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Report No: PAD2910

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF SDR 10.9 MILLION
(US$15.0 MILLION EQUIVALENT)

AND A PROPOSED CREDIT

IN THE AMOUNT OF EUR 13.4 MILLION
(US$15.0 MILLION EQUIVALENT)

TO THE UNION OF COMOROS

FOR THE

COMPREHENSIVE APPROACH TO HEALTH SYSTEM STRENGTHENING PROJECT

JUNE 10, 2019

Health, Nutrition and Population Global Practice
Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2019)

Currency Unit =	Comorian Franc (KMF)
US$1=	439 KMF
US1$=	SDR 0.721
US1$=	EUR 0.891

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Mark R. Lundell
Senior Global Practice Director:	Timothy Grant Evans
Practice Manager:	Magnus Lindelow
Task Team Leader:	Voahirana Hanitriniala Rajoela

ABBREVIATIONS AND ACRONYMS

AFD	French Development Agency (*Agence Française de Développement*)
AMG	General Health Insurance (*Assurance Maladie Généralisé*e)
CERC	Contingent Emergency Response Component
CHW	Community Health Worker
COMPASS	Comprehensive Approach to Health System Strengthening
CPD	Continuous Professional Development
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
DA	Designated Account
DESPP	Directorate of Public and Private Health Structures (*Direction des Etablissements de Santé Publics et Privés*)
DFIL	Disbursement and Financial Report Information Letter
DGEPS	General Directorate for Studies, Planning and Statistics (*Direction Générale des Etudes, de la Planification et des Statistiques*)
DGS	General Directorate of Health (*Direction Générale de la Santé*)
DHS	Demographic Health Survey
DP	Development Partners
DPS	Department of Health Promotion (*Direction de la Promotion de la Santé*)
EEZ	Exclusive Economic Zone
EmOC	Emergency Obstetric Care
ESMF	Environmental and Social Management Framework
FM	Financial Management
GAVI	Global Alliance for Vaccines and Immunization
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GNI	Gross National Income
GoC	Government of Comoros
GRS	Grievance Redress Services
GTI	Island Technical Group
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HNP	Health Nutrition and Population
HQSS	High-quality Health Systems Framework
IA	Internal Auditor
IBRD	International Bank for Reconstruction and Development
IDA	International Development Agency
IFC	International Finance Corporation
IFR	Interim Financial Report
IHR	International Health Regulations
IPF	Investment Project Financing

JEE	Joint External Evaluation
JICA	Japan International Cooperation Agency
KMF	Franc Comorian
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MOH	Ministry of Health, Solidarity, Social Protection and Gender Promotion
NCD	Non-communicable Disease
NHIS	National Health Insurance System
NMWMP	National Medical Waste Management Plan
NPC	National Performance Committee
NPV	Net Present Value
OB-GYN	Obstetrics-gynecology
OCOPHARMA	National Technical Platform of Health, Infrastructure, Pharmaceutical and Procurement
OOP	Out of Pocket
OP	Operation Procedure
PAD	Project Appraisal Document
PASCO	Health Sector Support Project for Comoros (*Projet d'Appui au Secteur de la Santé aux Comores*)
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PIQ	Five-year Investment Plan (*Plan d'Investissement Quinquennal*)
PMU	Project Management Unit
PPA	Project Preparation Advance
SARA	Service Availability and Readiness Assessment
SCD	Systematic Country Diagnosis
SDG	Sustainable Development Goals
SDR	Special Drawing Rights
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TFR	Total Fertlity Rate
UGP	Project Implementation Unit (*Unité de Gestion des Projets*)
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Comoros	Comprehensive Approach to Health System Strengthening	
Project ID	**Financing Instrument**	**Environmental Assessment Category**
P166013	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[✓] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[✓] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
01-Jul-2019	30-Sep-2024

Bank/IFC Collaboration

No

Proposed Development Objective(s)

(i) To improve utilization of quality PHC and (ii) strengthen capacity of institutions which are critical to quality PHC

Components

Component Name	Cost (US$, millions)

Improve PHC infrastructure, workforce and service delivery platforms	22.00
Strengthening institutions and governance which are critical to (i) quality PHC and (ii) response to disease outbreaks	5.00
Citizen Engagement and Empowerment, Project Management, Monitoring and Evaluation,	3.00
Contingent Emergency Response Component	0.00

Organizations

Borrower:	UNION OF COMOROS
Implementing Agency:	MINISTRY OF HEALTH, SOLIDARITY, SOCIAL PROTECTION AND GENDER PROMOTION

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	30.00
Total Financing	30.00
of which IBRD/IDA	30.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	30.00
IDA Credit	15.00
IDA Grant	15.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
National PBA	15.00	15.00	0.00	30.00
Total	**15.00**	**15.00**	**0.00**	**30.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025
Annual	6.90	6.30	5.70	5.10	4.80	1.20
Cumulative	6.90	13.20	18.90	24.00	28.80	30.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High

7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
10. Overall	High

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[✓] Yes [ ] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09		✓
Physical Cultural Resources OP/BP 4.11		✓
Indigenous Peoples OP/BP 4.10		✓
Involuntary Resettlement OP/BP 4.12		✓
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description

Schedule 2- Section II. C The Recipient shall take all action required on its behalf to establish, not later than six (6) months after the Effective Date, and thereafter maintain and operate, a functional grievance handling mechanism

for the Project, with adequate staffing and processes for registering grievances and acceptable to the Association, thereby ensuring the ongoing improvement on service delivery under the Project.

Sections and Description

Schedule 2-Section I.A.2. the Recipient shall strengthen the PIU, with the recruitment, not later than three months after the Effective Date, an internal auditor, a financial officer, a chief accountant and an accountant, all under terms of reference and with qualifications and experience satisfactory to the Association

Conditions

Type	Description
Effectiveness	Article IV - 4.01 a) The Recipient, through the PIU, shall have adopted the Project Implementation Manual, in form and substance satisfactory to the Association.
Type	Description
Effectiveness	Article IV-4. 01 b) The Recipient shall have appointed to the PIU a safeguards and social specialist under terms of reference and with qualifications and experience satisfactory to the Association
Type	Description
Disbursement	Schedule 2- Section III -B b) No withdrawal shall be made under Category (2), unless: (i) the Recipient shall have adopted the Performance-Based Financing Manual in form and substance satisfactory to the Association; (ii) the Recipient shall have concluded with FENAMUSAC the FENAMUSAC Delegation Agreement in form and substance satisfactory to the Association
Type	Description
Effectiveness	Article IV - 4.01 a) The Recipient, through the PIU, shall have adopted the Project Procedural Manual, in form and substance satisfactory to the Association.

I. STRATEGIC CONTEXT

A. 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 (EEZ) 70 times the size of its land area. About half of its 800,000 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).[1] Third, remittances deepen a consumption driven growth trajectory.

3. The country has made uneven progress in poverty reduction. The June 2018 revision of the national account system resulted in an increase of the gross national income (GNI) per capita (Atlas method) from US$760 to US$1,280 in 2017. Comoros will therefore formally achieve lower middle-income status in July 2019. Around 38 percent of Comorians are living under the international poverty line of US$3.2 a day per capita. Close to 40 percent of households receive remittances which help raise them out of poverty. Those without access to remittances are 11 percentage points more likely to be poor.[2]

4. Human development in Comoros remains low. The Human Capital Index (HCI) 2017 value for Comoros is 0.41.[3] This means a child born in Comoros today will be 41 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 (122nd ranking out of 157 countries).

5. Comoros' fiscal balance has been largely under control in recent years but is highly dependent on grants.[4] Between 2011 and 2017, total revenues, at 17.2 percent of gross domestic product (GDP), outweighed total expenditures (15.6 percent), generating a positive fiscal balance of 1.6 percent. However, without large and continuous support from external donors during this period (on average 7.9 percent of GDP), the fiscal balance would have been negative. Comoros's very limited access to financial markets may have been another factor which helps keep its fiscal balance under control. Comoros' risk of debt distress is moderate as per the 2018 WB-IMF joint debt sustainability assessment. The large share of the wage bill in the budget—more than 60 percent of domestically generated revenues over the last decade—leaves very little room for other spending.

B. Sectoral and Institutional Context

6. Health outcomes in Comoros have improved since 2000, generally surpassing Sub-Saharan Africa (SSA) averages but lagging those of lower-middle- income countries (Table 1)**.** However, the country performs worse than SSA averages

[1] Comoros is on the World Bank's 2019 Harmonized List of Fragile Situations.
[2] Systematic Country Diagnosis: Towards a more united and prosperous Union of Comoros, World Bank, 2018.
[3] *www.worldbank.org/humancapitalproject*.
[4] Systematic Country Diagnosis: Towards a more united and prosperous Union of Comoros, World Bank, 2018.

in three child health indicators: infant mortality rate, neonatal mortality rate and severe wasting. The gaps between Comoros's health outcomes and lower- middle-incomes averages are significant. Such gaps are even bigger if the country is compared to its aspirational peers; namely Mauritius, Cape Verde, Samoa and Fiji.

Table 1: Comoros's Health Outcomes, Health Service Coverage and Health Expenditures

	Comoros		SSA	Lower middle income
	2000	Latest available year	Latest available year	Latest available year
Outcome Indicators				
Under 5 mortality rate (per 1,000 live births)	102.9	73.3	78.3	50.7
Infant mortality rate (per 1,000 live births)	73.8	55.0	53.3	38.3
Neonatal mortality rate (per 1,000 live births)	41.6	32.8	27.7	24.8
Maternal mortality ratio (per 100,000 live births)	509	335	547	254
Total fertility rate (children per woman)	5.4	4.4	4.9	2.8
Adolescent fertility rate (per 1,000 women ages 15-19)	94.8	65.3	99.8	45.8
Stunting (height for age <-2SD, %)	46.9	32.1	37.5	36.7
Underweight (weight for age <-2SD, %)	25.0	16.9	19.4	25.2
Severe wasting (weight for height <-2SD, %)	7.2	4.4	2.4	4.1
Service Coverage Indicators				
Skilled birth attendance (% of pregnant women)	61.8	82.2	55.3	71.4
Contraceptive prevalence rate (modern methods) (% of women ages 15-49 years)	25.7	19.4	23.7	45.1
DPT immunization (% of children age 12-23 months)	70	91	73.6	82.0
Children who slept under an ITN last night (% of under-5 children)	9.0	41.1	NA	NA
Health Financing Indicators				
Health expenditure per capita (current US$)	13.1	56.7	98.2	92.0
Health expenditure, public (% of total health expenditure)	42.8	32.8	42.6	37.1
Health expenditure, public (% of government expenditure)	9.3	8.7	11.9	6.9

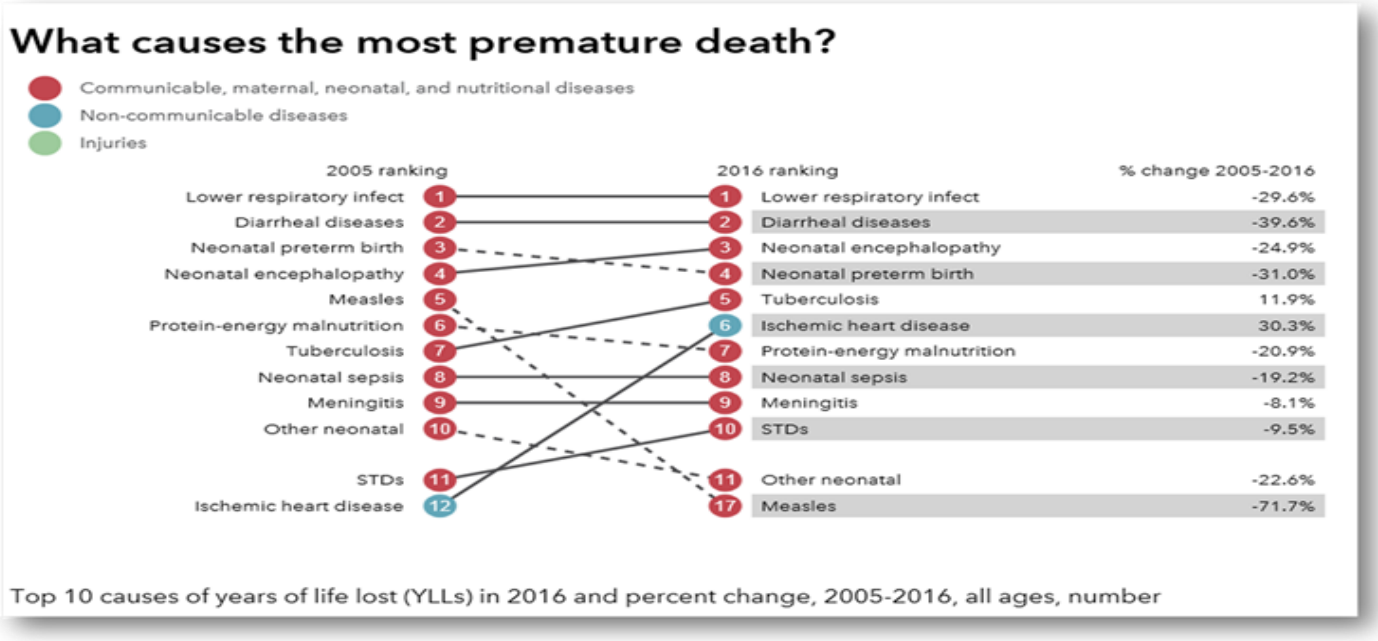
Source: World Development Indicators, 2017.

7. Communicable diseases and child health conditions (including malnutrition) still dominate Comoros's burden of diseases. They account for nine out of the top 10 causes of premature deaths (Figure 1). Especially, Comoros has a high prevalence of diarrheal diseases and acute respiratory infection (ARI) among children under five. 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. [5] Key underlying determinants of undernutrition are early childbearing (with birth by age 18 at 17 percent), low female secondary education enrolment (47 percent) and low sanitation coverage (34 percent).[6]

8. At the same time, Comoros has been facing a significant surge in non-communicable diseases (NCDs). NCDs now account for 41 percent of deaths in the country, compared with 28 percent in SSA. Figure 1 shows that between 2005 and 2016, ischemic heart disease has 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.[7]

Figure 1: Causes of Premature Death in Comoros



Source: Institute for Health Metrics and Evaluation, 201.7

9. Comoros has yet to make a full fertility transition and is still a long way from reaping the demographic dividend. Over the last 15 years, population growth averages 2.4 percent per year, which is below the SSA average but higher than that of lower-middle-income countries. With around 4.4 children per woman, Comoros falls in the group of countries where the fertility transition has been initiated but fertility rates remain high, particularly among adolescents at 65.3 per 1,000 women aged 15 to 19.[8] Contraceptive prevalence rate is low and declining between 2000 (25.7 percent) and 2017 (19.4 percent). Over the next 15 years, the total population is projected to increase by 50 percent and the size of the labor force to double, resulting in employment creation and poverty reduction challenges as well as additional pressures on limited land and natural resources.[9]

[5] Demographic Health Survey (DHS)-MICS 2012 and WBG Report, Comoros Action Plan for Targeting and UHC, 2017, Comoros
[6] Global Nutrition Report: *https://globalnutritionreport.org/documents/224/Comoros.pdf.*
[7] World Health Organization (WHO), Comoros STEP Wise report, 2011.
[8] As per Guengant 2017, there are five groups of SSA countries: (i) fertility transition complete (or close to completion) with total fertility rate (TFR) is less than 3; (ii) fertility transitions underway with TFR is in the 3-4 range; (iii) fertility transitions initiated with TFR in the 4-5 range; (iv) slow and irregular transition with TFR in the 5-6 range; and (v) very slow and/or incipient fertility transitions with TFRs over 6.
[9] Systematic Country Diagnostic. Towards a more united and prosperous Union of Comoros; World Bank Group; 2017.

10. Comoros's health system consists of three levels of facilities. They are central (a national referral hospital); intermediate (one regional hospital in each of the three islands); and district (17 district health centers and 73 health posts). District facilities and the nascent community health platform constitute Primary Health Care (PHC). Paragraph 15 gives details of the community health platform.

11. Overall, health service access and utilization have improved. On average, 63 percent of the population live within 5 km of a health facility. However, geographical access varies among the islands with 45 percent in Ngazidja, 69 percent in Mwali and 74 percent in Ndzuwani. To help ease this constraint, the Government has been providing the poorest households with patient transport subsidies, especially for referrals among islands. As Table 1 shows, 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). Similarly, with a DPT immunization rate of 91 percent among children age 12-23 months, Comoros outperforms SSA (73.6 percent) and lower-middle-income countries (82 percent).

12. However, PHC is still facing major challenges. While a PHC approach is the most efficient, fair and cost-effective way to organize a health system, significant deficiencies in Comoros's PHC remain. Less than half (48.9 percent) of pregnant women receive full antenatal care (ANC) which is defined as four ANC visits or more. Only 38.1 percent of children under 5 with suspected pneumonia are taken to an appropriate health facility or provider. Although data on quality of PHC are extremely limited, available information indicates major quality deficits, especially in the process of care and patient outcomes. For example, only 33 percent of ANC clients are counseled on complications, 27 percent of women who delivered in a facility receive a timely check-up postpartum, 23 percent of children with pneumonia receive antibiotics and 37.5 percent of children with diarrhea receive appropriate treatment.[10] Blood pressure under control is only achieved in 27 percent of hypertensive cases.[11]

13. To better understand the system constraints, a rapid mixed methods assessment of PHC system quality in Comoros was jointly conducted by the Ministry of Health, Solidarity, Social Protection and Gender Promotion (MOH) and the World Bank in January 2019. The assessment examined all the elements of the foundation of quality PHC (population, governance, platforms, workforce and tools) as per the framework by the Lancet Global Health Commission on High Quality Health System,[12] using the Primary Healthcare Performance Initiative's data collection approach. Figure 2 provides more details of the framework.

14. The assessment found that delivery of quality PHC in Comoros is hindered by major constraints in governance, capacity and institutions. At the population level, there is little citizen engagement and patient empowerment. People do not trust PHC and prefer to seek care in hospitals. In terms of governance, various important health policies, strategies, regulations, standards and norms are yet to be developed. Other than the performance-based financing (PBF) scheme put in place since 2016 (see Paragraph 20 and Box 2 below) with the support of the French Development Agency (*Agence Française pour le Développement*, AFD), there are not significant accountability mechanisms in PHC. A culture of monitoring and evaluation (M&E) for decision making and improvement is yet to take root, especially in quality of care. The capacity of key institutions for stewardship or service delivery in PHC is low. As a result, the country does not have a systematic approach to quality of care and key quality improvement interventions such as licensing, training, supportive supervision, clinical mentorship/coaching, and clinical audit are very patchy. Others, for example, accreditation, pay for

[10] Kruk M. E. et al. Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. *Lancet* 2018.
[11] Dzudie A, Kengne A. P., Muna W. F., Ba H., Menanga A., Kouam C. et al. Prevalence, awareness, treatment and control of hypertension in a self-selected Sub-Saharan African urban population: a cross-sectional study. BMJ Open. 2012;2(4):2012–001217.
[12] Kruk et al. ibid.

quality, and continuous quality improvement are absent. There are no clear recruitment and promotion criteria for PHC workers to form a basis for a career development path. The growing private sector is unregulated by the national government. In terms of tools, the majority of PHC facilities have unmet needs in equipment and infrastructure. Regarding the PHC workforce, 60 percent of staff in public facilities are volunteers, which is an anomaly not only in the region but also globally. Annex 2 has details.

15. The community health platform is particularly underdeveloped. The National Community Health Strategy was developed in 2014 with the plan to put in place at least two Community Health Workers (CHWs) per village. The CHWs, to be trained and supervised by district health centers and health posts, would be responsible for the delivery of a package of community health interventions. However, the implementation of the National Community Health Strategy has been very small-scale and fragmented. The most significant effort in community health so far is the introduction of this platform in 69 of the poorest villages/communities on three islands, representing only 22 percent of the total in 2016 with the support of the World Bank-financed Comoros Social Safety Net project.[13] Under the nutrition component of this project, 100 CHWs were trained and put in place for the delivery of a minimum package of nutrition-specific interventions for the "first thousand days" window of opportunity—from pregnancy to two years of age. It also promotes better nutrition and reproductive health for mothers. United Nations Children's Fund (UNICEF) Comoros is the implementing agency of this component with US$1 million grant from the project. Other than this initiative, Comoros's community health platform is very nascent. There are some CHWs, but they are only activated during specific health campaigns. Given the limited coverage of community health so far, it is critical to further expand this platform in Comoros.

16. 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 was rated 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 is also low, per the JEE.

17. Comoros spends much less on health than SSA and lower-middle-income country averages. Total health expenditure per capita is around US$57, which is much lower than both the SSA average (US$98) and lower-middle-income countries' average (US$92)**.** Government spending on health accounts for 32.8 percent of total health expenditure, which is also lower than SSA average (42.6 percent) and lower-middle-income countries' average (37.1 percent). Health accounts for 8.7 percent of total government spending. As the result of low public spending on health, the share of out-of-pocket (OOP) spending on health in total health expenditure at 43 percent is much higher than the WHO-recommended threshold of 20 percent. Coverage of private health insurance schemes ("Health Mutuelle") is low at 3.3 percent of the population as of 2012.[14] Every year, OOP for health drive 1.7 percent of the population into poverty, increasing the overall level of poverty by 5 percent. In other words, on average, 35 Comorians fall into poverty daily because of catastrophic health expenditures. Many already poor households experience a deepening of poverty due to

[13] The Comoros Social Safety Net Project (P150754) is financed by a US$6 million IDA grant. Its PDO is to increase poor communities' access to safety net and nutrition services. It became effective on July 2, 2015 and will close on June 30, 2019.
[14] Politique Nationale de Protection Sociale en Union des Comores, July 2012.

OOP.[15] Around 67 percent of the population self-report problems in accessing health care due to treatment cost.[16]

18. Health is prominent in the Government's 2016-2021 Multisectoral Five-year Investment Plan *(Plan d'Investissement Quinquennal*, PIQ). The overall objective of the health-related action plan in this five-year PIQ is "to improve the health status of the Comorian population through an efficient and equitable health system." The immediate goal is to improve accessibility and quality of essential health and nutrition services to the population. Activities to achieve this goal include: (i) improving supply side through the construction/rehabilitation of health facilities, provision of equipment and essential generic drugs; (ii) developing community health service focusing on maternal and child health (MCH); (iii) continuing and scaling up the PBF scheme in MCH; (iv) creating a health solidarity/equity fund through the taxation of goods and services; and (v) conducting National Health Accounts and developing national health financing policy.

19. The Government has recently made a commitment to Universal Health Coverage (UHC). The Parliament has ratified Law No.17-012/AU to establish a compulsory National Health Insurance System (NHIS or General Health Insurance (*Assurance Maladie Généralisée*, AMG) for UHC (summarized in Box 1) to be funded by (i) contribution from the formal sector and (ii) government subsidies for the non-formal sector, especially the poor. The law also identifies several measures to strengthen service delivery in preparation for the AMG. They include the introduction of an accreditation system, a referral mechanism and other interventions to strengthen quality. A technical committee was also established to guide the implementation of the new law.

Box 1. Comoros's Proposed National Health Insurance System

Vision

- Benefits package: progressive expansion of selective PHC interventions in the benefits package, with priorities given to MCH, communicable diseases and selected NCDs. Benefits package also includes a capped amount for hospital care (emergencies, surgeries, other hospital inpatient and outpatient care).
- Population coverage: the entire population of Comoros.
- Financial protection: progressive reduction of out-of-pocket payments for people with health insurance.
- Financing: through contributions and government's subsidies for the poor.
- Provisional costing: KMF (Franc Comorien) 10 billion per year (18 percent of Government of Comoros (GoC) budget).

Road map

- Completed: bill adopted and promulgated, details of the benefits package under discussion, preparatory studies initiated.
- Pending: adoption of regulations, establishment of agencies (National Fund for Social Safety), discussion on funding (contribution and subsidies), development National Health Insurance Communication Plan.

Challenges

- Ambitious roadmap and timeline (to be launched in the first quarter of 2020).
- Unclear plan for financing, particularly for the informal sector and the poor.
- Low quality of care can be a factor which deter people from enrolling.

[15] Sub-National Analysis of Systematic Differences in Health Status and the Access to and Funding of Health Services: An Example from Comoros. World Bank 2016.
[16] PPCPI 2018.

20. Since 2011, the AFD has been supporting a PBF scheme under the Health Sector Support Project for Comoros *(Projet d'Appui au Secteur de la Santé aux Comores,* PASCO*)*. PASCO reimburses public facilities for the provision of (i) a package of MCH services, including family planning, at PHC level and (ii) C-section at the hospital level at significantly reduced user fees. The scheme has shown promising results. The service utilization rate has increased from 26 percent at baseline to 80 percent for facilities in the scheme. PASCO reimbursements account for 40- 60 percent total non-salary income of facilities (in all facilities of 15 districts out of 17). However, the scheme is only limited to pay-for-quantity so far and has yet to incorporate pay for quality. It will close by the end of 2020. See Box 2 below for more details.

Box 2. Third-party PBF Scheme in Comoros

The third-party PBF scheme in the Union of Comoros was set up to (i) improve financial accessibility to health services through subsidizing the cost of a package of essential MCH services and (ii) stimulate the performance of health facilities. The scheme is financed by AFD under the PASCO project.

The verification and payment mechanism. MOH contracts National Federation of Health Mutual of Comoros *(Federation Nationale des Mutuelles de Santé des Comores,* FENAMUSAC) to be the verification and payment agency. FENAMUSAC then enters into contracts with each eligible facility in the PBF scheme. Facilities are paid based on verified delivery of pre-defined health services. The scheme has three levels of verification of results.

First level of verification: Once the contracted services have been provided, a facility submits an invoice to FENAMUSAC. FENAMUSAC then visits the facility and compares the invoice with the facility's registry/cards. Afterwards, the facility sends the final invoice to FENAMUSAC which then forwards it to the Island Technical Group (GTI).

Second level of verification: GTI meets to validate the invoices by comparing them to the service record sheets and then issues a payment order. On this basis, facilities are paid.

Third level of verification: GTI generates a list consisting of a random subset (50 percent) of patients from the registry of payable services for community-level verification. Community verification associations contracted by FENAMUSAC contact such patients in their communities to verify that they indeed received the health services. Misreporting by health facilities as discovered through community verification can result in penalties.

Governance: At the central level, a National Performance Committee (NPC) provides oversight and strategic guidance to the PBF scheme. However, this committee is not yet functional. At the island level, each island has an GTI with the mandates to (i) conduct the second level of verification and (ii) to establish the list of random patients for community verification.

Incentives for quality of reporting. In addition to payment for contracted services, there is also a bonus/malus payment for the quality of reporting. Quality of reporting is defined as the difference between the quantity of services reported by facilities and the quantity verified by FENAMUSAC. When this difference is 2 percent or less, quality of reporting is considered good and facilities receive a bonus up to 2 percent of their total payments. Above this threshold, a facility is penalized for each additional point of percentage in discrepancy. For example, if the difference is 5 percent, total payment to the facility will be reduced by 3 percent. Other than incentives/disincentives for quality of reporting, the PBF scheme has not been able to incorporate any element of pay for quality of care. It is therefore mostly a pay-for- quantity scheme.

C. Relevance to Higher Level Objectives

21. The proposed project is fully in line with the strategies and visions for health and nutrition of the GoC. The project supports the GoC's Accelerated Growth and Sustainable Development (SCADD) Strategies for the 2018-2021 period, especially (i) SCADD Core Strategy 2 "Accelerating the development of human capital and promoting social well-being and (ii) Strategic Objective 2.1 "Promote population health and nutrition and accelerate the demographic transition". It also contributes toward the achievement of UHC stipulated in the new law No.17-012/A.

22. The proposed project is aligned with various World Bank strategies and objectives. First, it is fully in line with the World Bank Group's (WBG) twin goals of reducing poverty and promoting shared prosperity. Second, it is meant to support Pillar 2 (shared growth and increased employment) of the WBG's Comoros Country Partnership Strategy (CPS) for FY14-19[17] (Report No. 82054-KM) and specifically Objective 5 which seeks to improve effectiveness of social safety nets and active labor markets. Third, it will address some of the binding constraints identified in the World Bank's 2018 Systematic Country Diagnosis (SCD) for Comoros through its focus on improving health system governance, institutions and capacity. Fourth, it is part of the Word Bank's Human Capital Plan (HCP) for Africa. The objective of the plan is to enable Africa's young people to grow up with optimal health and equipped with the right skills to compete in the digitizing global economy.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

23. The project development objective is (i) to improve utilization of quality PHC and (ii) strengthen capacity of institutions which are critical to quality PHC.

24. The following PDO Level indicators will measure the achievement of the PDO:

a. PHC facilities with accreditation level 2 above as per the facility accreditation program (number)
b. PHC facilities participating in the PBF scheme supported by the project which reimburses for both quantity and quality of service (number)
c. People who have received essential health, nutrition and population (HNP) services (number) (including the following three underlying indicators: number of children immunized; number of women and children who have received basic nutrition services; number of deliveries attended by skilled health personnel)[18]
d. Functional community health sites (number)
e. Annual District and National Health Assemblies (number).

B. Project Components

25. The project will support the strengthening of the foundational elements of a quality PHC system: infrastructure, workforce, service delivery platforms, governance, institutions for quality, and citizen engagement/empowerment, to

[17] The CPS FY14-FY17 was extended to cover FY14-FY19 by Performance and learning review (PLR, Report No. 125363-KM)
[18] These are also World Bank's Corporate Results Indicators (CRI) for HNP.

bring quality PHC closer to the people. Support for such elements are organized into four components.

26. Component 1. Improving PHC infrastructure, workforce, and service delivery platforms (US$22 million equivalent). This component will support: (i) rehabilitation of district centers and health posts[19] and provision of PHC equipment and vehicles; (ii) pre-service and in-service training for selected health cadres as well as recruitment of PHC health workers; (iii) a PBF scheme in PHC; and (iv) scale-up of the community health and nutrition platform piloted under the Comoros Social Safety Net Project.

27. *Subcomponent 1.1: Supporting the rehabilitation of PHC facilities (district health centers and health posts) and the provision of PHC equipment and vehicles*. The project will support minor rehabilitations (including those related to improving health care waste management and facility resilience to climate change) and provision of equipment for selected existing health centers and health posts based on a comprehensive needs assessment. No financing for new facility constructions is expected. Ambulances and vehicles will be procured to support (i) emergency referrals and (ii) PHC supervision in health districts. The project will also contribute to the piloting of Emergency Medical Service (EMS) units in two districts.

28. *Subcomponent 1.2: Improving PHC workforce*. This subcomponent will finance selected in-service and pre-service trainings in PHC as part of its support for the implementation of the National Human Resources for Health Policy. A comprehensive five-year training plan will be developed and updated annually on a rolling basis. On that basis, the project will finance a subset of the training plan. Support for pre-service clinical training includes (i) at least 20 scholarships for overseas training in selected specialties such as pediatrics, obstetrics-gynecology (OB-GYN), surgery and anesthesia[20] and (ii) assistance for the nursing school in Moroni to adopt a competency-based curriculum in nursing and establish the laboratory technician training program. Support for non-clinical pre-service training includes, *inter alia*, training in public health, health economics, health management and planning to help create a pipeline of heath leaders/experts for the country. For in-service training, the project will support the development and implementation of integrated curricula for continuous professional development (CPD) that prioritizes (i) training in quality of care and patient safety for PHC health workers; and (ii) training in health management and planning for managers at both national and district levels. On-the-job trainings will be linked to the PBF or pay for performance scheme for PHC facilities, with the use of training outcomes as part of the performance indicators. Finally, the project will support the recruitment of PHC professionals for selected district health centers with the aim to reduce the reliance on volunteers. The administration will examine the possibility of integrating these positions into the government payroll when the project ends.

29. *Subcomponent 1.3: Supporting the PBF scheme in PHC*. Building on the PBF experience with 58 health centers supported by PASCO so far, the project will expand the PBF scheme to the remaining 32 health centers. Although the project will adopt the key approaches of the PBF scheme under PASCO as described in Box 2, it will also introduce new features, including (i) expansion of the PBF service package to include more services (e.g. selected NCD interventions such as opportunistic screening of hypertension and diabetes and their management at the PHC level) and (ii) addition of a pay-for-quality component to the PBF scheme (beyond the existing pay-for-quantity approach). For the latter, PHC facilities in the scheme will undergo a quarterly quality assessment, using a detailed Balanced Score Card. PBF payments to facilities will be a function of quality and quantity performance by facilities, with the aim to stimulate health workers' performance. It also provides an entry point to introduce more facility managerial autonomy and more accountability

[19] District health centers are headed by a medical doctor whereas the health posts are managed by midwives or nurses. Health posts are under the supervision of district health teams.

[20] While these specialists are critical to (i) the PHC continuum and (ii) the training, supervision and mentorship for PHC health workers, such pre-service specialty trainings are not available in Comoros.

for results. The project will closely coordinate with PASCO in terms of institutional arrangements (for example, third-party payment, verification of results, and mainstreaming) to maximize synergy and avoid duplication. When PASCO ends (expected date: December 2020) the project will take over the support for the PBF scheme in all the 90 PHC facilities[21] while awaiting the effective implementation of the NHIS.

30. ***Subcomponent 1.4: Scaling up the community health platform***. The project will support the continuing implementation of the National Community Health Strategy 2014-2016 through the recruitment, training, motivation, supervision and monitoring of CHWs to deliver a package of health, nutrition, family planning and early years development services at the community level. Built on the experience of the World Bank-financed Social Safety Net project, the service package provided by CHWs will be complemented by a peer-led education approach. In this approach, each community group will elect a lead mother ("mother leader") to provide peer support and organize regular community discussions on health, nutrition, family planning, early years development, and other topics of their interest. Such activities aim to build knowledge and skills of caretakers as one of the major pathways to improving PHC outcomes. Mother leaders will also be linked to CHWs and PHC facilities to foster coordination among them. The project will scale up the community health platform from the 69 poorest communities/villages under the Social Safety Net project to at least 170 additional villages, or 40 percent of total population owing to MOH capacity constraint.

31. Component 2: Strengthening institutions and governance which are critical to (i) quality PHC and (ii) response to disease outbreaks (US$5 million equivalent).

32. This component will support the strengthening and operationalization of selected institutions and governance structures which are critical to (i) quality PHC and (ii) disease outbreak response. These include, *inter alia,* the Directorate of Public and Private Health Structures (*Direction des Etablissements de Santé Publics et Privés*, DESPP) which takes the lead in setting quality standards, norms and regulations; the Department of Health Promotion (*Direction de la Promotion de la Santé,* DPS) (which is also responsible for coordination of communications in public health emergencies); the National Technical Platform of Health Infrastructure, Pharmaceutical and Procurement (OCOPHARMA); the emergency medical aid services and Public Health Emergency Operations Center; Health Professional Associations; and quality units (or quality committees) at the facility levels.

33. It will support such entities to:

a. Develop relevant sector policies, strategies, plans and regulations.[22]
b. Develop/revise and implement quality standards, norms, protocols, guidelines, and procedures, including a health facility accreditation program; an integrated supportive supervision scheme for PHC facilities with a focus on quality, using a standardized quality checklist which include skills assessment; and initiatives to improve quality of care such as clinical mentoring/coaching and team-based quality improvement approaches.
c. Strengthen their capacity to implement their most critical mandates related to quality PHC and response to disease outbreaks.
d. Strengthen their M&E, including purposeful quality of care monitoring at the PHC facility level for accountability and improvement.

[21] The public health structures in the Comoros are composed of: a national hospital center; three regional hospitals on the island; 17 district health centers; and 73 health posts.
[22] Priorities include the revision of the interim National Health Strategic Plan 2019-2021 and the development of (i) National Strategy for Quality of Care; (ii) National Strategy for Non-Communicable Diseases Control; (iii) National Health Strategic Plan 2017-2022; (iv) National Health Risk Communication Strategy; (v) National Antimicrobial Resistance Action Plan; and (vi) National Infection Prevention and Control

e. Conduct selected assessments, pilot innovations and carry out operational research.

The support will be in the form of technical assistance (TA), selected equipment, consultancy; and non-salary operating costs.

34. Component 3: Citizen engagement and empowerment, project management, M&E, (US$3 million). This component will finance (i) citizen engagement, patient empowerment and support, and (ii) project management and project M&E.

35. Su*bcomponent 3.1: Citizen engagement, patient empowerment and other patient support*. This will include support for (i) strengthening of PHC facilities' community management boards to help them better carry out their mandates; (ii) establishment and/or strengthening of the associations of people living with hypertension, diabetes, chronic respiratory diseases, cancer support groups, etc.; (iii) periodic implementation of a patient experience survey at least every 2 years; (iv) Annual District and National Health Assemblies to bring all key stakeholders and citizen representatives together once a year to discuss health issues and come up with resolutions; and (v) inter-island patient transfer, targeting the two poorest quintiles.

36. *Subcomponent 3.2: Project management and project M&E*. This sub-component will finance Project Implementation Unit (PIU) staff salaries and other operating costs to enable the PIU carry out its mandate covering coordination, financial management (FM), procurement, audits, and M&E. M&E support will include contributions to (i) the Service Availability and Readiness Assessment (SARA) baseline and end-of-project study; (ii) the EDS/MICS survey; and (iii) annual joint reviews of the health sector, all of which will be co-financed by various Development Partners (DPs).

37. Component 4: Contingent Emergency Response Component (CERC), (US$0 million). A CERC will be included under the Project in accordance with paragraphs 12 and 13 for situations of urgent need of assistance or capacity constraints of the World Bank Policy for Investment Project Financing (IPF) . This will allow for rapid reallocation of project proceeds in the event of a natural or man-made disaster or crisis that has caused, or is likely to imminently cause, a major adverse economic and/or social impact.

38. **Project Cost and Financing:** The proposed total project cost is US$30 million over five years (Table 2).

Table 2: Project Costs by Component (in US$ million)

Project Components	Project cost	IDA Financing
Component 1: Improve PHC infrastructure, workforce and service delivery platforms	**22.0**	**22.0**
Sub-Component 1.1: Supporting rehabilitation of district health centers and health posts, provision of PHC equipment and vehicles	5.0	5.0
Sub-Component 1.2. Improving PHC workforce	4.0	4.0
Sub-Component 1.3: Supporting the PBF scheme in PHC	8.9	8.9
Sub-Component 1.4: Scaling up the community health platform	4.1	4.1
Component 2: Strengthening institutions and governance which are critical to (i) quality PHC and (ii) response to disease outbreaks	**5.0**	**5.0**
Component 3: Citizen Engagement and Patient Empowerment, Project Management, Monitoring and Evaluation	**3.0**	**3.0**
Sub-component 3.1: Citizen engagement and patient empowerment	0.5	0.5
Sub-component 3.2: Project Management and Project M&E	2.5	2.5
Component 4: Contingency Emergency Response Component	**0.0**	**0.0**
Total Project Costs	**30.0**	**30.0**

C. Project Beneficiaries

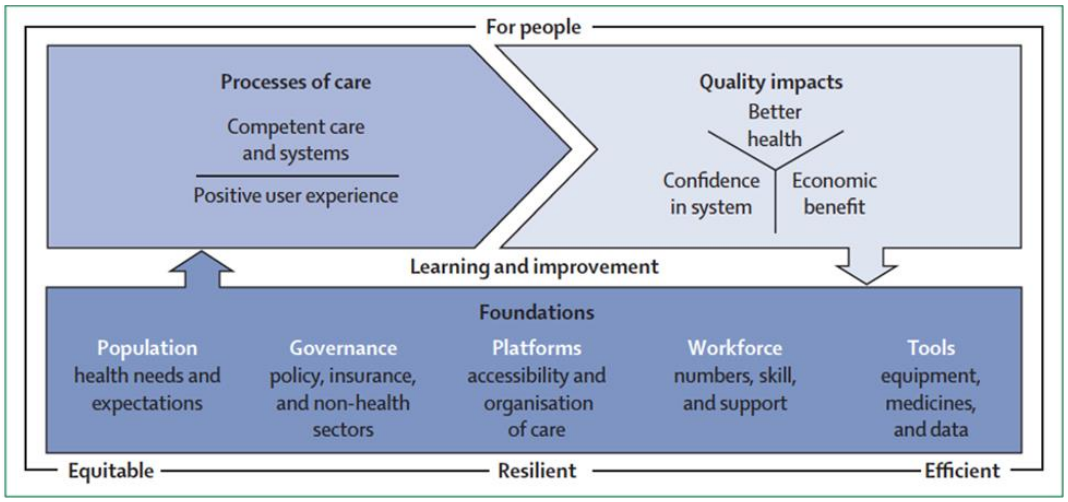
39. The project beneficiaries are the people of the Union of Comoros, particularly children under five, women, adolescents, patients with NCD as well as PHC providers in the public sector.

D. Theory of Change and Results Chain

40. **The project design is guided by the High-quality Health Systems (HQSS) framework (HQSS framework)**. The Lancet Global Health Commission on High Quality Health Systems framework (Figure 2) calls for health systems that are for the people, equitable, resilient and efficient. The Commission makes the case that the most sustainable and effective way to build a high-quality health system is to strengthen its *foundations*– population, governance, platforms, workforce

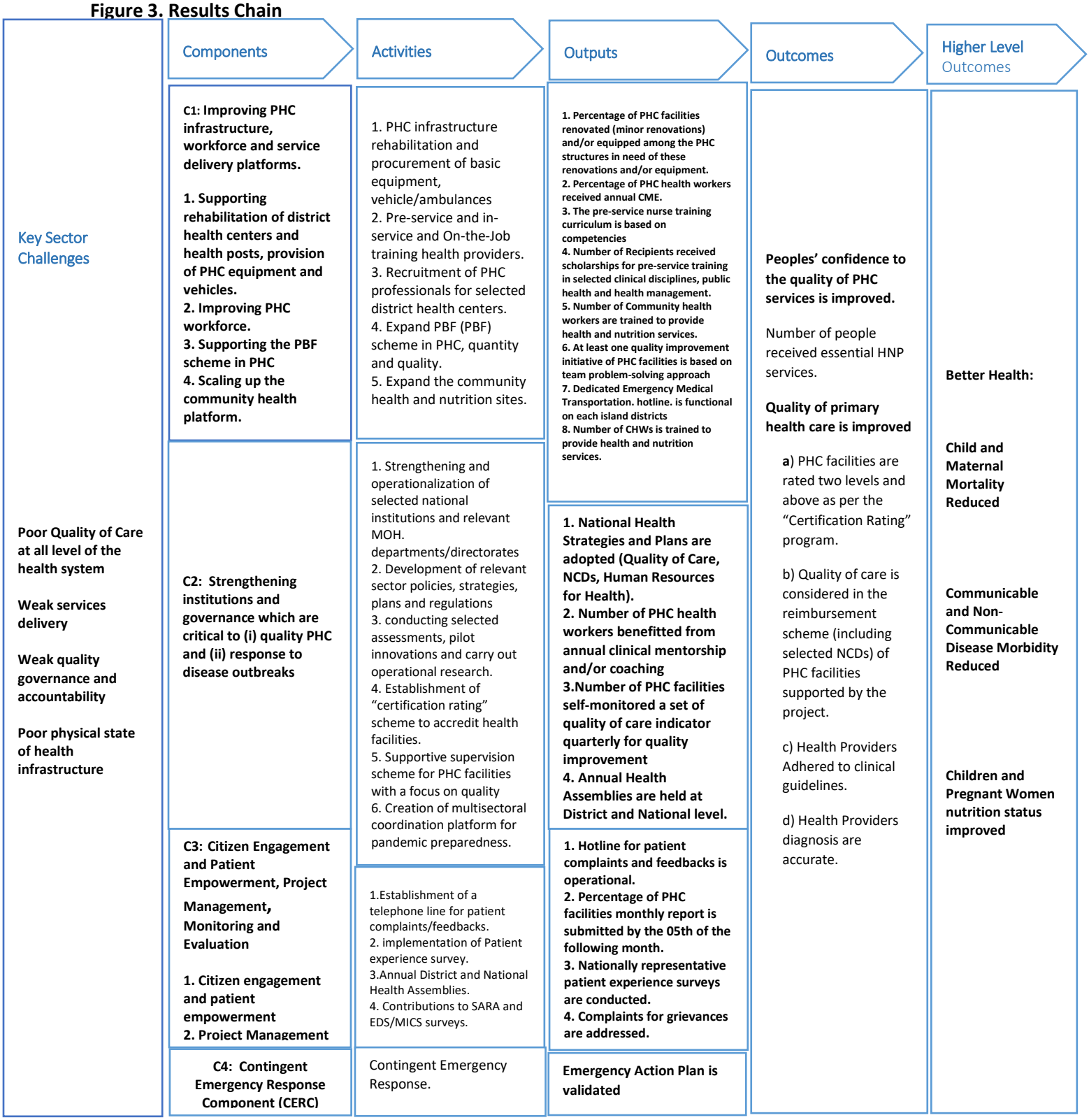
and tools. Such strong foundations make high quality process of care, and therefore quality impacts, possible. Good quality impacts, in turn, reinforce the foundations. Data and learning systems facilitate the interactions among the elements of the framework and inform system improvements. The four primary improvement recommendations from this Commission are to govern for quality, ignite demand for quality, transform the workforce through pre-service education and redesign health systems. Figure 3 details the results chain.

Figure 2. High Quality Health Systems Framework



Source: The Lancet Global Health Commission on High Quality Health Systems, 2018.

Figure 3. Results Chain



E. Rationale for World Bank Involvement and Role of Partners

41. The value added of the World Bank support is three-fold. First, it provides the much-needed financing to Comoros' health sector, for which both domestic funding and external support are limited. Second, the World Bank can amplify the effectiveness of its financing with the sharing of knowledge and solutions. Given its global footprint, the World Bank has a strong comparative advantage in knowledge management and can share with Comoros the international experience and innovations in health systems strengthening including PBF, health financing, Human Resources for Health, supply chain management, governance, public financial management (PFM), M&E, operational research, etc. Third, World Bank's financing is accompanied by intensive implementation support in both operational and technical matters to help the country achieve the PDO.

42. There will be close coordination with DPs. There are few DPs active in Comoros's health sector (details in Annex 3). In terms of financing, AFD is the only significant bilateral partner for health, and there is a clear division of labor and complementarity between World Bank and AFD support in four aspects. First, the project will focus on PHC while AFD will prioritize its support for hospitals in the next cycle to funding for Comoros, starting from 2020. Second, the project will scale up the PBF scheme in the districts which AFD does not cover. Third, the project will add a pay-for-quality element which currently does not exist. Fourth, the project will take over the support for the entire PBF scheme when PASCO closes in 2020. Regarding other DPs in Comoros active in PHC/health system strengthening such as WHO, UNICEF, United Nations Population Fund (UNFPA), GAVI Alliance (formerly the Global Alliance for Vaccines and Immunization) and Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), the World Bank will continue to collaborate and coordinate with them to ensure alignment and synergies of support.

F. Lessons Learned and Reflected in the Project Design

43. The project design has taken on board the recommendations of the World Bank's 2017 Discussion Paper "Comoros Action Plan for Targeting and UHC." The paper highlights the key elements that are needed to improve service delivery in Comoros**.** These include, *inter alia*: (i) expanding the PBF program both in terms of geographical coverage and the scope of the PBF service package in collaboration with AFD; thereby stimulating health facilities to provide more priority services to meet national targets; (ii) ensuring supply side readiness and improving quality of care for effective coverage; (iii) improving technical platforms and means of transport developing the capacity for purchasing in Comoros; and (iv) strengthening clinical and management training to improve technical and managerial capacity of health staff. All these elements are reflected in the project design.

44. The project is informed by the three recent major global reports on quality of care. The year 2018 saw the release of three major global reports on quality of care: (i) "High quality health system in the Sustainable Development Goal (SDG) era: time for a revolution" by the Lancet Global Health Commission on High Quality Health Systems; (ii) "Delivering quality health services: a global imperative for UHC" by WHO, World Bank and the Organisation for Economic Co-operation and Development (OECD); and (iii) "Crossing the global quality chasm: improving health care worldwide" by the US National Academies Press. All three reports make the case that improving quality of care should be a core component of UHC, along with expanding coverage and financial protection. Such an effort will require system-wide actions because there is no single silver bullet in improving quality of care. Multiple interventions on various fronts (population, governance, service delivery platforms, workforce and tools) for various relevant stakeholders who have a role to play are needed to build an ecosystem for quality and introduce a culture for quality.

45. The project's PBF design is built on the existing PBF scheme supported by AFD as well as the World Bank's global experience in PBF. The PBF subcomponent draws on the PBF model under PASCO, especially in terms of institutional arrangements, verification, pricing of services, etc. It also takes into account the World Bank's experience in supporting PBF in more than 40 low- and middle-income countries, which shows that it is critical to link PBF payment to quality of care, not just quantity of services. For this reason, a pay-for-quality element will be added to the PBF scheme in Comoros. Another lesson is the need to empower facilities and give them more managerial autonomy/flexibility while holding them accountable for actual results. Therefore, improving managerial autonomy and PFM of facilities will be part of the PBF design.

46. The project's support for the community health platform is informed by the experience of the Comoros Social Safety Net Project. One major lesson from the Social Safety Net Project is the need to engage and empower community peer groups to amplify the effectiveness of CHWs. For this reason, in addition to supporting CHWs, the project will also scale up support for community peer groups led by "mother leaders" who serve as the linkage between communities with CHWs and facilities.

47. The project draws on lessons from other World Bank-supported health operations in small island states. The World Bank has supported various health operations in small island states in the Caribbean and South Pacific. Key lessons of such operations include the need to: (i) consider a more comprehensive range of interventions in a project for a small island state, given the country's size, needs and limited available support from DPs; and (ii) build local capacity and institutions for long-lasting impacts.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

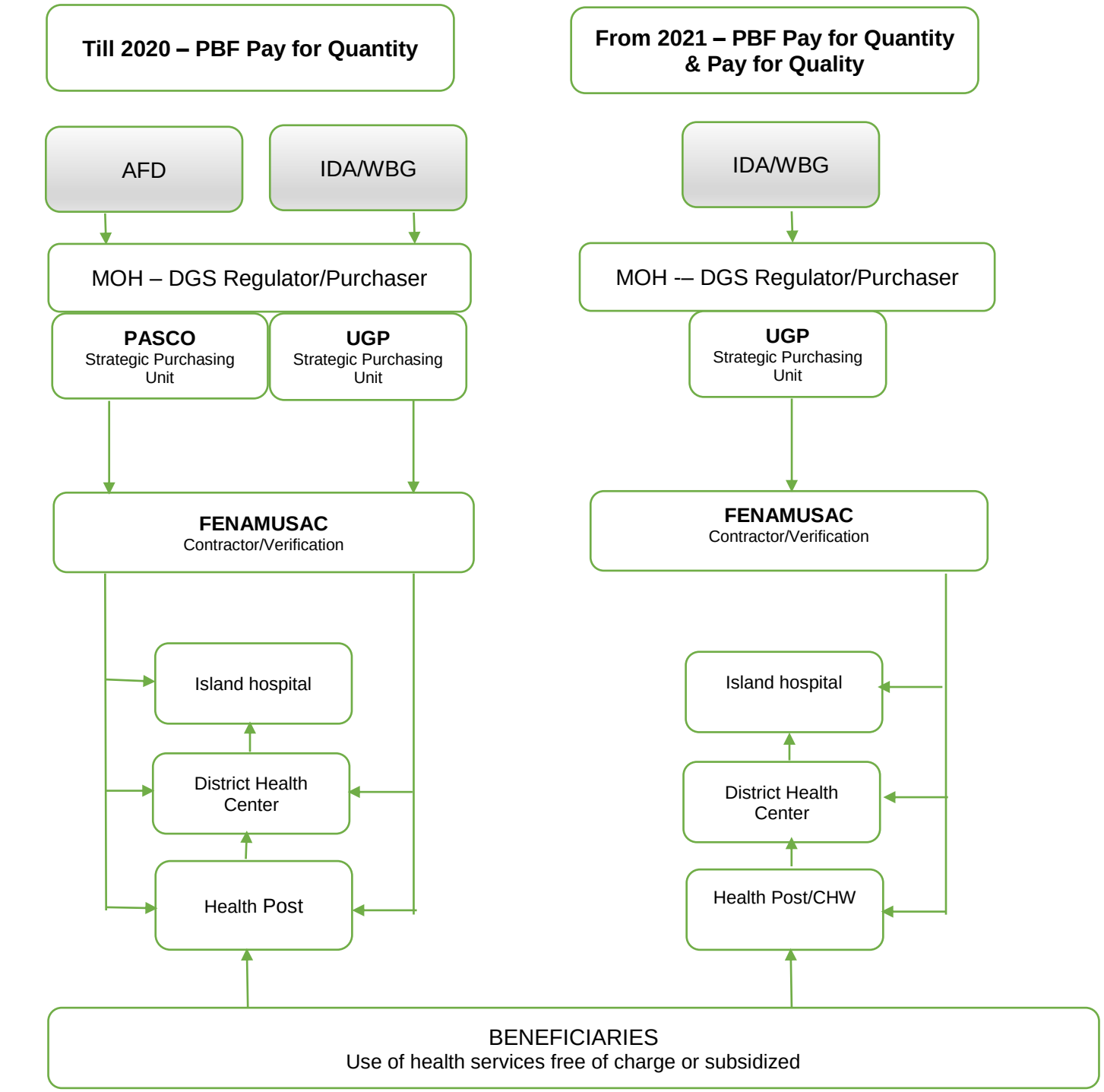
48. The MOH is the Project's Implementing Agency. MOH is responsible, under the leadership of the General Director for Health (*Direction Générale de la Santé,* DGS), for project implementation, technical oversight and overall coordination of all the project stakeholders. The Director of the Regional Health Directorate will oversee the implementation of project activities at the regional (island) level.

49. The MOH's Project Implementation Unit (*Unité de Gestion des Projets, UGP)* will be responsible for the fiduciary matters as well as other day-to-day management of the project. UGP was established as a MOH unit in February 2019 to take charge of fiduciary matters and other day-to-day management of all health projects financed by DPs including the International Development Association (IDA), in close collaboration with different national and regional structures of the MOH. Different MOH departments and GoC agencies who benefit from the project support will develop annual workplans with detailed activities and proposed budgets for UGP's validation. UGP will then consolidate annual workplans and submit to the World Bank for No Objection. To ensure that UGP can carry out its mandates, the Project will support (i) capacity building for UGP in procurement and FM and (ii) selected key UGP positions at the central and regional levels.

50. The institutional arrangements for the PBF scheme will mirror those under PASCO. Like PASCO, UGP will play the role of the Strategic Purchasing Unit for the PBF scheme supported by the Project, while FENAMUSAC will play the role of the verification agency (including community-based verification). When PASCO closes in 2020, UGP will be the sole Strategic Purchasing Unit for PBF in the country (Figure 4). For sustainability, when the Project closes in 2024, the Strategic Purchasing Unit will transition from UGP into either the General Directorate for Studies, Planning and Statistics

(*Direction Générale des Etudes, de la Planification et des Statistiques*, DGEPS) department of the MOH or the AMG, if such an agency has become operational by then.

Figure 4. PBF Arrangements and Flow of Fund



B. Results Monitoring and Evaluation Arrangements

51. The project will support the generation and use of data for decision making in PHC in Comoros. The project's results framework is a subset of the MOH's M&E framework. Most of the project indicators are from a list of indicators routinely monitored by the MOH. Key data sources include (i) the routine health management information system, which is now being upgraded to DHIS-2 with the support from GFATM; and (ii) other administrative databases maintained by various MOH departments/directorates and UGP. Beyond the project's results framework, the project will support different institutions to strengthen their M&E capacity and arrangements, including purposeful quality of care monitoring at the PHC facility level for accountability and improvement**.** Selected surveys such as SARA, patient satisfaction survey, and MICS will be strategically financed or co-financed by the Project). Under the PBF scheme, the project will support FENAMUSAC to adopt a web-based information technology (IT) solution for the consolidated monitoring of performances by PBF facilities. This is to generate and use of data for decision making in PHC in Comoros.

C. Sustainability

52. The scale-up of cost-effective PHC interventions under the project, using the PBF and community health platforms, will contribute to the project's technical sustainability. Such technical interventions are well-known but have not been implemented in Comoros in a systematic manner. With the use of PBF and community health platforms, coupled with capacity building, the project will help the country to improve the delivery of technical interventions in PHC in a more sustainable manner.

53. The project's strong focus on building institutions and governance is likely to have long-lasting impacts, with positive outlooks on institutional sustainability. The critical role of institutions in sustainable development is undisputable. The Project will strengthen/operationalize various institutions and governance structures which are critical to quality PHC. It will also create the entry points to potentially improve the way such institutions behave and interact with one another in a sustainable manner. However, it is worth pointing out that the track record in mainstreaming PBF schemes supported by World Bank projects into government systems after such projects end remains mixed. Therefore, this issue is not simply related to institutional sustainability; it is also a challenge in financial sustainability. The PBF scheme's linkage to the planned NHIS can increase the likelihood of its sustainability.

54. The project's financial sustainability depends on various factors. One important determinant of the project's financial sustainability is the country's economic outlook, but this is outside the control of the project and the sector. Another factor is whether the project can increase PHC performance—including quality and efficiency—in Comoros and help the country get more health for the money**.** Successful implementation of the project is therefore critical to its financial sustainability. Regarding the PBF scheme, the nation-wide coverage of PBF in PHC will cost 6.5 percent of government's annual expenditure on health**.** These estimates include a 2 percent annualized cost for the maintenance of equipment. Political commitment to health is another important factor for the project's financial sustainability. With the Parliament's ratification of the law related to national health insurance as well as an accreditation system, a referral mechanism and other interventions to strengthen quality, the Government indicates a strong political commitment to UHC.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

55. The project supports scaling up a package of evidenced-based, cost-effective PHC interventions to be delivered through two service delivery platforms—facility-based PBF and community health. Such PHC interventions, with a strong focus on reproductive, maternal, newborn, child and adolescent health and selected NCDs, are universally accepted as "best buys" in health. They are priorities in the interim National Health Strategic Plan 2019-2021 and the National Community Health Strategy.

56. Among those, nutrition interventions particularly stand out as very cost-effective. Poor nutrition in early childhood results in decreased cognitive ability, lower educational attainment, lost earnings, and lower economic output. Malnutrition's most damaging effects occur during pregnancy and in the first two years of life, and the consequences of this early impairment are largely irreversible. Improving child health and nutrition, especially in the first 1,000 days, is critical for addressing the WBG's twin goals of ending extreme poverty and boosting shared prosperity. At the individual level, chronic malnutrition in children is estimated to reduce a person's potential lifetime earnings by at least 10 percent. Studies have shown that a 1 percent loss in adult height results in a 2- 2.4 percent loss in productivity.[23] At the country level, the economic costs of undernutrition are large. A recent analysis estimates these losses at 4 to 11 percent of GDP in Africa and Asia each year. Madagascar and Lesotho annually lose between 7 and 12 percent of their GDP as a result of not addressing developmental needs of children in the first 1,000-day window.[24]

57. As per the most recent Cochrane review (2017), the evidence on PBF effects remains mixed but PBF impact depends on implementation effectiveness. This include incentives for quality of care provided by primary-care physicians, outpatient referrals from primary to secondary care, recruiting and retaining health professionals in remote areas, utilization of services, and patient outcomes. Regarding the impact on quality of care especially, the review indicates that special attention be put on the design and evaluation to secure maximum of intended impact while controlling for unintended consequences. Nevertheless, the review indicates that incentives for recipients of care improves patient return for start or continuation of treatment and service utilization with moderate-certainty evidence.[25]

58. The cost-benefit analysis (CBA) estimates benefits from avoided child mortality, and morbidity. In alignment with the investment, the CBA on maternal and child nutrition encompasses benefits from avoided mortality and morbidity. Avoided morbidity is informed by data in the Global Burden of Disease (GBD) Database and the epidemiology profile of Comoros: diarrhea, acute lower respiratory infection, and a few other infectious diseases. Likewise, interventions to impact on quality of care, with focus on maternal and newborn mortality can include improved coverage of quality services. For family planning and prenatal care, this would comprise of 4-6 prenatal visits including physical exam, urine protein screen, screening and treatment for anemia and syphilis, iron/folate supplementation, tetanus vaccination, and if indicated, treatment for sexually transmitted infections. High-quality intrapartum care would include access to skilled

[23]Horton, S. and R. Steckel. 2013. "Malnutrition: Global Economic Losses Attributable to Malnutrition 1900–2000 and Projections to 2050." In The Economics of Human Challenges, edited by B. Lomborg, 247–72. Cambridge, U.K.: Cambridge University Press.
[24]Richter L, Daelmans B, Lombardo J, Meyman J, Lopez Boo F, Behrman J et a. Investing in the foundation of sustainable development: pathways to scale up for early childhood development. The Lancet 389(10064): 103-118.
[25] Financial arrangements for health systems in low-income countries: an overview of systematic reviews (Review). Cochrane Database of Systematic Reviews, published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.

attendants and Emergency Obstetric Care (EmOC)—timely access to a facility with surgical expertise, critical care capability including blood transfusions, and ability to manage serious obstetric complications that can cause death. Postpartum care would feature a postnatal visit including physical exam, iron and vitamin A supplementation.[26]

59. Costs will solely be covered by the project budget as distributed per targeted interventions. The overall envelope of the project is US$30 million to be invested in five years. Over that period, an estimate of 932,035 beneficiaries will be reached nationwide with infant, child, and maternal nutritional and health services. Among them, 24 percent will be pregnant women, 14 percent infants less than 11 months of age, and 62 percent children aged 12 to 59 months. There will be a focus on quality of care with investment on equipment, and sustained capacity building.

60. The CBA results indicate that in Comoros, the package of interventions—nutrition specific and sensitive activities, overall quality improvement with special target on maternal, newborn and child health—reaching every project beneficiary would yield a net present value (NPV) of US$29.5 million after five years at a 5 percent discount rate. The NPV varies very conservatively against 0 or 3 percent discount rate (see Table 3).

Table 3: CBA Comoros Health Project

Discount Rate	Present Value Total Benefits	Present Value Total Costs	Net Present Value
0	US$60,481,985	US$30,000,000.00	US$30,481,985.00
5%	US$55,733,740	US$26,181,730.31	US$29,552,009.93
3%	US$57,533,796.55	US$27,609,136.06	US$29,924,660.48

B. Fiduciary

(i) Financial Management

61. The project will be implemented by the Project Implementation Unit (PMU) within the MOH. A FM assessment of the PMU was carried out in April 2019 as part of the project appraisal process. The Assessment was carried out in accordance with the World Bank Directives and Policy for IPF and the World Bank Guidance on FM for IPF operations issued on February 28, 2017. The conclusion of the assessment was that subject to the proposed mitigation measures, the FM arrangements within the PIU are acceptable and satisfy the World Bank's minimum requirements.

62. The overall FM risk has been assessed as "High" mainly due to the lack of experience in implementing World Bank projects as well as the high risk related to the funds flow given the decentralization and the nature of activities to be financed. Some mitigation measures have been proposed and, once implemented, the residual risk will improve to "Substantial." Additional information on FM is available in Annex I.

(ii) Procurement

63. The procurement part of the project will be implemented by the MOH. The entity has never implemented a World Bank-financed project but has experience with other donors. A procurement assessment was undertaken on the

[26] Hu D, Bertozzi SM, Gakidou E, Sweet S, Goldie SJ (2007) The Costs, Benefits, and Cost-Effectiveness of Interventions to Reduce Maternal Morbidity and Mortality in Mexico. PLoS ONE 2(8): e750. doi:10.1371/journal.pone.0000750.

MOH and in conclusion, the risk is rated as "High" mainly due to the requirements of the Procurement Regulations for IPF Borrowers. The risk will be mitigated through regular reporting on the progress and implementation of fiduciary activities by the MOH, World Bank supervision, World Bank procurement team hands-on support when required, and further capacity building. Procurement under the proposed operation will be guided by the following documents: (i) the 'World Bank Procurement Regulations for IPF Borrowers' dated July 1, 2016, revised in November 2017 and August 2018 (Procurement Regulations); and (ii) the World Bank's anticorruption guidelines, "Guidelines on Preventing and Combatting Fraud and Corruption," dated October 15, 2006 and revised in January 2011 and as of July 1, 2016. The Project Implementation Manual (PIM) framework will be drafted in accordance with these documents and detailed procedures for administration and handling of procurement-related complaints. As required by procurement regulations, the Project Procurement Strategy for Development (PPSD) and a Procurement Plan covering the first 18 months of implementation were developed and approved by the World Bank.

64. The project will use the World Bank's online procurement planning and tracking tools to carry out all procurement transactions. The Systematic Tracking of Exchanges in Procurement (STEP) will be used for submission, clearance, and update of the Procurement Plan.

a. All goods and non-consulting services will be procured in accordance with the requirements set forth or referred to in Section VI of the procurement regulations.

b. Approved Selection Methods: Consulting services will be procured in accordance with the requirements set forth or referred to in Section VII of the procurement guidelines.

65. Comoros has a procurement regulatory framework, but the national procurement procedures are not widely used for most Ministries and the Client has proposed the use of World Bank's procedures and documents for this project. The proposed project will have complex procurement that will challenge the Borrower's capacity. Procurement activities will be closely followed up by the World Bank team and dedicated consultants.

C. Safeguards

(i) Environmental Safeguards

66. The only safeguards policy triggered by this project is the environmental safeguards policy, OP/BP 4.01 (Environmental Assessment). Its potential impacts are expected to be minor to moderate, temporary, site specific, and manageable. The project's requirement related to OP/BP 4.01 was to prepare an Environmental and Social Framework (ESMF) and a National Medical Waste Management Plan (NMWMP). The ESMF and NMWMP were published in-country and released through the World Bank's website on March 12, 2019. As specific rehabilitation sites are identified, environmental and social screenings will be conducted, and public consultations will be carried out. Environmental and Social Management Plans (ESMP) will subsequently be prepared as needed for site specific interventions based on the risks identified during screening.

67. The proposed project has been assessed as Category B (Partial Assessment) under OP 4.01 (Environmental Assessment) and has been transferred accordingly. The project will finance minor rehabilitation of health infrastructure and the installation of small incinerators at the sites of district health centers. Project activities in Component 1 aim to improve the quality of health and nutrition services at the PHC level. All of this is expected to yield positive social and environmental benefits. While negative environmental impacts are expected to be minimal and manageable, the

improvement of access and utilization of health services could increase the medical and pharmaceutical waste production in the different types of health facilities, which could adversely affect the environment and the local population. The MOH has prepared the NMWMP that includes a Guide for the Destruction of Expired or Damaged Medicines.

68. The project will complement and finance the implementation of the NMWMP on the three islands within five district health centers of the project, and there will be a review of the implementation of NMWMP before the end of this proposed operation. Consultant(s) will be financed by the operation to support the training of health center staff at the primary care level and a monitoring plan will be developed within the Ministry, in collaboration with the project team to adequately monitor the implementation of the NMWMP. Consultant(s) will also support capacity building within different ministries that will play a role in implementing the NMWMP, including the destruction of expired or damaged medicines. The project will support effective and practical sorting of medical waste on site, as well as the safe collection and transport of medical waste at local health posts to district health centers for destruction in a manner that is effective, efficient, and ensures robust procedures for monitoring and safe handling. Training will be provided for those transporting the waste and those destroying it. Capacity building and training needs have been identified in the ESMF and appropriate funding has been allocated in the overall project budgeting. The World Bank has reviewed and cleared the NMWMP and the Client is preparing an implementation, training, and monitoring plan as part of project implementation.

(ii) Social Safeguards

69. **Social impacts including gender.** The project is expected to have substantial positive social benefits. Moreover, the project is expected to have a positive impact on gender in Comoros given that the package of PHC interventions would have a strong focus on reproductive, maternal, child and adolescent health. Project-financed activities are expected to increase the access of the population to health services and their level of knowledge and behavior in solving their health problems; improve social cohesion and inclusion, create opportunity for direct and indirect jobs, mainly for women and young communities in the vicinity of health centers during the rehabilitation/construction of treatment facilities; promote the development of small income-generating activities for especially poor households; favor the development of local activities such as brick making and carpentry; and improve the working conditions of the health personnel.

70. The negative social impacts could arise due to increased access to and utilization of health services as this could increase the medical and pharmaceutical waste production in health facilities which, in turn, could adversely affect the health of local population, impacting their capacity to work and generate revenue and directly affecting their livelihoods. Other social negative effects are linked to the risk of Gender-based Violence (GBV) and spreading of HIV/AIDS by proximity of construction site staff to women in communities and areas affected by rehabilitation/renovation works. Measures to be taken to address the challenges will include, but are not limited to, (i) an assessment of labor influx risks in the ESMF; (ii) a requirement that the Borrower includes clauses on workers' conditions and management, child protection, and GBV prevention in all contracts; (iii) provision of TA and training to the Borrower and awareness raising on GBV among all contractors, workers, and local residents; and (iv) the setup of an accessible and accountable Grievance Redress Mechanisms (GRM) system to ensure that any incident related to workers and GBV will be addressed in an effective manner with sufficient social sensibility. The PIM will be updated to cover worker GBV and sexual exploitation abuse issues and detailed guidance to the Client in the mitigation of these and other potential impacts are presented in the ESMF and NMWMP documents**.**

(iii) Climate Co-Benefits

71. The project was screened for climate and disaster risk and found to be at high risk from climate change related exposures. Decreases in precipitation and prolonged droughts have led to water shortages. The possibility of increased droughts in the future under climate change is a concern for Comoros. River networks primarily supply the islands of Dzouani and Mwali and decreases in rainfall could diminish the hydrographic network on these islands. Roads, public and private buildings, and critical infrastructure such as hospitals are increasingly under threat from sea level rise, coupled with limited habitable land space and high population growth. Increased temperatures as well as precipitation extremes pose risks to public health by increasing the likelihood of disease epidemics such as malaria, diarrheal diseases, and acute respiratory diseases. Heavy rains cause flooding of rivers, combined with deforestation also promote instability of the land, causing landslides and rock falls, especially on the islands of Dzouani and Mwali. This adversely impacts agriculture through loss of crops, biodiversity, coastal erosion, and loss of beaches. Additionally, devastating storm surges caused by heavy winds and sea level rise have caused severe inundation. Cyclones threaten Comoros every year and in recent years, their occurrence has been trending upward. In 2004, Comoros experienced particularly intense storms that caused significant damage and mortality. Areas of vulnerability include regional flooding, damage to infrastructure, loss of life, public health problems, migration, saltwater intrusion, loss of crops, biodiversity, coastal erosion, and loss of beaches, among others.

72. Comoros is ranked as one of the most vulnerable countries in Africa as regards natural hazards and the effects of climate change. It is estimated that about 54 percent of the Comorian population is exposed to natural disasters. This vulnerability is expected to increase because of climate change. First, the expected increase in population density (through migration from rural to urban areas) will put additional pressure on limited land and resources. Second, the projected rise in sea level could have a major adverse effect on agriculture and fisheries as well as public and private infrastructure. Social and financial protection services in Comoros are limited, which makes the population even more vulnerable. The 2012 floods in Comoros highlighted the vulnerability of Comoros as a small island state and revealed the importance of strengthening disaster risk management in the country.

73. Specific project activities which will help the population adapt to climate change include, under Subcomponent 1.1 (US$4 million), improvements to PHC infrastructure will adapt measures to factor in increasing extreme weather events in the PHC infrastructure plans, by ensuring structures are better able to withstand increasing likelihood of strong winds, extremes of precipitation and heat. Climate-smart approaches will be promoted in action-plans submitted for financing. Subcomponent 1.2 (US$4 million) which focuses on pre-service and in-service training of selected health cadres will include training on climate risks and adaptation measures, so health care workers are better able to support the population to adapt to the health risks of climate change. Component 1.4 (US$4.1 million) will scale-up the community health and nutrition platform piloted under the Social Safety Net Project. This platform will eventually reach 40 percent of the population, delivering significant nutrition related adaptation and resilience benefits for nearly half the population. Component 2 (US$5 million) will strengthen selected institutions and health system governance for quality and pandemic preparedness. Improvements in key guidance documents, including setting of standards and norms, will be supported; this component will ensure that this guidance includes specific recommendations on climate-smart infrastructure, climate resilience approaches and training. Also, under this component, disease surveillance systems will be reviewed and improved which will also contribute to improving adaptation of the MOH to emerging and existing diseases.

74. Specific project activities which will mitigate climate change include: Under Component 1.1, support for the rehabilitation of district centers and health posts as well as PHC equipment and vehicles and the installation of incinerators (US$4 million total costs). All this rehabilitation work will follow climate-smart infrastructure principles—

solar panels, thermal insulation, the use of modern and efficient water supply and treatment as well as low energy lighting. In terms of equipment and the five incinerators, these will have climate-friendly requirements specified in their procurement, such as use of renewable energy supply and energy saving appliances to reduce carbon emissions and increase energy efficiency. By strengthening the PHC level of services, this component will also contribute to reduced need for services at the hospital level which are more energy-intensive, thereby further reducing the carbon footprint of the health sector. In addition, this will also offset longer patient trips seeking higher level care farther from their homes. The project will also support the procurement of low-emission ambulances and vehicles and, where feasible, electric vehicles. Component 1.3 (US$8.9 million) will support the PBF scheme in PHCs where the PBF manual will include guidance for PHC facility managers/head doctors on ways to use the PBF quality incentives to ensure climate-smart infrastructure is employed for any refurbishment and that climate resilient and carbon reducing measures are taken on board at the facility level.

(iv) Citizen Engagement

75. The project supports an integrated citizen engagement approach as detailed in Component 3 of the Project. The project will encourage citizen engagement through a number of mechanisms: (i) the inclusion and monitoring of citizen engagement indicators—a hotline for patients complaints and feedback, patient experience surveys, complaints for grievances addressed; (ii) Citizen third party monitoring which would be used for some of the project interventions; (iii) Feedback beneficiary consultations conducted periodically to inform subsequent activities; and (iv) develop a transparent and consolidated grievance redress mechanism (see below) to strengthen project governance. The MOH will prepare a Stakeholder Engagement Plan (SEP) to improve and facilitate decision making and create an atmosphere of understanding that actively involves relevant stakeholders in a timely manner, to ensure these groups are provided adequate opportunity to voice their opinions and concerns that may influence Project decisions. Prior to effectiveness, the project's Environmental and Social Safeguard Specialist will develop the SEP that will identify the key stakeholders and outline the mechanisms of consultation for project implementation.

(v) Grievance Redress Mechanisms

76. A Grievance Redress Mechanism (GRM) has been developed as part of the ESMF and operational manual to capture any grievances and give a voice to all stakeholders that could be affected directly or indirectly by activities of the project. The GRM will be further developed once the PIU recruits an environmental and social safeguards specialist and will include a communication strategy to ensure it is accessible to stakeholders affected by the project. In addition, the Recipient shall establish, not later than six months after the Effective Date, and thereafter maintain and operate, a functional grievance handling mechanism for the project, with adequate staffing and processes for registering grievances.

77. Grievance Redress Service (GRS). Communities and individuals who believe that they are adversely affected by a World Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of non-compliance with the World Bank's policies and procedures. Complaints may be submitted to the Panel at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

(vi) Safeguard, CE, GRM Monitoring and Evaluation

78. The M&E system of the project includes the monitoring of safeguards/CE/GRM impacts and measures related to safeguard policies. The MOH has a limited experience in managing environmental and social safeguards. Therefore, several actions have been recommended as part of the ESMF and will be implemented during preparation and implementation. The MOH will (i) recruit for effectiveness an environmental and social safeguards specialist to monitor and evaluate environmental and social aspects; (ii) Involve the ministry in charge of the environment in the M&E of the project's environmental and social safeguard activities; and (iii) strengthen staff capacity in environmental and social safeguards. The World Bank's supervision missions will include an environmental and social safeguards specialist to assist the PIU by (i) providing regular implementation support; (ii) carrying out field reviews of safeguards implementation; and (iii) monitoring safeguards implementation based on quarterly progress reports.

V. KEY RISKS

79. The **overall risk of the project is considered high**. The key risks that could affect the achievement of the PDO and proposed mitigation measures are described in the following paragraphs.

80. **Political and governance risks are high**. Comoros has enjoyed a period of relative peace and stability in recent years. While there is reasonable optimism that political stability will be sustained, the country remains riven by inter-island tensions. The new administration that assumed office in 2016 introduced amendments to the constitution in July 2018, removing the presidential power sharing arrangement for the three islands as well as presidential term limits. The risks related to politics and governance will be mitigated by the World Bank and DPs supporting and aligning with the Government's commitment to reform of the Comoros health sector. The project has an important focus on strengthening health sector governance structures, which will play a major role in the roadmap towards development of a national health insurance system.

81. **The macroeconomic risk is rated as substantial**. The Comorian economy's performance improved modestly to 2.7 percent GDP growth in 2017. Nevertheless, Comoros remains fragile. Growth is expected to remain below potential over the medium-term, which will be insufficient to significantly improve real per capita incomes. The new government developed an ambitious five-year public investment program which includes an action plan for the health sector towards development of an equitable, efficient and sustainable health system. The fiscal risks inherent in the government moving too quickly toward UHC will be mitigated by the simple project approach grounded in strong analytical work and adequate TA by the World Bank and DPs.

82. **The risk related to technical design is substantial**. The project will support relatively new and complex reforms and programs in several areas—quality of care improvement, nutrition, and strengthening capacity of institutions for quality of care. As regards the strengthening of institutions, the project will set realistic objectives and initially support a limited number of MOH departments and agencies which can be scaled up if needed following the mid-term review. For the component related to quality of care, the project will work closely with AFD to benefit from synergies with the ongoing PBF program (PASCO). For nutrition activities, an assessment of the community-based nutrition program under the Social Safety Net Program will be undertaken through the Project Preparation Advance (PPA) to inform its scale-up under the project. Thus, the mitigation measures include keeping the project design simple, using existing platforms, and leveraging other investments such as the PASCO and Social Safety Net Projects. The project will adopt a flexible, learning-by-doing approach, combined with analytical work and TA to support government's move towards NHIS. This will involve strengthening the M&E system at the MOH as an integral part of the project management to allow for documenting

progress and making appropriate adjustments during implementation as needed.

83. The risks related to Institutional capacity for implementation and sustainability, as well as fiduciary risks are rated as high. The MOH has limited experience in managing World Bank-financed operations. Currently, the MOH is implementing several projects financed by the AFD and other partners. Each program is implemented by an independent unit overseen by the DGS under the MOH. For this project, the MOH will establish a new PIU to ensure early readiness and smooth implementation of the Project and management of the project funds. This unit will be responsible for the fiduciary management of the Project within the MOH and will comprise of a Coordinator, a FM Specialist and a Procurement Specialist. The PPA will provide for training of the fiduciary and project management staff of the PMU. The project will also have a strong focus on frontline workforce, strengthening health sector governance and building knowledge and skills of health professionals at national, regional and district levels. In summary, the high risks related to fiduciary issues and institutional capacity for implementation and sustainability will be mitigated by: (i) the establishment of a new Project Management Unit (PIU) within the Ministry of Health, Solidarity, Social Protection and Gender Promotion (MOH) to be in charge of Project coordination and fiduciary management; (ii) close fiduciary supervision and implementation support by the World Bank; and (iii) the Project's strong focus on building the capacity of institutions.

84. The social and environment risks are moderate. The potential adverse environmental impacts are likely to be small and site-specific, thus easily mitigated. These impacts are those usually associated with health care wastes and disposal. The environmental risk is moderate because mitigations of these impacts will rely heavily on the implementation of the NMWMP which has been prepared and disclosed in country and on the World Bank website. A PPA under the project will cover the services of a consultant to support the Government in identifying the specific personnel and capacity needs related to implementing all measures identified in the ESMF and NMWMP. Site specific screenings will be prepared to identify risks associated with specific rehabilitation works and ESPMs prepared as needed according to the risks identified during the screenings. A Grievance redress mechanism will be established for the Project and will be informed by the experience under the Social Safety Net Project.

VI. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Comoros

Comprehensive Approach to Health System Strengthening

Project Development Objectives(s)

(i) To improve utilization of quality PHC and (ii) strengthen capacity of institutions which are critical to quality PHC

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
(i) to Improve utilization of quality PHC and (ii) strengthen capacity of institutions which are cri			
PHC facilities with accreditation level 2 above as per the facility accreditation program (Number)		0.00	40.00
PHC facilities participating in the PBF scheme supported by the project which reimburses for both quantity and quality of service (Number)		0.00	80.00
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)		0.00	106,500.00
Number of children immunized (CRI, Number)		0.00	15,000.00
Number of women and children who have received basic nutrition services (CRI, Number)		0.00	75,000.00
Number of deliveries attended by skilled health personnel (CRI, Number)		0.00	16,500.00
Functional community health sites (Number)		69.00	172.00
Annual District and National Health Assemblies (Number)		0.00	18.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Component 1 Improving PHC infrastructure, workforce and service delivery platforms			
PHC facilities renovated (minor renovations) and/or equipped among the PHC structures in need of these renovations and/or equipment (percentage) (Percentage)		0.00	100.00
PHC health workers receiving annual CME (Percentage)		0.00	70.00
Revision of the pre-service nurse training curriculum to make it competency-based (Yes/No)		No	Yes
Recipients of scholarships for pre-service training in selected clinical disciplines, public health and health management (Number)		0.00	35.00
Community health workers trained to provide health and nutrition services (Number)		0.00	516.00
PHC facilities with at least one quality improvement initiative with the team based problem solving approach (Number)		0.00	60.00
Functional Emergency Medical Transportation with a dedicated hotline on each island (Number)		0.00	5.00
Community health workers trained to provide health and nutrition services (Number)		0.00	516.00
Component 2 Strengthening institutions and governance which are critical to (i) quality PHC and (ii)			
National Health Strategies and Plans adopted (Quality of Care, NCDs, Human Resources for Health) (number) (Text)		0.00	3 (strategies and their related plans)
PHC health workers benefiting from annual clinical mentorship and/or coaching (Number)		0.00	100.00
PHC facilities self-monitoring a set of quality of care indicator quarterly for quality improvement (Number)		0.00	50.00

Indicator Name	DLI	Baseline	End Target
Membership of health professional associations (Number)		0.00	100.00
Component 3 Citizen Engagement and Empowerment, Project Management, Monitoring and Evaluation			
Operational hotline for patient complaints and feedbacks (Yes/No)		No	Yes
Patient associations/support groups established (diabetes, hypertension, chronic lung diseases, cancer) (Number)		0.00	4.00
Primary health care facilities submitting monthly report according to national guidelines (Percentage)		0.00	70.00
Nationally representative patient experience surveys conducted (Number)		0.00	2.00
Complaints for grievances timely addressed (Percentage)		0.00	75.00
Component 4 Contingent Emergency Response Component (CERC)			
Emergency Action Plan validated (Text)		Emergency Action Plan prepared	Emergency Action Plan officially validated before CERC activation

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
PHC facilities with accreditation level 2 above as per the facility accreditation program	Refers to the number of faciilites which received two stars rating per the quality Star Rating program	Annual	Project Report	Implementation Report	UGP
PHC facilities participating in the PBF scheme supported by the project which	Refers to the number of PHC facilities (Health Posts and	Semester	Facilities Monthly	Routine data	UGP

reimburses for both quantity and quality of service	District health center) which are part of the quality of care reimbursement scheme among all existing PHC facilities		Report		
People who have received essential health, nutrition, and population (HNP) services		Annual	Project Report	data collected from HMIS	UGP/MOH/DGS
Number of children immunized		Annual	Project Report	Implementation Report	
Number of women and children who have received basic nutrition services		Annual	Project Report	Implementation Report	MOH/UGP
Number of deliveries attended by skilled health personnel		Annual	Project Report	Data collected from HMIS	UGP/MOH/DSF
Functional community health sites	Refers to the number of community sites operational with management tools and growth monitoring equipments, operated by at least one community health workers	Annual	Project Report	Implementation Report	MOH/UGP
Annual District and National Health Assemblies	Refers to the number of Health Assembly organized at each of the health districts and at national level annually	Annual	Project Report	Implementation Report	MOH/UGP

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
PHC facilities renovated (minor renovations) and/or equipped among the PHC structures in need of these renovations and/or equipment (percentage)	Refers to the number of facilities renovated and/or equipped by the project	Annual	Project report	Implementation Report	UGP
PHC health workers receiving annual CME	Refers to the percentage of PHC health workers receiving CME among all existing PHC health workers supported by the project	Annual	Project Report	Implementation Report	UGP
Revision of the pre-service nurse training curriculum to make it competency-based	Refers to the availability of revised competency-based pre-service nurse training curriculum	Annual	Project Report	Implementation Report	UGP
Recipients of scholarships for pre-service training in selected clinical disciplines, public health and health management	Refers to the number scholarship receipients for pre-service training in selected clinical disciplines, public health and health management	Annual	Project Report	Implementation Report	UGP
Community health workers trained to provide health and nutrition services	Refers to the number of community health workers receiving training on health and/or nutrition services	Semester	Project Report	Implementation Report	UGP
PHC facilities with at least one quality improvement initiative with the team based problem solving approach	Refers to the number of PHC facilities holding team-based problem solving approach for quality improvement	Annual	Project Report	Implementation Report	UGP

	among the PHC facilities supported by the project				
Functional Emergency Medical Transportation with a dedicated hotline on each island	Refers to the total number of functional emergency medical transportation (ambulances) with a dedicated hotline supported by the project	Annual	Project Report	Implementation Report	
Community health workers trained to provide health and nutrition services	Refers to number of community health workers receiving training on health and/or nutrition services	Semester	Project Report	Implementation Report	UGP
National Health Strategies and Plans adopted (Quality of Care, NCDs, Human Resources for Health) (number)	Refers to the development of national Health Strategies and Plans (Quality of Care, NCDs, Human Resources for Health) and are officially adopted	Annual	Project Report	Implementation Report	UGP
PHC health workers benefiting from annual clinical mentorship and/or coaching	Refers to the number of PHC health workers receiving clinical mentorship and/or coaching among the total number of PHC health workers supported by the project	Annual	Project Report	Implementation Report	UGP
PHC facilities self-monitoring a set of quality of care indicator quarterly for quality improvement	Refers to the number of facilities which has conducted a self-monitoring set of quality of care indicator for quality improvement	Quarter	Project Report	Implementation Report	UGP

Membership of health professional associations	Refers to the number of health professional who have membership card from a health professional associations (medical doctor, dentists, pharmacists, nurses, midwives…)	Annual	Project Report	Implementation Report	UGP
Operational hotline for patient complaints and feedbacks	Refers to the operational hotline on which patient can call for complaints or feedbacks	Yes/No	Project Report	Implementation Report	UGP
Patient associations/support groups established (diabetes, hypertension, chronic lung diseases, cancer)	Refers to the number of patient associations/support groups established (diabetes, hypertension, chronic lung diseases, cancer)	Annual	Project Report	Implementation Report	MoH/DGPE
Primary health care facilities submitting monthly report according to national guidelines	Refers to the percentage of the PHC facilities submitting monthly report according to national guidelines among the existing PHC facilities	Annual	Project Report	Implementation Report	UGP
Nationally representative patient experience surveys conducted	Refers to the number of Nationally representative patient experience surveys conducted (at least two during the project)	Bi-Annual	Project Report	Implementation Report	UGP
Complaints for grievances timely addressed	Refers to the number of grievances responded to and/or resolved within the stipulated service standard	Annual	Project Report	Implementation Report	MoH/UGP

	for response times among total number complaints for grievances received in the project				
Emergency Action Plan validated	Emergency Action Plan focused on activities that can readily be implemented on the ground in the circumstances of emergency	NA	MOH HMIS	Routine data or Secondary data or qualitative information (such as social assessments)	UGP

ANNEX 1: Implementation Arrangements and Support Plan

1. **Summary of the project activities.** The proposed project amounting to US$30 million will operate in the three islands of the Union of Comoros. It will build capacity for quality PHC in the country. The project will mainly finance rehabilitation of health facilities, purchase of health equipment, subsidies to health facilities, trainings, and other operating costs. Thirty percent of the financing amount (US$8.9 million) are subsidies using PBF approach to enhance the quality of health service.

2. **Country issues**. The overall country fiduciary risk is **high**. A Public Expenditure and Fiscal Management Review finalized in October 2016 concluded that there had been a degree of improvement in PFM since the previous assessment done in 2007. However, the PEFA[27] assessment identified several critical gaps in the areas of budget credibility, completeness and transparency, execution, and control. The Government has been pursuing a program of PFM reforms since 2010 and the Ministry of Finance is committed to modernizing the PFM system through the implementation of the PFM Strategy for 2010-2019. This strategy is a comprehensive response by the authorities to address the weaknesses of their PFM system, as identified by the previous PEFA assessment and recommendations from DPs, including France, the European Union, the International Monetary Fund and the World Bank.

Financial Management Arrangements for the Project

3. ***Budgeting and planning.*** Budget arrangements will be described in the FM procedures manual to be developed. The PIU will prepare the annual budget which will be approved by the General Directorate of the MOH. The periodic variance analysis will enable the timely identification of deviations from the budget. These reports will be part of the unaudited interim financial reports (IFRs) that will be submitted to the Association on a quarterly basis.

4. ***Accounting.*** The PIU will acquire appropriate accounting software for the preparation of the quarterly IFRs, the annual financial statements and the daily monitoring of the project financial transactions.

5. ***Internal controls/FM procedures manual.*** The FM procedures manual will develop the procedures governing the budgeting, accounting, reporting, auditing procedures as well as the flow of funds applicable to the project. The PMU will periodically review the manual over the project life to ensure their continuing adequacy and compliance with the requirements set out therein.

6. Regarding PBF, the MOH acquired substantial experience on managing PBF through the implementation of the ongoing Health Sector Support Project PASCO.[28] PASCO set up a third-party, performance-based payment mechanism in the Union of Comoros to improve financial accessibility to health services. The proposed project will rely on the same PBF payment mechanism. The FENAMUSAC will be retained under a Delegation Agreement to be concluded with the PIU before disbursements take place under this component, thereby ensuring the subsidies are transferred to the beneficiaries. The MOH has developed a comprehensive PBF manual of procedures that considers adequate segregation of duties between payment agents and controllers. The

[27] PEFA: Public Expenditure and Financial Accountability.
[28] PASCO is a project funded by the AFD since 2015.

procedures set out in this manual will be updated as a condition of disbursements to integrate the features of the project activities as well as the institutional arrangements. The updated manual of procedures will be applied to the project.

7. ***Internal audit.*** The PIU will recruit a qualified internal auditor (IA) no later than three months after project effectiveness. The IA will continuously ensure the effectiveness and efficiency of the governance, risk management and control over the project's activities. A risk-based audit program will be submitted to the World Bank for review. During the project implementation, the IA will prepare after each audit a report to be submitted to the General Directorate of the MOH. The reports will be shared with the World Bank.

8. ***Financial reporting.*** The PIU will prepare quarterly unaudited IFRs for the project, the report format will be agreed with the World Bank. These IFRs will be submitted to the World Bank within 45 days after the end of the quarter to which they relate. The annual financial statements will be prepared using internationally accepted accounting standards. At the end of each fiscal year, the project will prepare annual financial statements which will be subjected to an external audit.

9. ***Staffing.*** The PIU will recruit FM staff with qualifications and experience acceptable to carry out the FM activities of the project. The staff will include a Finance Manager, a Chief Accountant, and an Accountant.

10. ***Flow of Funds - Designated Account.*** The DA is denominated in local currency (KMF, Franc Comorien) to receive funds from the World Bank. This account will be opened at an acceptable commercial bank to enable payment of eligible expenditures. Funds will be released via bank transfer to the beneficiaries by FENAMUSAC.

11. ***Disbursement arrangements.*** Transaction-based disbursements will be used. An initial advance up to the ceiling of the DA and representing four months' forecast project expenditures payable through the DA will be provided. Subsequent disbursements will be made monthly against submission of the Statement of Expenditures (SoEs) or other documents as specified in the Disbursement and Financial Report Information Letter (DFIL).

Table 1.1: Eligible Expenditures

Category	Amount of the Credit Allocated (expressed in EUR)	Amount of the Grant Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, training and operating costs under Parts 1.1, 1.2, 1.4, 2 and 3 of the project.	8,900,000	7,300,000	100%
(2) Performance-based payments under Part 1.3 of the project.	4,000,000	3,200,000	100% of the payment ordered issued by the relevant Island Technical Group
(3) Emergency expenditures under Part 4 of the project.	0	0	100%
(4) Refund of preparation advance.	500,000	400,000	Amount payable pursuant to Section 2.07 (a) of the General Conditions
TOTAL AMOUNT	13,400,000	10,900,000	

12. ***External Audit.*** The project accounts will be audited annually, and the audit report will be submitted to the World Bank no later than six months after the end of each financial year. At the time of the appraisal, there is no overdue audit report for the sector. The project will comply with the World Bank's disclosure policy on audit reports—making publicly available, promptly after receipt of all final financial audit reports—including qualified audit reports and place the information provided on the official website within one month of the report being accepted as final by the Association.

13. A performance audit of the FENAMUSAC payment system will be conducted by an independent consultant after the first fiscal year to reinforce the control over the system.

14. ***Supervision plan***. Based on the current overall FM risk, the project will be supervised three times during the first 12 months and could be reduced to two per year thereafter. In addition to field visits, supervision will include routine desk-based reviews and FM regular meetings, to ensure that the project's FM arrangements operate as intended and that funds are used efficiently for the intended purposes.

15. ***FM Risk assessment and mitigation.*** The content of these risks is described in the table below:

Table 1.2: FM Risk Assessment

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
Inherent risk	H			S
Country level: The MOH system mirrors the Central level PFM system and its weaknesses resulting in the risk of lack of transparency and accountability in the use of public funds.	H	The GoC is committed to implement further reforms of the country's PFMs, with support from the DPs.	N	H
Entity level: Financial management requirements not met, weak FM capacity.	H	The PMU will recruit FM staff that possesses adequate experience and competence.	N	S
Project level: The resources of the project may have distracted due to weak control environment.	S	The PMU will comply with the internal control processes as set out in the FM procedure manual. The internal audit unit will also continuously review the adequacy of internal controls and make improvement recommendations.	N	S
Control Risk				
Budgeting: Weak budgetary execution and control leading to budgetary overruns or inappropriate use of project funds.	S	The FM procedures manuals will spell out the budgeting and budgetary control arrangements to ensure appropriate budgetary oversight. The budget follow-up will be documented in the quarterly IFR.	Y	S
Accounting: Reliable and accurate information not	H	The PMU will recruit suitably qualified and experienced FM personnel to	N	S

provided to inform management decision.		ensure appropriate performance of the accounting and FM functions. The financial reporting processes will be facilitated by the utilization of appropriate computerized accounting systems.		
Internal Control: Business process, role and responsibilities within the project is not clear leaving to ineffective of control. Loss of assets due to low control over regions.	H	The FM Procedures Manual will be reviewed to ensure continuing adequacy over the course of the project life. The manual will contain all the key internal control processes pertaining to the various project activities. International control risks at regions level will be mitigated as part of the internal audit engagements.	Y	S
Funds Flow: Risk of misuse and inefficient use of funds; Inappropriate Funds arrangements may lead to non-financing of the project activities. Errors or frauds in payment of PBF activities (PBF estimated at US$8.9 million).	H	The process leading to payment will be well described in the financial manual and monitored to mitigate the risk of the use of funds for unintended purposes. The PMU will adopt a comprehensive PBF procedures manual suitably respecting segregation of duties between payment agents, supervisor. This PBF manual will be a disbursement condition of the PBF activities	N	S
Financial Reporting: The project may not be able to produce the financial reports required in a timely manner as required for project monitoring and management	S	The PMU will recruit qualified FM personnel that possess adequate experience and competence. The PMU will use the computerized accounting acquired during the preparation phase. The system will enable the efficient and timely generation of financial information.	N	S
Auditing: Delays in submission of audit reports. Poor quality of audit report.	S	The auditor will be recruited early. The computerized accounting system will lead to timely generation of IFRs and financial statements. The Union of Comoros does not have a professional accountancy body recognized by IFAC[29]. Hence, the external auditor recruitment will be opened at international level, and only qualified external auditors will be short-listed.	N	S
Governance and Accountability: Possibility of corrupt practices	H	Robust FM arrangements, World Bank FM and procurement supervisions.	N	S

[29] IFAC – International Federation of Accountants

including bribes, abuse of administrative & political positions, mis-procurement and misuse of funds etc., are a critical issue.		Effective internal control arrangements.		
Overall FM risk	H			S

Financial Management Action Plan

The FM Action Plan described below has been developed to mitigate the overall FM risks.

Table 1.3: FM Action Plan

Remedial action recommended	**Responsible Entity**	**Completion date**	**Effectiveness Conditions**
Recruit qualified internal auditor.	MOH	No later than three months after the effectiveness.	No
Recruit qualified staff including Financial Officer, Chief Accountant, Accountant.	MOH	No later than three months after effectiveness.	No
Adopt the PBF procedures manual for the project.	MOH	Disbursement condition	No
Develop FM procedures manual as part of the procedural manual	MOH	Effectiveness condition	Yes

ANNEX 2: Rapid Mixed Methods Assessment of Health System Quality in Comoros

1. Despite good population access, a relatively high density of facilities, and a large number of personnel, the Comorian health system is limited in its ability to deliver high quality care. This is apparent across system levels. Service delivery capacity is severely compromised, with the tertiary care center in the capital under construction while primary care centers suffer from a broad range of deficits ranging from routine shortages in inputs to a lack of accountability. The Primary Healthcare Performance Initiative, a World Bank partner project aiming to improve the measurement and implementation of primary healthcare, has collated what limited data is available on primary care performance for Comoros.[30] The data shows good performance on vertical programs such as childhood immunizations (91 percent DTP3 coverage) and weaknesses in areas that require high quality processes of care, such as in the number of children with diarrhea receiving appropriate treatment (37.5 percent). The Lancet Global Health Commission on High Quality Health Systems has also collected what quality-specific evidence is available on the health system in Comoros. That analysis also shows quality deficits, especially in the process of care. For example, only 33 percent of ANC clients are counseled on complications, only 23 percent of children receive antibiotics for pneumonia and only 27 percent of postpartum women who delivered in a facility receive a timely check-up.[31] A study from this same group showed that over 1000 people died in Comoros in 2016 due to deaths that were amenable to high quality health systems.[32]

2. Given these signals of poor-quality care in Comoros and the overall lack of available data, a rapid mixed methods assessment of health system quality in Comoros was conducted by a World Bank team in partnership with the MOH in January 2019. It used the Lancet Global Health Commission on High Quality Health System's framework as a measurement guide (See Figure 5) and a variation of the Primary Healthcare Performance Initiative's data collection approach. In addition to a review of existing data and documents, the study included facility inventories (n=11), focus groups with the ministry of health, civil society, health system users and providers (n=7), individual interviews with health system leaders, providers and patients (n=54) and visit observations (n=13). The assessment looked at the foundations of quality healthcare—populations, governance, platforms, workforce, and tools; the processes of care—visit and system competence, and patient experience; and the outcomes of care—health outcomes, confidence and economic benefit.

3. Component 1 will support facility-based service delivery that mirrors the five elements comprising the foundations of a high-quality health system (governing for quality, redesigning service delivery, transforming the workforce, igniting demand for quality, and facility equipment and infrastructure). Together they address the need for a stronger health system that can make improved processes of care and better outcomes achievable. Component 1 will also support the community health platform as guided by the recently adopted Community Health Strategy, with a focus on nutrition-related services. Component 2 will focus on improving health sector governance in the country, aiming at institutional strengthening of selected national agencies. Component 3 will support citizen engagement and empowerment, project management, and M&E. Component 4 will be a zero-dollar CERC.

4. The project will build on existing support the health system is receiving, including from the PASCO, the AFD-supported PBF project**. The persistence of low quality of health care in Comoros provides an opportunity to leverage the PBF scheme for quality improvement in a pragmatic way. The proposed project will initially complement PASCO by incentivizing quantity and quality of services in 32 health facilities not covered by the PASCO PBF program. After December 2020, when PASCO program closes, this project will take over the third-party payment program and invest in

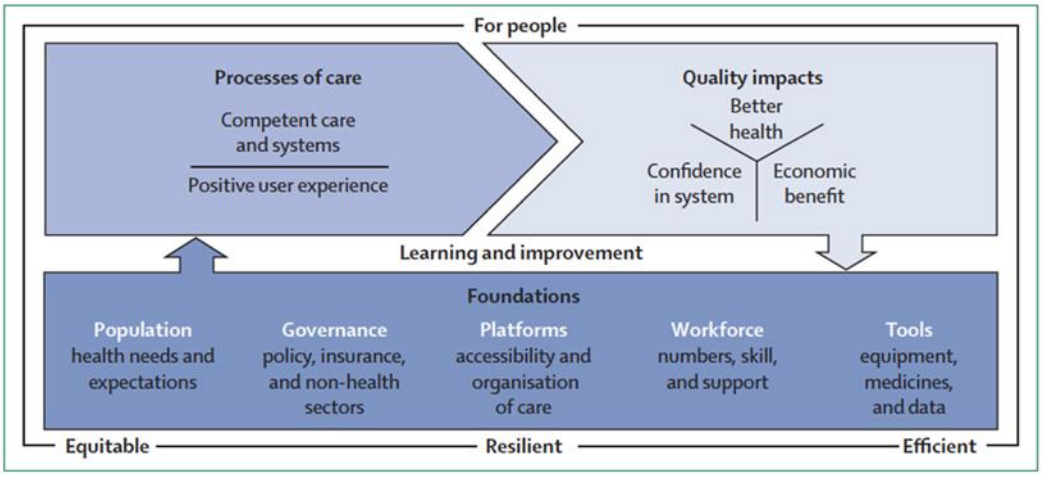
[30] https://improvingphc.org/sub-saharan-africa/comoros.
[31] Kruk, Margaret E. et al. Lancet Global Health 2018; 6: e1196–252 Published Online September 5, 2018. *https://doi.org/10.1016/S2214-109X(18)30386-3.*
[32] Kruk et al, *ibid*.

the combination of the existing incentive scheme and a multiphase quality improvement plan that strengthens the foundations of the health system. The investment will simultaneously aim to target interventions changing structural conditions, such as human resources incentives, as well as those directly affecting providers' practices and effectiveness. These include organizational change management models, targeted education and professional retraining, clinical guidelines, training with peer review feedbacks, pay for performance, high volume of care, and performance-based professional recognition.

5. The project will also coordinate with ongoing or planned projects. This project will expand the community-based nutrition services implemented by the World Bank financed social safety net project. Logistical support to the *Office Comorien des Produits Pharmaceutique* (OCOPHARMA) will build on the previous program of the Global Fund to Fight AIDS, Tuberculosis and Malaria to improve medical storage and distribution capacities in the country. Also, the project will coordinate with the planned investment from the French Government to the GoC to support the NHIS, El Maarouf—the tertiary hospital located in Moroni—and island hospitals in terms of training, equipment, running and maintenance after 2020, when PASCO closes.

6. The project will support the country's health information system and E-health. This aspect will include the strengthening of the directorate in charge of planning, study and health statistics which is preparing the next five-year strategic plan including E-health. As District Health Information System 2 (DHIS2) introduction and roll out will be supported by the Global Fund, the project will focus more on incorporation of selected quality of care (QoC) indicators into DHIS2. Regarding to E-health, the Project will support clinical decision support tools, applications to empower patients, etc. Telemedicine with France will also be explored.

Figure 2.1: Lancet Global Heath Commission on High Quality Health Systems Framework



Source: The Lancet Global Health Commission on High Quality Health Systems, 2018.

7. Foundations. There is a lack of consensus around what should fall within the scope of primary care. Communities and providers have unrealistic expectations about primary care facilities, wanting inpatient treatment capacity at even the smallest facilities. This leads to potentially dangerous delays in seeking appropriate care in hospitals. For example, primary care facilities, often with minimal or no equipment to handle obstetric emergencies, conduct "low risk" deliveries, despite mounting global evidence showing the risks of delivery further than 30 minutes from definitive care. The assessment found that primary care health system utilization is low; most visited facilities had more providers than

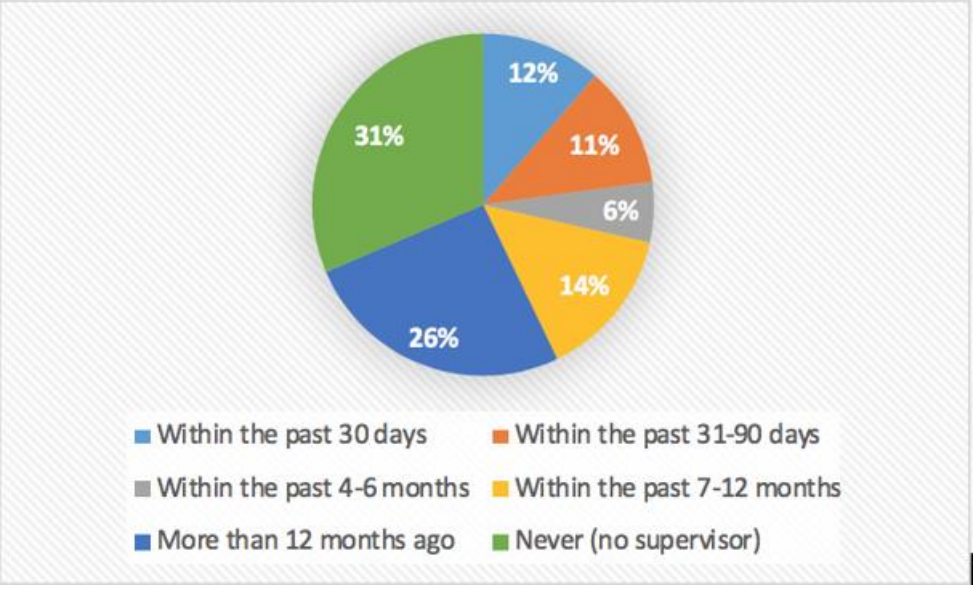
patients. Sixty-eight percent of providers interviewed reported seeing fewer than 10 patients on a given day; one third saw fewer than five. These volumes make it difficult for providers to maintain competence in the care of high acuity conditions. It is unclear if this is due to an oversupply/underutilization because of lack of need or if people are staying home because of other constraints. Many informants raised the cost of care and lack of financial protection as a possible explanation. It is also possible that people are bypassing the primary care facilities for higher level care, for private care, or for care abroad. Hospitals are generally much busier than primary care facilities.

8. Unbalanced utilization is also a signal of a health system that is lacking in basic system governance—planning, management, design and accountability. The system has challenges in connecting facilities appropriately for care. i.e. norms and standards for referral and intra-facility communication are missing. Many facilities are autonomously funded, often with diaspora remittances, and only loosely controlled by the national government, making it impossible to account for the quality of care in these facilities or to strategically locate them in relation to other facilities. An example of lack of system control over facility performance is supervision: one-third of providers do not receive any supervision, as shown in Figure 6. Frequent political transitions and politically-driven hiring and payment practices also make the system unstable. For example, there is no merit-based system for promoting providers to a status of civil servant. Additionally, a growing private health sector is reported to be highly utilized but unregulated by the national government.

9. Human resources abound. Interviewed providers reported appropriate pre-service training experiences for their posts. For example, among providers that attend vaginal births, the average number of supervised births done in pre-service training was 23 (with a variation from three to 100). However, provider motivation appears to be very low. Most providers (80 percent) reported that they did not believe that the services they provided were high quality care. Sixty-four percent of providers said that their salaries were not high enough for the work they do. No interviewed providers earned more than 220 euros per month and some earned less than 100. Many providers cited the lack of merit-based hiring and promotion as a source of demotivation.

10. In addition to the paid providers, many volunteers provide services at primary care facilities. Some are unpaid but provide essential services such as a medical director in a health post, and others are excess staff. These volunteers report a variety of reasons for continuing to work without pay. Some want to maintain their skills or give back to the community. Others are able to make small amounts of money by working overnight shifts or extracting additional payments from patients. There are no performance management systems to monitor these volunteers, and the overall number of volunteers working in the system is unknown. One visited health center routinely performs antenatal/postnatal visits with a ratio of six providers in the room—one doctor and five midwives. Despite the abundance of providers overall in the system, nearly half of providers reported performing duties which they were not trained to do.

Figure 2.2: Length of Time Since Provider Met with a Supervisor (n=35), January 2019



11. Serious deficits were found in the availability of tools required to perform high quality care, as recorded in Table 2.1. There are not enough of these necessary inputs to deliver high quality care. Only 23 percent of providers said that they had the necessary equipment to do their jobs. The majority of facilities did not have basic equipment and amenities to provide safe care. Only one third of facilities reported safe waste disposal and 86 percent had no sterilization equipment. No visited facilities had functioning emergency transport. Overall, facilities that were supported by the AFD PASCO program reported better basic amenities and equipment. Data, a critical health system tool for managing and maintaining quality of care, is lacking in Comoros. This includes facility and household level data that are either routinely or periodically collected.

Table 2.1: Basic Facilities Amenities and Equipment in Primary Care Facilities (as of January 2019)

	Yes	No
Are these facility amenities available?	**n (%)**	**n (%)**
Electricity	6 (86%)	1 (14%)
Safe water source	5 (71%)	2 (29%)
Sanitation facilities	7 (100%)	0
Communication equipment	4 (57%)	3 (43%)
Computer with internet connection	1 (14%)	6 (86%)
Access to emergency transportation	0	7 (100%)
Waste disposal	2 (29%)	5 (71%)
Are these standard facility safety precautions and equipment available?		
Sterilization equipment	1 (14%)	6 (86%)
Safe final disposal of sharps	2 (29%)	5 (71%)
Safe final disposal of infectious waste	1 (14%)	6 (86%)
Surface disinfectant	4 (57%)	3 (43%)

Single-use standard disposable or auto-disposable syringes	7 (100%)	0
Soap and running water or alcohol-based hand sanitizer	7 (100%)	0
Latex gloves	6 (86%)	1 (14%)
Guidelines for standard precautions against infection	3 (43%)	4 (57%)
Is the following basic equipment available and functional?		
BP Equipment	7 (100%)	0
Stethoscope	7 (100%)	0
Adult Scale	7 (100%)	0
Child Scale	5 (71%)	2 (29%)
Newborn Scale	7 (100%)	0
Light Source	1 (14%)	16 (86%)
Thermometer	6 (86%)	1 (14%)
Sharps box/container with lid	7 (100%)	
Waste bin with lid and liner in exam room	6 (85.71%)	1 (14.29%)
Do the consultation rooms allow for auditory privacy?	4 (57.14%)	3 (42.86%)
Do the consultation rooms allow for visual privacy?	5 (71.43%)	2 (28.57%)

12. Processes of care. Gaps in the process of care at the visit level were common. Half of patients reported that the provider asked no questions about personal, family or medical history during their last visit. Patients were not consistently told how to take prescribed medications, and most were not told about potential side effects of medication. Visits were often didactic, leaving little time for patients to ask questions or even confirm that they had understood instructions. Nearly half of interviewed patients said that they or their family member had something done to them without their permission. This reflects an observed pattern of limited patient autonomy and consent across patient visits and facilities. Outright patient mistreatment was also reported. Though few visits were observed due to low volumes at visited facilities, technical deficits were observed. Providers were observed "going through the motions" of performing physical exams; performing cardiopulmonary auscultation while speaking to the patient or conducting abdominal exams in patients who were seated. Decisions were observed to be made without essential vital signs data and medications were prescribed without asking about current or previous medication history.

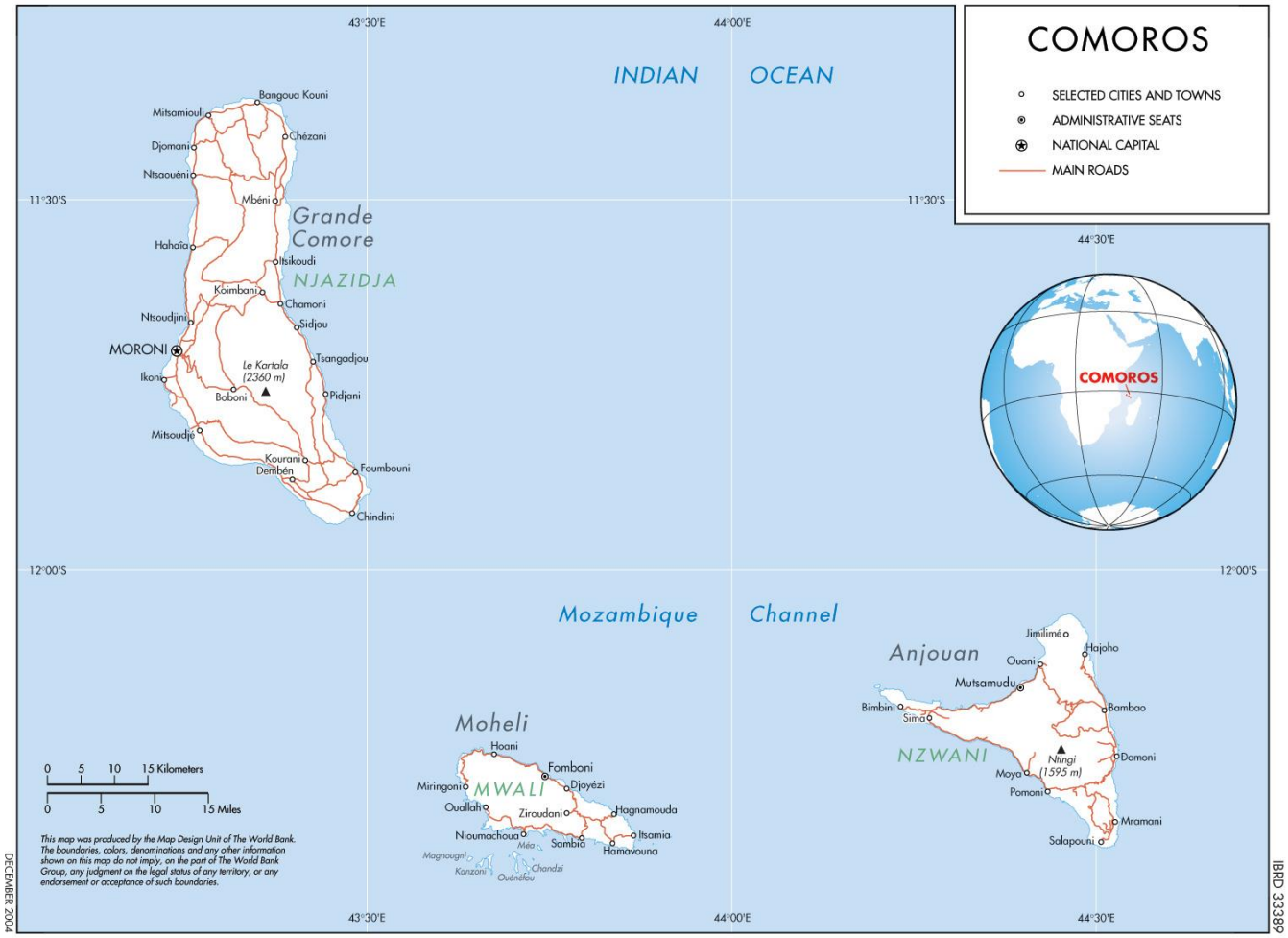
13. Outcomes. According to the measurement framework used for this analysis, outcomes of a high-quality health system are better health as well as confidence in the system and economic benefit. Focus groups with community members and women's groups highlighted a serious lack of confidence in the Comorian health system. Many informants described a pattern of wealthier Comorians going abroad for healthcare. Even poor Comorians are travelling to Mayotte via a dangerous sea passage for what is perceived to be higher quality care. The frequency of international bypassing could not be estimated with existing data. Domestically, of patients interviewed, one-third reported bypassing the clinic closest to their home for care. In terms of economic benefit, the low utilization and poor system planning is associated with significant system waste. Providers are seeing low volumes of patients, but clinics are often open for 24 hours. There are underutilized maternity wards staffed day and night by midwives' minutes away from secondary level facilities to which women prefer to go. The political patronage system means that provider payments are sometimes wasted on supporters without clinical training who do not work at facilities. There is no regulation or integration of private healthcare, which means that resources are sometimes being used to keep empty public facilities open when more highly utilized private options could be contracted. Most importantly there is limited financial protection for patients.

Informants from the Government, civil society, communities, and healthcare facilities pointed to cost as a barrier to healthcare facility utilization. The AFD PASCO project has addressed some of these concerns by offering free basic services in their supported facilities but the assessment concludes that cost and other key issues remain to be tackled across the Comorian healthcare system.

ANNEX 3: Role of Key Development Partners Active in the Health Sector

DPs	TA			Project financing		
	US$	Timeframe	Activity focus	US$	Timeframe	Activity focus
AFD	Eur 450,000	PASCO 3 2016-2020	– TA to National health insurance situation analysis and feasibility studies; and to National Strategy on NCD	– Eur 3,400,000 – Eur 275,000 – Eur 500,000 – Eur 2,000,000	– 2016-2020 – 2010-2018	– PBF and on quality of care (supply and demand sides (MCH) – Ambulances for 4 District Hospitals – Equipment and Medical devices – Contribution to El Maarouf Hospital – MCH Pole construction
SUB TOTAL A	**Eur 450,000**			**Eur 6,175,000**		
GAVI	US$247,000	2018-2019	– Restructuring action of and Strategic planification and capacity building for immunization program management & coordination (Cabinet Dalberg)	– US$1,600,000 – US$2,998,278 – US$1,000,000 – US$543,000	– 2012-2016 – 2018-2022 – 2017-2020 – 2008-2020 – 2019	– Health System Strengthening – Immunization and Health system strengthening – Injection safety devices – Vaccines procurement – Governance of immunization program and data quality
SUB TOTAL B	**US$247,000**			**US$6,141,278**		
GFATM	US$24,000		– NHA	– US$1,734,870 – US$2,800,000 – US$1,817,850 – US$770,674 – US$6,237,153 – US$4,088,974	– July 2019 - June 2020 – 2015-2019 – 2015-2019 – Oct 2018 - Sept 2021 – 2015-2019 – Jan 2019 - Dec 2021	– HIV – HIV: Health System Strengthening (incl. HMIS) – TB – Paludisme
SUB TOTAL C	**US$24,000**			**US$17,449,521**		
WHO	US$83,500 US$320,000	2017-2021	– TA support to health policies and strategies; on health financing – Strengthening leadership and			

DPs	TA			Project financing		
	US$	Timeframe	Activity focus	US$	Timeframe	Activity focus
	US$350, 000 US$415,000 US$525,000 US$705,000 US$375,000 US$ 335.000 US$432,000		governance capacities of MOH – HRH Development – Establishing mechanisms for equitable health financing for the greatest number of people – QoC improvement) – Information and evidence on health systems – Access to drugs and other health technologies and regulatory capacity building – Action on the socio-economic and environmental determinants of health – People-centered integrated health services			
SUB TOTAL D	**US$3,540,500**					
UNICEF		2019	MICS	– US$4,000,000 – US$135,000 – US$450,000	– 2019-2021	– Support to immunization and HSS, – Vaccines and supplies procurement – Strengthening maternal and neonatal health care (incl. Centre of Excellence for neonatal emergency care)
SUB TOTAL E				**US$4,585,000**		
UNFPA		Till now	TA support to Reproductive Health, Family Planning and Adolescent			
SUB TOTAL F				**US$**		
Japan International Cooperation Agency (JICA)				US$100,000 US$160,000	– 2019-2021	– Support for the improvement of maternal nutrition – Support for the management of severe acute malnutrition
SUB TOTAL G				**US$260,000**		

DPs	TA			Project financing		
	US$	Timeframe	Activity focus	US$	Timeframe	Activity focus
WBG				US$1,600,000 US$30,000,000	2016-2019 2019 -20125	– Support nutrition intervention through community sites under SSN Project – New HNP Project
SUB TOTAL H				**US$31,600,000**		
Qatar Charity				US$2,000,000 US$7,000,000	Before 2018	– Hospital in Moheli equipment – Hospital in Moheli
SUB TOTAL I				**US$9,000,000**		
Saudi Arabia				US$2,500,000	Before 2018	– Support to Hospital level
SUB TOTAL J				**US$2,500,000**		
TOTAL (A to J)	**Eur 450,000 US$3,811,500**			**Eur 6,175,000 US$71,535,799**		

ANNEX 4: Map of Comoros