 US$ M
   - 4.7 US$ M
   - 6.5 US$ M

B) Supply chain
   - 0.4 US$ M
   - 0.1 US$ M
   - 0.2 US$ M
   - 0.5 US$ M
   - 1.3 US$ M

C) Service delivery
   - 0.6 US$ M
   - 0.2 US$ M
   - 0.3 US$ M
   - 0.8 US$ M
   - 1.9 US$ M

Cost per dose
   - $2.95
   - $9.95
   - $9.76
   - $13.50
   - $9.07

Cost per person vaccinated
   - $6.20
   - $20.90
   - $14.19
   - $28.35
   - $17.74

35. The Government of Comoros launched on April 10, 2021 the COVID-19 national vaccination campaign. To date, Comoros has received vaccines from China (Sinopharm: 100,000 doses), Africa Union (AVATT, 6,000 doses), and COVAX (AstraZeneca: 12,000). For the initial phase of the campaign (April 10-26), they administered 40,836 Sinopharm first shot (around 5% of the population received a first dose). Seventeen percent of these doses were for health workers (3,125), 41 percent for older adults and 41 percent of doses to people with conditions. Second shots for these priority groups are expected to start in May. The campaign with AstraZeneca doses would start on June 1st.
COMPONENTS

Component 1: Vaccines and related supplies provision and deployment. US$10.7 million.

36. Acquisition of COVID-19 vaccine and related supplies. Comoros anticipates the receipt of vaccines through the COVAX facility to cover at least 16-20 percent of its population. The African Union, the Government of India, and France have also indicated possible support for the acquisition of additional doses. This project will support Comoros’s counterpart contribution to reach 60 percent of the population if shortfalls arise, or more depending on actual costs of acquisition and deployment, up to an estimated US$10.7 million. Technical assistance will be directed to ensure that comprehensive plans are in place to enable effective deployment of this first and second phases of coverage, with the possibility to increase allocations to this component once systems are established and tested. This will be particularly important considering the uncertainties related to the COVID vaccine market, including testing, approval, availability and pricing, which require flexibility, close monitoring and strong WB support. This financial support will be aligned with the National Deployment and Vaccination Plan (NDVP), being developed by the Government with support from WHO, UNICEF and GAVI. This will be accompanied by support under this component to acquire vaccination supplies (syringes and safety boxes). This includes the procurement of other COVID-related supplies, including diagnostic tests (polymerase chain reaction, rapid diagnostic tests, etc.). This support will help avert cost impacts on beneficiaries who receive vaccinations, which will be exempt of any related user fees. To prevent further disruptions in essential immunization services, this project will also support the enhancement of routine vaccinations programs and other procurement of related essential supplies, to avert interrupted utilization.

37. Vaccine Targeting: The COVID-19 vaccination effort will create unprecedented challenges for targeting essential workers and vulnerable groups in the adult population. This includes people living with underlying conditions (diabetes, hypertension, HIV and TB), a large portion of which are not currently receiving services in the public health system. This component will support the correct identification and targeting of prioritized population groups for the first two steps of vaccine deployment. This will require enhancing design of existing health service delivery models to ensure they reach target populations, with special focus on vulnerable and hard-to-reach groups such as poor women. Further detail on targeting strategies will be elaborated as part of the NDVP finalization.

38. Distribution and Cold Chain Equipment. As part of broader project support to strengthen immunization logistics, ongoing needs assessments will provide the basis for required financing to reinforce dry storage and cold chain capacity and distribution networks, above the likely ceiling provided by the COVAX Facility for Cold Chain Equipment. This can include required maintenance or upgrading of warehouses, vehicles and other logistics infrastructure. This could also include potential outsourcing to the private sector of certain functions, such as rental space, vehicles, or CCE.

39. Technical assistance, training, and related activities under this component will include: (i) support to develop a roadmap to close gaps identified in the vaccine readiness assessments for COVID-19-related systems strengthening measures; (ii) up-front technical assistance to assess and enhance policies and institutional frameworks around safe and effective vaccine deployment; (iii) support for the quantification and forecasting of supply needs, including vaccines, immunization-related supplies and human resources, to ensure no disruption in essential services while COVID-19 vaccines are being rolled out; and (iv) training of front-line delivery workers and ensuring reach and effectiveness of service delivery modalities. This may involve the temporary recruitment of health workers to be deployed in the acute phase.

40. **Bio-medical waste procedures and management**: Bio-medical waste management is an unfinished agenda in Comoros that can be advanced with additional resources through this project. Evidence from the ongoing World Bank-funded operation shows that there are still weaknesses in implementing national standards for biomedical and pharmaceutical waste, particularly at the district and facility levels. This project will also invest in waste management and disposal supplies and maintenance; structure the collection and transportation of waste to identified disposal sites; and, implement waste collection, transport, and disposal plans.

41. **Vaccine safety and surveillance**: There has not been sufficient time to evaluate longer-term safety of COVID-19 vaccines under development, especially within the African context where interactions with other factors are unpredictable. As shown in the VRAT/VRAF, Comoros lacks a robust framework for post-vaccination surveillance. This project constitutes an opportunity to conduct a more robust post-marketing evaluation of the COVID-19 vaccine, while strengthening the existing adverse events following immunization (AEFI) monitoring system, including policies and structures for indemnification and compensation. This can also include support to institutionalize traceability tools, skills and processes to: i) improve distribution to end-users; ii) prevent diversion; iii) contribute to regulatory efforts to identify false and sub-standard products; and/or monitor AEFI, with potential for broader application in the health system. Technical assistance will be employed to strengthen relevant existing institutions, such as the National Medicines Regulatory Authority and the National Institute of Health. This project will also apply innovations, institute processes, and build capacity of national stakeholders to manage communication following any AEFI.

42. **Data quality**. Disease surveillance and data integration will be crucial to monitor the success of the vaccine deployment. The project will aim to improve effective data utilization. Provisions will be made for: (i) technical assistance to develop harmonized procedures for surveillance, reporting, diagnosis and response to COVID-19 and other priority diseases to assess the impact that this new intervention might have on other programs; (ii) improve the interoperability of laboratory and data systems (disease surveillance, drugs and equipment, human resources, vaccine logistics, and medicines supply chain) and support a platform (DHIS2) that allows for visual representation and use of data for decision-making; (iii) expand sentinel surveillance sites; and (iv) support piloting of innovative digital surveillance approaches to improve monitoring and control of COVID-19 and infectious disease outbreaks.

43. This component will also include vital support to close gaps in planning and budgeting capacity identified in readiness assessments. This will complement efforts by the COVAX Facility to develop a Procurement Plan for COVID-19 Vaccines and related supplies and build on current practices for the procurement of EPI vaccines and supplies. A mapping of current available financing modalities against overall context and needs is now being conducted, including the COVAX Facility and direct purchasing options and resources. This project will also strengthen the overall national immunization budgeting and budget tracking capacity, including the identification of options to address the recurrent cost implications associated with the introduction of the vaccine for country health spending, and how the vaccine can be sustainably deployed moving forward. The new vaccine and its administration may require a substantial increase in public health financing in Comoros for the vaccine program; therefore, this project will support coordination mechanisms between national health and finance authorities and donors, to facilitate a broader discussion about how to increase domestic financing in the sector, taking into account the national immunization program, financing for other essential services as well as COVID-19 vaccine deployment.

44. **Community engagement**. Building community trust and vaccine confidence is crucial to vaccine acceptability and to improve participation in the COVID-19 response. Under component three, a national risk-communication plan, and activities to ensure community participation in COVID-19 vaccination efforts will be ensured. This will include accurate information sharing, efforts to create demand, and counter measures for addressing mis- or disinformation. This project will capitalize on previous undertakings by the Government of Comoros, use existing structures such as the
network of community health workers, NGOs and their relations with established women and youth-led civil society organizations as well as with local and traditional leaders. It will also support the establishment of two-way channels for community and public information sharing, e.g. hotlines, responsive social media such as U-Report and existing Civil Society Organization social media platforms and radio shows. Multi-level health promotions interventions will be tailored to the specific needs to vulnerable and hard-to-reach groups and be designed to be understood by all, including women, girls, and other disadvantaged populations who are illiterate or lack access to information sources. Building “vaccine literacy” for the COVID-19 vaccine is also an opportunity to boost overall confidence in vaccinations, thereby leading to greater utilization and retention in the EPI program. In this regard, financing will include activities such as reviewing and deepening beneficiary research on perceptions and obstacles to vaccine uptake.

45. **Communications and community engagement efforts and targeting strategies** that explicitly address restricted mobility and access to information and vaccinations by women. This will include: (i) support to the development of community-level mobilization efforts and vaccination points targeting women in priority groups; (ii) inclusion of women who work in informal sectors and as community health workers as part prioritized groups; (iii) provision of fully subsidized vaccines to remove financial barriers which would disproportionately impact women and other vulnerable groups. The project will also seek to address gender dimensions of social and behavior change communications, to ensure that beneficiary research identifies and monitors possible misconceptions that may be disproportionately held among women who face greater barriers in accessing reliable information, and among men who may oppose vaccination for themselves or for female members of their households. This can include interventions to support vaccinators who may face stigmatization, and support to ensure the provision of accurate information about COVID-19 as part of ante-natal care and reproductive health services. Risk communications should be delivered using multiple outreach mediums, including messaging through radio, television, and community-based platforms in local languages. Beneficiary research can also be conducted using Interactive Voice Technology (IVR) in multiple languages and with screening questions to identify women and other disadvantaged groups. These communications efforts will include linkages to reinforced services for domestic and gender-based violence.

46. **The project will build on existing Grievance Redress Mechanism (GRM) to enable a broad range of stakeholders to channel concerns, questions, and complaints to the MoH.** The MoH has little experience through the COMPASS in managing grievances as its GRM has been functional since October 2020. Possible support can include support for COVID-19 Call Centers with toll-free numbers, publicly disclosed throughout the country. GRM mechanisms will be equipped to handle cases of SEA/SH.

47. **Institutional Strengthening.** Building on the technical assistance plan formulated through Comoros’s COVAX application, the project contributes to strengthen capacities of key administrative and clinical personnel at different levels, and the effective execution of the mandates of key institutions in Comoros’s immunization system. This includes capacities for planning, budgeting, and procurement, vaccine distribution from central level to the point of administration, quality control and monitoring of vaccine delivery and related safeguards, regulation of vaccine safety and indemnification systems, and communications with the public.

48. **The project will also seek to operationalize a network of high-quality laboratories for human health in Comoros.** This capitalizes on previous investments made through CERC activations, investing to expand and strengthen testing alongside COVID-19 vaccinations. In addition, this project will also support the undertaking of a baseline sero-surveillance study with representative samples of target populations to receive the COVID-19 vaccine in order to distinguish between infection and vaccine acquired immunity.

**Component 3: Contingent Emergency Response Component (CERC). No allocation**
49. This component will facilitate access to rapid financing by allowing reallocation of uncommitted project funds in the event of a natural disaster, either by a formal declaration of a state of emergency or upon a formal request from the Government of Comoros.

Table 4: Project cost and financing (US$ millions)

<table>
<thead>
<tr>
<th>Project Components</th>
<th>IDA Financing</th>
<th>ESMAP TF (to be confirmed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component 1: Vaccines and related supplies provision and deployment</strong></td>
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<tr>
<td><strong>Component 2: Safety, community engagement, surveillance and institutional strengthening</strong></td>
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<tr>
<td><strong>Component 3: Contingent Emergency Response Component</strong></td>
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<td><strong>Total Costs</strong></td>
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Legal Operational Policies

<table>
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<tr>
<th>Legal Operational Policies</th>
<th>Triggered?</th>
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<tr>
<td>Projects on International Waterways OP 7.50</td>
<td>No</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP 7.60</td>
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Summary of Screening of Environmental and Social Risks and Impacts

From the preliminary assessment of the project, five ESS are considered to be relevant: such as ESS1 Assessment and Management of Environmental and Social risk and impact, ESS2 Labor and Working Conditions, ESS3 Resource Efficiency and Pollution Prevention and Management, ESS4 Community Health and Safety and ESS10 Stakeholder Engagement and Information Disclosure. In line with the World Bank ESF guidelines the environmental and social risk rating for this project has been classified as substantial. While project activities are expected to have positive long-term impacts, the urgency and relative unknowns around COVID-19 vaccine deployment engenders several consequential risks that will need capacity building and monitoring. The project aims to improve disease surveillance, monitoring and containment in the country as well as health systems preparedness for future outbreaks. Based on the nature and magnitude of the activities and investments planned as well as medical waste due to project activities, potentially adverse impacts on the environment and risks to it are deemed site-specific, reversible, and manageable with adequate mitigation measures, especially on medical waste management and stakeholder engagement. Health facility support and vaccination deployment may engage the handling of infectious products that present risks of contamination for workers in labs and medical health care centers, and then for the communities. Project implementation will also involve different types of workers including PIU staff, health civil servants, local CSOs staff, community health and nutrition workers which may arise OHS concerns as well as potential SEA/SH (Sexual Exploitation and Abuse/Sexual Harassment) risks. The project specifically targets vulnerable and disadvantaged groups (elderly, disabled, chronically diseased people with no health insurance, migrants, single parent headed households, economically marginalized and disadvantaged groups especially residing in geographically challenging areas) however specifics measures will be necessary to include strong stakeholder engagement and inclusivity as identified...
in the project design. The project will have to ensure to review and update the existing Grievance Mechanism (GM) developed under the COMPASS project and ensure that there are dedicated staff responsible for broader social development and risk management issues. Prior to appraisal, the Recipient will need to prepare and disclose a (i) Draft Environmental and Social Commitment Plan (ESCP), (ii) Draft Labor Management Procedures (LMP), (iii) a Draft Stakeholder Engagement Plan (SEP); (iv) a Draft Environmental and Social Framework including SEA/SH Prevention and Response Action Plan and a Hazardous Waste Management Plan and; (v) and an updated National Medical Waste Management Plan.

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