

# TOWARDS A MORE UNITED & PROSPEROUS UNION OF COMOROS

Systematic Country Diagnostic



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# **ABBREVIATIONS & ACRONYMS**

<b>CPIA</b>	Country Policy and Institutional Assessment
<b>CSOs</b>	Civil Society Organizations
<b>DeMPA</b>	Debt Management Performance Assessment
<b>DPO</b>	Development Policy Operation
<b>ECP</b>	Economic Citizenship Program
<b>EEZ</b>	Exclusive Economic Zone
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>GDP</b>	Gross Domestic Product
<b>GNI</b>	Gross National Income
<b>HCI</b>	Human Capital Index
<b>HDI</b>	Human Development Index
<b>ICT</b>	Information and Communication Technologies
<b>IDA</b>	International Development Association
<b>IFC</b>	International Finance Corporation
<b>IMF</b>	International Monetary Fund
<b>INRAPE</b>	National Institute for Research on Agriculture, Fisheries, and the Environment
<b>LICs</b>	Low-income Countries
<b>MDGs</b>	Millennium Development Goals
<b>MIDA</b>	Migration for Development in Africa
<b>MSME</b>	Micro, Small, and Medium Enterprises
<b>NGOs</b>	Non-profit Organizations
<b>PEFA</b>	Public Expenditure and Financial Accountability
<b>PPP</b>	Public/Private Partnerships
<b>R&amp;D</b>	Research and Development
<b>SADC</b>	Southern African Development Community
<b>SDGs</b>	Sustainable Development Goals
<b>SOEs</b>	State-Owned Enterprises
<b>SSA</b>	Sub-Saharan Africa
<b>TFP</b>	Total Factor Productivity
<b>WDI</b>	World Development Indicators
<b>WTTC</b>	World Travel & Tourism Council

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This report has been prepared by a team led by Carolin Geginat (Program Leader EFI, AFSC2) and Jose Luis Diaz Sanchez (Country Economist, GMTA4). Marco Ranzani (Poverty Economist, GPV01), and Neelam Verjee (Social Development Specialist, GTFSA) were core team members and important background work for this report was conducted by Nadia Belhaj Hassine Belghith (Senior Poverty Economist, GPV01). The team gratefully acknowledges the overall guidance of Mark Lundell (Country Director, AFCS2), Mathew Verghis (Practice Manager, GMTA4), Magnus Lindelow (Practice Manager, GHN01), Rasit Pertev (Resident Representative, AFMKM), Antoissi Said Ali Said (Operations Officer, AFMKM), Thomas Buckley (Country Program Coordinator, AFMZ), Raymond Bourdeaux (Program Leader SD, AFCS2) and Peter Holland (Program Leader HD, AFCS2). The table below identifies the full list of team members who have provided written inputs to the SCD. The team would like to thank the peer reviewers Alexis Sienaert (Senior Economist, CROCR), Robert Swinkels (Senior Economist, GPV07), Rafael Munoz Moreno (Program Leader, LCC5C) and Johannes Hoogeveen (Lead Economist, GPV06) for their very helpful comments. Finally, we would also like to thank Joana Mota (consultant) for excellent research assistance and Cybil Maradza for designing the final document.

SECTOR OR THEME	SCD TEAM MEMBERS
<b>Social Protection</b>	Andrea Vermehren
<b>Health and Gender</b>	Voahirana Hanitrinala Rajoela, Tazeen Hasan
<b>Education</b>	Peter Holland
<b>Poverty</b>	Marco Ranzani, Djibril Ndoeye
<b>Macro</b>	Jose Luis Diaz Sanchez, Shireen Mahdi, Natasha Sharma
<b>Financial Sector</b>	Brinda Devi Dabysing, Nicholas Timothy Smith, Julian Casal
<b>Transport</b>	Papa Mamadou Fall, Atsushi Iimi
<b>Private Sector and Trade</b>	Yannick Saleman, Eneida Fernandes, Lorenzo Bertolini, Claire Hollweg
<b>Agriculture</b>	Ashesh Prasann
<b>Fishery</b>	Xavier Vincent, Maminaiaina Rasamoelina, Julien Million
<b>Energy</b>	Jan Friedrich Kappen, Ewa Katarzyna Klimowicz
<b>Governance</b>	Tiago Carneiro Peixoto, Heriniaina Mikaela Andrianasy, Helene Grandvoinnet
<b>ICT</b>	Tim Kelly, Isabella Maria Linnea Hayward
<b>Jobs</b>	Andrea Vermehren, Julia Rachel Ravelosoa, Federica Ricaldi, Marco Ranzani, Arvo Kuddo
<b>Fragility</b>	Neelam Verjee
<b>Social Development</b>	Jana EL-Horr
<b>Water</b>	Chris Heymans, Nicholas Kudakwashe Tandji
<b>DRM</b>	Ana Campos Garcia
<b>Environment &amp; Natural Resources</b>	Maminaiaina Solonirina Rasamoelina
<b>IFC</b>	Kailash Sharma Ramnauth, Ugo Amoretti

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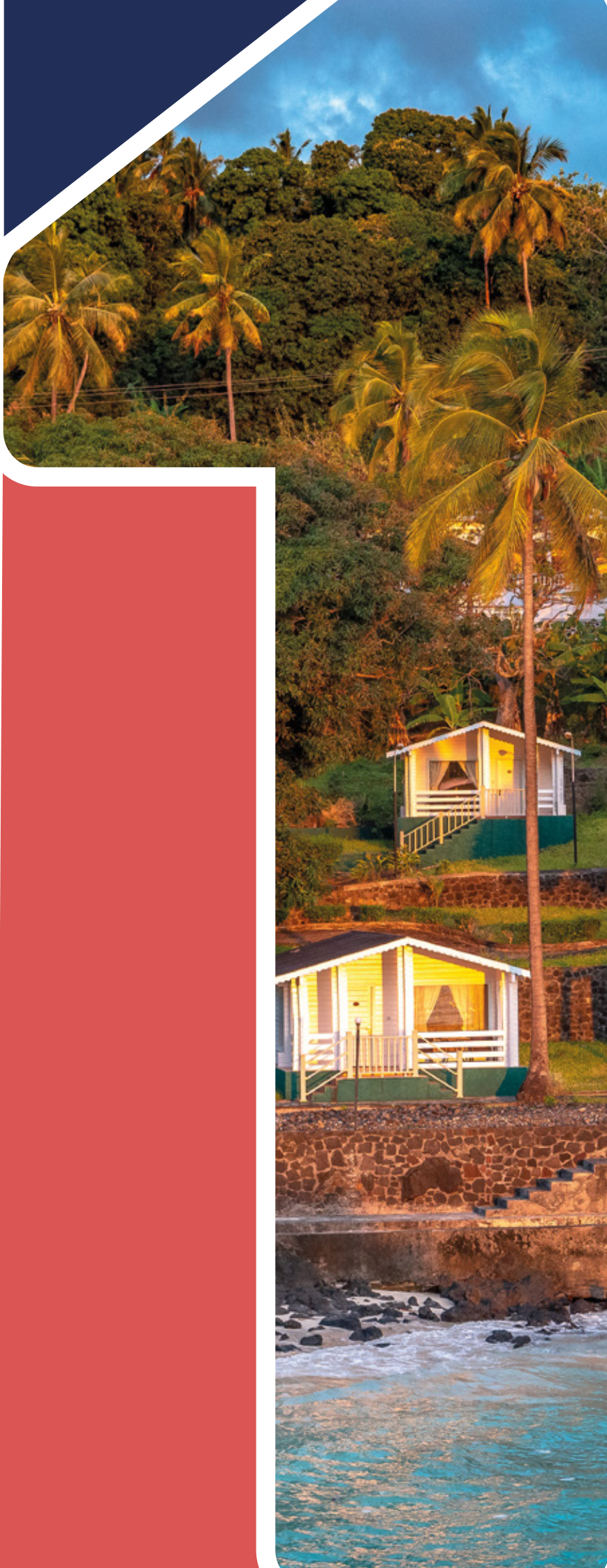
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# EXECUTIVE SUMMARY

**Comoros, sometimes called the “perfumed islands” because of its fragrant beauty, is an archipelago located on the ancient trade routes of the Indian Ocean.** This island nation is home to 800,000 inhabitants, densely populated over a total territory of no more than 1,800 square kilometers, located between the shores of Tanzania, Mozambique and Madagascar. Comoros' cultural heritage descends from Africa, the Middle East and Europe and 98 percent of the population adhere to a form of Sunni Islam. Its population is predominantly young due to high (albeit slowly declining) fertility rates. Women play an important role in society due to matrilineal traditions but tend to exercise their voice in the background of the Comorian household rather than in the public square. Historically, emigration has always been an important part of society, with one third of the population living outside of the country today. Emigres have close ties to their home communities and send remittances averaging 13 percent of the annual GDP in the last decade, making Comoros one of the highest remittance-recipient nations in Sub-Saharan Africa.

**Politically, Comoros has experienced protracted political instability since gaining independence in 1975.** Although conflict in the Comoros has generally been low-intensity, with clashes rarely resulting in more than five deaths, the country has experienced recurring political instability, including 21 successful and attempted military coups, and various secession attempts by some of the islands. Mercenaries have played a role in the political setting of various governments. Since 1975, Comoros has had five different constitutions. All these factors together have made it difficult for formal institutions to take root and establish their legitimacy. Local communities

cope with the absence of the State by relying on traditional governance structures and their own financing sponsored by the diaspora. As a result, local observers of Comoros refer to the country at times as a “*confederation of villages*” rather than a nation state.

**Comoros' economy is undiversified and among the most food-import dependent in the world.** Commerce (mostly of an informal nature) and public services account for half of the economy. Another thirty percent are generated by agriculture produced on small family owned farms and destined mainly for home-consumption. Despite this strong presence of the agricultural sector in the Comorian economy, the country meets most of its food needs through imports. Close to 40 percent of all imports are food imports. Weak connectivity between the three islands translates into high transport costs. This and lack of other supporting infrastructure (like warehousing, cold storage etc.) limits the ability of higher productivity zones to supply growing urban markets at prices that can compete with those of imports.

**Comoros' development performance since 1975 has been shaped by three defining characteristics:**<sup>1</sup> First, the country has a challenging economic geography, in that the *smallness, remoteness, and inaccessibility* of its territory has led Comoros to suffer, like other small islands, from the challenges of diseconomies of scale, highly concentrated markets, lack of competition, and high costs of living due to high transport and trading costs. Second, *political fragility and the weakness of formal institutions* have exacerbated these by fragmenting an already small country further, as the central state, the islands, and local communities offer competing governance

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<sup>1</sup> As a result of these three characteristics, Comoros is compared throughout this SCD to other small-island states of similar income, that share some level of fragility and remittance dependence. See Chapter 2 for a full list of comparator countries.

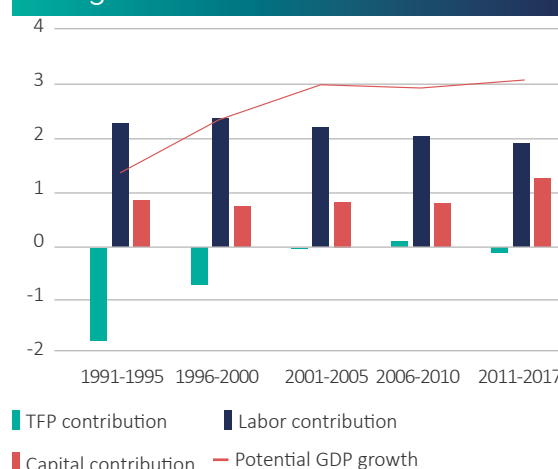
structures to the population that often impede productive collaboration. Third, *remittances* have contributed to deepening a consumption driven growth trajectory and uneven progress towards shared prosperity by raising many Comorians out of poverty while leaving those behind who cannot rely on diaspora networks.

**These characteristics have resulted in a low growth-moderate poverty paradox.** In an environment of stagnating GDP per capita growth and political and institutional fragility, the country has achieved a reduction in poverty rates that compares well with those of other lower-middle income countries. Despite its consistently weak growth performance, Comoros is today a lower-middle income country (GNI per capita of 1,280 dollars in 2017, atlas method). As this analysis will show, this paradox is to a large degree explained by the significant remittance flows from Comoros' growing diaspora. Close to four out of ten households receive remittances and those households that do benefit from remittances are on average 11 percentage points less likely to be poor than those that cannot rely on transfers from a family member. However, as remittance flows are highly localized in one of the three islands, they have also deepened existing disparities.

## Growth

**After significant volatility in the first decades after independence, Comoros' growth performance stabilized at the beginning of the 2000s in a persistent low-growth equilibrium.** Since then, the average real growth rate of GDP per capita was 0.3 percent as the low pace of growth of the economy could not keep up with high fertility rates. Growth was predominantly consumption-driven from the demand side, fueled by remittances flowing in from the diaspora. From the supply side, labor was the main contributor to growth, but below its potential because of a very low labor

**Figure 1: Factor Contribution to Potential GDP growth**



Source: Staff calculations using Comoros' revised national accounts and WDI

force participation (see Figure 1). The capital contribution to growth has been limited due to a dearth of savings and investment. Productivity growth has been nearly absent – even negative in some years.

**National savings and investment rates in Comoros have been consistently low with adverse effects on growth.** Gross national savings rates in Comoros have averaged 5.9 percent of GDP since the beginning of the century, half the average in Sub-Saharan Africa. Public savings and investment are constrained by low domestic revenue mobilization and a budget tilted towards consumption. Revenue collection in Comoros is very low at an average of 7 percent of GDP for the period 2000-2017. Weak revenue administration and policy coupled with a low level of formal economic activity restrict the revenue base and contribute to the weak domestic revenue performance. The large wage bill leaves very little room for spending on items such as social services and education or infrastructure projects. A high reliance on volatile flows of external revenues represents a challenge for medium term budgetary planning and



undermines the momentum for structural reforms. In the last 10 years, foreign grants have oscillated between 27 and 51 percent of total revenues.

**Comoros has been unable to establish an environment of trust that would encourage private investment.** Political instability has been a significant deterrent for investment in Comoros. In addition, the general investment climate in terms of supporting infrastructure and regulations is weak; the rule of law is often not respected putting in question the enforceability of contracts. The financial system (except for some micro-finance institutions) is not trusted because of political interference and a justice system that is more supportive of non-paying creditors than lending institutions. Public sector led utilities deliver expensive services of weak quality and represent a burden on public finances, crowding out the space for more efficient capital investments that could give private sector activity a boost.

**The human capital contribution to growth is constrained by weak health and education conditions and the economy is struggling to create jobs.** Comoros has one of the lowest female labor force participation rates in the region and unemployment among the youth – and especially first-time job seekers – is high. As investment in Comoros wavers, so does private sector activity, resulting in an economy struggling to provide economic opportunities and jobs for its population. As a result, emigration has grown three-fold in the last 25 years, with a growing share of women leaving the country. And as emigres send remittances to their families back home, this discourages at times the labor contribution of family members in Comoros. The productivity of those active in the labor market is constrained by the education and health conditions that exist in Comoros today.

**Comoros is not leveraging its resource potential.** Natural assets abound in Comoros,

but they are badly managed, and risk being squandered. Comoros is endowed with fertile volcanic soil, good precipitation, beautiful scenery and an economic fishing zone 70 times the size of its land mass. It also used to have extensive forest cover. Its landscapes, topography and history, could make Comoros a prime location for tourism. But weak public management capacity and the earnings pressures of communities that rely on fisheries and agriculture for their livelihoods have led to a gradual depletion of natural assets. Since 1990, Comoros has lost one percent of its forest cover to agricultural land every four years. And as forest disappeared increasing erosion has led to a deterioration of soil fertility. Renewable internal freshwater resources are under extreme stress and the maritime ecosystem is under threat from overfishing of a variety of species.

**As a very small open economy with limited exports and a large trade deficit, Comoros is vulnerable to external shocks.** Comoros export capacity is limited and concentrated in just three products: cloves, ylang-ylang and vanilla. Export revenues are less than half the import expenditure in agriculture. The deficit in the trade of goods and services averaged 19 percent of GDP over 2011-2017 and is offset by buoyant remittances (estimated at 12 percent of GDP over 2011-2017). Large external grants (estimated at 8 percent of GDP over 2011-2017), have helped contain the current account deficit (3.2 percent of GDP on average over 2011-2017). The Comorian Franc has been pegged to the French Franc since shortly after its independence, and then the Euro since 1999 (currently at KMF 490 per Euro), which has helped the Central Bank maintain low levels of inflation and adequate levels of foreign reserves. Since the introduction of the peg to the Euro, the Comorian franc has occasionally deviated from its medium-term fundamentals, combining periods of overvaluation (e.g. 1995-1999) with periods of undervaluation (e.g. 2002-2005).



## Poverty and Inclusion

**Comoros has achieved poverty rates comparable with those of richer countries in its income group, but regional disparities exist.**

Six out of ten Comorians can be considered non-poor at the international poverty line for lower-middle income countries (USD 3.2 per day) and only two out of ten Comorians live in extreme poverty. Chances to escape poverty in Comoros are high. One fourth of all poor in Comoros could move out of poverty if their income was raised by just USD 0.7 per day. However, the average disguises poverty differences across islands and across the rural and urban divide. Those living in Anjouan and Mohéli are 8 and 6 percent more likely to live in poverty than those living in Grande Comore. The poverty incidence is lowest in Moroni - the main city of Grande Comore and capital of the Union of Comoros.

**Despite clear geographic disparities, the main drivers of poverty in Comoros are family size and the sector of employment and educational attainment of the head of household.** Poverty among households consistently increases with the number of children, reaching 70 percent among households with five or more children,

compared to less than 20 percent among households with no children. Poverty is high among those working in agriculture and significantly lower among wage employees, especially in the service sector and industry and trade. Fewer than 10 percent of the poor work in the public sector. Primary education alone is not enough to increase poor people's opportunities for moving out of poverty. There is a considerable poverty gap between households whose head has secondary or upper education and households whose heads have no or only primary education.

**Progress towards shared prosperity has been modest.**

While the average per capita consumption increased by about 30 percent between 2004 and 2014, the average consumption of the poor and the bottom 40 percent of the population only grew by about 4 percent and 15.5 percent respectively. At 44.9, the GINI coefficient for Comoros is slightly higher than for Sub-Saharan Africa (42.3) and significantly higher than for structural peers (32.9). Disparities are most pronounced in rural areas and Anjouan, where income (not time) related underemployment is high.<sup>2</sup> To halve extreme poverty by 2030, Comorian households at the bottom of the distribution will have to post a consumption growth twice as fast as the average. By contrast, should

the extent to which the poor benefit from economic growth keep the same pace as was observed in the past, extreme poverty in Comoros will decline only modestly from 18 percent in 2014 to about 15 percent by 2030.

**Despite progress on measures of monetary and non-monetary poverty, two thirds of the population remain vulnerable to deprivation.**

Considering the non-monetary aspects of poverty progress has been made with improved access to schooling and living conditions, but access to basic services remains a challenge. The incidence of deprivation – as measured by the proportion of the population deprived in at least a third of relevant dimensions of wellbeing, such as consumption and measures of multi-dimensional poverty – declined from 85 to 75 percent between 2004 and 2014. Poor segments of the Comoros' population are experiencing high deprivation in several dimensions of well-being, including first and foremost in access to electricity and efficient cooking fuels, followed by sanitation and assets ownership. Mohéli and Anjouan are facing the highest levels of deprivation, while households in Grande Comore seem to be better off.

**Inequalities between islands have contributed to a sense of imbalance and perceptions of inequity that may have played into political instability in the past.**

Intergenerational persistence of poverty and inequality is predominantly driven by individuals' region (i.e. island) of birth. Inequalities and disparities between the islands can also be seen in terms of development indicators and uneven provision of services—for instance, the rate of access to electricity varies from 65 percent in Grande Comore, to 50 percent in Anjouan, and 20 percent in Mohéli. Remittance flows have contributed significantly to poverty reduction,

but due to their localized nature they are also exacerbating regional imbalances. Most of the incoming remittances accrue to Grande Comore (about 84 percent), as the central historical purpose of remittances is to finance the high expenses related to organizing the Grand Marriage (see Box 1 in Chapter 3 on this tradition), a tradition that is most common on the central island of the Union of the Comoros.

**Risks to Sustainability of Growth and Poverty Reduction**

**Comoros faces economic, social and environmental risks to the sustainability of growth and progress towards shared prosperity.**

A continuous structural imbalance between domestic resource mobilization and current spending undermines the ability to undertake growth-enhancing investments and provide basic services to alleviate poverty. A high vulnerability to climate change – paired with poor adaptation capacity – results in a physical vulnerability of populations and undermines the main sector of production, agriculture. Social protection in Comoros depends nearly exclusively on remittances, a mechanism that has displayed significant resilience in recent decades but benefits only some groups within the population. High rates of youth unemployment (in 2014, one of two young Comorians of working age were unemployed) represent not only an underutilized asset for growth but means that this demographic can also represent a social risk in the presence of increased illegal activity (in the form of narcotics trafficking and smuggling of migrants) and the growing influence of more hardline clerics amidst increasing global connectivity.

**Political instability remains a concern for both the sustainability of growth as well as**

<sup>2</sup> About one fourth of the workforce suffers from income-related underemployment (as opposed to time-related underemployment which is low in Comoros), with the highest rate of under-employment in Anjouan.

**for national and social cohesion.** Pervasive political instability has been in part a factor of tension and mistrust between the islands. Despite their common socio-linguistic identity and the unifying force of Islam, imbalances between the islands have deepened divides. They peaked during the 1997 attempts by Anjouan and Mohéli to secede from the Union, and again by Anjouan in 2007.<sup>3</sup> A national reconciliation agreement in 2001—the Fomboni Agreement—introduced the “*tournante*” system of a rotating presidency between the islands, which has helped to pave the way for successive peaceful and democratic handovers since 2002. A referendum on July 30, 2018, gave the government the green light to once again reconstitute the country’s political arrangements (see Table 2 in Chapter 3 for details on constitutional changes prompted by the referendum).

**A significant risk to sustainability stems from the depletion of Comoros’ human,**

**productive and natural asset wealth,** which has been on the decline because of a weak track record of investment and preservation (see Figure 2). Comoros per capita wealth – as measured by the World Bank’s 2018 Wealth of Nations report – has been on the decline since 1995.<sup>4</sup> In the same period, global wealth grew by 66 percent. In 2014, the gap in wealth per capita between Comoros and other lower middle-income countries was greatest in human capital, but it is in productive capital where the gap between Comoros and other lower middle-income countries has been growing the most since the beginning of the millennium. While natural capital has seen a slight increase due to an expansion of protected natural areas, the wealth generation ability of forests and cropland has been on the decline. Net foreign assets have also been on decline as current account deficits have been quite large and persistent in the last 20 years.

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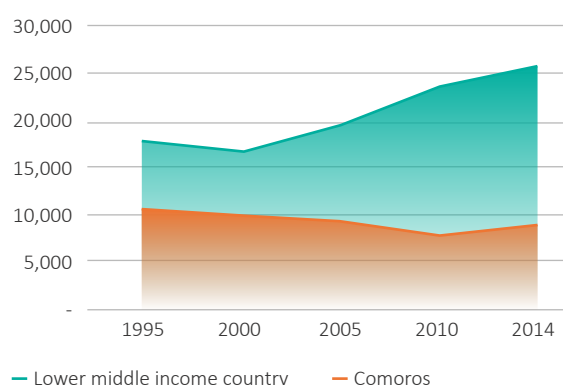
<sup>3</sup> In 1997 the islands of Anjouan and Mohéli both declared independence. Mohéli, which had already unsuccessfully claimed independence in 1991, rejoined the Republic of Comoros in 1998, following mediation by the African Union. Anjouan remained independent until the national reconciliation agreement (Accords de Fomboni) was signed in February 2001. A new secessionist attempts from Anjouan occurred in 2007, when Mohamed Bacar refused to leave office after reaching his constitutional term limit. This prompted the intervention of a military force led by the African Union to remove him from power.

<sup>4</sup> The Wealth of Nations’ measures use a balance sheet approach to the health of an economy by capturing a country’s wealth across four pillars of wealth generation: produced, human, natural and net foreign assets. *Produced capital* and urban land measures machinery, buildings, equipment, and residential and nonresidential urban land, measured at market prices. *Human capital* is measured as the discounted value of earnings over a person’s lifetime. *Natural capital* includes energy (oil, gas, hard and soft coal) and minerals, agricultural land (cropland and pastureland), forests (timber and some nontimber forest products), and terrestrial protected areas. *Natural capital* is measured as the discounted sum of the value of the rents generated over the lifetime of the asset. *Net foreign assets* denote the sum of the cross-border assets and liabilities held by country’s residents. These include, for example, foreign direct investment and reserve assets. Negative net foreign assets suggest that cross-border liabilities exceed cross-border assets. For example, debt outstanding with abroad might be exceeding foreign direct investment coming in significantly.

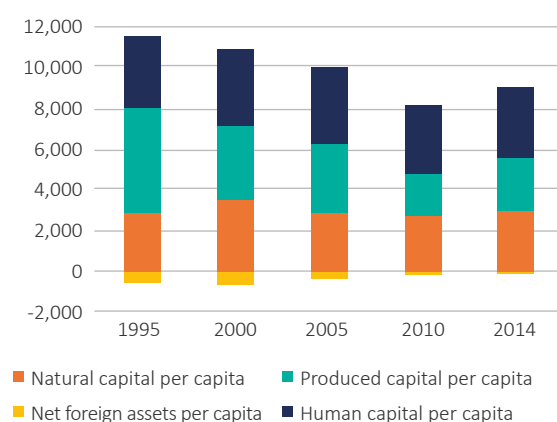


**Figure 2: Total per capita wealth, Comoros and Comparators (panel a) and type (panel b)**

a. Total per capita wealth (constant 2014 USD)



b. Total per capita wealth - Comoros



Source: World Bank Wealth of Nations

## Identity and Institutions

**40 years of political conflict motivated by the search for a national identity and separatist movements at the island level have weakened formal institutions in Comoros and decreased citizens' trust in public policy.** The main point of reference for most Comorians remains their village of origin. In the presence of these strong localized structures, the formal state finds it difficult to establish itself. The weakness of formal institutions, highly restricted state reach and presence, and contested authority, contribute to a lack of continuity in policy making, all of which profoundly impact Comoros' ability to attract investment and deliver services to its citizens. The inability of the formal state to deliver quality services in a manner that is perceived as inclusive and fair, impacts both its legitimacy and its ability to mediate conflicts, as is common in fragile countries (highlighted in the 2018 joint World Bank-UN publication Pathways for Peace report). Finally, as remittances have provided a social safety net for those who receive them, they may have decreased the State's incentive to raise domestic revenues and invest them into public services.

## The State's inability to establish an equal and robust presence across its territory reinforces reliance on traditional structures.

They are likely to supersede formal institutions in terms of moral authority and represent an entry point by which to address development deficits and perceptions of marginalization. Community organizations fund services for their villages and communities through remittances from members of the diaspora who remain connected to their village of origin. Informal institutions and structures are rooted in traditional local power and benefit from greater credibility and legitimacy among the population. Strengthening linkages between these parallel systems of governance while also ensuring that community-based organizations continue to influence their own development decisions and interventions is a means by which to help to shore up the legitimacy of the formal state. However, as the World Development Report 2011 on Conflict, Security and Development points out, the process of transforming institutions is slow, and can take a generation if not more. A recalibration of government policies to deliver services in partnership with local institutions, together with measures to support lagging

regions, could offer an avenue for Comoros to capitalize on its strengths and enhance the welfare of its people.

**To lift Comoros out of its low-growth equilibrium and achieve sustained poverty reduction with greater shared prosperity this SCD proposes that Comoros embarks on three pathways - overcoming the investment gap, raising human capital and protecting and leveraging natural resources.** The SCD further identifies the main constraints that would

have to be overcome to unlock the pathways. Finally, recognizing the significant institutional challenges that will have to be tackled to credibly address these constraints, the SCD makes a proposal on how to confront the foundational challenge of Comoros' Identity and Institutions. However, significant knowledge gaps regarding the deeper social dynamics of Comoros remain and will have to be filled in the coming years to support Comoros address some of its deep-seated fragility.

## Pathway

### 1

## Overcoming the investment gap

### **Comoros' investment needs are significant.**

At on average 16.7 percent of GDP, total investment has been respectively 4.6 and 7 percentage points short of the average for Sub-Saharan Africa and structural peer countries since the beginning of the century. Foreign direct investment averaged slightly more than 1 percent in the last decade. A protracted dearth of investment combined with rapid population growth has led to a decline of Comoros productive capital per capita, low levels of human capital and a slow depletion of its natural capital. According to the World Bank's Wealth of Nations report the productive capital per capita of Comoros has halved between 1995 and 2018 and is now half that of other lower middle and Sub-Saharan African countries.

**A lack of trust in the credibility and capacity of formal institutions is at the core of Comoros' low investment dilemma.** Investors locally and from abroad (including the diaspora) seek predictability and reliability when they make investments as the benefits of those tend to accrue only after several years. Like in other countries, political instability and a weak rule of law have been the biggest deterrents

for investors in Comoros. Low capacity macro-economic management, including intransparent and erratic budget decisions, and a tendency to spend on wages rather than investments have limited the Government's ability to make public investments and mobilize domestic revenues. Investment by private actors in central sectors like agriculture is discouraged by a weak rule of law, a weak financial system and an onerous business environment, which raises doubts whether returns on investments can be realized. In addition, in an environment where the State provides few services, the population is left with prioritizing consumption spending over investment, as they shoulder education and health expenses themselves.

**Years of low levels of investment have undermined Comoros' growth performance and have led to rising inequities.** Since 2001, investments' contribution to growth has been low and at times negative. Weak private sector development and job creation are a corollary of this weak track record of low investment, resulting in turn in low levels of labor demand and one of the lowest labor force participation rates in Sub-Saharan Africa, another brake

on growth. Public investments in inter- and intra-island connectivity as well as other core infrastructure services like electricity and water treatment should be prioritized to raise productivity in core existing sectors like agriculture, services and commerce and create the conditions for expanding manufacturing and tourism. Weak transport services currently segment surplus production basins from growing urban markets. Lack of public investment has also resulted in thin service delivery and rising inequities. Lack of access to basic services such as piped water facilities, electricity, a health center or markets is one of the strongest predictors of poverty in Comoros. Weak public service delivery has led to a privatization of health services. Comoros is one of the countries with the highest share of out-of-pocket health expenditures in the world, where every day an estimated 35 Comorians fall back into poverty because of health payments.

**Low investment in basic service delivery undermines an already fragile social contract between the islands.** Infrastructure and basic services in health and education provision have become uneven across the islands and risk aggravating an already existing sense of disconnect between the islands. Inequities fuel the desire of each island to assert its financial interests when in power, perpetuating the politicization of resource allocation. Local communities make up for the absence of the State and become more and more self-reliant. Schools and streets are built with diaspora funds leading to not always efficient allocation of private resources and a gradual privatization of important social services. But as local coping mechanisms differ within the Union of the Comoros, not all communities manage to cope to the same extent. Inequities have risen especially vis-à-vis and within Anjouan, as the main coping mechanism – remittances – does not accrue to this island the same way it does to Grande Comore and Mohéli.

## Pathway

## 2

## *Raising Comoros' human capital*

**Human capital in Comoros today is falling short of its potential.** Among the different types of assets and capital that a country possesses – productive, human and natural – human capital is where Comoros lags farthest behind other lower-middle income countries. Children in Comoros can expect to complete 8.4 years of schooling by age 18, 2 years less than their peers in other lower-middle income countries. And when years of schooling are adjusted for quality of learning, this is only equivalent to 5.3 years. Girls get significantly less education than boys and adolescent pregnancies are two to three-times as common as in aspirational peer countries.

31 out of 100 children grow up stunted due to chronic nutrition inadequacies and a lack of focus on early childhood development.<sup>5</sup> Finally, as stunting is most common among the poor in Comoros, it aggravates existing inequalities if left unaddressed.

### **Raising Comoros' human capital is key for accelerating growth and reducing poverty.**

Investing in human capital is an imperative for growth and poverty reduction. Given the human capital conditions that currently exist in Comoros, a child born today will only be 41 percent as productive as she could be if she had enjoyed complete education and

<sup>5</sup> Stunting is an important proxy as it reflects on the overall health environment in a country and compromises the long-term potential of individuals to contribute productively to the development of a country.

health. Investing in human capital requires the immediate attention of policymakers as the growth benefits of human capital investments tend to accrue with a generation's lag. Investments made in the youth of today, will only create a more productive workforce once they join the labor market. On the other hand, investments in human capital have the advantage of being less costly than investments in physical capital. And while these investments are made, additional investments in physical capital under the first pathway can have a more immediate impact on growth and pave the way for the next generation by creating job opportunities for when they are ready to enter the labor market.

**Human capital supports other sources of growth and inclusion.** Human capital complements physical capital in the production process and is an important input to technological innovation and long-run growth.<sup>6</sup> Human capital also fosters social capital. Surveys done around the world have found that more educated people are more trusting of others. This type of social capital is in turn associated with higher economic growth. Conversely, failing to protect human capital undermines social cohesion. Human

capital is one of the first things to suffer when things fall apart. Protracted conflict and fragility can prevent whole generations from realizing their potential or lead them to leave the country, taking their talents elsewhere.

**Investments in human capital also have the potential of ushering in a demographic growth dividend.** At 4.2 births per woman in 2014, Comoros has only just initiated its demographic transition. High fertility rates and population growth pose a significant burden on households as the number of dependents living in poor households in Comoros is high.<sup>7</sup> As one of the most densely populated countries in the world,<sup>8</sup> high fertility also increases land pressures which can undermine the sustainability of growth.<sup>9</sup> Lowering dependency ratios not only alleviates earning pressures in poor households, it can also raise the potential for savings which supports growth further.<sup>10</sup> Human capital investments can help bring the demographic dividend about: raising the quality and quantity of education, especially, for women, has been shown to decrease fertility rates both by delaying first-time pregnancies and by raising the opportunity costs of child-bearing.<sup>11</sup>

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<sup>6</sup> Putnam, Leonardi, and Nanetti (1993); Helliwell and Putnam (1995); Keefer and Knack (1997).

<sup>7</sup> The bottom 40 percent of households in Comoros have on average 3.5 children more than the top 30 percent and have significantly higher dependency ratios.

<sup>8</sup> Despite net emigration, Comoros is one of the most densely populated countries in the world 25th, with 328 people on average living on a square kilometer.

<sup>9</sup> Jayne, Chamberlin, and Headey (2014)

<sup>10</sup> Globally, it has been found that a 1 per cent fall in the dependency rate is associated with a 0.75 percentage point fall in headcount poverty and increase of one percentage point in the share of the working population will boost economic growth by between 1.1 and 2.0 percentage points (Cruz and Amer (2016).

<sup>11</sup> Following declines in infant and child mortality, a subsequent decline in fertility will increase the share of the working-age population. With fewer dependents and more people at work, growth per person will be accelerated, even when the output per person of working age remains constant (Bloom and Williamson 1997a) Second, a decline in fertility might lead to an increase in female labor-force participation, further boosting the pro-growth effect. Not only will the share of the working-age population increase, the economically active labor force would increase even more, raising the output per person of working age. Third, with fewer children, families (and the state) will have the opportunity to spend more per child on their welfare and education. As these children come of working age, and enter the workforce, the productivity of the workforce will increase—a result of the increase in health and educational attainment. In this way, the demographic transition is associated with an increase in the productivity of the workforce, which can be described as the 'skills effect' of the demographic transition.

## Pathway

## 3

*Protecting and leveraging Comoros' natural resource base***Natural resources are at the center of livelihoods and economic activity in Comoros.**

Comorians live off their natural resource base. Approximately 39 percent of Comoros' GDP is generated in activities for which land, sea and nature are important inputs. At 31.6 percent of total GDP (2011-2017), of which 7.5 percent of GDP account for fisheries, Comoros' economy is more dominated by agriculture than any comparator country or group. An additional 44 percent of GDP is generated by light agro-industry, which depends on agricultural output. Finally, while small by comparison but of great potential, the tourism sector contributes another 3.4 percent of GDP to the economy. 38 percent of employment is generated by agriculture and fisheries and 50 percent of the poor find their livelihoods in these two sectors.

**Growth in natural resource related sectors has been stagnant and below potential.**

Despite traditionally being the main drivers of growth in Comoros, the agricultural and fisheries sectors are of very low productivity compared to peer countries. Land expansion and the hours spent by farmers toiling on these land plots are already at their potential in Comoros. Low productivity is the result of soil degradation, increased water scarcity, outdated farming practices, lack of improved outputs and the absence of value chains. At sea, fishermen fish at subsistence level because of safety issues, a lack of specialized services and cold storage. As a result, foreigners are the main users of Comoros' generous fishing grounds and often illegally which has led to

an over-exploitation of many species. Tourism remains largely untapped, also because of a weak environment for attracting investment – which the first pathway, if unlocked, could help address.

**Greater productivity of the resource-based economy provides opportunities for poverty reduction.**

Comoros meets an exorbitant share of its food needs through imports (39.4 percent of all merchandise imports versus 18.7 percent in Sub-Saharan Africa). This high dependence on imported food makes the country vulnerable to price shocks, places a burden on Comoros' growth potential by discouraging private investment in the agricultural sector, and burdens its foreign exchange reserves. It also exposes consumers to food insecurity – as recently happened in 2008<sup>12</sup> – and constitutes a missed opportunity for poverty reduction and higher economic growth through import substitution. Food staples have been shown to offer larger growth multipliers and greater poverty to growth elasticities than an equal amount of productivity growth in cash crops (Diao et al. 2012), because they are currently being produced by most rural households and because productivity in these commodities is still very low.

**Comoros' natural resource base needs greater protection as it is increasingly vulnerable and exposed to frequent and costly shocks.**

Due to its location and topography Comoros is among the most climate vulnerable countries in the world. In addition, population pressures have led to deforestation and an erosion of the

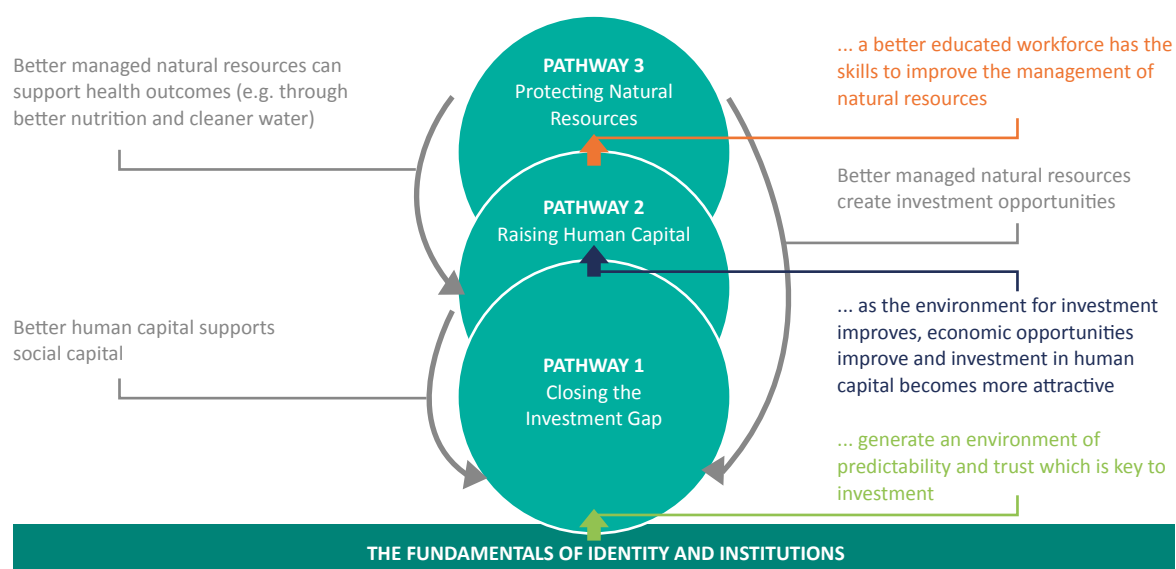
<sup>12</sup> Following a long period during which food staples were abundantly available in global markets and international prices were low and stable, extreme volatility has returned. Since 2008, international prices of rice, wheat, and maize have fluctuated sharply, at times reaching levels not seen in decades. Because Comoros imports a large share of its food consumption needs, the country was particularly exposed to the instability in global food markets.

quality of agricultural land. Rising sea levels have raised salinity levels of the ground water. Fishing grounds are unprotected from illegal fishing and risk exploitation. One out of two Comorians has been affected by some natural disaster since 2005. Natural disasters adversely affect the economy on the order of 1-3 percent of GDP every year. As losses are most pronounced in Anjouan where agriculture dominates, these losses also tend to aggravate inequities.

**Figure 3 summarizes visually how the foundations of Identity and Institutions and the pathways interact and positively affect each other.** Strengthening the two fundamental factors of Identity and Institutions will be key to Comoros' development going forward. They not only are the foundations of social capital and greater political stability, but also have a profound impact on Comoros' ability to attract investment both from within Comoros and the outside. As investments take time they require predictability to allow investors to plan and gauge the risks associated with their investments. When rules change

repeatedly or are not enforced, investors lose heart. Therefore, worldwide investment rates are higher in countries where political stability and strong institutions prevail.<sup>13</sup> If Comoros manages to unlock the first pathway of closing the investment gap, unlocking the other two pathways will be easier because they will have more investment funds to support them. Which does not mean that they should not receive attention already today. Investments in human capital only pay off a generation later, so starting today is important. And, as investment rates go up, Comoros currently very low domestic labor demand will increase, raising the opportunity costs of not getting more and better education. As the level of human capital in Comoros rises higher skills will support innovation in services but also in established sectors like agriculture and fisheries. This can help lift the productivity of these sectors, making them in turn more attractive to investors. Protecting the natural resources that are the foundation of these sectors should be a priority already today as many natural resources take a long time to regenerate once they have been depleted.

**Figure 3:** Summary of how the pathways interact



<sup>13</sup> Bénassy-Quéré et al. (2007) ; Acemoglu et al. (2001); Alesina and Perotti (1996); Besley (1995); Svensson (1998); Barro (1998); Schneider et al. (1985).



## Key Constraints and Prioritization

**To unlock the three pathways, several key binding constraints must be removed.** From a long list of required reforms presented in this report, we identify the 12 most critical binding constraints to the three pathways that we consider having both (i) a stronger effect on growth potential and (ii) a larger impact on poverty alleviation and greater social inclusion. Other criteria such as spillovers, preconditions, and time horizon of reforms were also considered. These are discussed in turn below. In addition, Table 1 proposes a prioritization of these key binding constraints based on a measure of urgency of reform. The methodology for calculating this measure is detailed in Chapter 8. The deeper the red of the bars, the greater is the urgency for Comoros to tackle the respective binding constraint.

**Overcoming the investment gap.** To unlock this pathway attention will have to be paid to four key areas of reform:

In the short run:

- **Improve macro-economic management to build trust with investors.** Closing the investment gap should start with higher rates of the budget being allocated to public investment. To be able to do this with its existing revenue stream, the Comorian government must improve its wage bill management, resist pressures to increase public sector employment and improve the efficiency of existing spending. Improved macro-economic management also means that the budgetary process must become more realistic and predictable and that debt financing be anchored in a medium-term fiscal framework. Currently, budget proposals often lack realism. Submitting them to greater public scrutiny could support a more credible budgetary process.

Comoros has one of the least transparent budgets in the world and parliamentary oversight is often bypassed. Involving local communities through participatory budgeting could support improvements in the quality of basic service provision and build trust with local communities. As part of better macro-economic management more transparency should also be created around the performance of the most important State-Owned Enterprises (SOEs) in the country. Progress on all these fronts would help build trust with private investors at home and abroad and could help raise private investment rates.

### ○ **Expand domestic revenue mobilization.**

A significant transformation of revenue administration and policies is needed to lessen the dependence on volatile budget funding from abroad and create more fiscal space for public investment. In the short run this should be achieved, ideally, through a combination of measures that simultaneously promote: i) enforcement of tax policies, ii) facilitation of tax compliance, and iii) trust in government spending. These include:

- **Enforcement:** Improve the land register and taxpayers' registration, increase SOEs' compliance with their fiscal obligations, reduce firms' informality, increase interoperability between the revenues and customs administrations, and continue the reduction of customs' unjustified and discretionary exemptions.
- **Facilitation:** Promote the simplification of tax and customs rate structures, while streamlining procedures to reduce the transactions associated with tax payment. Efforts should also be deployed to roll out tax morale



programs and consider the use of low-end technologies to support tax compliance (e.g. SMS tax reminder, mobile payments).

- **Improve Trust:** Adopt policies that promote visible links between government spending and delivery of public goods and services. These efforts, to be carried out particularly at the local level may include initiatives such as: i) local tax contributions earmarked to community-driven projects, ii) central government transfers that incentivize adoption of participatory budgeting practices and local tax mobilization, and iii) periodical budget meetings or “assemblies” that review tax contributions and local investments.

In the medium term:

#### ○ **Improve financial sector intermediation.**

Comoros' financial sector is weak and needs to be supported by putting in place the requisite financial sector infrastructure so that it can fulfill its role of channeling savings into credit for investments, while also supporting access to financial services for a greater share of the population. Resolving the liquidity and insolvency crisis of the systemically important postal bank, SNPSF, will be of fundamental importance in the short-term. Addressing the weakness of the financial sector will also require tackling the ability of courts to enforce debt payments, which has been at the root of rising Non-Performing Loans (NPLs) in the system.



***A more transparent fiscal policy would help gain citizens and investors' trust***

#### ○ **Create an enabling business environment.**

To attract investment, investors must trust that the private returns on investment can also be realized. In the context of a small domestic market – where returns are already constrained by diseconomies of scale – this can only happen by creating a more business friendly investment climate and ensuring greater protection

of property rights. Comoros' performance on international business climate rankings suggests that special attention must be paid to the environment for contract enforcement, paying taxes, business entry and exit, investor protection and electricity. An investment code less prone to ad hoc tax and customs exemptions would support fair competition. International

trade agreements could be used as external anchors supporting the business environment reform agenda.<sup>14</sup> Under an improved business environment that would favor entrepreneurship and the performance of existing firms, all sectors would benefit.

**Raising Human Capital.** Key areas of reform under this pathway are:

In the short run:

- **Reduce infant and child mortality.** The largest drivers of infant and child mortality in Comoros are preventable communicable diseases such as diarrhea and pneumonia, despite a high usage of health care services by mothers and their children. Therefore, addressing this health challenge requires actions on the supply-side of the quality of care. Three policy areas should be prioritized. First, more training of staff in health facilities is needed so that cases can be diagnosed in an accurate and timely fashion. Second, facilities need to be equipped with the right materials and medicines. Third, a robust referral system is currently missing, such that complicated cases can receive the higher-level care needed. Underpinning all of this is the need for better data in the hands of policymakers such that level of quality is better known, and support can be optimally targeted in an evidence-based way.

- **Reduce stunting:** The solution lies largely in getting the right nutrients to the population in the early years of life, when the foundations for human potential are laid. This involves not only having access to a nutritious diet, it also involves educating mothers and families. Community-based platforms for nutrition education and promotion are widely recognized as important strategies to deliver key maternal and child survival interventions.<sup>15</sup> A full spectrum of promotive, preventive, and curative interventions can be delivered via community platform and have the substantial potential to improve nutrition outcomes among difficult to reach populations.<sup>16</sup> Further, high coverage of high impact nutrition interventions need to be stepped up (including provision of improved water services) to support this agenda and counter the relatively high rates of stunting that exist among the poorest. In the long run, improved nutrition will boost labor productivity.

In the medium-term:

- **Improve the quality of education.** Better educational attainment of new cohorts entering the labor force is needed. Policies required to attain improved education attainment are three-fold: i) an increased focus on learning, by systematically measuring

<sup>14</sup> During the second semester of 2017, Comoros confirmed its membership in three international organizations, including the Southern Africa Development Community, the World Tourism Organization (UNWTO) and the African Import-Export Bank. Besides, the process of accession to the WTO is progressing as Comoros continues with sustained and constructive engagement in this process as they approach the final stages prior to WTO membership.

<sup>15</sup> Haines A, Sanders D, Lehmann U, et al. Achieving child survival goals: potential contribution of community health workers. *Lancet* 2007; 369: 2121–31

<sup>16</sup> GHWA. Global experience of community health workers for delivery of health-related millennium development goals: a systematic review, country case studies, and recommendations for integration into national health systems. Geneva: Global Health Workforce Alliance, 2010.

learning outcomes, and communicating results to schools; ii) paying greater attention to teachers, the most important factor driving student learning; and iii) transforming schools into spaces worthy of the children they serve. Comoros is the regional laggard with respect to the percentage of schools that have gender-separate toilets, with only 11 percent of schools having such basic facilities, as compared to the regional average of over 60 percent.

- **Close the educational gender gap.** The country needs to systematically remove the barriers and push factors that result in large populations of out of school girls. Policies that will do so exist on the supply side and the demand side. Aside from infrastructure actions as above, other supply-side policies that will help retain girls in school include recruiting more female role models in schools (as teachers and directors), making schools safer (through e.g. robust grievance redress mechanisms, actions that address the power dynamic between teachers and students, fostering more active school councils). On the demand-side, policy areas around reducing the direct costs of school (through e.g. scholarships, tuition waiver programs, and vouchers), reducing the indirect costs (through e.g. uniforms, school supplies, personal hygiene supplies), and facilitating safe school transport will all help keep girls – and boys – in school longer.

**Protecting and leveraging Comoros' natural resource base.** Priority reforms under this pathway include:

In the short-term:

- **Improve water management.** Better water management in terms of quantity and quality is needed to ensure that Comoros' very low per capita water endowment is not squandered. This should range from revisiting or designing water extraction and service delivery policies to specific technical initiatives such as encouraging rain harvesting, more generally water conservation and reducing pollution of sources, as well as ensuring more efficient urban water usage, while pricing water more economically. Improving the quality of water provided will also help address the challenges of nutrition deficiencies and stunting identified under the second pathway. In many countries, partnering with communities and local units of government, including putting resources under the direct control of community groups, has led to the efficient delivery of basic services, and, when sustained, measurable reductions in poverty. Considering the binding constraints identified for Comoros, a community driven approach in water management would: (1) fill institutional and capacity voids left by incomplete decentralization especially given the diversity of management arrangements between the different islands; (2) devolve decision making on services and on issues such as watershed protection to farmers themselves; (3) reduce the operational costs of infrastructure through responsive asset management at the local level; (4) provide a local, accessible home for dispute resolution among water users and between them and authorities; and (5) reduce transaction costs for compliance with water resources and water services regulations.<sup>17</sup>

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<sup>17</sup> A community driven approach has been tested in Mutsamudu (the second largest city in the country located on Anjouan island) with the establishment of a watershed management committee. Among other things this improved community and particularly women's formal participation in water resources and water services planning and management (UN, 2018).

- **Reform agriculture.** Yield-enhancing investments in climate smart technologies (CSA), inputs, and sustainable land and water management practices can deliver both productivity gains and build resilience to environmental risks. The transfer of off-the-shelf resilient and biofortified varieties of the main food crops – maize, cassava, bananas – from regional centers of excellence (RCoE) could enhance adaptation and food security without requiring duplicative financial and human resource investments in agricultural R&D. Coupled with the scale-up of practices like low-till agriculture, agroforestry, sustainable soil fertility management, and rainwater harvesting, strategic investments in CSA dissemination have the potential to transform Comorian agriculture and place it on a sustainable growth path.<sup>18</sup> Community-level rural development centers can help accelerate behavior change and adoption of CSA technologies and practices.<sup>19</sup>
- **Develop a sustainable management approach for fisheries.** To limit depletion of the fish stock in Comorian waters, and, especially, depletion of species in the coastal areas that are of value to the ecosystem, fisheries management must focus on increasing the economic benefits of fishing for local communities. This can be achieved by reducing post-harvest losses and increasing value-addition through investment in adequate infrastructure for artisanal fisheries (e.g. landing sites, cold storage, ice-machines, etc.). Fisheries co-management, an approach tested in other countries, holds promise for Comoros. Co-management involves communities in the decision making-process, increases ownership and supports the application and enforcement of the management measures adopted.<sup>20</sup> Samoa is a good example of an island state like Comoros which has adopted a community-based approach to subsistence fishery management. 44 percent of Samoa's approximately 230 coastal villages have village fishery management plans today.<sup>21</sup>

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<sup>18</sup> Other CSA technologies adaptable to Comoros include small-scale irrigation, terraces, contour bunds, grass bunds, rehabilitation of degraded micro-watersheds, woodlots.

<sup>19</sup> One example of a community level rural development center are farmer field schools championed by the FAO. A Farmer Field School (FFS) brings together a group of farmers, livestock herders or fisherfolk, to learn on how to shift towards more sustainable production practices, by better understanding complex agro-ecosystems and by enhancing ecosystem services. A FFS group meets regularly during a production cycle, setting up experimentation and engaging in hands-on learning to improve skills and knowledge that will help adapt practices to their specific context. The FFS empowers individuals and groups to move towards more sustainable practices and improve livelihoods.

<sup>20</sup> Fisheries co-management is flexible and cooperative management of the aquatic resources is performed by the user groups and the government. In this arrangement, both the community and the government are involved during the decision making, implementation and enforcement processes (Sen and Nielsen, 1996).

<sup>21</sup> Co-management activities in Comoros have already started under the World Bank's Coastal Resources Co-management for sustainable livelihood project, where 17 co-management agreements were signed with communities on Grande Comore, Mohéli and Anjouan, with the objective to improve human and institutional capacity development, design and implement fisheries management plans.



In the medium-term:

○ **Strengthen disaster risk management.**

Building resilience to climatic shocks requires taking a comprehensive disaster risk-management approach that encompasses detailed risk assessments, strengthening the legal framework and institutional capacity and the development of a national disaster risk management plan prioritizing critical areas. Enhanced disaster risk knowledge will allow Comoros to improve land use planning, as well as relocation and protection programs for the population living in risk prone areas. To build resilience at the community level, combining on-going efforts on social protection and adaptive safety nets with investments in effective early warning systems and community disaster preparedness would contribute to save lives and reduce the impact of disasters shocks on the poor.

In the medium term, the interdependence between forested areas, agricultural land and coastal zones in Comoros will require an integrated approach for policy-making with close collaboration between the different sectors (water, agriculture, fisheries, forest, energy, etc.).

In the long term:

- **Reform land tenure.** The current overlap of three land regimes prevents land from being sold and rented out and limits farmers ability to collateralize their land to obtain access to financing. The absence of a land registry coupled with an inefficient and corrupt court system leave many land conflicts at stalemate undermining the ability of owners to invest. Reforming land tenure tends to be a lengthy and politically charged process but could be catalytic for land productivity by eventually allowing for the concentration



of land and incentivizing investment in the adoption of modern inputs and farming techniques and water management. A clear land tenure system would also support the environment for investment and private sector development more generally.<sup>22</sup> Last, the lack of land tenure security binds poor families to the land they cultivate and limits their abilities to complement their on-farm with off-farm earnings because they must fear dispossession if they distance themselves from their land. Because of its very long-term nature – both in terms of winning support for it and its implementation – this reform area is not included in the list of priorities in Table 1 above, but because of its significant catalytic effect for development it is mentioned here.

**To strengthen the foundational factors of Identity and Institutions the following two main constraints must be tackled:**

- **Support citizen and community participation.** Reform efforts will have to be supported by a proactive engagement with the inclusion of local communities across traditional divides. A natural entry point is to leverage the existence of community-based organizations and village associations that take decisions related to development interventions, and collectively decide on how to spend the funds remitted from the diaspora. These associations have deep knowledge of local context and have the authority and credibility by which to take and carry out decisions. Opening the spaces in which people can engage in dialogue and express their thoughts and ideas-

particularly those who currently seek a greater voice in society, such as academics, local NGOs, trade unions, associations, private sector representatives, women, and youth groups, will be essential and will help to open channels of communication for non-traditional voices. An important aspect of this is to elevate the voices of women, who hold informal power within communities and are increasingly involved in the public sphere through women's associations and organizations, but find their roles circumscribed by religious and social norms.

- **Strengthen the capacity of key formal institutions.** To build up trust in the central state and its formal institutions, steps towards instituting greater transparency, oversight, and accountability mechanisms need to be taken. Examples include increasing transparency of and consultation on the budget with Parliament, publication of the financial accounts of the most important state-owned enterprises, and greater transparency regarding public procurement contracts (an issue that was widely raised in private sector consultations – see Annex 2). These efforts also need to be paired with measures to reinforce citizen engagement and provide citizens with opportunities to comment on law proposals etc. Only when citizens feel that their voice is being heard will they trust the central state. Ultimately, instituting these type of feedback mechanisms will facilitate the improvement of quality and delivery of services by the central state. Last, the knowledge base for evidence-based decision making needs to be improved by

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<sup>22</sup> Greater land tenure security can be achieved if land administration services are strengthened to undertake participatory titling in production basins. This process would consist of consensual demarcation, multi-stakeholder land recognition committees that facilitate a small-scale cadaster census, and land use planning.

addressing the weaknesses of the statistics system. A general absence of information to inform the design, implementation, monitoring, and evaluation of policies and to produce evidence-based service delivery generates inefficiencies and incoherence (see Annex 10 for an inventory of current data gaps).

### **Knowledge and Analytical Gaps**

- **Interaction between traditional and local governance networks.** An improved understanding of inter and intra-community dynamics, their reach and legitimacy, dynamics related to inclusion and exclusion is needed to develop an understanding of how to move from the existing situation of reliance on informal institutions to a decentralized structure that also helps to reinforce the authority, legitimacy, and reach of the central government.
- **Drivers of labor productivity by sectors.** Analytical work on the differences across sector productivity is lacking. Such a study would benefit from improved data collection on employment and firm performance by subsectors.
- **Role of political connections in market distortions.** A better understanding of the relationship between Comorian businesses and the government and how this affects resource misallocation is needed (typically through privileges in terms of commercial protection, rules and regulations, and access to finance).
- **Service Delivery Indicators.** To assess what it would take to improve the health and education outcomes, a proper measurement of the quality of services of health and education services is needed.
- **Agricultural census.** The first and last agricultural census in Comoros was conducted in 2004. Consequently, it is difficult to plan, monitor and evaluate investment projects at present.
- **Country Environmental Assessment.** Lack of data related to the environmental sector is significant and where data is available it is either outdated or suffers from inconsistencies. To inform policy-making, the country's natural capital values (especially water, fisheries and coastal resources, forestry and protected areas) need to be thoroughly assessed so that the continuous loss in forests, soil fertility, water, biodiversity, fisheries are no longer economically invisible but are fully considered to inform policy development.
- **Land reform.** A better understanding of the constraints for land reform and its effect on the economy would allow policy makers take more informed decisions to unlock the potential of this important production factor and to increase its productivity.
- **Urban development.** There is currently a lack of analytical work focusing on the challenges stemming from slowly increasing urbanization.



Table 1: Key binding constraints and prioritization

Pathway	Key binding constraints	Key Performance Indicator	Fragile	Performance of Comoros compared to worst-performing fragile country & best-performing aspirational peer											
				0	1	2	3	4	5	6	7	8	9	10	Aspirational
Overcoming the investment gap	Strengthen macro-economic management	Wage bill as % of current expenditure (WDI, 2011-2017)	Togo (72%)	Comoros (51%)											Fiji (32%)
		Ranking in the Open Budget Survey (0-100)	Yemen (0)	Comoros (8)											Fiji (41)
	Increase domestic revenue mobilization	Tax and Customs revenue as % of GDP (WDI, 2011-2017)	Micronesia (6.6%)	Comoros (71%)											Fiji (24%)
	Support financial sector intermediation	Domestic Credit to Private Sector (% GDP) (WDI, average 2011-2017)	Congo, DR (5.6%)	Comoros (13.9%)											Fiji (81.5%)
	Create a supportive business environment	Base of Doing Business Score (Doing Business, 2019)	Somalia (20.4)												Comoros (48.7)
Raising Human Capital	Reduce infant and child mortality	Probability of survival to age 5 (HCI, 2018)	Chad (0.88)	Comoros (0.93)											Tonga (0.98)
	Reduce stunting	Fraction of kids under 5 not stunted	Burundi (0.44)	Comoros (0.69)											Tonga (0.92)
	Improve quality of education	Learning adjusted years of school (HCI)	South Sudan (2.3)	Comoros (6.5)											Tonga (6.5)
	Close the educational gender gap	School enrolment, female secondary (WDI, 2011-2017)	Mali (27.7)	Comoros (45.8)											Samoa (83.3)
Protecting and leveraging natural resources	Improve water management	Renewal internal fresh water resources, total (billion cubi meters)	Djibouti (0.3)	Comoros (1.2)											Fiji (28.6)
	Reform agriculture	Average yield of cereals, fruits and vegetables (kg/ha) (FAOSTAT, 2011-2017)	Burundi (38,582)	Comoros (44,497)											Tonga (88,152)
	Protect fishing grounds	Fisheries current score 0-100 (Yale Environmental Performance Index)	Guinea-Bissau (36.45)	Comoros (57.81)											Tonga (76.86)
	Manage disasters better	Readiness indicator of the ND-GAIN Matrix (2014)	Central Africa Republic (0.17)	Comoros (0.32)											Cabo Verde (0.48)
Identity and institutions	Strengthen capacity of formal institutions	Government Effectiveness Percentile Rank (WGI, average 2011-2017)	Somalia (0)	Comoros (2.8)											Samoa (70.7)
	Support citizen participation	Voice Accountability Percentile Rank (WGI, average 2000-2017)	Eritrea (1)	Comoros (36.5)											Cabo Verde (76.1)



# INTRODUCTION

**1. This Systematic Country Diagnostic (SCD) – the first for the country - takes stock of Comoros' development progress since the early 2000s and reflects on the constraints and opportunities that the country encounters on that path.** The report provides elements to answer three main questions: (1) What are the main constraints hampering output and productivity growth? (2) What are the critical factors that determine poverty reduction and inclusion? and (3) How sustainable are the current trends in growth and inclusion? As the SCD investigates these questions it identifies three main pathways which if followed could accelerate progress towards the World Bank's twin goals of poverty reduction and shared prosperity.

**2. To identify policy areas in which the country faces the greatest challenges in advancing toward the World Bank's twin goals of poverty reduction and shared prosperity, this SCD relies on a few analytical tools.** A benchmarking exercise involving close to 1,000 indicators was undertaken to compare the performance of Comoros with other small-island states that share the core characteristics of income, fragility and remittances (see Table 2). Where Comoros' performance diverged significantly from its peers, a deeper analysis of the relevant issues was undertaken. This sectoral analysis was imbedded in the context of a growth decomposition and a detailed analysis of poverty and shared prosperity dynamics. New analysis of the labor market and the role of remittances for poverty reduction was undertaken for this SCD as both these topics emerged as important knowledge gaps during the conceptualization of the document. A Risk and Resilience Assessment complements the quantitative analysis and provides important context regarding the

social dynamics that drive growth and poverty outcomes in Comoros.

**3. To move from analysis to a prioritization of policy actions, the SCD applies a three-step process:** In a first step, the SCD identifies three main pathways that are currently blocked, yet, hold the biggest promise for stronger growth, more equitable poverty reduction, and for strengthening social cohesion and reinforcing state-society linkages, an important aspect of Comoros development story. In a second step, the SCD identifies reform areas that could unlock the three pathways. Finally, these policy actions are prioritized by a few criteria that are spelled out in Chapter 8.

**4. The report also identifies two important development filters that need to be applied when analyzing the way forward: *Identity and Institutions*.** These filters are motivated by the significant social, political, and governance challenges that Comoros faces. At a social level, Comoros struggles to maintain a sense of national identity and cohesion, with adverse consequences for growth and equity. Evidence from other small island states and fragile contexts suggests that countries that have enjoyed development progress share the common features of strong and inclusive governance structures that can help foster a sense of social cohesion. This allows these countries to build more robust and resilient formal state *institutions* that can ensure long-term policy making and continuity, and enables them to overcome some of the diseconomies of scale associated with their small size, as highlighted in both Pathways for Peace and the World Development Report 2011 on Conflict, Security and Development.<sup>23</sup> Considering their example, Comoros' development path will hinge on

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<sup>23</sup> Pathways for Peace (2018); World Development Report (2011)

its ability to strengthen its sense of national identity –effectively uniting and ensuring inclusion and representation of its multiple overlapping power centers to support the

common interest of growth and shared prosperity. Chapter 4 discusses the relevance of these two filters, Chapter 8 proposes how they could be supported.

**Table 2: Comoros and comparator countries**

Country	Population (millions)	Small States	CPIA* < 3.2 (i.e. fragile)	Island State	GNI per capita, Atlas method (current US\$) (2017)	Poverty Gap at USD 3.2 (most recent value)	Real GDP growth (annual) (average 2011-2017)	Personal remittances received (% of Nominal GDP) (2017)	Type of comparator
Cabo Verde	0.546	x		x	2,990	8	2.2	12.9	Aspirational peer
Tonga	0.108	x		x	4,010	1.9	1.8	25.9	Aspirational peer
Fiji	0.906	x		x	4,970	2.9	3.2	3.7	Aspirational peer
Samoa	0.196	x		x	4,100	1.7	2.4	17.6	Aspirational peer
<b>Comoros</b>	<b>0.814</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>1,280</b>	<b>15.4</b>	<b>2.9</b>	<b>13</b>	
Sao Tome and Principe	0.204	x	x	x	1,770	26.8	4.4	5.8	Structural peer
Solomon Islands	0.611	x	x	x	1,920	21.4	4.6	1.2	Structural peer
Timor-Leste	1.296	x	x		1,790	26.2	-0.9	4.2	Structural peer

\*Country Policy and Institutional Assessment (World Bank)

**5. The rest of this document is organized as follows:** Chapter 3 introduces Comoros to the reader. Chapter 4 discusses the social capital of Comoros, its role for fragility and resilience. Chapter 5 presents an overview of recent poverty and shared prosperity trends. Chapter 6 describes the growth performance of Comoros. Chapter

7 discusses the economic, political, social and environmental risks to the sustainability of growth and poverty reduction. Finally, Chapter 8 presents a way forward and a prioritization of policy actions that have the potential of supporting Comoros on its development path towards stronger growth and greater shared prosperity.





# **MEET COMOROS - SETTING THE SCENE**

## Geography and Society

**6. Comoros is a volcanic archipelago off the coast of East Africa that historically constituted an important trading post for Arab, European, Persian, and African merchants and traders from the 15th century onwards.** It stretches across four islands—Grande Comore, Mohéli, Anjouan, and Mayotte, the latter of which remains under French administration. About half of the population lives on the largest island, Grande Comore, which is also home to the union capital Moroni. The volcanic islands have been called the “*perfumed islands*” for their fragrant plant life and are known for their scenic beauty. At the heart of a triangle between Tanzania, Mozambique and Madagascar, Comoros is considered the second triangle of reef biodiversity in the world, after Indonesia. Comoros has about 1,800 square kilometers of land; off-shore it controls an Exclusive Economic Zone (EEZ) of 160,000 km<sup>2</sup> or 70 times the size of the country's land area.

**7. Comoros population make-up has been shaped by a history of multiple migrations.** The country's complex ethnic make-up is the result of multiple waves of migration—from Indonesia, East Africa, Melanesia, Polynesia, the Arabian Gulf, Persia, Europe, Madagascar,

and others. The official languages spoken today are Arabic, French, and Shikomori (derived from the Bantu language family). 98 percent of the population adheres to a form of Sunni Islam deriving from the Shafi'i tradition. As per a newly passed referendum, the new constitution makes it explicit that Sunni Islam, rather than Islam, is the state religion.

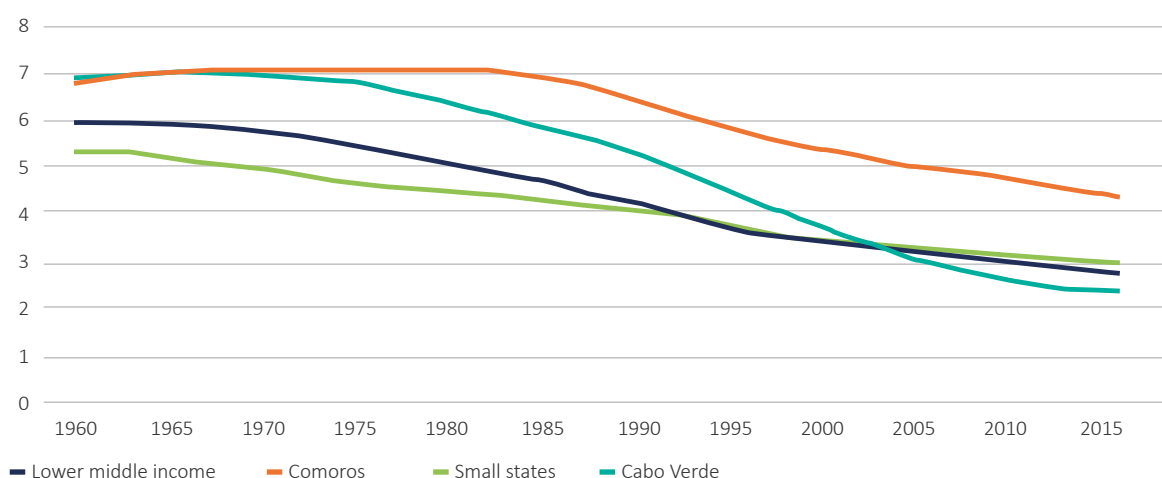
**8. Comoros has yet to reap a demographic dividend.** The population of around 800,000 is young (with 54 percent under the age of 20) and largely rural (at two-thirds of the population). At around 4.3 children per woman, Comoros falls in the group of countries where the fertility transition<sup>24</sup> has been initiated but fertility rates remain so high that they adversely affect growth and poverty (see *Figure 4*). Over the last 15 years, population growth averaged 2.4 percent per year, below the average for SSA and other low-income countries, but well above that of structural and aspirational peers. Demographic projections indicate that the total population of Comoros will increase by 50 percent and that the size of the labor force will double over the next 15 years, posing a major challenge in terms of employment creation, poverty reduction and coping with the additional pressures placed on limited land and natural resources.<sup>25</sup>

<sup>24</sup> Based on their status in the fertility transition, Guengant (2017) identifies five groups of countries in Sub-Saharan Africa: **Fertility transition complete (or close to completion).** In these countries the TFR is less than three per woman in 2010-15. These countries include: Mauritius, the Seychelles, Cape Verde, South Africa and Botswana. **Fertility transitions underway:** In these countries the TFR is in the 3-4 range. These countries include Lesotho, Djibouti, Swaziland and Namibia (representing 0.7 per cent of the SSA population). **Fertility transitions initiated:** Here the TFR is in the 4-5 range. This group consists of 20 countries, including Comoros. **Slow and irregular transitions:** In these countries, the TFR is in the 5-6 range. These 12 countries are: Côte d'Ivoire, Guinea, South Sudan, Senegal, Tanzania, Malawi, Mozambique, Zambia, Burkina Faso, Nigeria, Gambia and Uganda. **Very slow and/or incipient fertility transitions:** The seven countries in this group—Burundi, The Democratic Republic of the Congo, Angola, Chad, Mali, Somalia and Niger - have TFRs at over 6 per woman.

<sup>25</sup> Despite net emigration, Comoros is one of the most densely populated countries in the world (25th), with 328 people on average living on a square kilometer.

**Figure 4: Demographic trends, Comoros and comparators**

Fertility rate, total (births per woman)



Source: WDI

**9. The role of women in Comoros' society is complex.** While Comorian society is matrilineal, giving women an important role in society in terms of asset ownership,<sup>26</sup> gender inequalities in Comoros are entrenched. The primary school completion rate for women is lower than that for men (70 percent vs. 90 percent) and literacy rates are higher for women (at 77.3 percent vs. 69.7 percent for men). Women's participation in the labor force is half that of men. Despite gender equality being enshrined in the Constitution, women are under-represented in the civil service, where a gender-biased patronage system works against them.<sup>27</sup> Although, women generally inherit land and houses according to custom, they do not always have usufruct

rights, which tend to go to their husbands, maternal uncles, or brothers.

**10. Young Comorians have limited educational options, scarce opportunities in the formal sector, little social mobility, and few avenues for political voice and expression.** High rates of unemployment have contributed to frustration among the youth and helped to drive outward migration. In 2014, one in two young Comorians of working age was unemployed. Only 3 percent of youth have found fixed employment in the formal sector, in a context of a severely constrained private sector, while 80 percent have secured a source of livelihood in the informal sector. The key source of formal employment in the country—the civil service—is saturated.

<sup>26</sup> Although, even if according to custom and granted by favorable laws, women have access to property, they do not always have the use rights of these assets. According to article 82 of the Family Code Comorian custom dictates that, each girl is entitled, at the time of her marriage, to receive a house from her parents. In principle, these assets available to women can be used as collateral and, therefore, could promote their access to credit and finance. However, in practice, assets tend to go to their husbands, maternal uncles or their brothers. A poor land registration system and matrilineal system which affirms the indivisibility and inalienability of the land, limits in practice women's ability to use their own land to access bank loans.

<sup>27</sup> Despite having ratified the Convention on the Elimination of all Forms of Discrimination against Women, Comoros continues to suffer from underrepresentation of women in all spheres of socio-economic activities, including national (3 percent) and local politics, in administration, and in the legal and judiciary profession judiciary.



## The Political Setting

**11. Since gaining independence in 1975, the country has experienced tension between the challenge of building a strong and cohesive nation state, and the regional push for autonomy at the island level.** This has acted as a recurrent source of instability in the Comoros and the absence of a strong sense of nationhood and national unity has exacerbated the salience of this tension as a factor of the country's history of persistent political upheaval. Comoros declared independence from France in 1975, having put the decision to a referendum. In Mayotte, however, 64 percent opted to remain with France, which paved the way for the colonial power to retain control of the island as a French territory. Since independence, the country has seen 21 successful and attempted military coups, two of which resulted in the assassination of the-then president. Mercenaries have played a role in the political trajectory; aiding coup attempts and deposing presidents.<sup>28</sup> The country also experienced multiple inter-island confrontations and separatist threats from the islands of Anjouan and Mohéli. That said, conflict in Comoros has generally been low-intensity, with clashes rarely resulting in more than five deaths.

**12. Efforts to address persistent tensions amongst the islands with respect to power sharing and government revenues have led to multiple revisions of the constitution and constitutional arrangements.** Since 1975, the country has enacted five constitutions and

numerous constitutional amendments. These have alternated between greater centralization and greater autonomy for the islands. Before the referendum of July 30, 2018, the constitution in place had dated from 2001 and came about as a result of a reconciliation agreement – the Fomboni Agreement – following the separatist crisis of 1997-1998, when the islands of Anjouan and Mohéli declared their independence from Comoros. To meet the aspirations of Anjouan, and to a lesser extent Mohéli, a high degree of island autonomy was introduced by means of a system called “*tournante*”, which rotates the presidency among the four islands in turn—Grande Comore, Anjouan, Mohéli, and Mayotte.<sup>29</sup>

**13. Since the introduction of the “*tournante*” system under the 2001 constitution, Comoros has experienced three relatively smooth transitions of presidential power.** It is widely accepted that the “*tournante*” has been essential to holding the country together. However, there are views among the Comorian political elite, especially on Grande Comore, that the “*tournante*” creates undesirable discontinuities in policies and practice and it is “undemocratic” in the sense that it departs from the principle of each vote having equal weight. Over a fifteen-year cycle, Mohéli, with the smallest share of the total population, will have the same chance to elect a President as Grand Comore, with a population almost ten times larger. On the other hand, there is a sense that if elections were open to all based on ordinary universal suffrage, it is unlikely that there would ever be a President from Anjouan

<sup>28</sup> These mercenaries were in close contact with France, and especially its secret services. Involved in several coups d'état in Africa, Bob Denard, nicknamed “the White Sultan of Comoros,” played a key role in the archipelago's political instability. He had a continuous presence in the country under President Abdallah (1978–1989), when he created and managed the Garde Présidentielle.

<sup>29</sup> Mayotte has been a French overseas department since 2011 following a referendum in 2009. Thus, Mayotte does not partake in the “*tournante*”, given that it remains under French jurisdiction. Relations between Comoros and France remain fragile, as Comoros continues to claim Mayotte as part of its territory.

and virtually impossible that there would ever be a President from Mohéli.

**14. Incomplete efforts to implement the decentralization of power envisioned under the 2001 constitution have hampered the emergence of a unified nation state by sharpening the disconnect between the central state and the islands.** Many laws required to implement the constitution—specifically regarding budget expenditures and devolving functions—have yet to be enacted. The formula for sharing state revenues with the islands has not been fully respected,<sup>30</sup> and financial transfers from the center are often negotiated on an ad hoc basis. This can reinforce a sense of mistrust and play into perceptions of neglect and marginalization of the islands.<sup>31</sup> Further, the legislature and judiciary are struggling to provide the requisite checks and balances over the executive branch of government, with a divided parliament, scarce oversight of

the budget,<sup>32</sup> and the ability of the executive branch to overrule ratified legislation.

**15. The country currently stands at a political crossroads.** A referendum on July 30, 2018, gave the government the green light to once again reconstitute the country's political arrangements (see Table 3). It follows a national dialogue conference (Assises Nationales) in February 2018 that recommended changes to the Constitution.<sup>33</sup> The proposed changes allow an incumbent president to re-stand for office and hold two consecutive five-year terms. The changes also abolish the Constitutional Court and transfer its responsibilities to the Supreme Court, whose members are appointed by the President. Thus, while the limits of the tournante system are clear with regards to long-term policy continuity, these changes will also have the effect of frustrating the ambitions of the political elite of Anjouan, the island next in line to take on the presidency.<sup>34</sup>

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<sup>30</sup> It was only respected under international oversight, during the transition period after the 2001 Constitution came into force.

<sup>31</sup> Geographical barriers and limited opportunities for the population to interact beyond their physical territory have been additional factors perpetuating a localized sense of identity across the islands. The education system does not effectively consolidate common values and shared reference points among all Comorians; the youth have few occasions on which to engage with their peers from other islands, while elites pursue higher education and training opportunities outside of the Comoros.

<sup>32</sup> The 2018 budget has not been formally voted on and no loi de rectification budgétaire was adopted this year. Comoros scores 8 out of 100 points on the Open Budget Index.

<sup>33</sup> The conference was organized to draw lessons from a comprehensive diagnosis of the country after more than 40 years of independence and to elaborate new arrangements for the future. Some political leaders and intellectuals refused to participate in the Conference, claiming instrumentalization by the organizers of the Assises Nationales in favor of President Assoumani and his supporters. The process was also contested by the governor of Anjouan. A few debates were also organized within Anjouan and Mohéli, in an attempt to qualify the process as "the Assises of Grande Comore."

<sup>34</sup> President Assoumani has argued that the former system hindered long-term planning; however, the opposition has countered that the move will broaden the powers of the executive and the president, as the amendment to the constitution will eliminate the post of vice-presidents and substantially dilute the powers of governors on the three islands.

**Table 3: Changes to the Constitution as per the Referendum of July 30, 2018**

2001 CONSTITUTION <sup>35</sup>	2018 CONSTITUTION
<b>Preamble:</b> Islam is the official religion of the state.	<b>Preamble:</b> Sunni Islam is the official religion of the State.
	<b>Article 97:</b> Sunni Islam of the Shafi'i tradition governs worship and social life.
<b>Article 7:</b> Each island is autonomous. The Union of the Comoros is a Federal State and the Union and the islands each have their respective competences.	<b>Article 1:</b> The Union of the Comoros is a Unitary State and the competences for the islands have been diminished.
<b>Article 13:</b> The Presidency rotates among the islands through the <i>tournante</i> system and each president would have to wait ten years for the cycle to return to their island to be eligible for a second term.	<b>Article 52:</b> The Presidency continues to rotate among the islands through the <i>tournante</i> system. Each island is now permitted to renew their mandate and hold the Presidency for two consecutive terms provided that the incumbent wins the subsequent elections.
<b>Article 14:</b> Each island has its own elected Vice-President. The VP of the island currently holding the Presidency will be the acting president.	<b>Article 58:</b> The posts of elected Vice-President has been eliminated and the Minister Premier will be the acting president.
<b>Article 36-40:</b> The Constitutional Court is the highest court in the land on constitutional matters and Judges are appointed by different political authorities (Union President, President of Parliament, and Island Governors).	<b>Article 96:</b> The Supreme Court is the highest court in the land - including on constitutional matters. A Chamber of the Constitutional Court has been created within the Supreme Court. The Judges of the Chamber are nominated by Presidential Decree.
Next Presidential election scheduled for 2021	Next Presidential election scheduled for 2019

## The Structure of the Economy

**16. Comoros' economy is undiversified and among the most food import-dependent in the world.** The economy remains structured on a narrow export base built around the production of vanilla, ylang ylang (ylang-ylang's aromatic oil is used in the perfume industry), and cloves. The economy is characterized by informality, and faces significant challenges related to competition and diversification (see Annex 9 for a distribution of economic activity by islands).

**17. Agriculture is Comoros' largest employer and second-largest sector (after services). It also accounts for most land-use.** Between 2011 and 2017, the sector's share of the GDP averaged 31.6 percent, high above the average of structural peers (15.7 percent) and the average of Sub Saharan Africa (23.7 percent) (see Figure 5). The bulk of agricultural production comes from small family-owned and operated farms that produce a range of food crops destined mainly for home consumption, including maize, cassava, bananas, taro, sweet potato, and coconut. Commercial agriculture

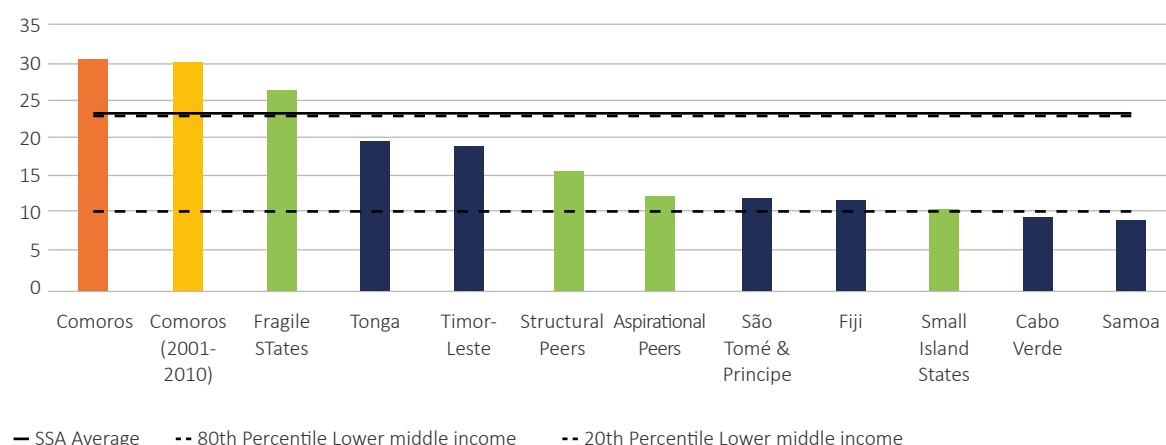
<sup>35</sup> As of further amendments from 2009 and 2013.

is underdeveloped and revolves around the production of three high-value crops destined for export, namely, vanilla, cloves, and ylang-

ylang. Like in comparator countries, the livestock sub-sector in Comoros is extremely small with less than one poultry bird per capita.<sup>36</sup>

**Figure 5: Size of the agricultural sector, Comoros and comparators**

Agriculture, value added (% of GDP) (2011-2017)



Source: Staff calculations using WDI

**18. Fisheries accounts for 24 percent of the agricultural GDP (or 7.5 of total GDP) and employs directly and indirectly an estimated 8,500 people or 4.2 percent of the labor force, thus providing an important source of livelihood for poor families.**<sup>38</sup> Comoros' Exclusive Economic Zone (EEZ) of 160,000 km<sup>2</sup> straddles the important tuna fishing grounds at the mouth of the Mozambique Channel. Many workers are women involved in gleaning, processing and marketing. However, fisheries in Comoros are almost entirely artisanal. The domestic fleet, due to their small size and limited equipment, lacks the capability to harvest offshore resources. Although most of the coastal waters are heavily exploited, particularly for high value demersal species (e.g. snapper, grouper, etc.),

there are many underexploited resources in the country, including lobsters, cephalopods (octopus), sea cucumber and bivalve mollusks.

**19. Fishing rights granted to foreign vessels have historically generated significant government revenues, but governance failures have brought this revenue stream to a halt.** Tuna is fished predominantly by countries from outside the region and no landing takes place in Comoros. Hence, the benefits to the Comorian economy consist largely of payments to the Government for access of foreign vessels to national waters. In the past, fees paid to the Government for access of foreign fishing vessels to the Comorian waters amounted to approximately US\$1.3 million per year or 0.7 percent of total government

<sup>36</sup> 0.67 in Comoros, 0.72 in Timor-Leste, and 1.15 in Sao Tome & Principe (only Solomon Islands is lower, at 0.4).

<sup>37</sup> Fishers households – both full-time fishers and subsistence fishers who alternate between agricultural work and fishing – make up a significant proportion of the households below the poverty level (i.e. 40 percent of inhabitants in Grande Comore and 70 percent in Anjouan).

revenues in 2017, half of which comes from a Sustainable Fisheries Partnership Agreement of the European Union for tuna and tuna-like species. However, in 2017 this revenue stream ended when Comoros was sanctioned by the EU for non-compliance with fighting illegal, unreported and unregulated (IUU) fishing.

**20. The secondary sector in Comoros is small and dominated by agroindustry and construction activities.** At 12.2 percent of GDP over 2011-2017, the secondary sector's share in the economy remains below structural peers (17.0 percent) and well below the SSA average (23.7 percent). Light agroindustry is predominant with the production of essential oil and spices currently emerging. Construction is the second highest subsector representing

about a sixth of the whole sector value added. Although the construction sector's share in the Comoros' economic activity has represented only around 2 percent in the last decade.

**21. The tertiary sector is led by commerce and public-sector services.** Services contribute the most to economic activity in Comoros. It represented 56.3 percent of GDP on average over 2011-2017 with commerce and public-sector services accounting for around half of value added. Commerce is dominated by simple retail commerce, most often informal. Other important subsectors include transport, financial activities, telecommunications and hotel and restaurant services. At 3.4 percent of GDP in 2017, the tourism sector remains underdeveloped relative to its potential (see Box 1).<sup>38</sup>

#### Box 1: Comoros as a tourism destination

Each of the three islands has its own unique attractions. Grande Comore is a scenic volcanic island dominated by Mount Karthala (2,361 meters), one of the world's most active volcanoes. Moroni's port offers a sense of the island's history and Arab-Swahili heritage. The main market resembles a small version of Zanzibar's famous Stone Town before its rehabilitation - urban restoration activities could potentially transform this asset into a strong tourism attraction. The coastline is fringed with white sand beaches such as Galawa and Maloudja, as well as coral reefs that offer world-class scuba diving and snorkeling opportunities. Lac Salé is a deep salt-water lake formed in a steep-sided volcanic crater. Mohéli, the smallest island of the archipelago, offers pristine beaches such as Nioumachoua, Moimbasa, Sambia, and Itsamia. The natural environment plays host to endemic and emblematic marine fauna such as dugongs, humpback whales, and sea turtles. Local communities hope to transform the island into an ecotourism destination. Anjouan is called "l'île aux parfums" because of the ylang-ylang tree plantations. The landscape consists of mangroves, mountains, lakes, and plantations. The city of Mutsamudu has the most important medina of the islands, as well as a citadel. Of the three islands, the greatest amount of tourism development has taken place on the largest island, Grande Comore - particularly in the capital city of Moroni. However, the destination Comoros lives in expectation of a development of its tourism like their golden ages in the 90s. This was greatly led by the resort Galawa Maloudja Beach (350 rooms), managed by the South African group Sun International and closed in 2001 which targeted a clientele of South African tourists subject to the restrictions of anti-apartheid measures.

<sup>38</sup> World Travel and Tourism Council (2018)



**22. Labor productivity in Comoros appears to be low, particularly in the agriculture and construction sectors.**

A proper analysis of labor productivity across sectors is hampered by uncertainties surrounding the collection of sectoral employment data, but available data suggests that labor productivity is comparable to the labor productivity observed in structural peer countries and in Sub-Saharan Africa, but significantly below the

average aspirational peer and lower-middle income country (see Figure 6).<sup>39</sup> Even though labor productivity appears to be poor across sectors, the agricultural and construction sectors present the lowest productivity levels. Further research in the drivers of low labor productivity level is needed and will be undertaken once a new household survey is available (currently under preparation with the support of the World Bank).



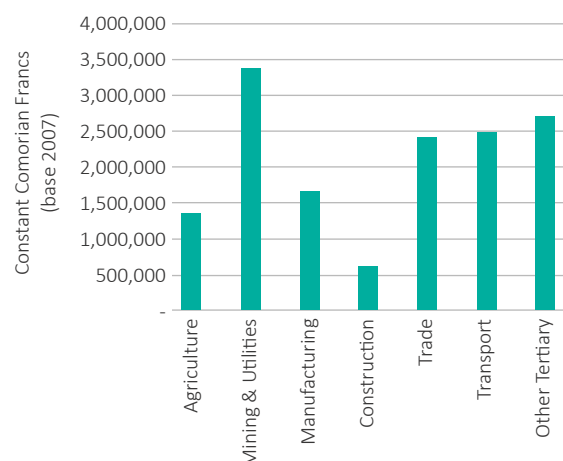
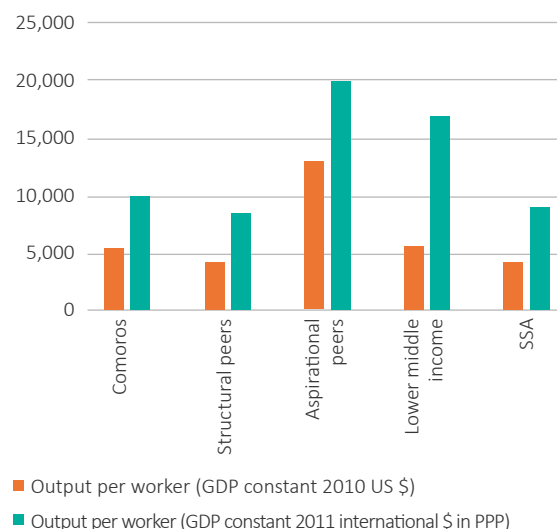
**Introduction to the macro-economic context**

**23. Comoros fiscal balance has remained largely under control in recent years but remains highly dependent on grants.**

Over the period 2011-2017, total revenues (at 17.2 percent of GDP) outweighed total expenditures (15.6 percent of GDP) generating on average a positive fiscal balance of 1.6 percent of GDP. Without large and continuous support from external donors (on average 7.9 percent of GDP between 2011 and 2017), the overall fiscal

deficit would have been most of the time in the two-digits range. The large share of the wage bill in the budget (more than 60 percent of domestically generated revenue over the last decade) leaves very little room for spending on items such as social services and education or infrastructure projects. Comoros fiscal balance may also have been more under control because of the very limited access of Comoros to financial markets (either domestic or international). Comoros' risk of debt distress has been assessed as moderate by the latest WB-IMF joint debt sustainability analyses.

<sup>39</sup> A recent comparative study suggests that Comoros was among the seven SSA countries that experienced the most stagnating labor productivity relative to the United States since the 1970s (Calderon et al. 2018).

**Figure 6: Labor productivity****a. Output per worker by sector (2014)****b. Total output per worker - Comoros and comparators (2017)**

Source: Panel a: Staff calculations using Comoros' revised national accounts and EESIC 2014. Panel b: ILO

**24. The external sector relies on private remittances and external grants.** Comoros export capacity is limited and concentrated in just three products: cloves, ylang-ylang and vanilla (90 percent of exports). Despite being a world leader in vanilla (6% of world production) and ylang-ylang (70 % of world production), export revenues are less than half the import expenditure in agriculture.<sup>40</sup> The deficit in the trade of goods and services averaged 19 percent of GDP over 2011-2017 significantly surpassing that of structural peers (3.5 percent of GDP). This large trade deficit is off-set by buoyant remittances (estimated at 12 percent of GDP over 2011-2017) and the current account deficit is financed mostly by external grants, which are estimated at 8 percent of GDP over 2011-2017.

**25. Thanks mostly to a monetary policy anchored in an agreement between the Central Bank of Comoros and France, inflation rates have been relatively stable and low compared with structural peers**

(see *Figure 7*). The Comorian Franc has been pegged to the French Franc since shortly after its independence, and then the Euro since 1999 (currently at KMF 490 per Euro). Its currency is guaranteed by the French treasury. While the agreement implies a de facto surrender of independent monetary policy in Comoros, the general conditions under this agreement have helped the Central Bank maintain low levels of inflation (especially when compared to structural peers and Sub Saharan Africa countries) and adequate levels of foreign reserves (8.1 months of imports). Price administration policy for staple goods (e.g. rice) are weakly enforced and most likely have no significant effect on inflation rates.

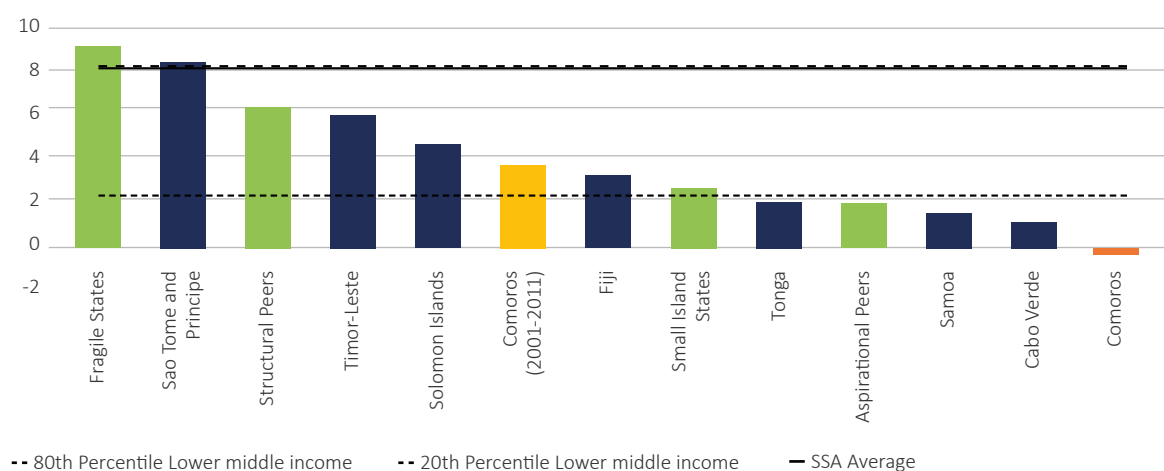
**26. The peg with the Euro has not produced a sustained overvaluation and is unlikely to have been the source of low growth.** Since the introduction of the peg to the Euro, the Comorian franc has occasionally deviated from its medium-term fundamentals (IMF,

2009, IMF 2014, 2016, and 2018), combining periods of overvaluation (e.g. 1995-1999) with periods of undervaluation (e.g. 2002-2005). For other countries, pegging has at times been found to increase the credibility of monetary policy and lower inflation rates at the expense of a loss in competitiveness.

However, in the absence of a sustained overvaluation in this century, Comoros' low level of competitiveness is unlikely to have been the result of the peg. The currency peg limits, however, the ability of the Comorian government to adjust to external shocks via the exchange rate.<sup>41 42</sup>

**Figure 7: Inflation, Comoros and comparators**

Inflation, consumer prices (annual %) (2011-2017)



Source: Staff calculations using WDI

**Table 4: Selected macroeconomic indicators**

	2015	2016	2017
GDP (millions current local currency)	438,331	455,546	466,312
GDP (millions current US\$)	988.2	1024.3	1068.1
GNI per capita for Comoros (Atlas method, US\$)	1120	930	1280
GDP growth	1.1	2.3	2.7
Fiscal balance (% GDP)	2.6	-4.2	0.4
Total Revenues and Grants (% GDP)	18.8	14.1	17.4
Total Expenditures (% GDP)	16.2	18.3	17.0
Debt (% GDP)	14.4	16.7	17.6
Tax revenues (GDP)	6.6	7.9	9.5

<sup>41</sup> Edwards and Levy-Yeyati (2005).

<sup>42</sup> Given the current modest fiscal space and the limited room for expenditure cuts (investment expenditures, usually downsized in difficult times, represent only a small proportion of total expenditures), a fiscal adjustment is highly challenging.

	2015	2016	2017
Current account (% GDP)	0.4	-4.9	-2.7
Trade Balance (% GDP)	-17.1	-15.6	-16.9
Imports (%GDP)	27.0	26.2	28.5
Exports (% GDP)	9.9	10.7	11.6
Personal remittances received (% GDP)	13.6	12.8	13.0
Domestic credit to private sector (% of GDP)	16.1	16.0	16.7
GDP shares expenditure side (% GDP)			
Consumption	103.1	99.8	99.4
Gross fixed investment	14.0	15.8	17.5
Net exports	-17.1	-15.6	-16.9
GDP sectoral shares supply side (% GDP)			
Agriculture	31.3	31.0	31.4
Industry	11.9	12.2	12.9
Services	56.8	56.8	55.7

## ***Progress on the Millennium and Sustainable Development Goals***

**27. By 2015, progress on the Millennium Development Goals (MDGs) was mostly positive and encouraging.** Among the most important MDGs reached were the ones linked to access to improved water (although continuous access to improved water is limited to less than 13 percent of Comorians) (MDG7) and to the incidence of malaria (MDG6), which is close to being eliminated in Comoros. Important improvements in the fight against extreme poverty and hunger (MDG1), primary completion rates (MDG2), maternal health (MDG5), infant mortality (MDG4), education gender parity (MDG3), and access to internet (MDG8) were also secured, however for the MDG5 and MDG4, structural peers did better than Comoros. Access to improved sanitation (also MDG7) was far from being reached, although structural peers also

lagged. As of 2015, less than 40 percent of the population had access to basic sanitation and hygiene services.

**28. Comoros presents mixed results so far on progress towards the Sustainable Development Goals (SDGs)** (see Annex 3 on Comoros' progress on the SDGs). Since 2000, significant progress was made on several fronts, including notably the reduction in maternal and children mortality ratios (SDG3), the increase in access to electricity (SDG7), and the rise of internet users and net ODA flows (SDG17). Results on economic growth have been disappointing, youth unemployment remains at very high levels (SDG8), and forest areas continue to decrease (SDG15). Lack of data constitutes a major challenge for measuring progress towards the SDGs. Comoros is among the 44 countries currently not included in the SDG Index and Dashboards due to insufficient data availability (27% of the values are missing).



# IDENTITY & INSTITUTIONS IN COMOROS<sup>43</sup>



<sup>43</sup> This section uses the World Bank's Risk and Resilience Assessment 2018 as a key input.

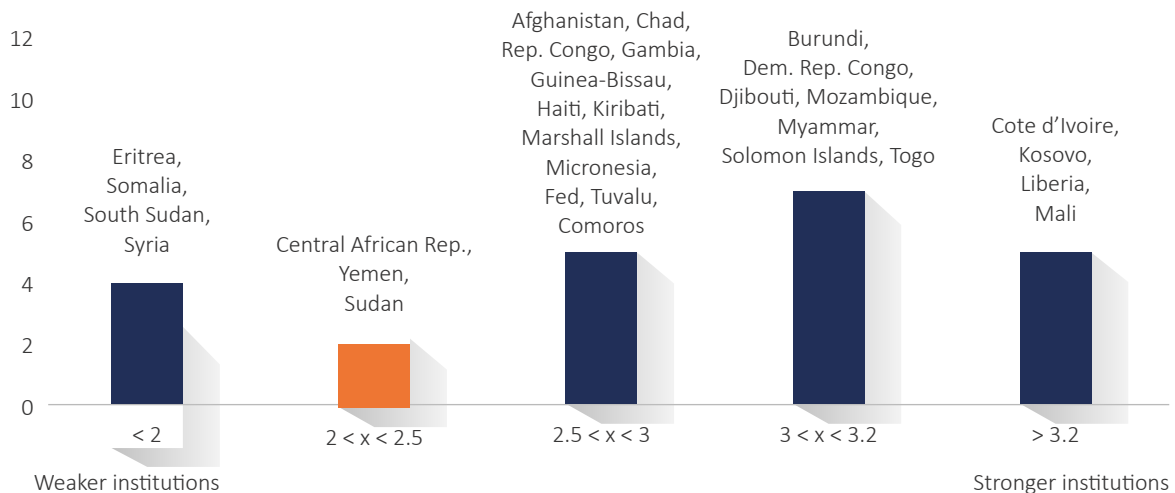


**29. Weak formal institutions and governance structures are at the core of Comoros' classification as a fragile country by the World Bank since 2006 (see Figure 8).** Comoros is among the 31 countries currently classified as fragile by the World Bank. The assessment of its institutions and policies consistently perform below the benchmark for lower-middle income countries and structural peers. Since the early 2000s, Comoros' rankings on

most available governance indicators have never risen above the 30th percentile of countries rated, with particularly low scores on government effectiveness, regulatory quality and the rule of law. These weak governance outcomes are rooted in societal structures that go beyond inter-island tensions, where formal institutions contend with a legitimacy deficit in the absence of an effective state presence through the country.

**Figure 8: Countries classified as fragile by the World Bank group by CPIA rating**

IDA eligible countries classified as in fragile situation by the World Bank in 2017, grouped by the harmonized Country Policy and Institutional Assessment (CPIA) rating



**30. To understand the complexity of social organization in the Comoros, one must look beyond its formal institutions and consider the multiple hierarchies around which society is structured.** Comorian society has developed unique forms of social and political organization based on tradition, religion, and culture—some aspects of which pre-date the arrival of Islam to the islands, and others that have adapted to incorporate elements of the faith. Historically, the traditional and informal rules that govern

society (*milanantsi*) in the Comoros are anchored in a vertical customary system based on the values of honor and prestige, and on the dominant role of the elders. The hierarchical norms (*yezi*) that govern society are largely oral and apply on the basis of group affiliation and identification (i.e., kinship, community, youth, women, elders).<sup>44</sup>

**31. The village (*mdji*) is the basic geographic unit of identification in the Comoros and holds**

<sup>44</sup> Ben Ali, Roubani, and Saïd (2011)

**the community together.**<sup>45</sup> It is the basis for the multiple forms of societal organization (social stratification, territorial organization, and religious hierarchy) and is the source of Comorians' sense of belonging, trust, and identity. Exclusion from the community is the harshest form of social sanction. A sense of belonging to and identifying with a particular village has historically been sustained by various social institutions such as the Grand Marriage (*anda*), which is at the heart of intra-community cohesion and regulates every dimension of society in the Comoros (see Box 2).<sup>46</sup> The

centrality of the village means that Comoros is sometimes referred to as “a confederation of villages,”<sup>47</sup> rather than a cohesive nation-state. This sense of localized identity is underpinned by a territorial hierarchy that developed between cities and villages according to their history of population settlement.<sup>48</sup> Villages from the most prestigious lineages are at the top of the territorial hierarchy, and those that were originally populated with slaves or their descendants are at the bottom and are generally marginalized.<sup>49</sup> This has helped fuel an urban-rural divide.

### Box 2: The Grand Marriage

Imported by migrants from East Africa, the Grand Marriage (as opposed to the Petit Marriage) is a rite of passage by which to gain the exalted status of a Notable (Homme accompli). This process entails several ceremonies (which culminate in the Grand Marriage) and features expensive and ostentatious gifts that are shared with the community and effectively boost the social status of the individual, his family, and village. Historically, the oldest son and daughter of families were expected to perform a Grand Marriage, but this has since been adapted to include any and all children who opt to undergo the process. The effect has been to increase the expenses associated with this ritual and has seen the growing monetarization of what had previously been considered a primarily social exchange. A Grand Marriage connects individuals via a deeply entrenched network of mutual social obligation. It represents a collective commitment of two families. Historically, it is an alliance that can only exist between members of the same village or city, and from the same social standing. This custom of the Grand Marriage is a common feature of the archipelago, though it holds more power in Grande Comore and Mohéli, than in Anjouan, where it has gradually declined in prominence.

Source: World Bank Risk and Resilience Assessment 2018.

<sup>45</sup> This varies from one island to another. Anjouan is presented as more individualistic, with social obligation being much less than in Grande Comore and Mohéli.

<sup>46</sup> Ben Ali and Mgomri (2013); Blanchy (2013); Walker, Le Guennec-Coppens, and Mery (2002)

<sup>47</sup> Interview with Mohamed Mchangama, President of the FCC, May 14, 2018, Moroni.

<sup>48</sup> Villages are classified into four different categories: *mdji wa yezi* (villages of power), *mdji mhuu* (big villages), *mdji ndze* (rural villages) and *itreya* (peripheral villages inhabited by fishermen and the descendants of slaves).

<sup>49</sup> Blanchy (2004).

### 32. The centrality of the village and informal institutions inform citizens' relations with the formal state.

Unlike local traditional governance systems, which are based on a combination of religion and custom and are deeply rooted in local norms and values, formal state institutions are still widely perceived as being imports. This has created two systems wherein informal, traditional systems of governance run parallel to formal ones. Unlike the formal system, which is premised on the concept of individual rights, the informal system is founded in community and kinship networks, a philosophy that extends to public institutions: The inhabitants of the territory on which the institution is established believe that the community should administer it, and that its management should benefit the community—and provide employment for community members. Notables exert pressure on government authorities to influence recruitment and promotions and are generally consulted ahead of nomination decisions.<sup>50</sup> As such, the functioning of the state is largely structured around kinship networks, generational groups, and territorial allegiances. Ultimately this compromises the functionality of the public administration and the management of state-owned enterprises (SOEs).

### 33. A decentralization process that has not fully aligned the creation of communes with traditional sphere of influence of the village, appears to have deepened the sense of disconnect between the central

### state and local centers of informal self-governance.

In 2015, the first ever local elections in the country took place as part of the decentralization process initiated by the 2001 Constitutional agreement and enacted in 2011.<sup>51</sup> However, there are several challenges with communes, including inadequate human resourcing and financing as budget transfers from the central state are often not received, and there are no revenues from local taxation. The main challenge comes from the design of communes, which has not sufficiently accounted for the local social and political context and has both fueled new tensions between villages and reinforced some historical rivalries between villages.<sup>52 53</sup>

### *Limited State Reach*

### 34. The legitimacy deficit of formal institutions has meant that the state has limited effectiveness and presence outside of Moroni and restricted service delivery reach.

Little attention has been paid to the accountability of the state vis-à-vis citizens, or to maintaining the social compact between state and citizens. The disconnect between the state and citizens is exacerbated by the scarcity of state-delivered services that has placed the burden of service delivery on alternative providers. Meanwhile, social accountability mechanisms—such as citizens' independent monitoring of public actions—are underdeveloped, while the legislature's weak functioning and an absence of transparency in public affairs further constrain social accountability.

<sup>50</sup> M'Sa Ali (2006).

<sup>51</sup> Some functions of the islands, like the civil registry and primary education, have since been transferred to the communes together with some civil servants. Other functions that should also be transferred from the islands to the communes include environment, basic health, sport, and urban planning.

<sup>52</sup> Ben Ali, Roubani, and Saïd (2011). For instance, some villages obstructed the construction of their Commune's town hall because it was planned in a competing village. However, there are some exceptions to this competitive logic, such as in the case of the commune of Moroni, where neighboring villages agreed to participate.

<sup>53</sup> Blanchy (2011).

### 35. The politicization of the public administration compounds poor state reach and weak institutions.

The various island administrations have further contributed to the inflated civil service. Civil service recruitment has usually increased in the lead up to elections. Anjouan fields the highest number of civil servants in the Comoros—as a product of political patronage under the then ruler of that island, President Bacar, and a “*reconciliation recruitment*” following the 2007 secession attempt. It is also the island on which civil servants’ salaries are the highest. The distribution of positions in the administration to political allies has bloated the Comoros’s civil service and created an unsustainable wage bill.<sup>54</sup> Public servants have limited training, and there is often a mismatch between the job and the skill set. Even though many are well educated,<sup>55</sup> the administrative elite lacks a unifying belief regarding the purpose of the state and how it should be managed. High turnover rates, absenteeism, and scarce resources undermine morale, as well as capacity and accountability. The public administration also suffers from bureaucratic competition between departments over the capture of state resources and development projects.

### *The role of outsiders – remittances and aid dependence*

### 36. Migration is a key feature of Comoros’ society, with an estimated one-third of the population living abroad, primarily in France.<sup>56</sup>

Relative to its population, Comorians are one of the largest African diasporas.<sup>57</sup> Since 1990, net emigration has grown at nearly twice the speed as the population overall, providing some relief from the pressures of high population growth. The number of Comorian emigrants has almost tripled over the last thirty years. Historically, Comorians often emigrated for political and commercial reasons, but today emigration mostly happens for economic reasons and women constitute an increasing proportion of the total number of emigres.

**37. Remittances from the diaspora represent a substantial source of revenue for families in Comoros, much of which goes towards consumption, rather than investment.** Gross private remittances constituted 13 percent of GDP in 2017, making Comoros one of the highest remittance-recipient nation in Sub-Saharan Africa and among small island states (see *Figure 9*). Between 70-90 percent<sup>58</sup> of total remittances are used

<sup>54</sup> In the last decade, more than 60 percent of domestically generated revenues were allocated to the wage bill. Recent limitations on recruitment in the civil service have been partly bypassed by the short-term hiring of young interns who can represent up to 40 percent of employees (Union des Comores, 2017).

<sup>55</sup> Rose and Gowthaman (2015)

<sup>56</sup> Comorian migrations initially resulted from land dispossession, slavery, and repression (Madagascar invasions in the 18th century, then French colonization). It has also served as a way to escape the rigidities of the social order or to accumulate economic resources to realize the Grand Marriage. The main triggers of migration include political instability and violence, limited opportunities for high-level education, scarce employment opportunities, and difficult access to land. Young Comorians first emigrated from Comoros to Muslim countries, such as Yemen or Egypt, and mostly to Zanzibar but also toward Madagascar during colonial rule. Following violence against the Comorian diaspora in Zanzibar (1964) and Madagascar (1976), emigration was directed toward France, where most of the Comorian diaspora now lives.

<sup>57</sup> According to estimates by the United Nations Population Division, in 2017 there were about 116,000 Comorian emigrants worldwide compared with 40,000 in 1990. This remarkable expansion in emigration, particularly since 2000, has outpaced population growth. Relative to population, the stock of emigrants has expanded from 9.7 percent in 1990 to 14.3 percent in 2017. The main destinations of Comorian emigrants are Mayotte, France, and Madagascar with a slight change in preferences, whereby metropolitan France that was the top destination in 1990 has recently been passed by Mayotte with some 58,000 Comorians living there as of 2017.

<sup>58</sup> World Bank (2017a)

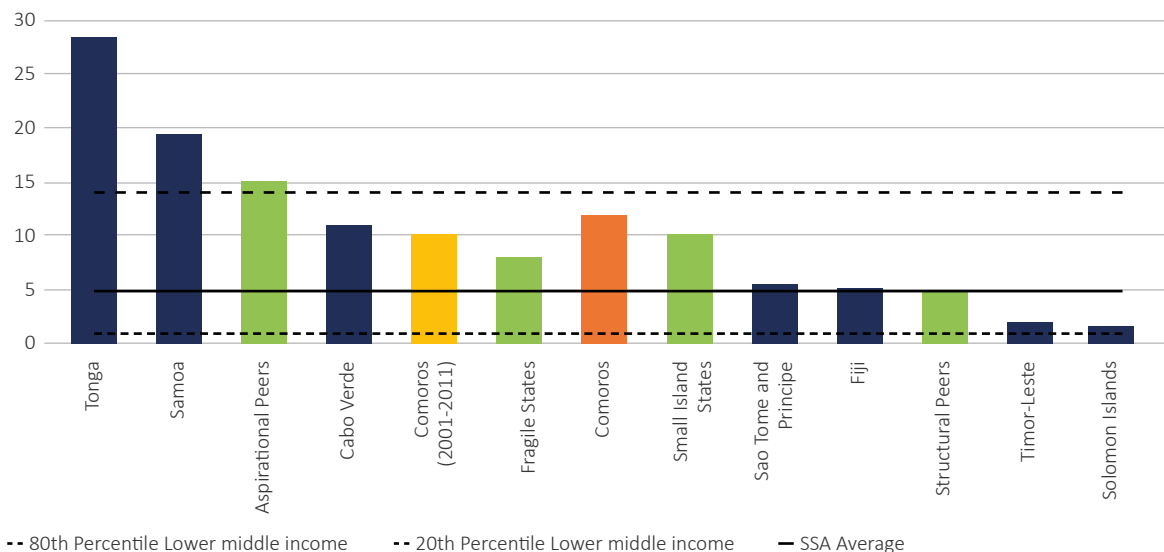
for consumption purposes,<sup>59</sup> and serve as a safety net to Comorians, mostly to cover their health, education, and food expenses. The diaspora also invests in social infrastructure and construction projects, such as building mosques, schools, health services, roads, community centers, and local media.

**38. The diaspora is a key development actor, and a factor of social change and influence at the village level.** Remittances are largely channeled according to village allegiances and are the main source of funding for services, filling some of the gaps left by the state.<sup>60</sup> Although the diaspora is not yet allowed to vote, it has a strong

political influence in Comoros. Representing about 25 percent of the electorate, its inclusion in the electoral process would have tremendous implications for political dynamics and could strengthen the demand for government accountability. Initially planned for the 2016 elections, the vote of the French diaspora was eventually not allowed for “technical reasons.” Nevertheless, members of the diaspora influence family members who remain in Comoros and help to finance political campaigns. During the 2016 elections, for example, most of the presidential candidates started their campaign in France, where they established support committees in various cities.

**Figure 9: Remittances, Comoros and comparators**

Personal remittances, received (% of GDP) (2011-2017)



Source: Staff calculations using WDI

<sup>59</sup> A central historical purpose of remittances is to finance the high expenses related to organizing the Grand Marriage and other socially binding events of Comorian society, such as funerals (Blanchy, 2014).

<sup>60</sup> Several co-development programs involving organizations from the Comorian diaspora were introduced, especially in France. Government and donors are trying to promote the establishment of financial instruments to better channel remittances toward development purposes. However, this endeavor has come up against the imperative and force of prevailing social dynamics and familial and territorial allegiances and is complicated by the general lack of trust in the Comorian state.



**39. Comoros is heavily dependent on donors and development partners. In the last 15 years, net official development assistance averaged about 10 percent of GDP.** This percentage is close to the total tax revenues in 2017 (9.5 percent of GDP) and is high compared to the Sub-Saharan average (4 percent of GDP), but below structural peers average (24 percent of GDP). There are currently about 30 development partners active in the country. Multilateral partners include the African Development Bank, the UN, the EU, the WBG, and the Islamic Development Bank. The key bilateral partners are France, China, and Japan. The weak state means that donors often drive the design and implementation of public policies. However, aid coordination is weak, and the effectiveness of development aid remains a concern, given the complex operating conditions. The predictability of the budget has decreased further in recent years with the increased role played by Gulf countries (in particular Saudi Arabia and United Arab Emirates) which provide budget support often in the form of ad-hoc and one-off payments.<sup>61</sup>

**40. France has retained a strong post-independence influence in the affairs of the Comoros.** The contested status of Mayotte, now a department of France but still claimed by the Comoros as part of its territory, has resulted in a tumultuous and

erratic diplomatic relationship. However, tensions remain contained, as the Comorian authorities are reluctant to jeopardize their relationship with their key bilateral partner. France has regularly financed arrears in civil service salaries and is an important partner in sectors such as education and water. The countries also have a strong relationship based on the number of Comorians living in France; as the host country of the largest segment of the diaspora, France has an interest in containing migration. The former colonial power views Comoros' strategic development plan as the way by which to contain outmigration, and plans to triple its aid<sup>62</sup> going forward, particularly given the recent tumult in Mayotte.<sup>63</sup> In 2017, for the first time in years, a Franco-Comorian commission was convened to consolidate the partnership between the two countries regarding the country's development.

**41. Comoros has strong ties to the Gulf, a continuation of precolonial history of migration and trade with Gulf countries.** Since precolonial times, relations with the Gulf have revolved around trade and commercial exchange, as well as that of knowledge and expertise. Hundreds of students from Comoros have been educated in Gulf countries,<sup>64</sup> especially in Saudi Arabia, and the Gulf states are increasingly stepping up development efforts in the Comoros,

<sup>61</sup> For instance, in 2015, Saudi Arabia provided a budget support equal to about 25 percent of total revenues and to around half of revenues excluding grants.

<sup>62</sup> An amount of €135 million had been scheduled in the 2015–20 partnership agreement between France and the Comoros (France Diplomatie 2018).

<sup>63</sup> In early 2018, inhabitants of Mayotte organized a blockage of the island to compel the French government to take action on the migration issue and more generally to increase its efforts to improve the island's development. During this crisis, the government of the Comoros stopped the return of its citizens expelled from Mayotte, increasing diplomatic tensions with France. It is estimated that more than 10,000 people are turned back from Mayotte to the Comoros each year.

<sup>64</sup> Ali, Roubani, and Saïd (2011)

<sup>65</sup> Qatar and Saudi Arabia provided one-off budget grants to pay government salaries and finance other expenses. Oman is also providing grants to the Comorian army. Arab investors (al-Marwan) took over a French company to manage the port of Moroni. Kuwaiti investors created the Banque Fédérale de Commerce in 2009.

particularly for roads and infrastructure.<sup>65</sup> The “*economic citizenship program*”—involving the sale of Comorian citizenship and passports to individuals from Saudi Arabia and Kuwait—

attracted much attention when it emerged that large sums of money deriving from this scheme had been siphoned off and were unaccounted for (see Box 3).<sup>66</sup>

### Box 3: Comoros' Economic Citizenship Program

Comoros' Economic Citizenship Program (ECP) started when the government struck a deal with the United Arab Emirates in 2008 to offer Comorian citizenship to stateless Bidoon people living in the Gulf. It offered Gulf governments a means of identifying these people without giving them local citizenship. In exchange Comoros received a fee for each passport issued. Comoros implemented the ECP mainly between 2010 and 2012, which gave a significant boost to non-tax revenues. Indeed, in 2012 (the more dynamic year of the program) the ECP at least doubled government revenues from non-tax sources. The program however declined steeply in 2013 following the imposition of tighter controls in response to earlier irregularities. Comoros parliament is currently investigating complaints of corruption and procedures not being followed.

The Comoros government received over USD4,500 for each citizenship issued, according to government documents from 2012. The Emirati government estimated that the number of Bidoon within the country ranged from 20,000 to 100,000. Currently at least 40,000 of these people carry Comorian passports. However, the citizenships and passports were also being sold to non-Bidoon people, sometimes at much higher prices, according to investigators in Comoros. Comorian passports are of value because they offer citizenship with no tax obligations, allow the opening of bank accounts in Gulf States and facilitate visa-free travel through the Gulf and to many major business hubs globally.

### 42. An important dimension of the country's relations with Gulf states are Sunni–Shi'a tensions between Saudi Arabia and Iran, which have come to impact the Comoros.

The country has historically had stronger links to Sunni Arab nations than to Iran, but strengthened its ties to that country under President Sambu (from Anjouan), who studied in Iran.<sup>67</sup> This trend was progressively reversed

under President Dhoinine (from Mohéli), when Saudi Arabia established an embassy in Moroni and provided a US\$40 million grant to the Comoros.<sup>68</sup> More recently, as tensions between Saudi Arabia and Iran have heated up, the Comoros took sides in that confrontation and cut diplomatic ties with Iran and Qatar in 2016. These geopolitical rivalries have to some degree played out

<sup>66</sup> More than 48,000 passports were sold instead of the 4,000 initially planned in the agreement. Former Presidents Sambu and Dhoinine are being sued in relation to this program (Jeune Afrique 2018).

<sup>67</sup> Sambu, who studied in Iran, signed a defense agreement with Tehran and allowed various foundations to operate in the Comoros. Iran provided support in sectors such as agriculture, fisheries, and health. This period was also marked by the development of Shi'ism in the Comoros, especially on Anjouan, Sambu's native island.

<sup>68</sup> Bayle (2016)

in the confrontation between the political opponents, with President Assoumani (from Grand Comore) seeking support from Saudi Arabia, and former President Sambi aligned with Iran.

## Sources of Resilience

**43. Despite the challenge that these features represent to economic growth and development prospects in the Comoros, the country can also draw on key sources of resilience.** These can help mitigate risks and represent important entry points by which to reinforce social cohesion, and better connect the parallel systems of governance to strengthen state-society relations and the legitimacy and reach of the formal state and its institutions.

### Religious Institutions

**44. Traditional and religious institutions mediate conflict and mitigate extreme behavior. The customary system, together with Islam, anchors the country's complex social organization and is the key driver of social cohesion in the Comoros.** Customary regulation and Islam are closely knit and have a strong influence on individuals' daily behavior. Youth are socialized via age-class organization (*hirimu*), where personal discipline is learned alongside respect for the elderly and for social hierarchy.<sup>69</sup> *Hirimu* organization also helps to consolidate allegiances to the group and the village community. At the same time, youth are socialized through the Koranic schools and the mosques, where the community gathers regularly. The Friday mosque—one per town or village—assumes a significant unifying role. Learning and sharing common values within these various social networks creates a sense

of solidarity and constitutes a safety net for Comorians. However, these social networks tend to be composed by members of the same social strata, with many (often the poorest) excluded from such communities.

**45. The traditional institutions that are anchored in the customary system are the first port of call in the case of community conflicts and play a critical role in dispute resolution.** Bilateral negotiations, mediation, arbitration, or judgment are all key means by which to manage disputes.<sup>70</sup> The objective is to preserve social peace within the community. Where necessary, cases are sent to the state justice system to be heard, whether through the *cadi* (local Muslim judge) or the modern tribunal. The Collège des Sages, an organization that gathers retired Notables and is recognized by the state, also plays an active role in mediating social conflicts between communities, and between the state and citizens. Additionally, informal arrangements can help to maintain social cohesion—for instance, with regards to land tenure. A series of oral agreements related to land management have in some cases helped to decrease the risk of unequal access to land.

### Communities

**46. Social dynamics are very strong at the village level and help fill the gap left by the state.** Villages in the Comoros do not rely on the state and instead act as service providers to the population. Led by village associations and funded by the diaspora and through contributions from local communities, traditional expenses related to community rituals (such as the Grand Marriage and funerals) are now channeled in part to investments in

<sup>69</sup> Ali, Roubani, and Saïd (2011)

<sup>70</sup> Ali, Roubani, and Saïd (2011)

schools, mosques, health dispensaries, as well as towards roads, water, and electricity infrastructure. Villages often finance the recruitment of staff to operate basic health and education services. A clear example of the important role of the village in public services is in civil safety. First responses to hazards always come from within communities,<sup>71</sup> as state services are either unable to intervene or arrive too late to provide support. Another example is the management of common pool resources.<sup>72</sup> For example, the creation of the Mohéli marine park in 2001 came about because of negotiations with local villages and civil society organizations. The multi-stakeholder governance ensures ownership by the community and helps to enforce regulations and protects natural resources. In Karthala park, the involvement of villages has resulted in communities controlling poaching and holding the perpetrators to account.

**47. Where community-based organizations and informal structures have stepped into the breach left by the state, they often lack enough oversight and regulation.** The de facto privatization of service delivery is not overseen by a central agency and does not benefit from a national planning process. As such, it can lead to duplication of services, inappropriate or insufficient recruitment of technical staff for schools and clinics, and further limit access for the poor. Other unanticipated consequences include the creation of alternative and unregulated curricula across the crop of private schools that have sprung up in the absence of sufficient public schools, which impedes the establishment of a qualitative

curriculum common to all schools in the country. In the health sector, public sector doctors have opened private medical practices where their earning power is tripled, but which contributes to absenteeism and a deterioration in healthcare at public hospitals.

## Women

**48. Women represent a reference point and a source of trust in Comorian society.** They hold informal power within communities. Although the traditional system tends to exclude women from decision-making at the local level, and women are forbidden access to the public squares where men make decisions regarding village affairs,<sup>73</sup> their approval is often essential to cement decisions made in these male-dominated village assemblies. They are at the forefront of social change and are supported by the diaspora, which pushes the boundaries with regards to traditional assumptions on gender. For instance, attempts to enforce the Grand Marriage on women who were born in or socialized in France tend to become a source of family tension; as such, family pressure to partake in these ceremonies is declining for those in the diaspora.<sup>74</sup> In 2004, 21.5 percent of the households' heads were women. This proportion increased to 27.8 percent in 2014. It is also worth noting that diaspora remittances tend to be sent more to women than men.

**49. Women are increasingly involved in the public sphere.** Female associations are very dynamic at the local level, and several women's organizations have emerged at the national level to oppose discriminatory practices against

<sup>71</sup> This organization is based on Comorian society's tradition of volunteering. Assisting and rescuing are social obligations that can lead to being banished from the community if they are not respected.

<sup>72</sup> Hauzer, Dearden, and Murray (2013).

<sup>73</sup> A new trend has developed in the diaspora in France where women, thanks to their important financial contributions, are allowed to participate in Notable assemblies (Blanchy and Lallemand, 2011).

<sup>74</sup> Abdillahi (2012)

women and advocate for their empowerment. Businesswomen have organized themselves through the development of associations and groups such as Association des Femme d’Affaires Comoriennes or Entreprendre au Féminin aux Comores (EFOI-COM). Similarly, cross-party political platforms have been established to raise women’s voice in the political sphere, where they play an active role—especially during electoral campaigns. However, although women are very active at the grassroots level, they occupy a less prominent role in higher-level political or economic fora. Women represent only about 2 percent of elected members of Parliament.

### *Civil society organizations*

**50. Community-based associations have blossomed in villages in the field of local development.** Created by young, educated Comorians, those associations are dynamic, involved in various sectors, and promote a vision of their communities’ development.<sup>75</sup> The Comorian diaspora significantly contributes to the development of these highly localized community associations. Some associations, such as 2Mains, were first created in France and later registered in the Comoros. They provide technical expertise and tend to fill the gap left by

ineffective public institutions in providing basic services to communities. Comoros has extensive experience with community-driven development (CDD) projects, which can help to build social cohesion, reduce poverty, mitigate factors of fragility, and promote human capital development. In the fisheries and agriculture sectors, these projects have focused on improving livelihoods and employment generation. Although they have reported positive impacts, it is unclear if they can be replicated or extended, and as such, it would be important to explore the potential of such approaches beyond livelihoods, and to ensure transparent and equitable service delivery.<sup>76</sup> Studies across multiple CDD projects have shown that infrastructure and public works led by communities are built at comparatively lower costs and that these investments deliver positive effects on material welfare.<sup>77</sup> At the national level, civil society organizations have also emerged in different sectors, such as education, health, the environment, water, and gender and human rights.<sup>78</sup> They have not yet succeeded in establishing national federations or inter-island networks. Even though there is no institutionalized dialogue with the state, civil society organizations are often involved in designing government strategies and making laws.

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<sup>75</sup> Mohan (2002)

<sup>76</sup> Casey, Katherine. Radical Decentralization: Does Community Driven Development Work? Stanford Graduate School of Business, Working Paper 3598. September 2017, p. 12. Available at <https://www.gsb.stanford.edu/faculty-research/working-papers/radical-decentralization-does-community-driven-development-work>; Wong (2012)

<sup>77</sup> Wong, Susan and Scott Guggenheim. Community-Driven Development: Myths and Realities. World Bank Group Policy Research Working Paper 8435. May 2018. Available at <https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/community-driven-development-global-solutions-group/documents/entry.html/2018/06/18/community-drivendev-haJ4.html>

<sup>78</sup> Most of those associations rely heavily on voluntary work and generally suffer from a lack of capacity. They remain highly dependent on external financing.





# POVERTY AND SHARED PROSPERITY IN COMOROS<sup>79</sup>

<sup>79</sup> This section is based on the World Bank's Poverty Assessment 2017.

« Je dirais qu'il faut vraiment chercher à régler les problèmes quotidiens d'un comorien (avoir quelque chose à manger, accéder à l'eau potable et à l'électricité normale) dans tout le pays et insister que les jeunes dans le monde de l'entreprise aient plus faim de pouvoir et visent plus haut.<sup>80</sup> »

## Comoros' Performance on the Twin Goals

### Poverty<sup>81</sup>

**51. Compared to other Sub-Saharan and other fragile countries, Comorians are less likely to be poor (see Figure 10).** As of 2014, four out of ten Comorians could be considered poor and two out of ten lived in extreme poverty.<sup>82 83</sup> This number puts Comoros significantly ahead of other fragile countries and the average for Sub-Saharan Africa and is comparable to poverty outcomes for the average lower-middle income country. Progress in reducing poverty in Comoros since 2004 has been modest. During the period 2004-14, poverty responded sluggishly to economic growth: a 1 percent increase in consumption reduced poverty headcount by only 0.7 percent and this response was entirely driven by an increase in mean household consumption

(growth effect) with no redistribution effects, i.e. inequality increased. The same pattern was observed at the national as well as rural-urban and islands.

**52. Chances to escape poverty are high in Comoros, both by international and national measurement standards.** The average consumption level of a poor Comorian is around 85 percent of the \$3.2 per day (2011 PPP) international poverty line compared to 86 percent in other lower-middle income countries, 68 percent of other SSA countries and 87 percent for aspirational peers. One fourth of the poor in Comoros currently live right below the national poverty line and could move out of poverty if their income would increase by around KMF 167 per capita per day (US\$ 0.7, 2011 PPP). However, there is also a good ten percent of the population who are at risk of falling below the national poverty line in the event of unexpected economic shocks.

<sup>80</sup> Quote from respondent to a Facebook online consultation on what Comorians consider the biggest obstacles to their country's development: "I would say that one has to really try to solve the daily problems of Comorians in the whole country (something to eat, drinkable water and normal electricity) and to insist that young people in the private sector have more hunger for power and set themselves higher goals."

<sup>81</sup> As it is typically the case in Sub-Saharan Africa (SSA), the EESIC 2014 uses consumption as the key welfare measure to analyze poverty. This consumption aggregate comprises food consumption, including food produced by households themselves, as well as expenditures on a range of nonfood goods and services (e.g., clothing, utilities, transportation, communication, health, education, housing-related expenditures and imputed rent, etc.). However, the consumption aggregate does not include expenditures on larger consumer durable items (such as cars, TVs, computers, etc.), nor does it include expenditures on ceremonies (marriage, funerals, etc.). To the extent that better-off households devote a larger proportion of their total consumption to durable goods, this omission creates certain biases and underestimates real consumption among wealthier families. This is less important for poverty analysis, where the focus lies on the bottom-end of the distribution, but it can have a significant impact on estimated inequality.

<sup>82</sup> Individuals are considered extremely poor if they cannot afford to buy enough food to meet the minimum nutritional requirements of 2,200 kilocalories (Kcal) per person per day.

<sup>83</sup> Both the national and the international poverty line of US\$3.2 per capita per day suggest that roughly four out of ten Comorians today can be considered poor.



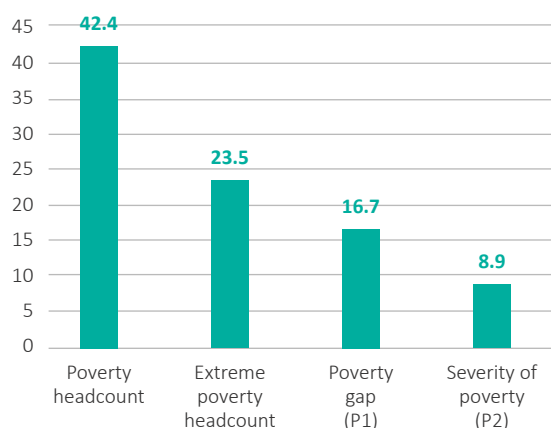
### 53. Important poverty differences exist across islands and across the rural and urban divide (see Figure 11 and Figure 12).

The reduction in the poverty headcount was achieved in both rural and urban areas, but poverty remains significantly lower in urban zones. Those living in Anjouan and Mohéli are 8 and 6 percent more likely to live in poverty than those living in Grande Comore. The poverty incidence is lowest in Moroni - the main city of Grande Comore and

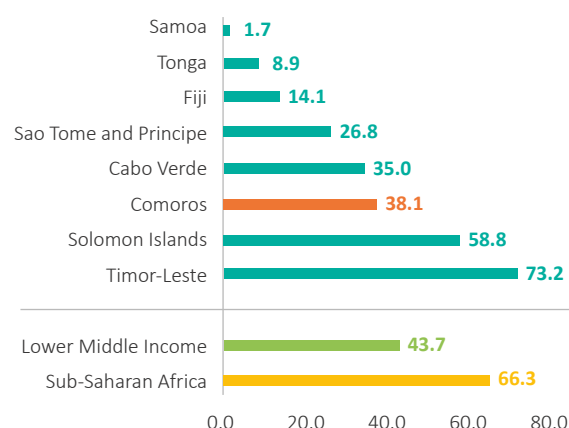
capital of the Union - where only 36.5 percent of the population live under the national poverty line, compared to roughly 45 percent in Anjouan and Mohéli. Reflecting differences in economic activity (rural agriculture dominates in Anjouan and Mohéli, services dominate in the urban centers and Grande Comore) across the islands, the incidence of poverty is estimated at 49.9 percent in rural versus 31 percent in urban areas.

**Figure 10: Poverty Incidence indicators by regions and between comparators**

a. Poverty and Extreme Poverty Incidence in 2014 (%) - national poverty line

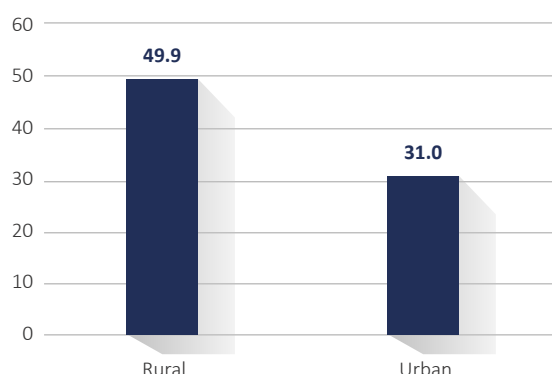
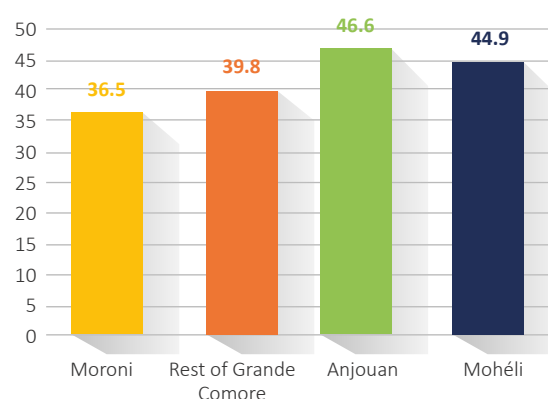


b. International Poverty Estimates in Comoros and comparators in 2014 (%)



Sources: Panel a: EESIC 2014, Panel b: WDI.<sup>84</sup>

<sup>84</sup> The poverty lines used are based on the cost-of-basic-needs approach. The EESIC 2014 food poverty line (KMF 16,711 per capita per month) is based on the cost of a food basket that delivers 2,200 calories per person per day (given consumption patterns in a reference population). The basic needs poverty line (KMF 25,341 per capita per month) adds an allowance for basic non-food necessities to the food poverty line. The basic needs headcount poverty rate (or as used in the text, poverty rate) measures the proportion of the population whose monthly (price-adjusted) total household consumption per person is below the basic needs poverty line. The extreme headcount poverty rate (used in the text as extreme poverty rate) measures the proportion of the population whose monthly (price-adjusted) total household consumption per person is below the food poverty line.

**Figure 11: Poverty Indicators for Comoros****a. Poverty Incidence by Area (%)****b. Poverty Incidence by Island (%)**

Source: EESIC 2014.

**54. Despite clear geographic disparities, family size, the sector of employment and educational attainments are the main factors that set the poor apart from the non-poor.**

Poverty among households consistently increases with the number of children, reaching 70 percent among households with five or more children, compared to less than 20 percent among households with no children. Three fourth of the poor are self-employed and over half of them depend on agriculture for their livelihoods. Poverty in Comoros is significantly lower among wage employees, especially in the service sector

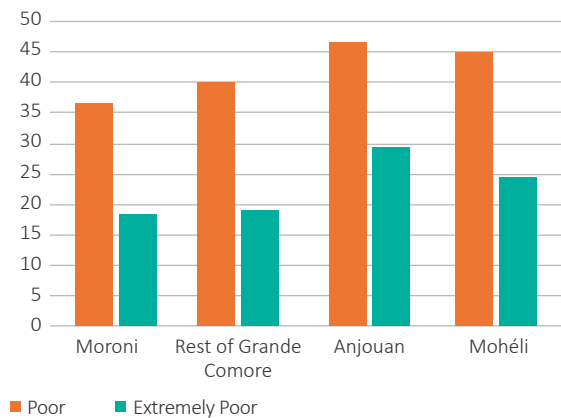
and industry and trade. Fewer than 10 percent of the poor work in government and public administrations. Primary education alone is not enough to increase poor people's opportunities for moving out of poverty. There is a considerable poverty gap between households whose head has secondary or upper education and households whose heads have no or only primary education. There is no significant relationship between the gender of the household's head and economic welfare of the household. Finally, a history of internal migration is associated with better poverty outcomes.

**Figure 12: Portrait of life in Comoros by income and location**

**The average person living in poverty in Comoros compared to a non-poor person:**

Lives in a rural area rather than in the city	Is less likely to have received secondary or tertiary education.
Lives in Anjouan or Mohéli rather than Grande Comore Island.	Lives in a household with 6 rather than 4 children and a greater number of dependents (children under the age of 15).
Lives in a household whose head works in agriculture rather than in commerce or services.	Has less access to infrastructure services.
The head of the household is <u>as likely</u> to be female or male.	Is more likely to come from a family with <u>no</u> history of internal migration.

Poverty headcount by location (2014)



Source: EESIC 2014

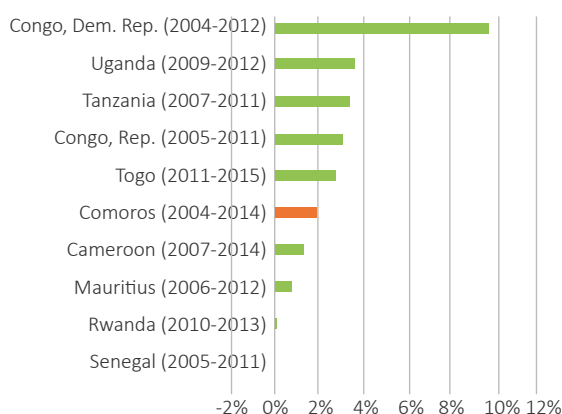
### Shared Prosperity and Inequality

**55. Since 2014, little progress was made towards shared prosperity and inequality has been on the rise (see Figure 13).** The growth incidence curve for 2004–2014, which shows the percentage change in average consumption for each percentile of the distribution, is upwardly sloped, indicating higher consumption growth amongst the richer and better off population

groups in Comoros. While the average per capita consumption increased by about 30 percent between 2004 and 2014, the average consumption of the poor and the bottom 40 percent of the population only grew by about 4 percent and 15.5 percent respectively. Therefore, despite the improvements witnessed in poverty levels, the share of overall consumption that accrued to the bottom 40 increased by only 1.92 percentage points over the period 2004–2014. At 44.9, the Gini index for Comoros is slightly higher than the SSA average of 42.3, but significantly higher than for structural peers (average of 32.9).<sup>85</sup> Disparities are most pronounced in rural areas and Anjouan, where income (not time) related underemployment is high.<sup>86</sup> To halve extreme poverty by 2030, Comorian households at the bottom of the distribution will have to post twice the consumption growth that the average posts. By contrast, the poor benefit from economic growth according to the same pattern as before, extreme poverty in Comoros will decline only modestly from 18 percent in 2014 to about 15 percent by 2030.

**Figure 13: Progress in inequality and shared prosperity for Comoros**

a. Progress towards shared prosperity (%)



Source: EESIC 2014

b. Growth Incidence, Comoros (2004–2014)



<sup>85</sup> Data are 2011–2017 averages from the Find my Friends WB's tool using WDI data.

<sup>86</sup> About one fourth of the workforce suffers from income-related underemployment (as opposed to time-related underemployment which is low in Comoros), with the highest rate of under-employment in Anjouan.



**56. Inequalities between rural and urban areas are large and are mainly driven by significant differences in returns to households' endowments (see Annex 5).**

Urban households are better off than their rural counterparts because they have smaller family sizes, more assets, particularly communication means and generators, better access to employment in commerce and manufacturing, as well as public administration, and higher access to basic services and infrastructure, mainly electricity, safe drinking water, markets and schools. However, even though urban households enjoy higher endowments, rural-urban inequality is mainly explained by the higher reward of these characteristics in the urban sector. Differences in returns to assets and access to basic infrastructure explain the largest portion of the inequality gap between rural and urban poor households.

**Non-monetary aspects of poverty**

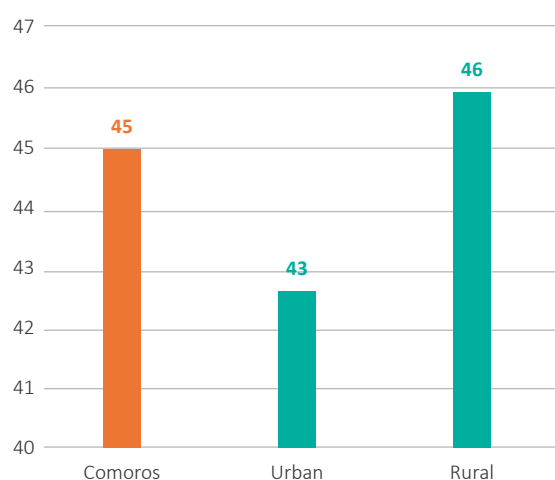
**57. Considering the non-monetary aspects of poverty, access to infrastructure services remains an important constraint for the poor, while access to schooling and living**

**conditions have improved (see Figure 14).**

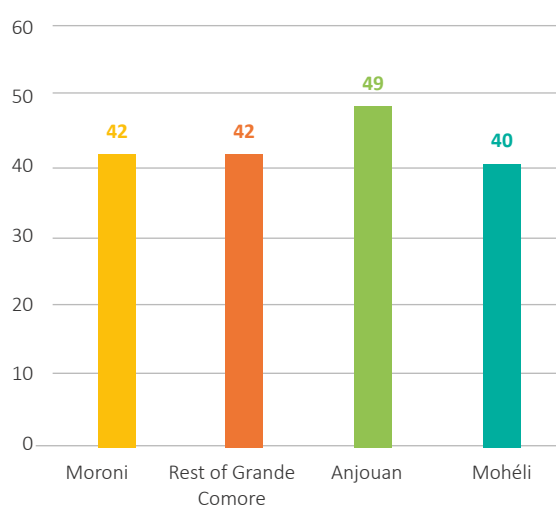
Multi-dimensional poverty incidence (MPI) estimates improved by 12 percentage points between 2004 and 2014, as households experienced considerable improvements in their housing conditions and modern amenities such as television sets and means of communication. Ownership of means of transportation and livestock improved as well. However, deprivation levels remained pronounced and even increased in the areas of access to cooking fuel, electricity, sanitation and water. Between 2004 and 2014 access to safe drinking water slightly improved at the national level and in rural areas but deteriorated in urban zones. Some progress was made with respect to access to improved sanitation, but traditional/unimproved sanitation facilities remain the most common feature. The use of electricity as a source of energy for cooking has remained marginal and the use of wood and charcoal for cooking increased among urban and rural households. Significant achievements were made on the human development front, with a remarkable expansion in education enrollment, particularly enrollment in upper secondary and tertiary levels.

**Figure 14: Inequality by region and island in Comoros**

a. Gini coefficient by region



b. Gini coefficient by island



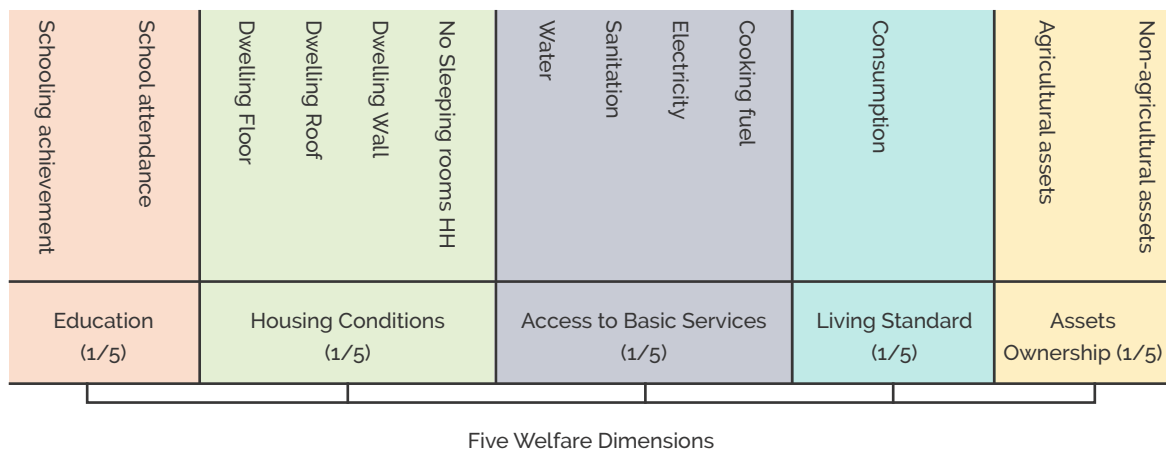
Source: Panel a: EIM 2004, Panel b: EESIC 2014

**58. Despite progress on measures of monetary and non-monetary poverty, two thirds of the population remain vulnerable to deprivation.**

The incidence of deprivation – as measured by the proportion of the population deprived in at least a third of relevant dimensions of wellbeing (see *Figure 15*), such as consumption and measures of multi-dimensional poverty – declined from 85 to 75 percent between 2004

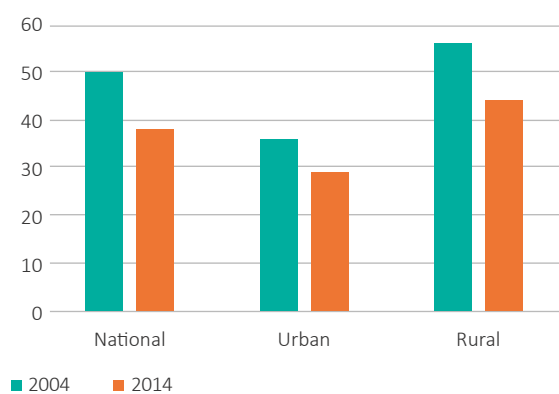
and 2014 (see *Figure 16*). Poor segments of the Comoros' population are experiencing high deprivations in several dimensions of well-being, including first and foremost in access to electricity and efficient cooking fuels, followed by sanitation and assets ownership. Mohéli and Anjouan are facing the highest levels of deprivation, while households in Grande Comore seem to be better off.

**Figure 15: Welfare dimensions and indicators of the method**

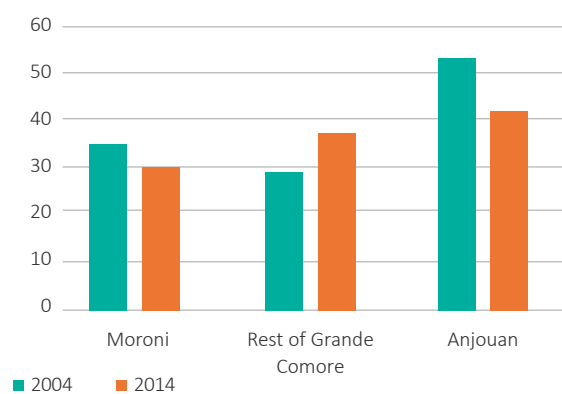


**Figure 16: Multidimensional deprivation indicators by region and Island for Comoros**

a. Urban-rural divide



b. Region-islands divide



Source: Panel a: EIM 2004, Panel b: EESIC 2014

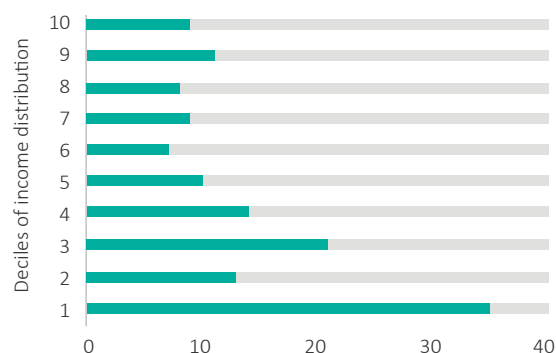
## Drivers of Poverty Reduction and rising Inequality since 2004

**59. Poverty reduction between 2004 and 2014 was to a large degree the result of an expansion of assets ownership among poor households, which was fueled by remittances** (see Figure 17 and Annex 5 for a decomposition of consumption growth by income groups). Increased household consumption led to a significant improvement in household endowments. Especially, the poorest experienced the expansion of asset ownership, especially in communication and

transportation means, and higher educational attainments. Remittances contributed significantly to asset acquisition and to raising household's living standards and consumption (see Annex 8). In 2014, close to 40 percent of Comorian households received remittances. The amounts sent represented on average 22 percent of recipient revenues. Remittances increased per capita consumption by about 22 percent and reduced the likelihood of being poor by about 11 percentage points. Estimates also show that remittances had a stronger impact on consumption levels among less affluent households.<sup>87</sup>

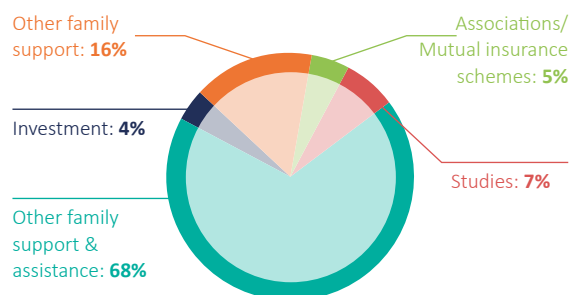
**Figure 17: Destination of remittances**

a. Per capita remittances/consumption ratio among recipient households (in %)



Source: EESIC 2014

b. Main purpose stated for remitting money in percentage of total amounts sent (2014)



**60. Remittances flows explain the significant variation in poverty outcomes across the different islands.** The highly localized nature of remittances from the diaspora perpetuates disparities. Most of the incoming remittances accrue to Grande Comore (about 84 percent), with the remainder going mainly to Anjouan. The average boost in consumption accruing to remittance receiving households in Anjouan

and Mohéli is 11 and 15 percent, respectively, vs. 17 percent in Grande Comore. These differences are the result of important cultural differences between the three islands. A central historical purpose of remittances is to finance the high expenses related to organizing the Grand Marriage, a tradition that is more common in Grande Comore and Mohéli, than in Anjouan.

<sup>87</sup> This effect is statistically significant at the 1 percent level of confidence. Remittances increase consumption by 31.7 percent, while the effect is 11.5 percentage points lower (20.2 percent) among more affluent households.

**61. Educational advances had a relatively small positive effect on consumption levels for the poor.**

Between 2004 and 2014, Comorians' access to education improved considerably. The bottom 40 percent benefitted significantly more from the increase in enrollment in primary, lower secondary and tertiary education, whereas the top 30 percent experienced a disproportionately larger increase in enrollment in upper secondary education. Yet, the richest segments of the population were more successful in reaping the gains of improved access to education as they were able to access formal and more productive jobs. Although the poor moved out of agriculture into manufacturing and commerce, where returns increased over time, they remain largely employed in informal and low-skilled jobs, and the increase in returns is from a low base.

**62. A shortage of employment opportunities and only limited structural transformation have meant that little poverty reduction occurred because of shifts in employment patterns.**

Those who were poor in 2004 were most likely to be non-poor by 2014, if they had moved out of agriculture into commerce, and a lesser extent the service sector. However, in the absence of a

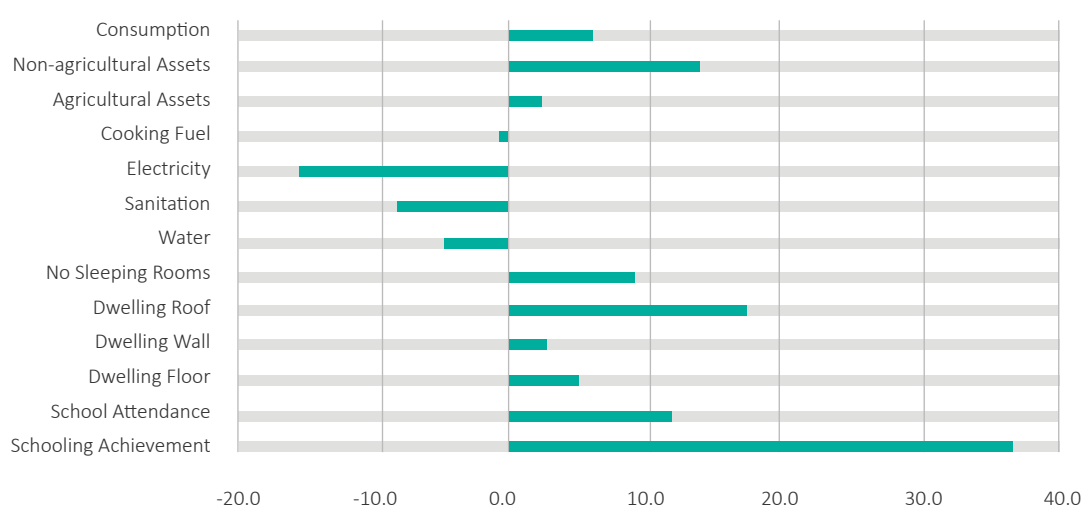
more pronounced structural transformation of the economy and a more generalized shortage of employment opportunities the positive effect on poverty has been limited (see for Annex 8 for a description of Comoros' labor market). This pattern also explains the increasing divide between rural and urban households as the former have less access to employment opportunities in these two sectors.

**63. Similarly, modest improvements in access to basic services did little to improve the life of the poor.**

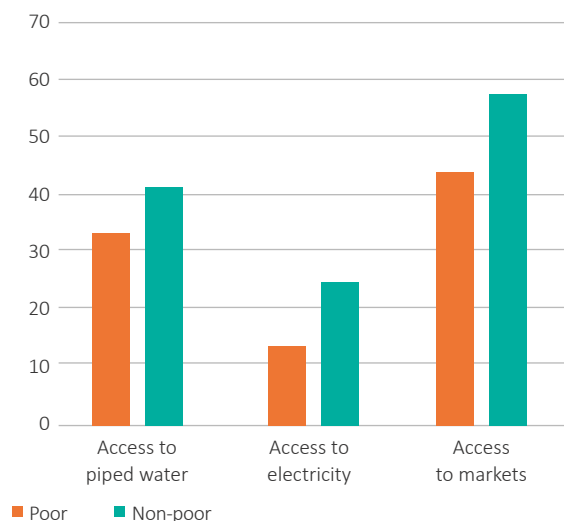
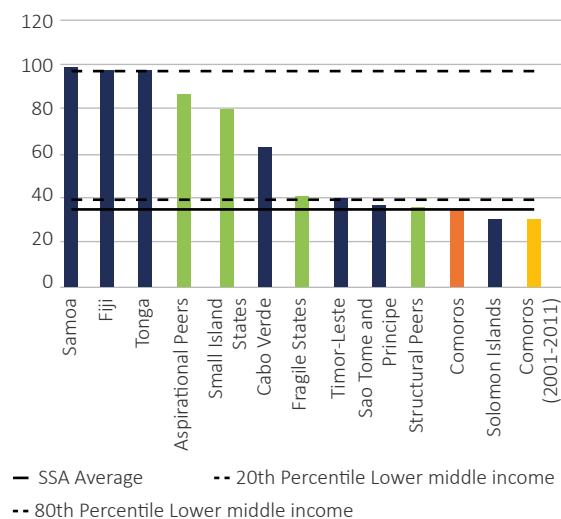
Despite some progress in access to basic services, over three quarters of the Comorian (multidimensional) poor remain deprived in access to electricity, efficient cooking fuels such as gas, kerosene or charcoal, and improved sanitation (see Figure 16 and Figure 19). The middle-class and the most affluent Comorian households benefitted the most from improvements in access to basic services, which together with ownership of assets account for the largest share of multidimensional poverty. Due to the initially very low level of access, limited access to basic services (such as access to water facilities, electricity, health centers and markets) continues to be a strong predictor of being poor in Comoros.

**Figure 18: Multi-dimensional poverty indicators for Comoros**

Comoros: Changes in multi-dimensional poverty (in %) between 2004 and 2014



Source: JMP, 2015.

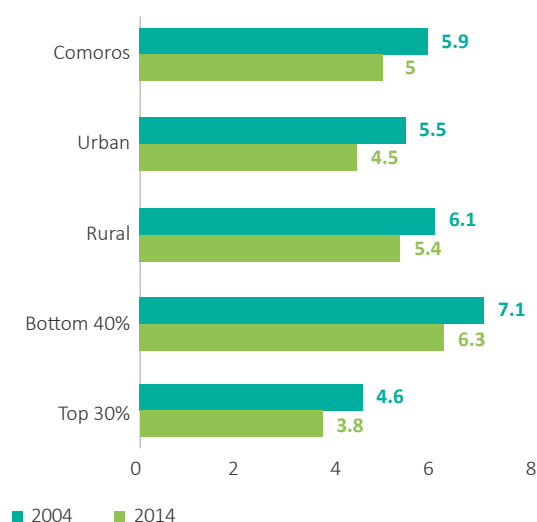
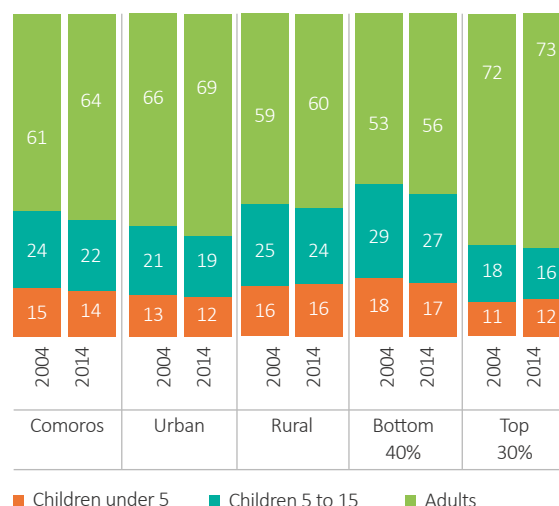
**Figure 19: Accessibility to basic infrastructure****a. Comoros: Access levels for infrastructure in 2014 (as % of population)****b. % Access: Basic Sanitation (2011-2017)**

**64. Between 2004 and 2014, one of the most important drivers of poverty reduction in Comoros were reductions in family size, however, the impact could have been larger if fertility had fallen at a faster pace. Fertility rates remain high (around 4.3 per woman), which result in households of significant size but varying across income levels and geographical areas.** Poor households in Comoros are typically larger in size, with an average of 6 members compared to an average of 4 members in non-poor households and have more children.<sup>88</sup> Between 2004 and 2014, the family size for households at the bottom 40 percent of the consumption distribution went down from 7.3

to 6.3 individuals, while the size of those from the top 30 percent declined from 4.6 to 3.8 individuals (see Figure 20). Rural households are larger compared to urban ones, but both have diminished, rural households' size declining from 6.1 individuals in 2004 to 5.4 in 2014, and urban households' size decreasing from 5.5 individuals in 2004 to 4.5 in 2014. The demographic structure of Comoros' households experienced a slight increase in the dependency ratio (i.e. the proportion of children and older family members to working-age adults). A similar trend is found across all households, no matter their urban/rural origin or their income. Dependency ratios are highest among the poor.

<sup>88</sup> Bigger family size translates into lower consumption levels and higher poverty, because a larger number of children and dependents threatens the ability of poor households to cover basic food needs. On the other hand, poor households often tend to have more children as an insurance strategy against infant mortality, trapping them in a vicious cycle of poverty.



**Figure 20: Demographic structure Comoros****a. Household's size, 2004-2014**  
(number of individuals)**b. Households' demographic structure, 2004-2014**  
(share of individuals within Comoros' households)

Sources: Panel a: EIM 2004, Panel b: EESIC 2014.

### 65. Despite evident disparities in the distribution of welfare between socio-demographic groups and geographic regions, most of the existing inequalities in Comoros are within groups.

A decomposition of inequality by household attributes suggests that 7 percent of inequality of per capita consumption is attributable to the educational attainment of the household head, 5 percent to the difference in households' demographic composition and another 5 percent to the sector of employment of the head of household (see Annex 6). Inequalities between urban and rural locations explain another 3 percent of the overall inequality, while disparities between Comoros' islands only have a marginal contribution. Explanations of remaining inequalities lie within groups and might be the

result of existing social policies, the structure of the labor market and its requirements, and the heavy dependency on transfers and remittances of some households.

### 66. Intergenerational persistence of poverty and inequality is predominately driven by an individual's region of birth.

Around one-fifth of total inequality in consumption is due to unequal opportunities associated with observed Comoros households' circumstances. This is quite a sizeable share compared to other SSA countries.<sup>89</sup> Inequalities of opportunities are significantly higher in rural areas and are driven by the individual's region of birth, indicating the large role played by birthplaces in shaping opportunities. The importance of local

<sup>89</sup> Almost 19 percent of consumption inequality in Comoros can be attributed to unequal opportunities. Such a share is quite significant compared with SSA standards, where inequality of opportunity's share is estimated at 12 percent in Ghana, 15 percent in Ivory Coast, 19 percent in Tanzania and 21 percent in Madagascar. However, the share of Comoros unequal opportunities within the consumption inequality remains lower than the levels observed in Latin America, where the opportunity shares of consumption inequality have been found to range between 24 percent in Colombia to 39 percent in Panama.

community's characteristics in explaining the disparities in terms of the distribution of returns and inequalities of opportunity may reflect past historical political instability and the effects of localized concentration of political power and economic resources. This finding can also explain why a history of internal migration (see Figure 12) tends to be associated with less poverty.

**67. Inequality would be higher in Comoros if it were not for fiscal policy,<sup>90</sup> but Comoros remains a country with high post-fiscal income inequality.** In-kind spending accounts for over 90 percent of the total inequality reduction from fiscal activity and 90 percent of these in-kind fiscal expenditures are targeted to education.<sup>91</sup> The administration and delivery of the public health system (excluding national referral hospitals) and the public education system (excluding tertiary education) are delegated to the islands; funding for these expenditures comes from non-designated transfers from the Union fiscal authority.<sup>92</sup> The positive impact of health and education expenditures from in-kind health and education services on inequality by island is highest on the island with the lowest initial inequality (Mohéli).

### ***Weak human capital and high fertility rates as drivers of poverty***

**68. Poverty and equity outcomes in Comoros are also the result of low levels of public investments in education and health services.**

A country's average income per capita and its investment in human capital are highly correlated, which reflects a two-way causality: human capital contributes to the production of output, but richer countries can also invest more in their children. Poverty is a function of both the average level of income and how income is distributed among households. In practice, it is poorer children in whom investment tends to be most deficient, and thus this is the group most likely to benefit from an increase in human capital investment. As a share of GDP investments in health and education are low in Comoros compared to other countries (see Figure 21) with the wage bill absorbing a large portion of Government's spending in the two sectors. Costs for services are often absorbed through out-of-pocket expenditures at the household level, resulting in especially low access to health services by the poor.<sup>93</sup> Where poorer households are recipients of remittances they use them to purchase education and health care for their children.

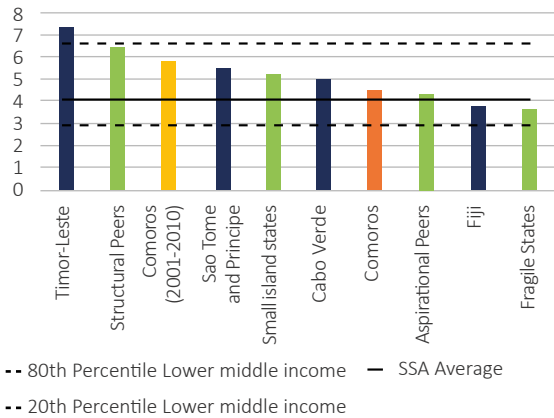
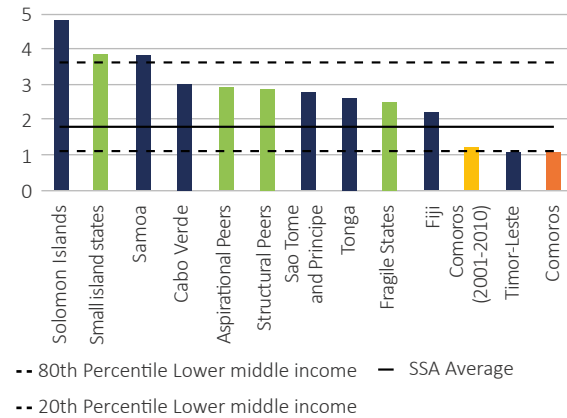
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<sup>90</sup> The analysis of the incidence of fiscal policy in the Comoros Poverty Assessment finds that fiscal policy in the form of direct and indirect taxes, and in-kind spending on health and education services, leads to a reduction of Comoros' Gini coefficient by approximately 3.3 points (World Bank, 2017a). The analysis is based on a Commitment Equity (CEQ) Assessment, which compares pre- and post-fiscal income distributions, using ESSIC 2014 data and budget reporting for the same year. In-kind transfers of education and health services have the largest impact on inequality. The impact of direct and indirect taxes is mixed. Overall, when excluding in-kind transfers, fiscal policy increases the poverty headcount, while most of the poor households are net payers into the fiscal system.

<sup>91</sup> See World Bank (2015).

<sup>92</sup> See World Bank (2015).

<sup>93</sup> World Bank. Assistance technique sur demande pour l'amélioration de la prestation de services (2016).

**Figure 21: Government expenditures on health and education, Comoros and Comparators****a. Government Expenditure on education as % of GDP (2011-2017)****b. Government expenditure on health as % of GDP (2011-2017)**

Source: Staff calculations using WDI.



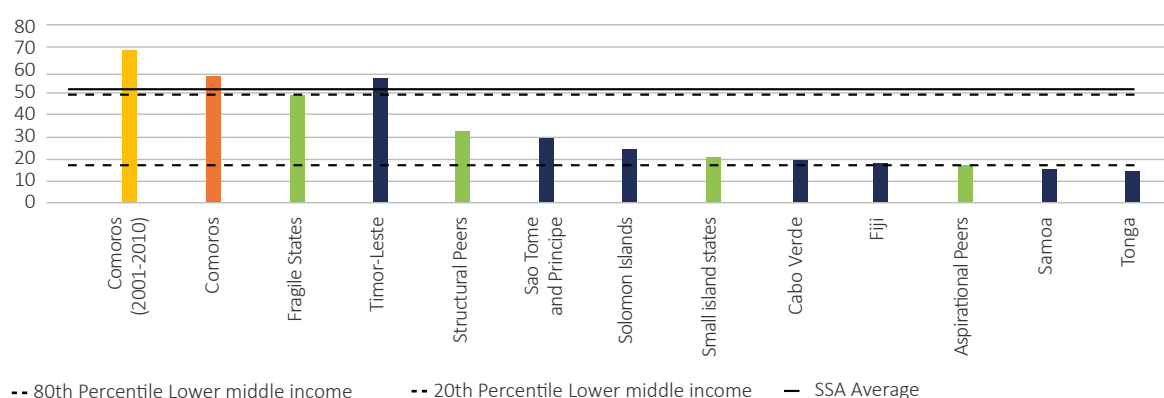
**69. Comoros' human capital lags that of other lower-middle income countries which compromises the earnings potential of the next generation (see Table 5).** In 2018, the World Bank launched its Human Capital project and the Human Capital Index (HCI) which measures the amount of human capital that a child born today can expect to attain by age 18 (see Box 4 on the methodology of the index). With an aggregate index score of 0.41 Comoros performs better than the average low-income country (0.38) but below the average of lower-

middle income country (0.48). In comparison with lower-middle income countries, Comoros lags most on the number of expected years of schooling (8.4 vs. 10.4 years), adult survival rates (78 vs. 81 percent) and the fraction of children that are not considered stunted (69 vs. 73 percent).<sup>94</sup> Infant and child mortality rates in Comoros have continuously improved, at respectively 57 and 67 per 1,000 live births, but infant and child mortality remain high by lower-middle income country standards and compared to structural peers (see Figure 22).

<sup>94</sup> Stunting measures the share of children who are unusually small for their age. It is broadly accepted as a proxy for the prenatal, infant, and early childhood health environment, and it summarizes the risks to good health that children are likely to experience in their early years—with important consequences for health and well-being in adulthood.

**Figure 22: Health and well-being indicators 1, Comoros and comparators**

Mortality rate, infant (per 1,000 live births) (2011-2017)



Source: Staff calculations using WDI.

**Table 5: The Human Capital Index and its components by income groups**

INDICATOR	COMOROS	LOW INCOME	LOWER MIDDLE INCOME	UPPER MIDDLE INCOME	HIGH INCOME
<b>HCI Component 1: Survival</b>					
Probability of Survival to Age 5	0.931	0.929	0.961	0.983	0.995
<b>HCI Component 2: School</b>					
Expected Years of School	8.4	7.8	10.4	11.7	13.3
Harmonized Test Scores	392	363	391	428	506
<b>HCI Component 3: Health</b>					
Survival Rate from Age 15-60	0.778	0.745	0.807	0.863	0.923
Fraction of Children Under 5 Not Stunted	0.689	0.658	0.730	0.869	0.935
<b>Human Capital Index (HCI)</b>	<b>0.41</b>	<b>0.38</b>	<b>0.48</b>	<b>0.58</b>	<b>0.74</b>

### 70. Despite important progress on school enrollment, Comorian children today spend too little time in school and learn even less.

Since 2000, enrollment rates in secondary education have doubled from about 35 percent to nearly 70 percent. Yet, enrollment

rates remain below those of aspirational peers' (91 percent on average)<sup>95</sup> and at 8.5 years of expected years of learning, children in Comoros spend 2 years less in school than children in other lower-middle income countries. In addition, increased schooling

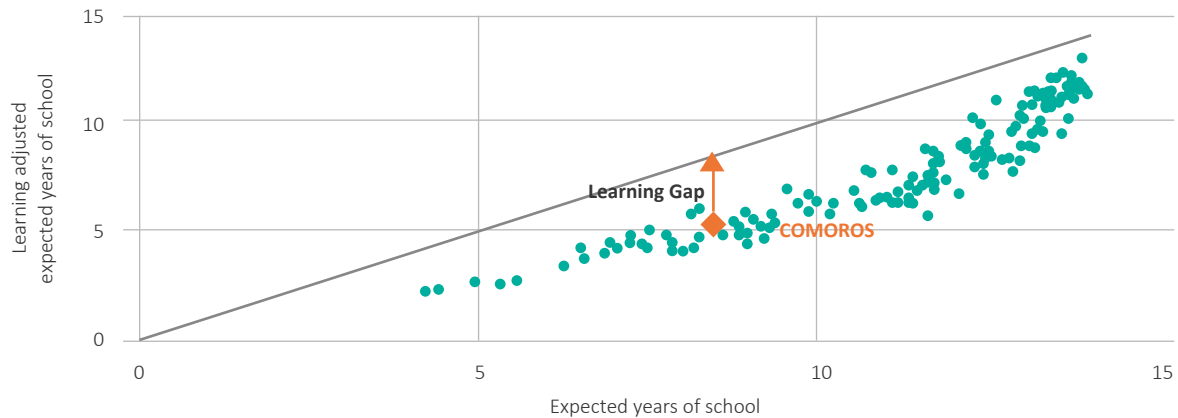
<sup>96</sup> Filmer et al. (2018)

does not always translate into more learning.<sup>96</sup> Only 30 percent of students in 5th grade achieve basic competencies according to PASEC, the regional learning assessment. As

a result, when years of schooling are adjusted for quality of learning, Comorian children today only spent an expected 5.3 years in school (see *Figure 23*).

**Figure 23: Learning Gap**

Learning adjusted expected years of school



Source: WB's Human Capital Index 2018

#### Box 4: What constitutes human capital and how to measure it?

In 2018, the World Bank launched its Human Capital project. Based on the current state of academic evidence on the relationship between human capital and growth and poverty a new measure was constructed – the Human Capital Index (HCI) – that conveys the expected productivity of the next generation of workers based on education and health outcomes in a country today.

The HCI is higher on average in rich countries than in poor countries and ranges from around 0.3 to around 0.9. The units of the HCI have the same interpretation as the components measured in terms of relative productivity. Comoros has an HCI of 0.41. A score of 0.41 means that if current education and health conditions in Comoros persist, a child born

<sup>96</sup> Increasing class sizes, weak teacher training and monitoring and a lack of operational financing are driving low educational efficiency and outcomes. A sectoral diagnostic (« RESEN ») conducted by the Ministry of Education, together with donors, revealed serious limitations in: teacher professional development (pre-service, and in-service), the monitoring of teacher performance, and the assessment of learning of students. There is also a shortage in financing of operating costs for schools, especially with regards to materials for teaching. Finally, average class size in primary education was estimated at 31 in 2017, and as low as 14 at the secondary level, resulting in a degree of inefficiency in schools, as teachers are not used to their full capacity at the secondary level.

<sup>97</sup> Per recent self-reported data, only 37 percent of 15-19 year olds could read. This is less than half of the regional average (77 percent) and places Comoros well below Chad, Niger, and Mali, let alone comparators like Cape Verde. In terms of curricular hours assigned to education, Comoros only has about 630 hours programmed at the primary level. This is at the low end of the distribution.



today will be only 41 percent as productive as she could have been if she enjoyed complete education and full health.

*The HCI is made up of five indicators:* the probability of survival to age 5, a child's expected years of schooling, a harmonized test scores as a measure of the quality of learning, adult survival rate (fraction of 15-year olds that will survive to age 60), and the proportion children who are not stunted.

The components of the HCI are combined into a single index by first converting them into contributions to productivity. Multiplying these contributions to productivity gives the overall HCI. The HCI summarizes how productive children born today will be as members of the future workforce, given the risks to education and health summarized in the components. The HCI is measured in units of productivity relative to a benchmark corresponding to complete education and full health.

The connection between each indicator and productivity is as follows:

- **Probability of survival:** Children who do not survive childhood never become productive adults. As a result, expected productivity as a future worker of a child born today is reduced by a factor equal to the survival rate, relative to the benchmark where all children survive.
- **Years and quality of education:** The relative productivity interpretation of education indicators is anchored in the large empirical literature measuring the returns to education at the individual level. A rough consensus from this literature is that an additional year of school raises earnings by about 8 percent. This evidence can be used to convert differences in learning-adjusted years of school across countries into differences in worker productivity. For example, compared with a benchmark where all children obtain a full 14 years of school by age 18, a child who obtains only 9 years of education can expect to be 40 percent less productive as an adult (a gap of 5 years of education, multiplied by 8 percent per year).
- **Health outcomes as proxied by stunting:** People are more productive when they are healthier. The economic literature often uses proxy indicators for health, such as adult height. This is because adult height can be measured directly and reflects the accumulation of shocks to health through childhood and adolescence. Stunting serves as an indicator for the prenatal, infant, and early childhood health environments, summarizing the risks to good health that children born today are likely to experience in their early years, with important consequences for health and well-being in adulthood. Available evidence suggests that an improvement in health that reduces stunting by 10.2 percentage points will lead to an improvement in worker productivity of 3.5 percent.

Source: World Bank's Human Capital Index's methodology.

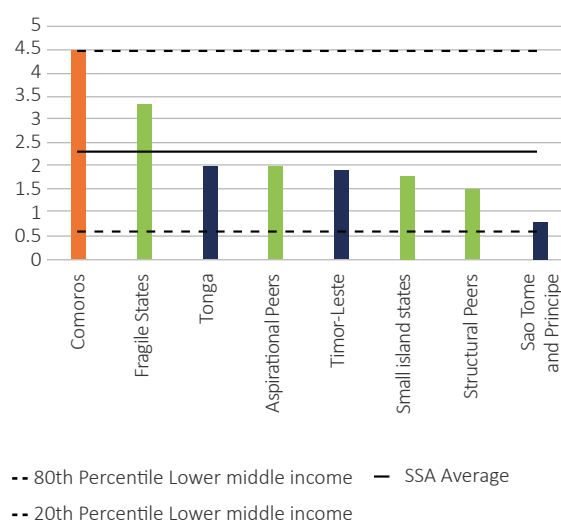
**71. There is a clear gender gap in educational attainment.** In Comoros, completion rates for girls in education lag those of boys. Primary school completion rates for boys versus girls are in the range of 90 versus 70 percent. Early marriage and adolescent pregnancies might be one reason for girls' low completion rates. Adolescent pregnancies are more frequent in Comoros than in other small island states and two to three-times higher than in aspirational peer countries (except for Cabo Verde). While the legal minimum age of marriage for men and women is 18, the Family Code gives judges the right to allow girls and boys to marry earlier based on serious and valid grounds, with the mutual consent of the future spouse.

**72. Poor results on stunting, especially among the rural poor, suggest the existence of chronic**

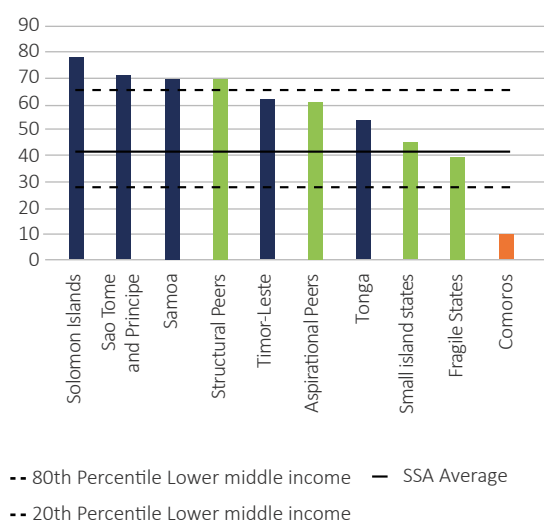
**nutrition inadequacies.** 31 out of 100 children growing up in Comoros are stunted and, hence, at risk of cognitive and physical limitations that can last a lifetime and undermine the long-term potential not only of the individual but society as a whole. The proportion of severely stunted children reaches 19.4 percent in rural areas, compared to 17.2 percent in urban areas. While health outcomes are relatively equally distributed undernutrition outcomes (low birthweight, stunted, underweight and wasted) are concentrated among the worse-off and particularly the first quintile of the income distribution. These poor results are in part explained by the absence of nutrition interventions and a low rate of exclusive breastfeeding (at 12% in 2012 and on decreasing trend during the last five years). And, although, the rate of oral rehydration is increasing, it remains under 60%.

**Figure 24: Health and well-being indicators 2, Comoros and comparators**

a. Prevalence of severe wasting, weight for height (% of children under 5) (2011-2017)



b. Exclusive breastfeeding (% of children under 6 months) (2011-2017)



Source: Staff calculations using WDI.

**73. Stunting in childhood is associated with adverse outcomes throughout the life cycle.** Undernourishment and diseases that cause stunting have been shown to impair brain

development, leading to lower cognitive and socioemotional skills, lower levels of educational attainment, and hence lower incomes. Health problems in terms of non-

communicable diseases are more likely in later life, leading to increased health care costs. The relatively low adult survival rates observed in Comoros may be a result of this difficult early start and of a health delivery service model that prioritizes those who can pay for health care out of their own pocket.

**74. High fertility rates are another driver of poverty but scaling up family planning efforts in Comoros might face cultural barriers.** At 32.3 percent, the unmet need for contraception (in percent of married women at reproductive age) is higher than the Sub-Saharan average (24.9 percent). Family planning programs have been found to be successful in countries where the desired number of children is markedly lower than the observed number of children.<sup>98</sup> In Comoros, however, the desired number of children – as reported by both men and women – is higher than the observed number of 4.3 children per woman in 2012. This finding is consistent across income groups and has grown over

time: In 1995, 60 percent of reported that would like to have fewer children, by 2012 this number had gone down to 50 percent. In 2012, men in Comoros aspired to have on average 5.7 children, women 5.3.

**75. Fertility rates are more likely to come down by closing the gender education gap and raising women's labour force participation.**

The number of children that women desire tends to vary significantly by the education status of the woman: in Comoros, women without any education state a desired number of children of 6.1 versus 4.7 for women with secondary education. Global evidence suggests that keeping girls longer in school might be a bigger driver for adjusting fertility preferences than family planning efforts. Also, at 33 percent of the working age population, women's participation in the labour force is one of the lowest in the region. As women engage in the labour market, the opportunity costs of having children rise, which usually leads to lower fertility rates.

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<sup>98</sup> Fertility has generally been found to be responsive to the implementation of family planning in the developing world (de Silva and Tenreyro, 2017). Using DHS data on exposure to family planning messages, a significant, negative association between the fertility change and exposure to family planning messages after controlling for other covariates has been found, suggesting that the delay in the implementation of the family planning programs in Africa largely explains the delayed decline in fertility in the region.





# **UNDERSTANDING COMOROS' LOW GROWTH PERFORMANCE**



« Premièrement, la hausse du chômage. Pourtant les diplômés sont là, mais le problème est que les Comores ne possèdent pas des grands débouchés dans tous les secteurs. Deuxièmement, le manque des infrastructures que se soient routières, portuaires ou touristiques. Par ailleurs, le pays demeure encore riche dans tous les domaines. Il est n'est pas exploité. Il est vierge. »<sup>99</sup>

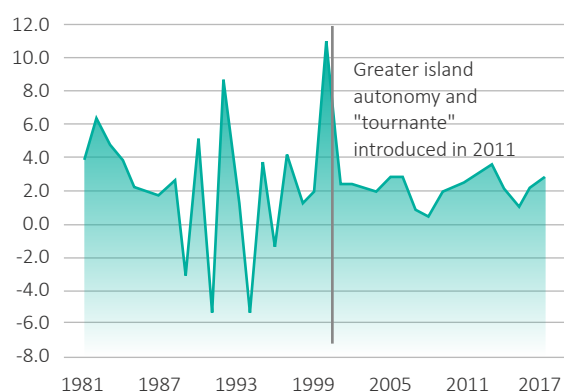
**76. Post-independence, Comoros' economic growth pattern was initially characterized by high volatility, a situation which stabilized after 2001 at a low level.**

Comoros' declaration of independence in 1975 was followed by repeated socio-political tensions, including unconstitutional changes in government. Periods of political instability have been associated with a contraction in growth.<sup>100</sup> Following the adoption of a new constitution

in the early 2000s, the number of political crises has reduced, which has tempered the volatility of growth pattern, but consistent with growth experiences of other politically fragile countries, growth stabilized at a low level (see Figure 25).<sup>101</sup> Over the period 2001 to 2017, the average real growth rate of GDP per capita was 0.3, also highlighting that the pace of growth of the economy has been unable to significantly outpace population growth.

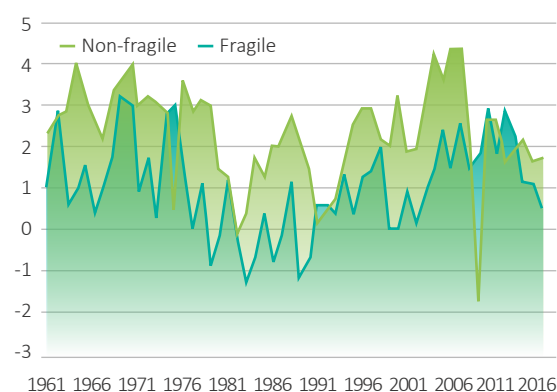
**Figure 25: Impact of political stability on growth**

a. Comoros GDP growth (annual %), 1981-2017



Source: WDI

b. GDP per capita growth (%): Averages for non-fragile and fragile countries



<sup>99</sup> Quote from respondent to a Facebook online consultation: "First, rising unemployment. People have degrees, but the problem is that Comoros does not have many work opportunities in many sectors. Second, the lack of infrastructure, be it roads, ports or tourism. Third, bad governance in the country; with that I mean the nepotism keeps growing. Beyond that, the country remains rich in many areas, it remains unused, it is still virgin."

<sup>100</sup> A background paper written for this report (De Filho and Diaz-Sanchez, 2018) finds that political instability tends to affect negatively per capita GDP growth and that the impact is stronger in fragile-low income countries.

<sup>101</sup> There is an ample literature documenting the negative effects of political instability on a wide range of macroeconomic variables including, among others, GDP growth, private investment, and inflation. Alesina et al. (1996) use data on 113 countries from 1950 to 1982 to show that GDP growth is significantly lower in countries and time periods with a high propensity of government collapse. Aisen and Veiga (2013) find that higher degrees of political instability lead to lower economic growth by lowering the rates of productivity growth and, to a smaller degree, physical and human capital accumulation.

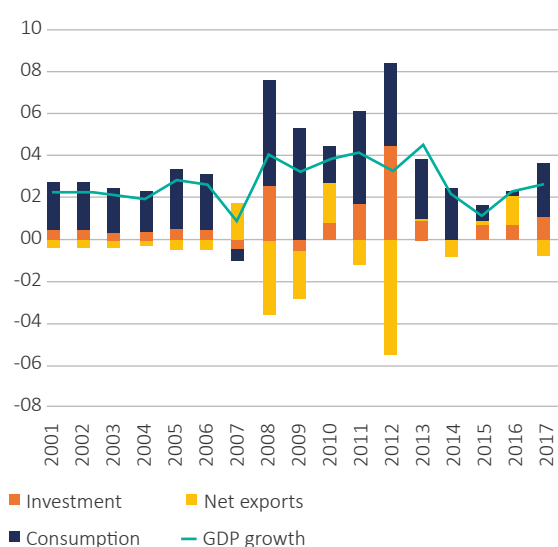


**77. From the demand side, growth has largely been driven by private consumption, reflecting high levels of transfers from abroad (see Figure 26).** Since 2001, consumption represents the main contributor to growth. Although public consumption also increased, it was private consumption that drove economic growth fueled by remittances. Remittances have been growing - in absolute terms and as a proportion of GDP - in the last couple of decades. Received personal remittances represented on average 12

percent of GDP between 2011 and 2017 and are high compared to the average of SSA (4.9 percent) and structural peers (5.0 percent) and to other comparator countries (e.g. fragile and small islands states with 7.7 and 7.0 percent, respectively). Investments' contribution to growth has been low, negative sometimes, and volatile. In 2017, FDI represented less than 1 percent of GDP, well below structural peers (5.4 percent over 2011-2017). Net exports contributed negatively to growth in most of the years since 2001.

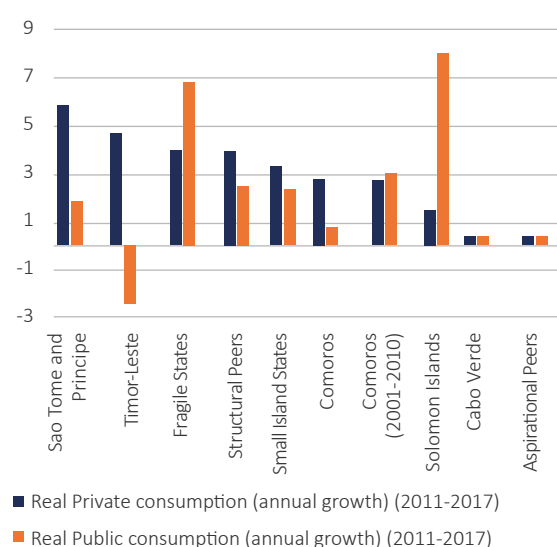
**Figure 26: Demand side drivers of GDP growth**

a. Comoros: Contribution to GDP growth - demand side



Source: Staff calculations using revised national accounts.

b. Comoros: Private and Public Consumption (annual growth)



**78. From the supply side, labor has traditionally been the main contributor to growth (see Figure 27).** In Comoros, working age population growth has been by the major contributor to economic growth in each year for the last quarter of the century. Low levels of capital growth have contributed very little to economic growth and have generated a low level of productivity gains in the economy, worryingly compromising future growth.

Overall, TFP growth has been negligible and for some years even negative.

**79. The sectoral contribution to growth is starting to change in favor of the services sector.**

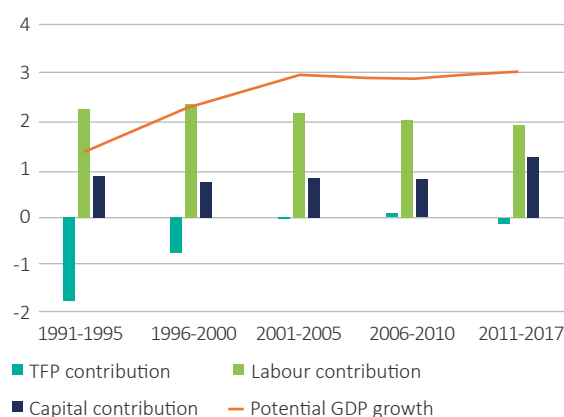
Growth in Comoros has traditionally been led by agriculture, however in recent years services have played a more important role, suggesting a beginning structural transformation of Comoros' economy. Between 2001 and

2017 the service sector grew annually by 2.6 percent on average (although, below structural peers) and was by far the main contributor to growth. Between 2004 and 2014, employment in the agricultural sector

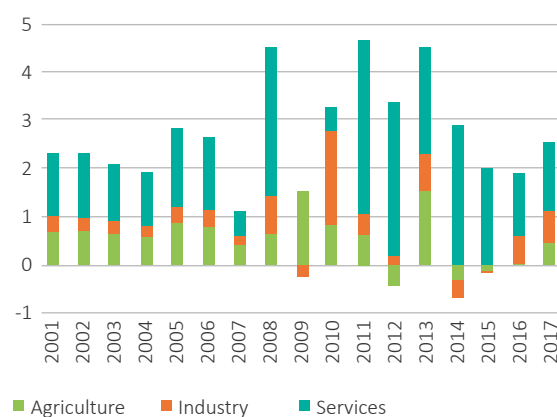
decreased by almost 20 percentage points (it accounted for 57 percent in 2004 against 38 percent in 2014), whereas employment in all other sectors (industry and services) has grown.

**Figure 27: Supply side and sectoral drivers of GDP growth for Comoros**

a. Comoros: Factor Contribution to Potential GDP growth



b. Sectoral contribution to growth (in %)



Source: Staff calculations using Comoros' revised national accounts and WDI

### *What would it take for Comoros to escape its low-growth equilibrium?*

**80. The Comorian Government has set itself the ambitious goal of “emergence” by 2030, which it hopes to achieve through an annual real GDP growth rate of 6 percent.<sup>102</sup>** However, simulations suggest that “emergence”, if defined as reaching middle income status, will require a far more ambitious growth target than 6 percent. To reach middle income status by 2030, Comoros real GDP would have to grow at 12 percent every year, a growth rate that no country could ever sustain for more than a couple of years. For instance, China, Thailand, and Malaysia

had growth rates above 10 percent but only for 3 or 4 consecutive years (in the 2000s, at the end of 1980s, and at the beginning of the 1970s, respectively). Assuming a real GDP growth rate of 4 percent, which is consistent with the average growth observed for Sub-Saharan Africa and for structural peers in the past decade, Comoros would have to either increase its labor force by 4.2 percent annually (compared to an average of 2.8 in the last 10 years), or accumulate capital at 6.9 percent annually (compared to an average of 3.6 in the last 10 years), or raise its total factor productivity annually by 1 percent. The following section discusses what currently stands in the way to any of these factors contributing more to growth.

<sup>102</sup> The government has recently updated its “Accelerated growth strategy for sustainable development” or revised SCA2D (Commissariat Général au Plan, 2018) that aims to support its 2030’s objectives. The plan focusses on key infrastructures in the areas of energy, transport (specially roads), and health.

## The Capital Contribution

**81. Years of low public and private investment rates have hampered the capital accumulation in Comoros and affected connectivity within and across islands (see Figure 28).** Over 2011-2017, total investment in Comoros represented 16.1 percent of GDP. This percentage was far below the one for structural peers (22.9 percent) and for the average of Sub Saharan Africa (23.1 percent). Around a third of total investment is public (5 percent), and only 11 percent is private investment, very far from the average of Sub Saharan Africa (20.8 percent). As a result, the capital stock in Comoros is very low compared to other structural and aspirational peers.

**82. Public savings and investment are constrained by low domestic revenues and**

**a budget composition that is heavily tilted towards consumption (i.e. recurrent spending on wages).** Available resources to step up public investment are constrained by low revenue collection (Box 5). Domestic revenues in Comoros averaged 17.2 percent of GDP over 2011-2017, a much lower percentage compared to structural comparators (45.3 percent) and below the average of Sub Saharan countries (22.5 percent). A wage bill that consumes 69.3 percent of tax revenues (over 2011-2017), higher than most of structural and aspirational peers, gives little room for investment. Further, the investment budget is typically cut in times of scarcity to accommodate recurrent spending needs, as occurred most recently in 2014 when the domestic investment budget contracted by 58 percent.<sup>103</sup> Finally, repeated forced changes in governments have resulted in a constant interruption and a lack of continuity in investments projects.<sup>104</sup>

### Box 5: Areas of reform of tax policy and tax administration

**Important progress in terms of reforms and performance has been made in the customs area. However, the Tax Directorate (AGID) is lagging.** Among the main challenges facing by the AGID are: (i) address the issue of the lack of standardization of accounting practices; (ii) create incentives to influence the behavior of public enterprises vis-à-vis their tax obligations; (iii) increase the very low rate of registration of taxpayers and taxable areas; (iv) fight against the predominance of cash transactions; (v) work to address the problem of low interoperability of revenue management systems (the case of customs, banks, and the Tax Identification Number); and (vi) increase the reliability of the land registry. Concerning the custom administration, an important area of reform is to fully implement Sydonia Word in the aim to activate the necessary modules to obtain a good administration of the value and risk management.

**In recent years there has been an uncontrolled proliferation of exemptions, a revision of exonerations should be at the core of the new investment code.** Indeed, the current

<sup>103</sup> There is not an analogous response of the investment budget in boom times. This asymmetry is also found for other countries and regions in the world (see for instance Gavin and Perotti (1997) for the case of Latin America and Dessus, Diaz-Sanchez, and Varoudakis (2016) for the case of WAEMU countries).

<sup>104</sup> Weak government capacity and poor medium-term planning affected the execution ratio of the public investment program, which remained at around 45 percent in recent years.

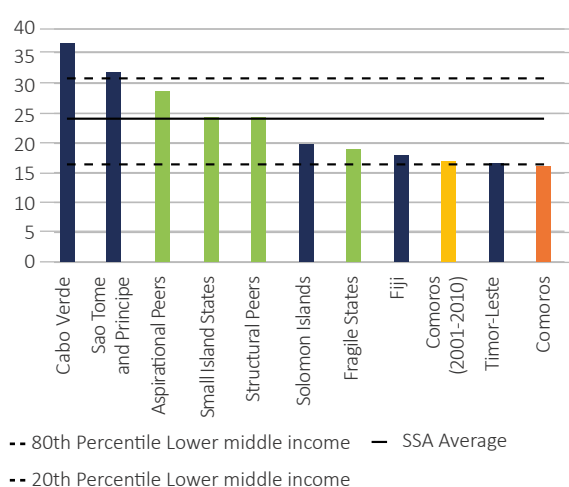
investment code presents important issues that should be addressed including: a lack of transparency, significant discretionary authority, risk of abuses, unequal treatment across firms, unpredictability, high costs in terms of fiscal and customs revenues. The World Bank provided analytical and technical support for a new investment code in Comoros. The draft law has not been yet submitted by the government to the Parliament.

**Reforming indirect taxation presents some risks, but it would help reduce exemptions and will be key in the WTO accession process.** Compared to the consumption tax, the VAT offers additional fraud opportunities through the creation of fictitious VAT credits. This results in a risk of revenue losses and distortions of competition between fraudulent operators and civic operators. Consequently, introducing the VAT in a low value-added economy could seem risky. However, the collect of more than two thirds of the VAT receipts in customs strongly limits the risk of revenue loss. In addition, the introduction of the VAT removes a major cause of the proliferation of exemptions. Finally, the VAT implementation is one of the conditions currently being negotiated between the government and the WTO for the Comoros' accession to the WTO.

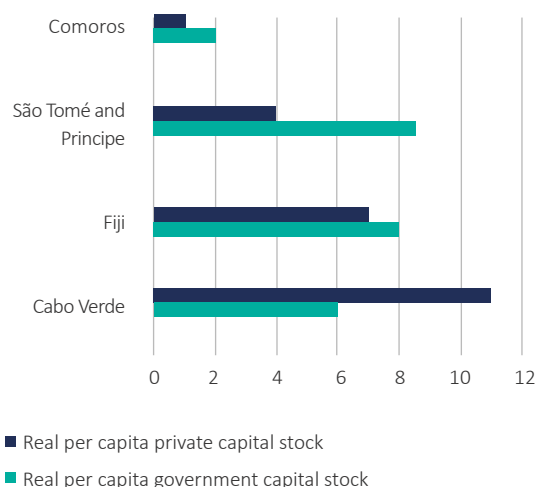
**Any tax reform will not be successful without better relations between the State and firms.** Thus, the accumulation of arrears constitutes a factor of opacity of the government's relation with the telecommunications company, which is the largest tax collector in the country. Similarly, the State should renounce to the discretion in the tax deadlines. Finally, clear rules should be respected for the application of tax procedures; for example, the plans for the controls must be defined according to criteria drawn from a risk analysis; and the quality of the controls must be key in the aim of reducing fraud behavior.

**Figure 28: Investment and Capital Accumulation**

a. Investment (share of Nominal GDP) (2011-2017)



b. Real Public and private stock per capita, 2015 (211 PPP\$-adjusted), thousands



Source: First panel: Staff calculations using WDI. Second panel: IMF database on capital stock.

**83. Political instability and a weak rule of law harm private sector investment.** Political instability not only affects the continuity of public investment, it also undermines the confidence of private investors. Foreign and domestic private investment in Comoros has been low. At an average of 0.9 percent of GDP over the period 2011-2017 Comoros attracted foreign direct investment at levels far below those of structural peers (5.4 percent) and Sub Saharan Africa (5.9 percent). A weak respect for the rule of law and very low ratings on other governance indicators – such as voice and accountability, government effectiveness, and control of corruption – are discouraging for private investors in Comoros and from abroad.

**84. Domestically, private investment is also constrained by the weak mobilization of private savings and a weak financial sector.** Gross private savings represented 4 percent of GDP on average over 2011-2017, far below the average for Sub Saharan Africa (13.6 percent) or other fragile states (11.2 percent). Similarly, at 13.9 percent of GDP, domestic credit has been at least 10 percentage points below structural peers and the average for Sub-Saharan Africa in recent years (2011-2017).<sup>105</sup> With just 136 bank accounts per 1,000 adults Comoros lags significantly behind the penetration rates for peers but falls even behind the average for Sub-Saharan Africa (332) and low-income countries (186).

**85. High asset impairment in the banking system threatens the stability of the financial sector and limits the availability of credit to the private sector.** Even though private credit to GDP has increased substantially from 5.7 percent in 2007 to 16.6 percent in 2017, this remains low compared to peer countries and the increase happened mainly in short-term loans to individuals.<sup>106</sup> Credit for investment is very limited and is backed by either immovable collateral, salary pledges or gold.<sup>107</sup> Non-performing loans (NPLs) are high and increasing (23.6 percent in 2017) with banks unable to resolve bad debts through the justice system.<sup>108</sup> The absence of a collateral registry for movable assets negatively impacts small and medium sized firms who do not possess the requisite immovable collateral for a loan to be securitized using immovable assets. Consequently, Comorians rely on microfinance institutions (MFIs) with the largest MFI's total outstanding loans representing more than a third of credit to the economy.

**86. Beyond banking and microfinance, other financial services are underdeveloped in Comoros.** Mobile money has yet to take off and insurance, pensions, and capital markets sectors are small, emerging, and unregulated. Modern payments platforms such as an Automated Transfer System (ATS) and a national switch are inexistent which impede the development of mobile banking and payments

<sup>105</sup> The uptake of banking services remains low (9 percent of the population has a bank account), mainly because of lack of trust in the banking sector, but also because Comoros is an economy with a high informal sector content and a poor population, which lacks discretionary income that could be saved for future use and investments deemed viable by banks.

<sup>106</sup> Among aspirational peers, Fiji has the highest share of private credit to GDP at 90.9%, followed by Samoa at 81.1%, Cabo Verde at 62.4% and Tonga at 41% (WDI, 2017).

<sup>107</sup> In the context of high levels of NPLs and weak bank profitability, lender risk aversion has increased leading to structural excess liquidity of 38 percent in the system.

<sup>108</sup> A few well-connected debtors in Comoros' undiversified economic structure account for a large share of the NPL stock. A considerable portion of NPLs represent legacy loans that turned sour during the vanilla sector crisis of the early 2000s and remain unresolved, along with other loans that are yet to be written off by holding institutions.



as well as other forms of non-cash payments that underlie the necessary foundations for the emergence of digital finance and ultimately financial inclusion. Given the importance of trade finance and remittances for the development of Comoros, correspondent banking relationships (CBR) between Comoros banks and MFIs and their partners in other jurisdictions needs to be strengthened.

**87. Private investment is further dimmed because private returns on investment are highly uncertain as property rights in Comoros are not protected, the investment climate is onerous and government policies are unpredictable.** The 2019 Doing Business Report ranked Comoros 164 out of 189

economies, below the average for South Saharan Africa (see *Figure 30*). In the period 2011-2017 the country has been consistently in the 15th percentile on the Worldwide Governance indicator of “*regulatory quality*” for private sector development, performing worse than structural peers. Property rights are unclear and difficult to enforce. Land is privately owned in Comoros through three co-existing systems: ancestral practices regulated under a traditional land allocation inherited through matrilineal lines, an Islamic law that equates ownership with land use and a modern one, which is based on private ownership. These conflicting systems have in the past generated conflicts and are a source of uncertainty for investors (see *Box 6*).

#### Box 6: Comoros' land regime

***Lack of clarity over tenure in Comoros results from the coexistence of three parallel and contradictory legal systems.*** The traditional system is largely based on *manyahuli*, a system of immovable property inherited through matrilineal lines and predicated on the inability to divide, and inalienability of, property. Under Islamic law introduced during the time of the Sultans, land belongs to whoever puts it to productive use, and transfers are made via cultivating the soil. Colonization introduced the modern law, which is based on private and domanial (state) ownerships. Currently, the legitimacy of the law inherited from the French remains weak, and Comorians continue to refer first to customary and Islamic laws to resolve their disputes. Few people register title deeds, and these are seldom put on the market, while several owners can claim the same piece of land on the basis of the different legal systems. This fuels low-level contestations over land, including between those considered native to an island and immigrants; between large-scale land owners and villages on the same island; and between neighboring villages over boundary delineations. That said, actual violent conflict related to land has rarely erupted in Comoros.

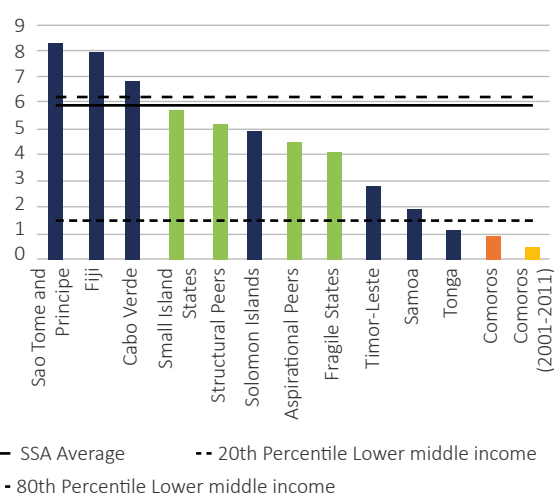
**Deficits in the institutional structure can also exacerbate tensions over land.** Many land cases can wait for several years (in some cases, more than 20) before being heard in court. The absence of a land registry also makes it nearly impossible to track land transactions, leaving many conflicts over land in a stalemate. As a result, disputes are often dealt with on an ad hoc basis through informal or formal arrangements. In Moroni, for instance, private owners who were unable to enforce justice decisions have reached a compromise with the people living illegally on their land: They are allowed to stay on the condition that they pay rent and do not build permanent houses.

**Unequal access to land has worsened income disparities and fuels internal migration.** In Anjouan, just 20 families control 40 percent of the arable land. This imbalance is worsened by a number of factors: Poor families using their land as collateral for microfinance loans in Anjouan have been dispossessed of their lands when they are unable to repay the loans, which are often set at punitively high interest rates. The land is then auctioned and bought by the richest families. Also, in Anjouan, poor families seize land and rapidly cultivate it in order to be the first to claim ownership of it. As in Mohéli, the lack of land tenure security and fear of dispossession can prevent owners from renting or lending their land, which leads to an increase in landless peasants and a decrease in cultivated lands. The impoverishment of peasants has contributed to an increase in migration to urban areas, to Grande Comore, or to Mayotte.

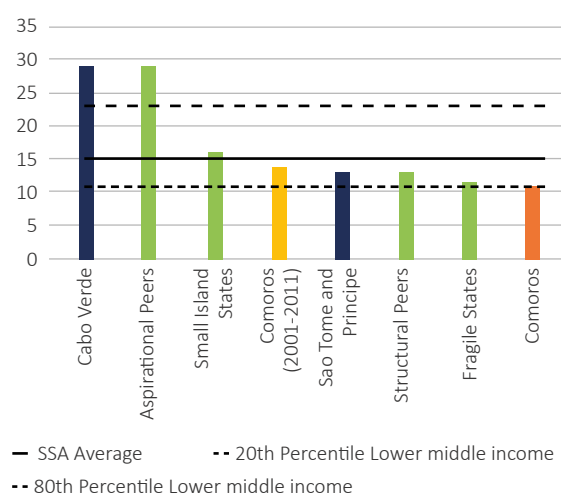
Source: World Bank Risk and Resilience Assessment 2018

**Figure 29: FDI and private investment, Comoros and Comparators**

a. Foreign direct investment, net inflows  
(% of GDP average 2011-2017)



b. Private Investment (% of GDP), most recent value (2011-2017)



Source: Staff calculations using Comoros' revised national accounts and WDI.

**88. The potential of the diaspora to help generate foreign direct investment is constrained.** Diasporas abroad are an important reservoir of knowledge about trade and investment opportunities. Migrants can help origin-country exporters find appropriate distributors and buyers, improve their knowledge of the market, and comply with government requirements and market standards. Sharing the same

language or a similar cultural background eases communication and facilitates better understanding of transport documents, procedures, and regulations. According to responses in diaspora focus groups in France, there are currently several obstacles to attracting diaspora investment, such as: (i) inadequate infrastructure; (ii) lack of trust; (iii) absence of institutions that engage with the diaspora for investing in projects; (iv) lack of

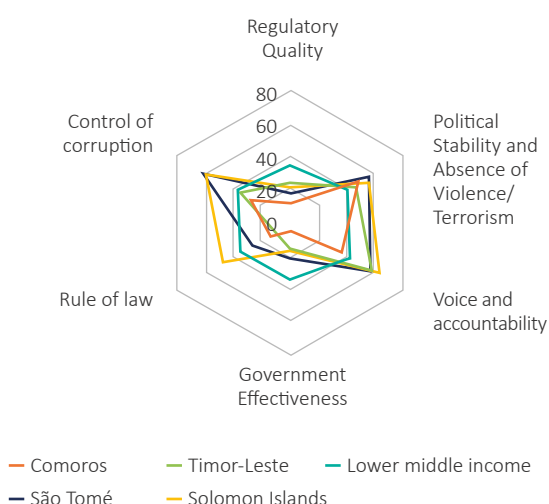
business development support for projects; (v) cost of financing and lack of access to financial products; and (vi) lack of skilled labor.

**89. A weak justice system and rampant corruption make it unlikely that property rights can be enforced.** Comoros has one of the weakest contract enforcement regimes in the world, ranking 180 out of 190 countries worldwide as measured by the World Bank's Doing Business report. The judiciary is perceived as corrupt and co-exists with informal justice institutions. Enforcement of existing legislation

is often lacking, and discretionary application prevails. Efforts to combat corruption have experienced significant setbacks. An anti-corruption commission was created in 2011, and an anti-corruption strategy adopted in 2012. The government empowered the commission by giving its officers the legal powers to investigate perceived corruption cases, and to prepare and submit those cases to the judiciary and, indeed, by 2013 15 such cases had been submitted. However, three months after the new President took office in 2016 the Anti-Corruption Commission was dissolved.

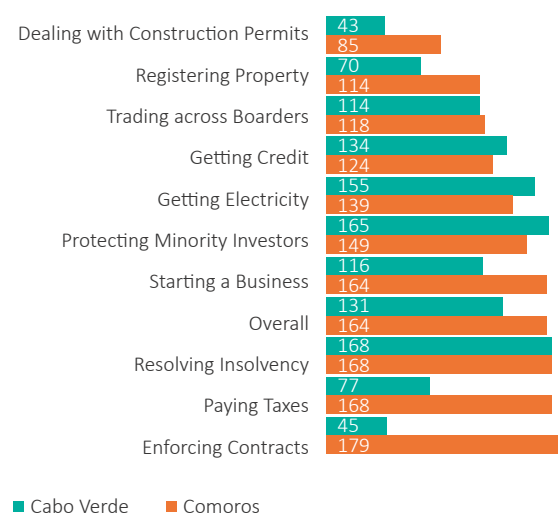
**Figure 30: Governance indicators and Business climate**

a. World Governance Indicators - 2017 percentile rating



Source: World Bank, Doing Business 2019

b. Ranking of Doing Business 2019, all indicators



**90. Weak and expensive provision of infrastructure services – especially electricity – is a major deterrent for investors.** Although electricity access is higher compared to Sub Saharan Africa average (Grande Comore and Anjouan, the biggest islands, have 65 and 50 percent access rates compared with 38 percent for the SSA average), the system

suffers from constant interruptions.<sup>109</sup> Power supply in 2016 in the capital Moroni ranged from 12-20 hours per day, but the rest of the islands only received about 6 hours of daily electricity service, with many localities at the periphery of the grid only receiving a few hours of power per week. Even though the quality of electricity service improved since 2016, this

<sup>109</sup> More on this in section 5, *Drivers of Poverty Reduction and rising Inequality since 2004*.

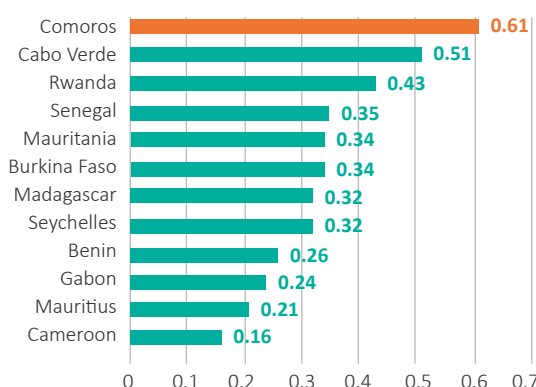
progress was coupled with a high increase in tariffs (the cost of service for the capital almost doubled). Besides, a sharp service deterioration started in 2019. Low reliability and quality and high costs discourage private sector investments. For instance, it makes it more difficult to invest in cold storage for perishable agricultural products at farm gate and ports in the aim of accessing output markets. The weak performance of the sector is also reflected in a low ranking on the indicator Getting Electricity of the 2019 Doing Business (Comoros at the 139 out of 190 countries).

**91. The performance of the electricity company MAMWE is indicative of challenges that undermine the provision of public services.** Comoros also has the second highest per unit operations and maintenance (O&M) and fuel costs in the SSA region after Liberia (where electricity costs 0.66 cents per kWh billed) (see Figure 31). This high cost reflects in part the economics of a small system whose generation is almost exclusively based on expensive imported diesel oil. Lack of strategic planning and weak commercial and financial management are other drivers of weak performance. At end-2016, an estimated 54 percent of MAMWE electricity production was never billed and 79 percent was collected. As a result of decades of erratic management, the Comorian power sector represents a very substantial burden on public finances. It is expected that in 2017, budgetary transfers to support MAMWE will be above US\$6.5 million, representing about 8 percent of tax revenues.

**92. Other important infrastructure gaps that discourage private sector investment can**

**Figure 31: Electricity costs, Comoros and comparators**

Cost of electricity (US \$ per kWh billed)



Source: Trimble et al. (2016).

**be found in the transport sector.** While the density of paved roads (412 km per thousand km<sup>2</sup>) in Comoros is impressive compared to a Sub-Saharan Africa average of 31, lack of adequate funding for its rehabilitation and maintenance has left the road network in poor conditions and the first mile of transport from agricultural fields is often hampered due to poor conditions of feeder roads. In 2018, 22.3 percent of national roads were in poor condition. Expenditure efficiency is a serious concern as limited budgets are often directed towards the extension of the already dense road network at the expense of the more pressing rehabilitation needs and the improvement of rural connectivity.<sup>110</sup> Airports play an important part in the country's transport infrastructure as almost all inter-island passenger traffic is done by air despite air routes being four to five times more expensive than sea routes. Lack of scheduled sea passenger transport leaves Comorians with little choice. Comoros'

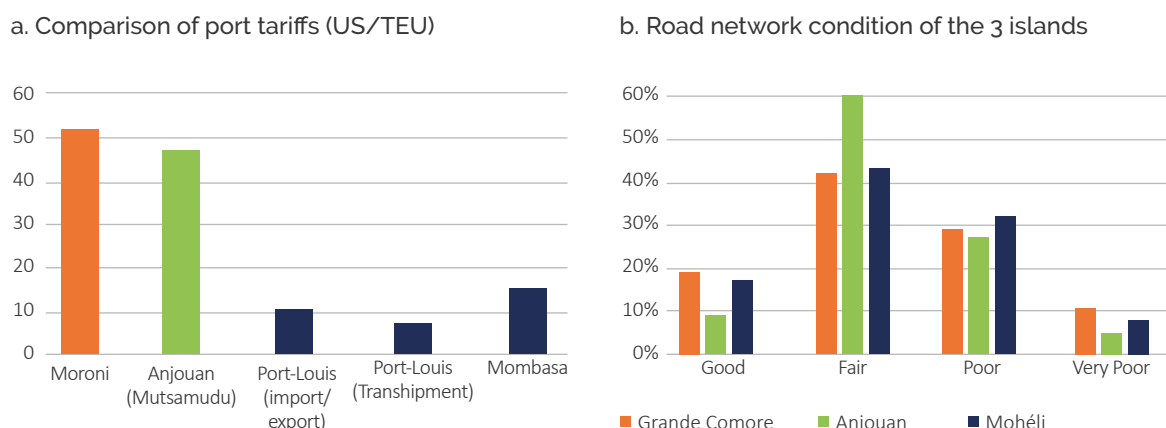
<sup>110</sup> While a road database has been established, a lack of regular, systematic updates impedes the implementation of asset management in the sector.

<sup>111</sup> For example, port infrastructure and equipment are not compatible with the type of vessels that are operating between the islands. For passengers, port facilities are not adequate for the sizes of ships used for this activity.

port infrastructure does not meet minimal standards regarding safety requirements as well as ports operations and management,

resulting in high transport costs of goods and passengers.<sup>111</sup>

**Figure 32:** Port tariffs in Comoros' two main ports (Moroni and Mutsamudu) are five times higher than in Mauritius and three time higher than in Mombasa



Source: Panel a: Direction Portuaire (MTBS, 2014). Panel b: PADDST 2014.

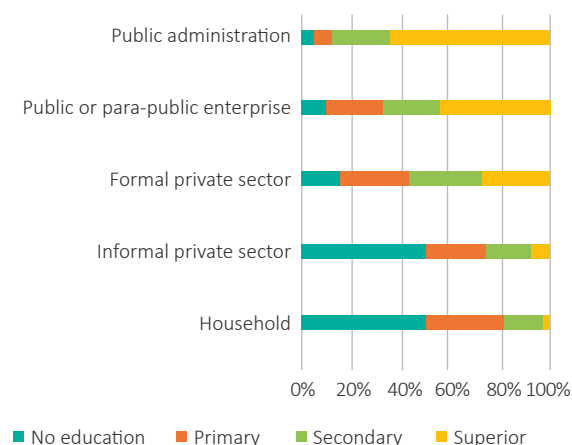
## The Labor and Human Capital Contribution

**93. Comoros' labor contribution to growth is constrained by a low labor force participation and high levels of outward emigration (see Figure 33).** Only 42.7 percent of the working age population (average over 2011-2017) are currently participating in the labor force, which is lower than in structural peer countries (average of 56.5 percent) and substantially lower than in Sub-Saharan Africa (average of 67.3 percent). The labor force participation is especially low for women, with men almost

twice as likely to participate in the labor force. Including discouraged work seekers in the labor market increases the labor force participation rate by ten percentage points: there were about 42,000 discouraged work seekers in Comoros in 2014 – more than twice the number of actively searching unemployed which stood at about 15,000 people. Unemployment is primarily an issue of access to the labor market.<sup>112</sup> In 2014, 80.3 percent of Comoros' unemployed were first-time job seekers. The number of emigrants living outside Comoros has more than tripled during the last 25 years.

<sup>112</sup> The majority of employed individuals live on the island of Grande Comore. Employment in Comoros is characterized by predominantly own-account workers. More than 60 percent of the employed work for themselves and 93 percent of people work in firms employing ten people or less. Women, in particular, tend to be own account workers with more than two thirds of women working in this way compared to about 56 percent of men. This is coupled with women being substantially more likely to be self-employed than men, with 64 percent of women being self-employed and only 46 percent of men.



**Figure 33: Migration trends and human capital for Comoros****a. Evolution of total migrant stock by sex from Comoros****b. Institutional sector of employment by education (% of labor force)**

Source: EESIC 2014.

**94. Constrained labor demand due to a lack of private sector activity appears to be the main driver of a low labor contribution to growth.** Comoros is an economy struggling to provide economic opportunities. Most economic activity in Comoros continues to be informal and employs low skilled workers.<sup>113</sup> As younger cohorts become more educated they are struggling to find employment. The formal private and the public sector have the highest demand for skills, but neither is growing (see Figure 34). The public sector – where the highest returns to education can be earned – is increasingly saturated and the formal private sector is too small to provide employment for the remaining skilled job entrants.<sup>114</sup> The highest proportions of tertiary educated individuals for both genders are found amongst the narrowly unemployed,<sup>115</sup> suggesting a lack of economic

opportunities available for those with higher levels of human capital. Measures to address structural bottlenecks to private sector growth are key to a better absorption of skilled and low-skilled workers into the labor market. Constraints to private investment growth (that is directly linked to private sector growth) are described below.

**95. Labor supply in Comoros is also constrained as women hesitate to join the labor force due to cultural and legal restrictions.**<sup>116</sup> Labor market data for Comoros not only shows a statistically significant lower labor force participation for women than for men, it also clearly shows that there is an earnings premium for married men and a marriage penalty for women (see Annex 8). The average wage increases from 1.67 USD

<sup>113</sup> In 2014, informal production units (UPI) accounted for 73% of all production units in Comoros. Most workers in the informal sector are uneducated; only 7 percent have attended secondary school.

<sup>114</sup> The formal private sector absorbs only 2 percent of the labor force versus 19 percent for the public sector.

<sup>115</sup> Education levels are highest among the unemployed population for both men and women, with an average of 5.85 years for women and 6.77 years for men.

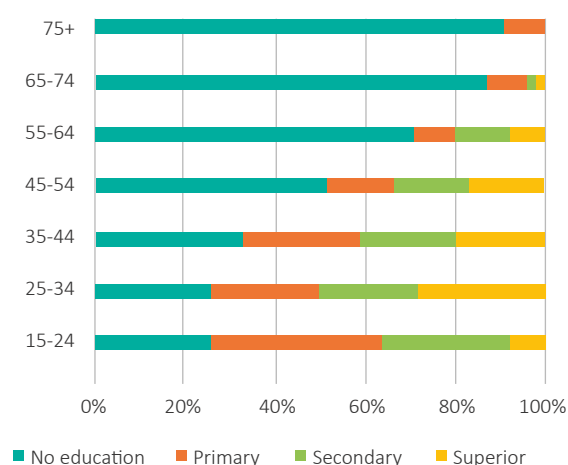
<sup>116</sup> See Milazzo and Goldstein (2017) on how formal constraints and social norms are important factors that contribute to the persistence of gender gaps.

to 1.73 USD for single versus married men, respectively. By contrast, married women earn 1.45 USD on average which is less than the average for single women which is 1.64 USD. This female marriage penalty is likely to be rooted in the cultural and legal structure of Comoros. The Comorian 2005 Family Code provides that a married woman cannot choose where to live in the same way as a married man.<sup>117</sup> This kind of restriction can

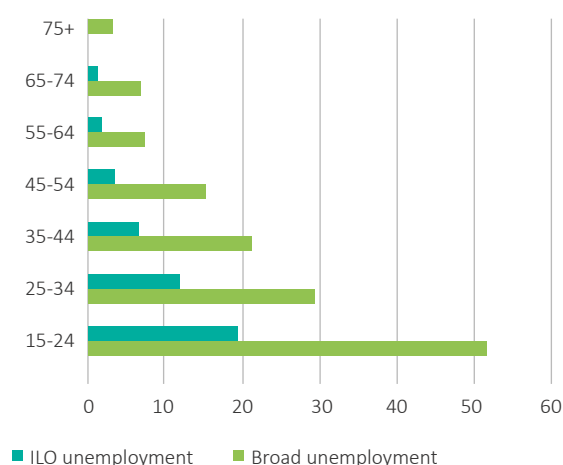
limit women's economic choices. Further, the Family Code stipulates that a married woman cannot get a job in the same way as a married man because professional and career choices of a married woman *"must not jeopardize the interests and the stability of her family"*.<sup>118</sup> High levels of female emigration suggest that women are responding to these labor market circumstances by leaving on a permanent basis to seek economic opportunities abroad.

**Figure 34: Labor force and Unemployment by age**

a. Labor force by education and age (%) in 2014



b. ILO-unemployment and broad-unemployment rates by age (%)



Source: Panel a: EESIC 2014. Panel b: EESIC 2014.

**96. Finally, there also appears to be a small adverse effect of remittances on labor supply.** As a form of additional non-labor income for households, remittances can lower labor force participation by individuals living in remittance-receiving households. This could be due to individuals feeling less pressured to participate in the domestic economy and earn a wage, since they are receiving income in the

form of remittances from a migrant worker. It could also be the result of workers considering wages of their migrant family members abroad as their own reservation wage. As migrant networks grow, the costs associated with migrating fall, which can make the wage abroad a more important benchmark domestically. An analysis undertaken for this SCD (see Annex 9) finds that there is a statistically significant,

<sup>117</sup> According to the World Bank's Women, Business and the Law report, in Sub-Saharan Africa, only 17 economies imposed this type of restriction on women's mobility in 2017.

<sup>118</sup> Only 19 of all the 189 economies covered by Women, Business and the Law limit women's professional choices in this way.

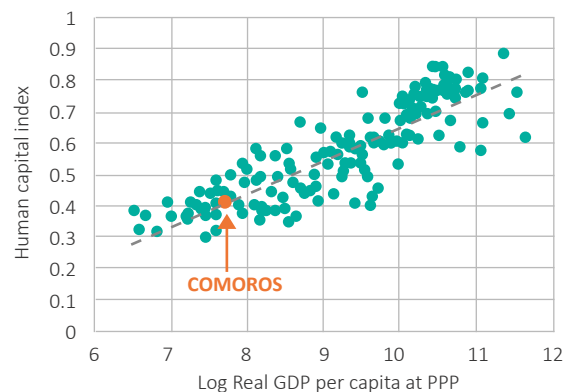
although small, negative effect of receiving remittances on labor force participation. The effects on labor market participation are larger at the household level than at the individual level, indicating that migration and remittance of income are decisions taken jointly by all members of the household rather than by individuals alone.<sup>119</sup>

**97. Independently of how high or low the labor participation in an economy is, the human capital of the average person working is another important driver of a country's growth performance.** Comoros' human capital is in line with its GDP per capita level (see Figure 35). New research (Collin and Weil, 2018) for 157 countries (including Comoros) suggests that increasing investment in human capital would not only help alleviate poverty but could also give growth a boost. Investments in human capital also have the advantage that they tend to be relatively cheap compared to investments in physical capital. However, the growth effects of investments in human capital tend to materialize later because human capital investments tend to be made into the work force of the future rather than the one of today.

**98. Comoros' human capital investment of today constitutes a significant break on future productivity.** According to the World Bank's Human Capital Index (HCI) – that was introduced in the last chapter – a child born in the Comoros today will only be 41 percent as productive when she grows up as she would be if Comoros performed better on education and health indicators.

**Figure 35: Human Capital in Comoros**

Human capital index versus GDP per capita



Source: Trimble et al. (2016).

If investments in its human capital were to be in line with those made by countries that score in the 75th percentile of HCI (e.g. Seychelles, Malta), Comoros' like other lower income countries' GDP per capita could get a boost of up to 25 percent by 2050 (Collin and Weil, 2018). A further growth dividend might accrue from secondary effects of investments in human capital. For example, a natural expectation would be that raising quality and quantity of education, particularly of women, would reduce fertility both by raising the opportunity cost of children and increasing women's control over their own childbearing. Lower fertility would in turn impact future dependency ratios in a manner that further increased income per capita and lower poverty (Canning and Raja, 2015). Higher human capital could also result in higher productivity growth, through education's effect on innovation, management quality, and adaptation to changing economic circumstances.

<sup>119</sup> Although the effect of remittances on labor force participation is generally statistically significant, the effect is very small. Individuals in remittance receiving households are only 2.1 percentage points less likely to participate in the narrow labor force and they are not statistically significantly less likely to participate in the broad labor force. Households receiving remittances, however, have a statistically lower share of individuals participating in the labor market than households not receiving remittances: the narrow household labor force participation rate is on average 5.1 percentage points lower for recipient households, and the broad labor force participation is on average 4.0 percentage points lower.

## Total Factor Productivity Growth

**99. Comoros' ability to generate total factor productivity growth through innovation and technology spill-overs is compromised by the country's inability to attract foreign direct investment, low human capital and its limited integration into global value chains and an untapped diaspora.<sup>120</sup>** Assessing Comoros' ability for innovation is a difficult task as traditional benchmarking for the country does not exist, but it is reasonable to assume that it is low. R&D budgets either in the government, SOEs or in private firms are almost non-existent. A dearth of foreign direct investment and a lack of integration into global value chains deprives Comoros of two important sources of innovation and technology spill-overs. Diaspora communities can also make a unique contribution to the development of their home countries through beneficial transfers in the form of technological and entrepreneurial know-how. International experience shows that to fully tap this potential, governments and other stakeholders need to develop and strengthen linkages between the diaspora members and their countries of origin.<sup>121</sup>

**100. Another drag on total factor productivity results from a misallocation of resources in the economy due to inefficient government spending and the weak governance of SOEs (see Box 7).** Government spending's efficiency is low, especially in the areas of infrastructure and education. The "government effectiveness" indicator from the World Governance Indicators, that measures perceptions of the quality of public services and the quality of the civil service, places Comoros far behind structural comparators. Most sectors in the economy - industry, agriculture, transport, land-line communication, international trade, banking, and non-banking financial services - are subject to extensive state directives, and in many cases, dominated by poorly governed SOEs. The inefficiencies associated with SOEs (e.g., corruption, patronage, nepotism, and asset-stripping) have led to prohibitively high infrastructure costs, distort the market, undermine the efficient allocation of resources, and undermine the creation of an efficient and competitive corporate sector.<sup>122</sup>

<sup>120</sup> See World Bank (2017d) for a study on how important technology adoption and innovation are for Africa's future.

<sup>121</sup> The Migration for Development in Africa (MIDA) - a program implemented by the International Organization of Migration - has been involved in several projects on how to use the expertise and knowledge of diaspora members. Many of these projects starts with increased dialogue and knowledge sharing. For example, the MIDA Great Lakes project involves missions, workshops, and roundtables to facilitate the exchange of knowledge between institutions in Burundi, the Democratic Republic of Congo, and Rwanda with the diaspora in Belgium. Other countries have implemented specific programs to benefit from technical diaspora knowledge and experience acquired abroad. For instance, countries such as Japan, the Republic of Korea, and Taiwan have promoted the return of foreign-educated students or established networks of knowledge exchange with them. Other countries rely on temporary or virtual return through extended visits or electronic communication in professional fields. For example, qualified health Ghanaian diaspora living in the European Union returned temporarily to hospitals and medical training institutions in their homeland through a MIDA Ghana Health Project. Similarly, University lecturers from Burundi, the Democratic Republic of Congo, and Rwanda were invited to collaborate in the development and teaching of courses in their countries of origin.

<sup>122</sup> See more on productivity and resource misallocation in Sub Saharan African in Calderon et al. (2018).

**Box 7:** SOE performance – the example of the telecom sector in Comoros

The telecom sector in Comoros was controlled until recently by state-run monopolist Comores Telecom (CT), as at least two prior attempts at bringing private commercial operators to the sector had failed. The first, aimed at bringing in a second operator in 1994, was dropped when the licensee failed to pay the license fee; the second, seeking to privatize the incumbent operator CT, failed in 2014 when the initiative was stopped by the National Assembly over potential job losses. As a result, the Comorian telecom sector remained a monopoly, characterized by a poor and expensive service.

The International Development Association's grant to the Government of the Union of Comoros under the fourth phase of the Regional Communications Infrastructure Program (RCIP-4 – P119213), which runs from November 2013 to December 2019, provided US\$ 22M and helped the government to liberalize the market by introducing a second operator, chosen through competitive tender. The program leveraged over US\$90 million in license fees and private-sector led infrastructure investments, thus illustrating the potential for mobilizing private financing even in the context of a fragile small-island economy such as Comoros.

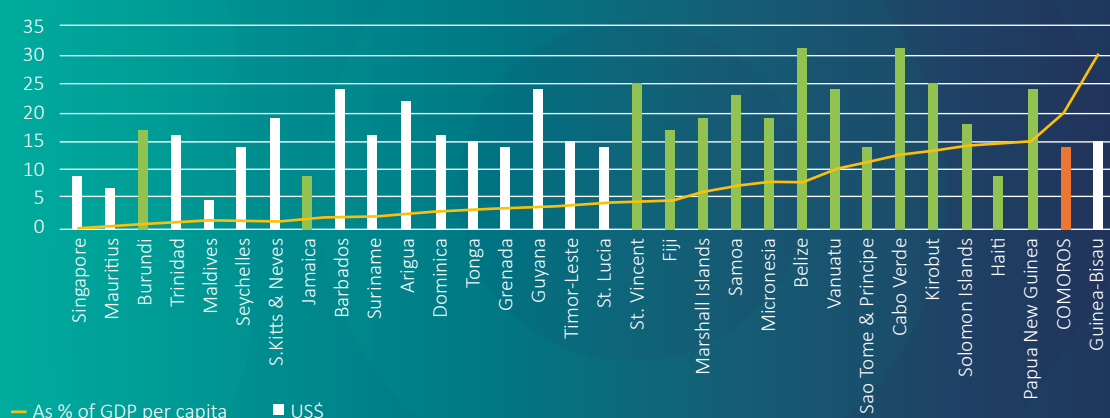
A consortium led by Telma, a privately-owned operator in Madagascar, paid some US\$16m for a full-service license in December 2015 and launched services one year later. Within six months, it significantly expanded its user base, and currently provides a modern and efficient service to a quarter of a growing market of mobile broadband service subscribers. In response, CT has regularly restricted the interconnectivity with Telma Comoros, forcing customers to use international calls; has used its political influence to pressure the regulator, ANRTIC, into obliging Telma Comoros to raise its prices to match those of CT; and the customs department into seeking payment of duties and charges on equipment that was exempt per the license conditions. The reaction of the incumbent operator is highly detrimental to the development of the telecom sector in Comoros, as well as that of those sectors and outcomes that telecoms enable, such as mobile money transfers, access to finance and information, and, ultimately, inclusion.

IFC is about to finalize a \$16M funding with Telma Comoros. The business plan of Telma Comoros faces challenges as CT has refused to share network infrastructure and regularly restricts interconnectivity. This is a clear situation where regulatory and competition interference is restricting service delivery and a strong impediment to private sector investment and growth. A level playing field of liberalized digital services in Comoros could substantially improve services from the current 33 per cent unique subscriber basis, accelerate 3G and 4G penetration currently standing at less than 1 per cent, and further increase access to digital services (e.g. mobile money transfers) and information platforms, connecting Comoros to the world and promoting inclusion across the Comorian society.



**Figure 36: Mobile sector Comoros and comparators**

Price of a monthly basket of mobile services, 2014, in USD and as % of GDP per capita



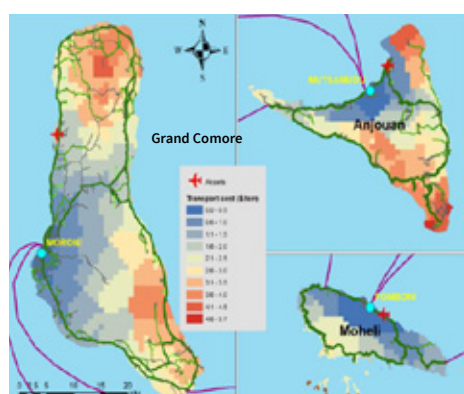
Source: Trimble et al. (2016).

**101. Like for other small island states diseconomies of scale represent a drag on the economy and are exacerbated by weak transport connectivity (see Figure 37).<sup>123</sup>** The challenges of diseconomies of scale in Comoros are great and living costs are high due to high transport and trading costs. Accessing Comoros' largest market (Moroni) is costly, especially for transport of merchandise from Anjouan and Mohéli (including high maritime transport costs and port services,

and in terms of time lost due to lengthy port processes). Aerial transport remains costly and not fully reliable, limiting movement of tourists across islands and hindering investment in the sector. A recent transport analysis undertaken by the World Bank finds that the weak transport infrastructure translates into high average transport costs, higher than in other African countries (representing 7 percent of average consumption versus 5 percent in Sub-Saharan Africa).<sup>124</sup>

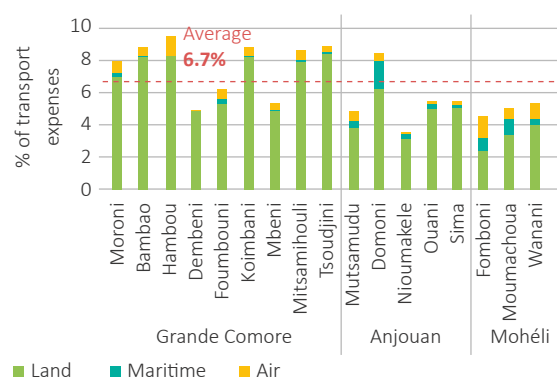
**Figure 37: Transport costs in Comoros**

a. Transport costs between regional centers in 2014



Source: World Bank (2019)

b. Households proportion of income spent on transportation

<sup>123</sup> Elbadawi et al. (2006) study the influence of geography on access to export markets and to input supplies in African countries.<sup>124</sup> World Bank (2019)

**102. Finally, a cultural environment that discourages entrepreneurship and competition may also be contributing to low productivity growth.**

A legacy of weak economic governance and political instability has accentuated the cultural and political divide across the islands and within the islands. The resultant isolation has strengthened the non-competitiveness-enhancing interests of a narrow community (cultural needs) and weakened attention to productive investments for a broader, common good to the Comorian society. The culture of entrepreneurship that has emerged is predominantly informal and focused solely on simple trade/commerce with little exposure to corporate culture or modern practices of business organization and management.

***Entry points to raising productivity in agriculture and fisheries***

**103. Agricultural productivity in Comoros is lower than in many other developing countries with similar agro-climatic conditions.**

Two traditional drivers of agricultural productivity have reached their limits: a) land expansion is reaching its limits with Comoros witnessing already one of the fastest rates of deforestation in Africa, especially in Anjouan,<sup>125</sup> b) under-employment<sup>126</sup> – which has been found to be a contributor to low agricultural productivity in other parts of Sub-Saharan Africa – is low at around 5 percent. Low agricultural productivity in Comoros can be mainly attributed to use of outdated farming practices, limited availability

and high cost of improved inputs, lack of land tenure security and the resulting low use of production credit, an unproductive agricultural labor force and natural resource degradation which has been affecting soil quality. Cooperatives are nascent, and older producer associations have been unable to link farmers to the credit market and consolidate high quality output consistently, leading to high transaction costs, weak forward and backward linkages along the value chain, and little or no value addition. Relatively higher productivity zones in Mohéli and Anjouan are hampered by low intra and inter-island connectivity, segmenting farmers in surplus production areas from growing urban markets.<sup>127</sup> Water scarcity is also increasingly a concern for agricultural productivity.<sup>128</sup>

**104. Innovation in agriculture requires more targeted financial and technical support.**

Underinvestment in foundational public goods in agriculture – advisory and extension services, technology transfer and dissemination, and provision of market information – has led to low access to knowledge of modern crop and livestock production techniques among Comorian farmers. Equipping the recently established agriculture advisory and extension system (CRDEs) with the human, physical and financial resources to rapidly demonstrate and disseminate climate smart agriculture (CSA) technologies, multiply seeds, and conduct artificial insemination and vaccination campaigns, among other activities, is a critical investment for the successful implementation

<sup>125</sup> In Anjouan, the annual deforestation rate was 8 percent between 1995 and 2014. Between 2000 and 2005, the annual deforestation rate in Comoros was 7.4 percent, the highest in Africa (UN, 2007). ("Forest Data: Comoros Deforestation Rates and Related Forestry Figures" n.d.)

<sup>126</sup> Less than 5 percent of workers in agriculture are in a state of time-related underemployment.

<sup>127</sup> Only 20-30 percent of the most important agricultural products make it to the market in Comoros and that 25-50 percent of agriculture prices reflect transport costs (World Bank, 2019).

<sup>128</sup> At the 2014 launch of the National Adaptation Program, the then Minister of Production, Energy and Environment warned that increased precipitation brought risk of a reduction of water resources and a deterioration of agricultural productivity from 3 to 4%.

of projects aimed at raising crop and livestock productivity. Reorienting public investments towards community-level rural development centers is critical for accelerating behavior change and adoption of CSA technologies and practices.

**105. Productivity of the fisheries sector is hampered by supporting infrastructure and weak management of fishing rights.**

While the sustainable level of annual fishing is estimated to be 33,000 tons, average annual production is estimated to be 16,000 tons. Various factors contribute to these low production levels. The embryonic network of cool storage suffers from absence of regular energy and maintenance. Landing sites rarely benefit from amenities. Specialized services remain limited for shipbuilding and ship repair, and for small fishing equipment bunkering. State support to the sector remains limited despite the existence of various sector institutions for management, monitoring and safety at sea, sanitary control, research and training. Budget and staff cuts, lack of clarity in the allocation of resources among the islands, but also poor planning affect response capabilities. Safety at sea is one of the priorities of communities and administration, dozens of people are lost at sea every year.

**106. The public institutions working on agriculture and fisheries in Comoros are fragmented, inadequately staffed, and poorly managed.<sup>129</sup>** Responsibility for key functions is distributed across multiple ministries and agencies, making it difficult to forge an overall vision for the development of the sector. The National Institute for Research on Agriculture, Fisheries, and the Environment

(INRAPE) is underfunded and understaffed, which explains its poor record in generating improved technologies adapted to the needs of Comorian producers. A monopolistic state marketing agency has been granted exclusive rights to import and distribute rice, without having been given the financial resources needed to carry out these functions. Agricultural policies in Comoros have varied over the years in terms of focus and approach, but a common feature has been a recurring reliance on special initiatives, programs, and projects to provide immediate solutions to pressing crises. Agricultural policies have tended to change frequently with changes in political leadership.

***Entry points for improving the potential of the tourism industry***

**107. Comoros' potential in tourism remains largely unexploited.** Islands with similar characteristic have proven that their development of the tourism sector can drive economic development. The World Travel & Tourism Council (WTTC)<sup>130</sup> estimates that the tourism sector directly accounted for only 3.4 percent of GDP in 2017, compared to structural peers such as Sao Tomé (10.8 percent) and Solomon Islands (4.3 percent) and far below other small islands in the region such as Mauritius (7.4 percent) and Seychelles (26.4 percent) and aspirational peers (13 percent). The country was dealt a major blow when a South African consortium abandoned in 2001 the flagship Galawa Hotel. Several attempts to revive the hotel have since failed. Since then, leisure tourism has been on a steep decline, falling from 13,069 in 2000 to 2,497 in 2011.<sup>131</sup> Currently, most international arrivals

<sup>129</sup> See Goyal and Nash (2017) for a study on public spending for increasing agricultural productivity in Africa.

<sup>130</sup> World Travel and Tourism Council (2008)

<sup>131</sup> More recent datasets do not disaggregate leisure tourism from family tourism, which is the biggest source of air traffic to Comoros.

are members of the Comorian diaspora who come to visit friends and relatives between the months of July and September for the traditional wedding season.

**108. Comorian tourism suffers from an important image deficit (specially from political instability) and strong competition from immediate neighbors (Mauritius, Zanzibar and Madagascar).** These challenges will only be managed if important internal obstacles to tourism are overcome to allow more capital (domestic or FDI) to flow to this sector.<sup>132</sup> These include: strengthening the institutional and regulatory framework, improving the port infrastructure to accommodate cruise

ships and simplifying visa administrative procedures. Accessibility and connectivity to long-haul and domestic air must be improved. The quality of accommodation and reception capacity, improving quality of tourist services and availability of professional inbound tour operators, improving training capacity, increasing visibility on the international market. Comoros also must actively address its image of a high-risk country with significant political instability. As the current air traffic consists mainly of the Comorian diaspora, growth must be sought through prospecting increased tourism which has dropped over the years, leading to a limitation of available flights and the high cost of air transport fares.

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<sup>132</sup> In aspirational countries such as Fiji and Cape Verde, FDI played a key role in the development of the tourism sector (World bank, 2018a)





# **RISKS TO THE SUSTAINABILITY OF GROWTH & POVERTY REDUCTION IN COMOROS**



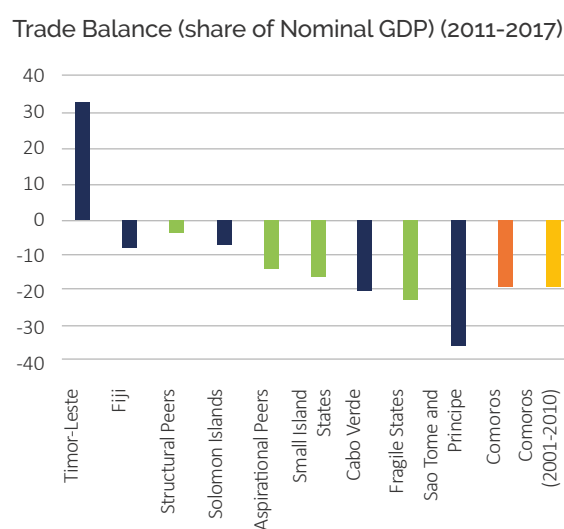
**109. Achieving continued progress also depends on managing the risk factors that affect economic, environmental, political and social sustainability.** However, Comoros is struggling with addressing many of the risks in these three areas. Economic risks arise mainly due to Comoros' large trade deficit and import dependence, its small domestic revenue base, weak macro-economic management capacity and the depletion of its asset base. Environmental risks are great due to Comoros' high vulnerability to climate change and its weak mitigation capacity. Social risks are growing due to very low rates of public investment in basic services, rising youth unemployment and an overreliance on remittances as a social safety net, which is deepening social inequities due to the localized nature of remittances. Together with new political risks these factors risk undermining further already weak levels of social cohesion. This section discusses how these risks could derail Comoros' achieving higher growth levels and more sustained poverty reduction and shared prosperity.

### **Economic risks**

**110. As a very small open economy with limited exports and a large trade deficit, Comoros is vulnerable to external shocks.** Comoros' export capacity is limited and concentrated in just three products. Imports are concentrated in energy (mostly fuel oil) and vital agricultural products, with food imports representing close to 40 percent of total merchandise imports in average since 2011, one of the highest food import rates in the world.<sup>133</sup> The deficit in the trade of goods and services averaged 19 percent of GDP over 2011-2017 significantly surpassing that of structural

peers (3.5 percent of GDP) (see Figure 38) and is offset by buoyant remittances estimated at 12 percent of GDP over 2011-2017. Large external grants (estimated at 8 percent of GDP over 2011-2017), have helped contain the current account deficit (3.2 percent of GDP on average over 2011-2017). With 50 percent of domestic revenues coming from customs and international trade, government finances are vulnerable to changes in the exchange rate and price shocks (with the latter shocks particularly large).<sup>134</sup> A stronger and more diversified export base is critical for Comoros to mitigate external shocks.

**Figure 38: Trade Balance, Comoros and comparators**



Source: Staff calculations using the IMF WEO

**111. A continuous structural imbalance between domestic resource mobilization and current spending undermines the Government's ability to undertake growth enhancing investments and provide basic services to alleviate poverty.** Although some

<sup>133</sup> In terms of volume, Comoros currently imports nearly 70 percent of its food requirements, with diet staples like rice, vegetables, fruit juice, chicken and beef among the top commodity imports.

<sup>134</sup> In recent years, oil and food prices fluctuations have been large and affected customs and international trade revenues. Crude oil (\$/bbl) went from 104 (\$/bbl) in 2011 to 53 (\$/bbl) in 2017. The WB Commodity Market Outlook's nominal price index (2010=100) for "Food" went from 123 in 2011 to 91 in 2017.

tax administration measures<sup>135</sup> took place in recent years, tax revenue collection remains very low at an average of 7.1 percent of GDP for the period 2011-2017, compared with the average for Sub-Saharan Africa (15.9 percent of GDP) and with the average of structural peers (15.4). A low level of economic activity coupled with different regimes of exonerations and a large informal sector restricts the tax base and contributes to the weak domestic revenue performance. An inefficient revenue administration, both at the general tax and customs administration levels, aggravates the situation further. The large share of the wage bill in the budget (more than 60 percent of domestically generated revenue over the last decade, well above the average of Sub-Saharan Africa countries) leaves very little room for spending on items such as social services and education or infrastructure projects.<sup>136</sup> Tax revenues only cover 73.4 percent of current expenditures (average over 2011-2017), compared to a higher coverage in structural and aspirational peers (see Figure 39).

**112. A high reliance on volatile flows of external revenues represents a challenge for medium term budgetary planning and undermines the momentum for structural reforms.** In the last 10 years, excluding the 2013 HIPC budgetary support, foreign grants have oscillated between 3 and 9 percent of GDP or 27 and 51 percent of total revenues,

lower than structural peers but much higher than the SSA average. Without this large and continuous external support, the overall fiscal balance would have been most of the time in the two-digits range. Episodic one-off budget support grants are often large (for instance, a grant received from Saudi Arabia in 2015 was equal to 4.1 percent of GDP). Sporadic by nature, they are a source of significant volatility of external financing flows, which makes medium term budgeting challenging. In 2017 the government was expecting a much larger budget support grant than the amount that it finally received, which adversely affected expenditure plans. These large one-off budget supports also have the potential of delaying structural reforms by diminishing the political will to enact policy reform. Indeed, most of these grants help maintains current expenditures levels and then, necessary and sometimes painful reforms are delayed or avoided.

**113. Opaque and poorly governed SOEs expose the government to significant contingent liability risks, especially in the context of a weak debt management capacity.** Contingent liabilities associated with relatively large SOEs represent an important risk reinforced by weak management and governance and a lack of transparency. No regular annual reports are produced, and audits are almost inexistent. Besides, there is not a proper registry of the

<sup>135</sup> The implementation of SYDONIA ++, and more recently the first steps in the implementation of SYDONIA WORLD, improved considerably the custom administration efficiency. Decrease in discretionary customs exonerations have also boosted tax revenues since last year.

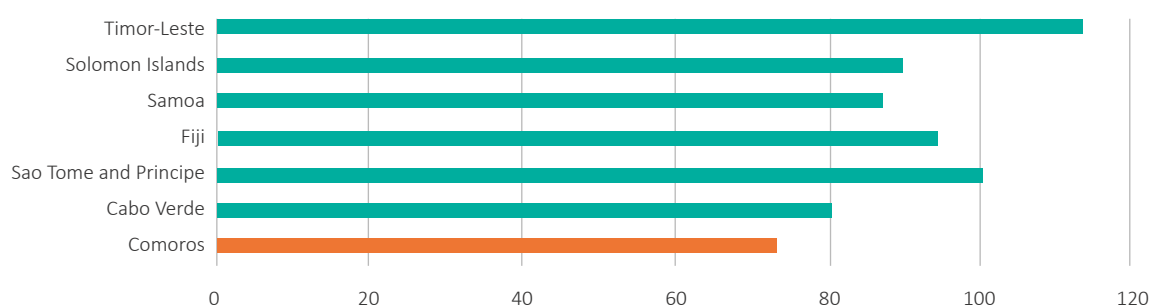
<sup>136</sup> The government has taken steps to improve the effectiveness of public administration, but much remains to be done. There were 11,000 civil servants at the time of the census in 2010, and recruitment has continued ever since. Obstacles to reform include the overlapping and often disjointed responsibilities between the Union and Island authorities, the role of political patronage in civil service recruitment, and the lack of alternative employment opportunities, all of which create strong vested interests in the status quo and opposition to reform. A unified computerized civil service roster was established, and development of integrated civil service and wage management software was undertaken. administration (cadres organiques), an updated version of which was adopted by Parliament in 2010 but has not being fully implemented so far. The remaining challenges include regularizing mismatches between the database and the reality on the ground, as they render the civil service roster an ineffective management tool.

SOEs' debts to the government or vice versa, which contributes to the overall very low debt management performance in the country.<sup>137</sup>

The serious recapitalization need that the SNPSF is currently facing is a good example of a materialization of this risk (see Box 8).

**Figure 39:** Current expenditures covered by tax revenues

Tax revenues (% Current Expenditures)



Source: WDI

#### Box 8: Risks to financial stability originating from SNPSF

The Société Nationale des Postes et Services Financiers (SNPSF), wholly owned by the Comorian state, is a systemically important financial institution. It is the second largest collector of deposits (21 percent of the sector) due to its exclusive collection of civil servants' salaries. SNPSF also hosts government and SOE accounts and provides its clients with short-term loans (the majority being overdrafts) and saving instruments.

SNPSF has faced major operational difficulties for many years. Its operating expenses consistently exceed its net income and the bank has been loss-making for more than a decade (accumulated losses reached KMF 7.5 billion – USD 18.3 million – in 2017) and as of October 2018, it had an asset shortfall of KMF 6.2 billion (USD 14.3 million). This situation is partly due to a high proportion of doubtful exposures on both loan and overdraft portfolios worth KMF 5 billion (52% of total exposure), of which KMF 1.8 million is not covered by provisions.

SNPSF faced serious liquidity issues during the first semester of 2018, resulting from large deposit withdrawals and the launch of significant loan activity in early 2018 (worth KMF 1.7 billion); all loan activity excluding overdrafts, was suspended by BCC in July 2018. Its liquidity challenge was temporarily resolved by the release of the first tranche

<sup>137</sup> Debt management performance is very weak according to the last Debt Management Performance Assessment (DeMPA). Most of the 14 debt performance indicators in the 2016 DeMPA indicates a very low management debt performance (the lowest rating over a four-point rating scale). The follow-up of arrears is deficient, and the stock is significant (especially for domestic arrears).

(KMF 1 billion of 3.5 billion available) of BCC's three-year rescue plan, using funds from BCC's statutory advance facility to recapitalize SNPSF. Despite this, the situation remains fragile. The audited accounts have not been certified for the last four years due to several discrepancies between the banking system and the general ledger. To clean up SNPSF's financial position and make it fully functional, it would require an injection of a minimum of KMF 7.5 billion (USD 17.3 million) based on the October 2018 balance sheets.

Considering SNPSF's dire financial situation, the significant adverse impact that a disorderly liquidation could have on the Comorian economy, the authorities plans to restructure it. It is vital that SNPSF adopts and implements a realistic and ambitious restructuring plan, with strong organizational reforms (i.e., separation of postal and financial activities and a new governance framework with limited staff) and implements a new business model, potentially focused on the delivery of financial services exclusively to individuals (including digital payments).

**114. Finally, Comoros risks further depleting its asset base which undermines sustained long-term economic growth and poverty reduction.** According to the World Bank's 2018 Wealth of Nations report, Comoros per capita wealth has been on the decline since 1995.<sup>138</sup> In the same period, global wealth grew by 66 percent (see Figure 40). This decline in Comoros total wealth has happened predominantly because of a 50 percent decline of its productive capital and a more than 90 percent decline of its ability to generate net foreign assets. Productive capital has been on the decline because of

low investment rates. Net foreign assets have decreased as the external balance has been strongly negative for the past 20 years. In 2014, the gap in wealth per capita between Comoros and other lower middle-income countries was greatest in human capital, but it is in productive capital where the gap between Comoros and other lower middle-income countries has been growing the most since the beginning of the millennium. While natural capital has seen a slight increase due to an expansion of protected natural areas, the wealth generation ability of forests and cropland has been on the decline.

<sup>138</sup> The Wealth of Nations' measures use a balance sheet approach to the health of an economy by capturing a country's wealth across four pillars of wealth generation: produced, human, natural and net foreign assets. Produced capital and urban land measures machinery, buildings, equipment, and residential and nonresidential urban land, measured at market prices. Human capital is measured as the discounted value of earnings over a person's lifetime. Natural capital includes energy (oil, gas, hard and soft coal) and minerals, agricultural land (cropland and pastureland), forests (timber and some nontimber forest products), and terrestrial protected areas. Natural capital is measured as the discounted sum of the value of the rents generated over the lifetime of the asset. Net foreign assets denote the sum of the cross-border assets and liabilities held by country's residents. These include, for example, foreign direct investment and reserve assets. Negative net foreign assets suggest that cross-border liabilities exceed cross-border assets. For example, debt outstanding with abroad might be exceeding foreign direct investment coming in significantly.



### *Environmental risks*

**115. Comoros is exposed to a wide range of natural hazards of two kinds: (i) hydrometeorological outbursts such as tropical storms, floods, and sea level rise; and (ii) geophysical occurrences such as earthquakes, volcanic eruptions, and landslides.** In 2005, the World Bank report<sup>139</sup> on natural disaster “hotspots” estimated that 59 percent of Comoros’s land area is exposed to natural disaster risks (at least two hazards) and that 54.2 percent of the population lives in at-risk areas. Rural populations are particularly exposed. Natural hazards have historically had dire consequences on the archipelago’s development. Devastating cyclones in 1949

and 1951 triggered a massive Comorian emigration to Madagascar. Since 2005, nearly half of Comoros’s population has been affected by a natural disaster. The 2012 floods affected infrastructures and food security, with farmers losing almost 80 percent of their crops. In 2005, the eruption of the Karthala volcano affected 245,000 people. Overall, direct losses caused by natural hazards in Comoros are estimated to be US\$5.7 million each year.<sup>140</sup> This is equivalent to 0.9 of Comoros GDP and 2.8 percent of the Government’s annual budget in 2017. The simulation also shows that losses would be highest in Anjouan, which experiences nearly 80% of the average annual losses for the three perils combined.

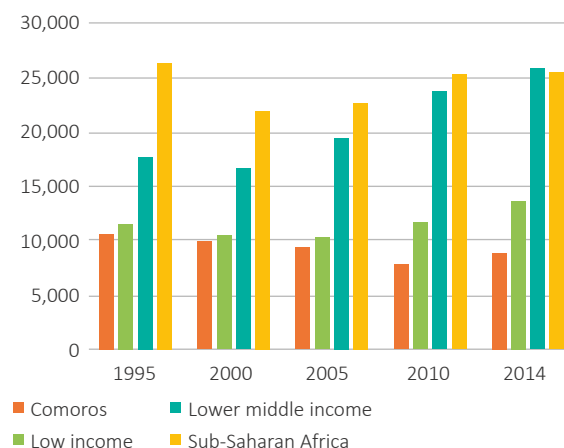
<sup>139</sup> Dilley et al. (2005)

<sup>140</sup> World Bank (2017c)

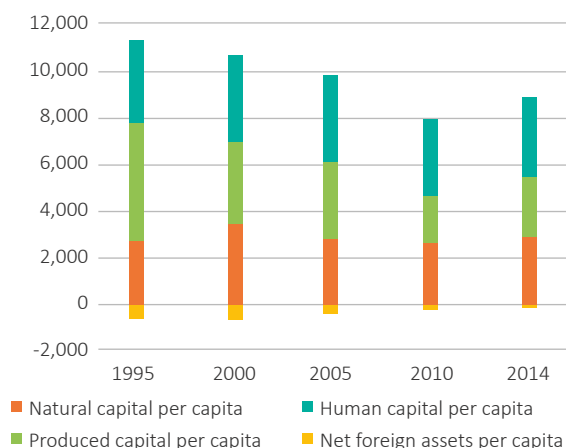


**Figure 40: Wealth Indicators**

a. Total wealth per capita (constant 2014 US\$)



b. Per capita wealth - Comoros

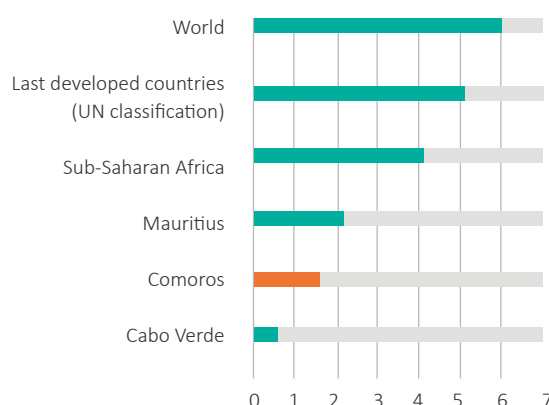


Source: World Bank Wealth of Nations

**116. A major source of Comoros' environmental degradation is anthropic pressure.**

The country is one of the most densely populated in Africa, which leads to intense exploitation of natural resources. The country's forest cover dropped from 26.3 percent in 1990 to 19.9 percent in 2015, suggesting that the country has been losing on average a quarter of a percentage point of forest cover every year. Even in protected areas, the rate of deforestation is very high due to the growing demand for wood and agricultural land. Deforestation is a major source of erosion which increases the runoff and leads to flooding, thus reducing soil fertility and agricultural yields further. Environmental degradation has been linked to weak state capacity to enforce regulation and to control the illegal use of mangroves, sea sand, and poaching. Comoros is particularly vulnerable to the effects of global warming, such as increased storms and rising sea levels. It has been estimated that along the coastline an expected 20 cm rise in sea level by 2050<sup>141</sup>

will result in the displacement of at least 10% of the population.<sup>142</sup> The agricultural sector, which is largely rainfed, is highly vulnerable to climate change, since rising temperatures have increased salinity levels of ground water in recent years and adversely affect crop growth cycles.

**Figure 41: Renewable internal freshwater resources per capita (thousand cubic meters)**

Source: World Bank.

<sup>141</sup> NAPA (2006)<sup>142</sup> PRGS (2010)

**117. Improved management is key to overcome a poor water resources endowment, especially with climate change affecting water stress levels putting pressure on production and domestic use.** Together with 16 other countries, Comoros ranks first in the world for water stress (withdrawals as a percentage of available water resources). All sectors- agriculture, industry and domestic use – have the highest water stress ranking (extremely high stress) used by the World Resources Institute Aqueduct.<sup>143</sup> Because of its size and its population density, the country has very low per capita water resources compared to the SSA or world averages (see Figure 41). Most rivers do not carry water throughout the year and the largest island Grande Comore is groundwater dependent. Climate change is likely to exacerbate these issues. Although all sectors are impacted by climate change, agriculture is the most exposed economic activity. It accounts for 47 percent of water withdrawals and water shortages are slowly becoming one of the binding agro-ecological constraints on the island. Available water for domestic use would also be affected, which could worsen an already low access to improved drinking water (currently limited to less than 13 percent of Comorians, see also section 5).<sup>144</sup>

**118. Comoros has made adaptation and mitigation a priority in its 2015 Nationally Determined Contributions (NDC) as part of the Paris Agreement, however, capacity weaknesses hamper the ability of the country to respond to climate change related shocks.** Comoros' NDC lists actions to adapt to climate change and increase resilience to natural disasters, including relocation and protection programs for the population living at-risk areas as well as early-warning systems

and effective interventions for emergencies. Along with the actions articulated in the NDC, Comoros has developed a rich environment-related legal framework, including the National Environmental Policy (NEP), the National Environmental Action Plan (NEAP) and the legal Framework for the Environment as well as specific Conservation Actions Plans and a Foundation dedicated to fund environmental activities. However, the effectiveness of these tools suffers from several institutional inefficiencies. Weak cross-sector coordination and the proliferation of committees have led to confusion in coordination role and responsibilities. In addition, low resources and lack of up to date environment-related data and information have played in the overall limited knowledge of climate change risks and adaptation opportunities, including its economic and social impact on the lives and livelihoods of the Comorians. As a result, the country remains among the most vulnerable countries to climate change risks, while being one of the least prepared to deal with it (see Figure 42).

**119. Agriculture, the mainstay of the economy, is the sector most affected by climate change.** Endowed with fertile volcanic soil, abundant land and good precipitation, the economy of Comoros has traditionally been dominated by agriculture. Agriculture also accounts for 47 percent of water withdrawals and water shortages are slowly becoming one of the binding agro-ecological constraints on the island. Rising sea levels have raised salinity levels of ground water in recent years. Accelerated soil erosion due to deforestation has increased runoff and led to flooding, reducing soil fertility and agricultural yields further. Water security is an urgent issue on all three islands – Grand Comore, Anjouan and

<sup>143</sup> Gassert et al. (2013)

<sup>144</sup> The Environmental Performance Index ranks Comoros at the 160th place out of 180 on the water and sanitation indicator.

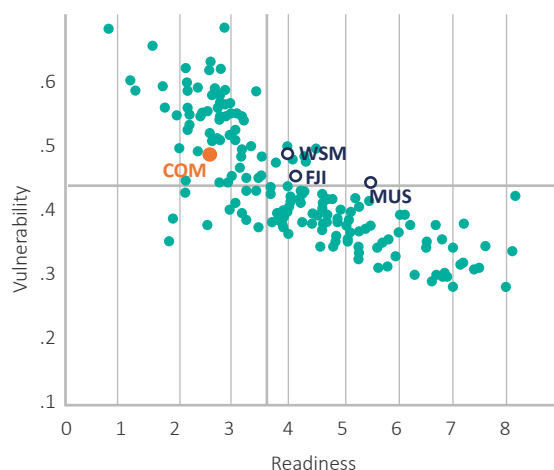
Mohéli – which not only affects the health and well-being of Comorians but could also impact agriculture. Climate change is deepening the risks for agriculture also because rising temperatures adversely affect crop growth cycles.

**120. Most of coastal fisheries are under heavy pressure with very limited potential for expansion.** Comoros ranks 53 out of 180 on the Fisheries Stock indicator of the Yale Environmental Index and 82 out of 180 on its Regional Marine Trophic Index (RMI), suggesting that selective overfishing of certain species is a greater problem for Comoros than over-fishing in general.<sup>146</sup> At the regional level, 40% of the stocks that have been assessed by the SWIOFC are considered over-exploited (SWIOFC, 2018). Offshore fisheries for tuna and tuna-like species are currently predominantly exploited by foreign fleets, resulting in low levels of local and national economic benefits, are an exception with potential for the development of domestic production. Near shore high-value fisheries (lobster, sea cucumber, etc.) are commonly overexploited but with potential for rapid improvement if adequate management system is developing, including through co-management with coastal communities.

### Political and social risks

**121. The tension between the challenge of building a strong and cohesive nation state, and the regional push for autonomy at the**

**Figure 42: Comoros is among the countries that are most vulnerable to climate change, but least prepared to deal with it**



Source: World Bank.<sup>145</sup>

**island level, has acted as a recurrent source of instability in the Comoros.** The latest effort to revise the constitution to recentralize power to create a more effective governance system and ensure policy continuity has been controversial. It can potentially upset the existing delicate equilibrium between islands that has helped foster an extended period of stability in the Comoros. Following the referendum, new elections are scheduled to take place with a year. Dates have yet to be confirmed, with an expectation that polls will be held in March or April 2019. There is likelihood of political turmoil in the run up to the polls. Amidst an atmosphere of heightened distrust, with historical grievances brought to the fore following the polarizing referendum,

<sup>145</sup> The ND-GAIN Matrix illustrates the comparative resilience of countries. The vertical axis shows the score of vulnerability and the horizontal axis shows the readiness score. A high vulnerability score and low readiness score place Comoros in the upper-left quadrant of the ND-GAIN Matrix, meaning it has both a great need for investment and innovations to improve readiness and a great urgency for action.

<sup>147</sup> The fish stock status indicator captures the percentage of fish stocks caught within a country's Exclusive Economic Zone (EEZ) that are overexploited or collapsed. The RMTI measures the extent to which the fishing sector has exploited larger, high-level species and is increasingly catching smaller, lower-level species, negatively impacting ecosystem health. A lower ranking on both indices is associated with a better relative performance.

there is also the risk of violence ahead of, during, and after the elections. Anjouan has already seen a spike in tensions and street protests, which prompted intervention by the military in mid-October 2018.

**122. Low levels of spending in the social sectors – particularly in health – result in high private expenditures that, in turn, put families at greater risk of entering poverty.** Public health expenditures as a share of overall health expenditures are below those observed in structural peer countries (13.4 percent compared to 52.3 percent, respectively) (see *Figure 43*). As a result,<sup>147</sup> three fourth of health financing is borne by households, through out-of-pocket expenditures. It is estimated that these expenditures result in an increase in the poverty rate by 5 percent, or an additional 12,826 people a year.<sup>148</sup> In other words, on average, 35 Comorians fall into poverty daily because of health payments. For those already poor, aside from deepening their state of poverty, it also results in low access to health services.

**123. Social protection systems that would protect the poor, such as social safety nets, are limited in Comoros.** Existing social protection schemes cover only a small part of the population (less than 10 percent) and are not targeted toward the poor. The

retirement fund for old-age, disability and death of civil servants and private sector employees, currently provides pensions to 10% of the population of over 65 years old. The Social Security Fund for the protection of employees against occupational diseases and accidents at work covers less than 6% of assets in Grand Comore. A health mutual provided coverage to 3.3% of the population in 2012.<sup>149</sup> A targeted cash-for-work program has been rolled out in 69 of the poorest villages in the country, reaching about 5,000 families.

**124. Remittances mitigate social risks, but they are geographically localized, and over-reliance risks aggravating existing inequalities.** By insuring households against negative economic shocks, large amounts of remittances can reduce the government's incentive to maintain fiscal policy discipline and use public funds for investment and social service delivery.<sup>150</sup> Also, remittances might at some point dwindle. With some concern that reliance on remittances is not sustainable in the long term, given that the third-generation gross remittances amounting about a quarter of GDP, this demographic wields substantial financial influence. There is evidence that Comorians living in France have a weaker sense of connection to Comoros and greater financial obligations than have previous generations. Government's initiatives to strengthen the link

<sup>147</sup> The (2015) Public Expenditure Review (PER) and other sources have identified a number of challenges in the health system in Comoros, including: (a) low levels of health expenditure financed by the state in general (\$ 3 per inhabitant); (b) high levels of expenditure on the salaries of health workers in relation to operating costs such as medical equipment, medicines and training; (c) the heavy reliance on user charges (user fees) to cover the costs of operating deficits resulting from very high levels of costs "out of pocket" or direct payments and private expenditure; and (d) differences in the distribution of funds between the central and island police and the allocation of financial and human resources between the islands.

<sup>148</sup> Haazen and Rajoela (2016)

<sup>149</sup> There is also a military retirement and a mutual fund for old-age, disability benefits and medical coverage for military personnel and their families.

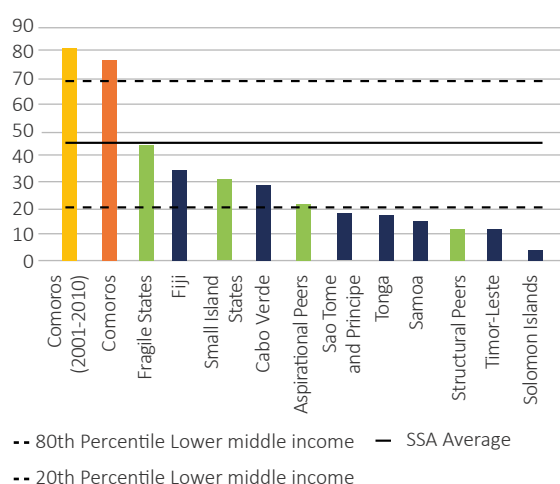
<sup>150</sup> Chami et al. (2008)

with the diaspora by creating a greater sense of connection from this community to home

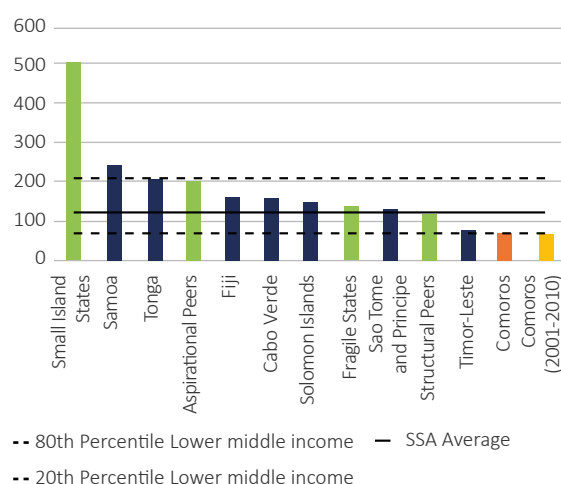
could sustain remittances and progressively encourage investments further.<sup>151</sup>

**Figure 43: Health expenditures**

**a. Domestic private health expenditure**  
(% of current health expenditure (2011-2017))



**b. Current health expenditure per capita**  
(current US\$) (2011-2017)



Source: Staff calculations using IMF data.

**125. Finally, social risks could emanate in the future from a growing group of young under- and unemployed Comorians.** High rates of employment have contributed to frustration among the youth and helped to drive outward migration. The number of Comorians living outside the country has more than tripled over the last 25 years. In addition, young people increasingly attach themselves to political elites or figures of authority in the hope that they can attain social mobility and secure resources. All in all, the multiple frustrations constitute a risk for social

cohesion. Particularly in Grande Comore, remittances may also constitute a disincentive for youth to participate in the labor market, as they receive regular financing from the diaspora;<sup>152</sup> meanwhile, cultural bias against doing petty and manual jobs acts as a further barrier to entry. Agriculture is increasingly less attractive to young rural Comorians who tend to migrate to urban areas, and currently represents 25 percent of youth employment.

**126. The risk of a rise in radicalization to violent extremism is heightened in the**

<sup>151</sup> Remittances have been boosted in Cabo Verde by legal and policy innovations designed specifically for the diaspora. Cabo Verde established a ministry for Diaspora Affairs and passed legislation to enable the diaspora to vote in national elections. Furthermore, to encourage emigrants to invest in real estate, for example, fiscal and administration fees have been waived or reduced. In addition, emigrants are also eligible for any of the investment incentives in place that benefit foreign investors, including sector specific investments in tourism and renewable energy (Resende-Santos, 2015). Such measures (along with political stability and general perception of good governance) are allowing remittances to be channeled to investments opportunities, particularly in the tourism sector, where 17 percent of small tourist businesses are owned by former emigrants (World Bank, 2018a).

<sup>152</sup> Per month, remittances can represent more (even twice) than the average salary.



**current charged environment, which has seen intensified repression of minority Shi'a groups and Christians.** The return of students educated abroad and exposed to foreign ideas and influences is on the rise, while foreign nongovernmental organizations (NGOs) that fill the gap left by the state in terms of service provision—especially in education and health—have also imported some hardline views. A new generation of theologians, trained abroad, is also challenging both the traditionally tolerant strands of Islam practiced in Comoros and the legitimacy of customary institutions. It may also deepen the frustration felt by the large youth demographic at the fact of limited opportunities for education, self-

improvement, and formal sector employment, and play into the hands of groups seeking to exploit this sense of dislocation.

**127. Other emerging risks relate to narcotics trafficking, the smuggling of migrants, and maritime piracy.<sup>153</sup>** Groups (said to be from Anjouan<sup>154</sup>) are smuggling narcotics—and a drug known as *chimique*—across borders, from the ports of Zanzibar and Dar es Salaam to Mayotte via the Comoros. These groups are also allegedly involved in smuggling migrants to Mayotte through Anjouan.<sup>155</sup> They make use of the weak surveillance capacity at borders and entry points and take advantage of corruption in the Comorian administration.

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<sup>153</sup> MF (2010)

<sup>154</sup> INL (2009)

<sup>155</sup> As of interviews conducted in country in preparation of the 2018 Risk and Resilience Assessment.



## **PATHWAYS & PRIORITIZATION**

**128. This chapter builds on the evidence presented in previous chapters and puts forward three inter-connected pathways that would help Comoros achieve sustainable growth and shared prosperity.** These pathways have been selected based on the impact they have on lifting Comoros out of its low-growth equilibrium as well as addressing some of the increasing inequities observed in Chapter 5 that could weaken social cohesion further. The resulting pathways are discussed below together with the main policy reforms that will be required to unlock them.

**129. In tackling these pathways, it has been important to carefully consider the foundational importance of *Identity and Institutions*, laid out in Chapter 4.** Comoros' social and historical make-up has had an important impact on the country's development trajectory to date. The country is still struggling with uniting behind a sense of national *identity*, which – when found – could strengthen the effectiveness of policy-making and reinforce national and social cohesion. Identifying which stakeholders will have the incentives to take the lead on specific priorities is beyond the scope

of the SCD. But tackling any of the reform areas identified by this SCD will require thoughtful consideration and inclusion of the interests and incentives of actors at the central, island, and local community levels, to broker a solution that unites different stakeholders behind a national vision, rather than undermines an already fragile concept of national identity.

**130. Similarly, institutional strengthening must be part of all reform efforts to ensure sustainability of reforms,** as years of political instability have undermined and weakened the capacity of formal institutions. Regional imbalances and spatial inequalities have fed into a sense of mistrust between the islands and the center. Meanwhile, perceptions of marginalization and inequality – both between islands and within villages – in part because of the country's history of population settlement and complex social hierarchies, have strengthened a sense of local identity at the expense of national unity. In this way, institutional strengthening can also bolster a sense of national identity across islands and between villages and help to reinforce state-society linkages.

## Pathways

### Pathway

#### 1

### Overcoming the investment gap

**131. Comoros' investment needs are significant.** At on average 16.7 percent of GDP total investment has been respectively 4.6 and 7 percentage points short of the average for Sub-Saharan Africa and structural peer countries since the beginning of the century. Foreign direct investment averaged slightly more than 1 percent in the last decade. A protracted dearth of investment combined

with rapid population growth has led to a decline of Comoros productive capital per capita, low levels of human capital and a slow depletion of its natural capital. According to the World Bank's Wealth of Nations report the productive capital per capita of Comoros has halved between 1995 and 2018 and is now half that of other lower middle and Sub-Saharan African countries.



**132. A lack of trust in the credibility and capacity of formal institutions is at the core of Comoros' low investment dilemma.**

Investors locally and from abroad (including the diaspora) seek predictability and reliability when they make investments as the benefits of those tend to accrue only after several years. Like in other countries political instability and a weak rule of law have been the biggest deterrents for investors in Comoros. Low capacity macro-economic management, including intransparent and erratic budget decisions, and a tendency to spend on wages rather than investments have limited the Government's ability to make public investments and mobilize domestic revenues. Investment by private actors in central sectors like agriculture is discouraged by a weak rule of law, a weak financial system and an onerous business environment, which raises doubts whether returns on investments can be appropriated. In addition, in an environment where the State provides few services, the population is left with prioritizing consumption spending over investment, as they shoulder education and health expenses themselves.

**133. Years of low levels of investment have undermined Comoros' growth performance and have led to rising inequities.**

Since 2001, investments' contribution to growth has been low and at times negative. Weak private sector development and job creation are a corollary of this weak track record of low investment, resulting in turn in low levels of labor demand and one of the lowest labor force participation rates in Sub-Saharan Africa, another brake on growth. Public investments in inter- and intra-island connectivity as well as other core infrastructure services like electricity and water treatment should be prioritized to raise productivity in agriculture, services and commerce and create the conditions for expanding manufacturing and tourism. Weak transport services currently segment surplus production basins from growing urban markets. Lack of public investment has also resulted in thin service delivery and rising inequities. Lack of access to basic services such as piped water facilities, electricity, a health center or markets is one of the strongest predictors of poverty in Comoros. Weak public service delivery has led to a privatization of health services. Comoros

is one of the countries with the highest share of out-of-pocket health expenditures in the world, where every day an estimated 35 Comorians fall back into poverty because of health payments.

**134. Low investment in basic service delivery undermines an already fragile social contract between the islands.** Infrastructure and basic services in health and education provision have become uneven across the islands and risk aggravating an already existing sense of disconnect between the islands. Inequities fuel the desire of each island to assert its financial interests when

in power, perpetuating the politicization of resource allocation. Local communities make up for the absence of the State and become more and more self-reliant. Schools and streets are built with diaspora funds leading to not always efficient allocation of private resources and a gradual privatization of important social services. But as local coping mechanisms differ within the Union of the Comoros, not all communities manage to cope to the same extent. Inequities have risen vis-à-vis and within Anjouan, as the main coping mechanism – remittances – does not accrue to this island the same way it does to Grande Comore and Mohéli.

## Pathway

## 2

## *Raising Comoros' human capital*

**135. Human capital in Comoros today is falling short of its potential.** Among the different types of assets and capital that a country possesses – productive, human and natural – human capital is where Comoros lags farthest other lower-middle income countries. Children in Comoros can expect to complete 8.4 years of schooling by age 18, 2 years less than their peers in other lower-middle income countries. And when years of schooling are adjusted for quality of learning, this is only equivalent to 5.3 years. Girls get significantly less education than boys and adolescent pregnancies are two to three-times as common as in aspirational peer countries. 31 out of 100 children grow up stunted due to chronic nutrition inadequacies and a lack of focus on early childhood development.<sup>156</sup> Finally, as stunting is most common among the poor in Comoros, it aggravates existing inequalities if left unaddressed.

**136. Raising Comoros' human capital is key for accelerating growth and reducing poverty.** Investing in human capital is an imperative for growth and poverty reduction. Given the human capital conditions that currently exist in Comoros, a child born today will only be 41 percent as productive as she could be if she had enjoyed complete education and health. Investing in human capital requires the immediate attention of policymakers as the growth benefits of human capital investments tend to accrue with a generation's lag. Investments made in the youth of today, will only create a more productive workforce once they join the labor market. On the other hand, investments in human capital have the advantage of being less costly than investments in physical capital. And while these investments are made, additional investments in physical capital under the first pathway can have a

<sup>156</sup> Stunting is an important proxy as it reflects on the overall health environment in a country and compromises the long-term potential of individuals to contribute productively to the development of a country.



more immediate impact on growth and pave the way for the next generation by creating job opportunities for when they are ready to enter the labor market.

**137. Human capital supports other sources of growth and inclusion.** Human capital complements physical capital in the production process and is an important input to technological innovation and long-run growth. Human capital also fosters social capital. Surveys done around the world have found that more educated people are more trusting of others. This type of social capital is in turn associated with higher economic growth.<sup>157</sup> Conversely, failing to protect human capital undermines social cohesion. Human capital is one of the first things to suffer when things fall apart. Protracted conflict and fragility can prevent whole generations from realizing their potential or lead them to leave the country, taking their talents elsewhere.

**138. Investments in human capital also have the potential of ushering in a demographic growth dividend.** At 4.2 births per woman in 2014, Comoros has only just initiated its demographic transition. High fertility rates and population growth pose a significant burden on households as the number of dependents living in poor households in Comoros is high.<sup>158</sup> As one of the most densely populated countries in the world,<sup>159</sup> high fertility also increases land pressures which can undermine the sustainability of growth.<sup>160</sup> Lowering dependency ratios not only alleviates earning pressures in poor households, it can also raise the potential for savings which supports growth further.<sup>161</sup> Human capital investments can help bring the demographic dividend about: raising the quality and quantity of education, especially, for women, has been shown to decrease fertility rates both by delaying first-time pregnancies and by raising the opportunity costs of child-bearing.<sup>162</sup>

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<sup>157</sup> Putnam, Leonardi, and Nanetti (1993); Helliwell and Putnam (1995); Keefer and Knack (1997).

<sup>158</sup> The bottom 40 percent of households in Comoros have on average 3.5 children more than the top 30 percent and have significantly higher dependency ratios.

<sup>159</sup> Despite net emigration, Comoros is one of the most densely populated countries in the world 25th, with 328 people on average living on a square kilometer.

<sup>160</sup> Jayne, Chamberlin, and Headey (2014)

<sup>161</sup> Globally, it has been found that a 1 per cent fall in the dependency rate is associated with a 0.75 percentage point fall in headcount poverty and increase of one percentage point in the share of the working population will boost economic growth by between 1.1 and 2.0 percentage points (World Bank 2016, Marcio Cruz S. Amer Ahmed 2016).

<sup>162</sup> Following declines in infant and child mortality, a subsequent decline in fertility will increase the share of the working-age population. With fewer dependents and more people at work, growth per person will be accelerated, even when the output per person of working age remains constant (Bloom and Williamson 1997a) Second, a decline in fertility might lead to an increase in female labor-force participation, further boosting the pro-growth effect. Not only will the share of the working-age population increase, the economically active labor force would increase even more, raising the output per person of working age. Third, with fewer children, families (and the state) will have the opportunity to spend more per child on their welfare and education. As these children come of working age, and enter the workforce, the productivity of the workforce will increase—a result of the increase in health and educational attainment. In this way, the demographic transition is associated with an increase in the productivity of the workforce, which can be described as the 'skills effect' of the demographic transition.

## Pathway

## 3

*Protecting and leveraging Comoros' natural resource base***139. Natural resources are at the center of livelihoods and economic activity in Comoros.**

An approximate 39 percent of Comoros' GDP are generated in activities for which land, sea and nature are important inputs. Endowed with fertile volcanic soil, good precipitation, beautiful scenery and an economic fishing zone 70 times the size of its land mass Comorians live of their natural resource base. At 31.6 percent of total GDP (2011-2017), of which 7.5 percent of GDP account for fisheries, Comoros' economy is more dominated by agriculture than any comparator country or group. An additional 4 percent of GDP is generated by light agro-industry, which depend on agricultural output. Finally, while small by comparison but of great potential, the tourism sector contributes another 3.4 percent of GDP to the economy. 38 percent of employment is generated by agriculture and fisheries and 50 percent of the poor find their livelihoods in these two sectors.

**140. Growth in natural resource related sectors has been stagnant and below potential.**

Despite traditionally leading Comoros' growth performance, the agricultural and fisheries sectors are of very low productivity compared to peer countries. Land expansion and the hours spent by farmers toiling on these land plots are already at their potential in Comoros. Low productivity is the result of soil degradation, increased water scarcity, outdated farming practices, lack of improved outputs and the absence of value chains. At sea, fishermen fish at subsistence level because of safety issues, a lack of specialized services and cold storage. As a result, foreigners are the main users of Comoros' generous fishing grounds

and often illegally which has led to an over-exploitation of many species. Tourism remains largely untapped, also because of a weak environment for attracting investment – which the first pathway, if unlocked, could help address.

**141. Greater productivity of the resource-based economy provides opportunities for poverty reduction.**

Comoros meets an exorbitant share of its food needs through imports (39.4 percent of all merchandise imports versus 18.7 percent in Sub-Saharan Africa). This high dependence on imported food makes the country vulnerable to price shocks, places a burden on Comoros' growth potential by discouraging private investment in the agricultural sector and burdens its foreign exchange reserves. It also exposes consumers to food insecurity – as recently happened in 2008<sup>163</sup> – and constitutes a missed opportunity for poverty reduction and higher economic growth through import substitution. Food staples have been shown to offer larger growth multipliers and greater poverty to growth elasticities than an equal amount of productivity growth in cash crops (Diao et al. 2012), because they are currently being produced by most rural households and because productivity in these commodities is still very low.

**142. Comoros' natural resource base needs greater protection as it is increasingly vulnerable and exposed to frequent and costly shocks.**

Due to its location and topography Comoros is among the most climate vulnerable countries in the world. In addition, population pressures have led to deforestation and an erosion of the quality of agricultural land. Rising sea levels have raised

salinity levels of the ground water. Fishing grounds are unprotected from illegal fishing and risk exploitation with adverse effects on the health of the marine ecosystem.<sup>164</sup> One out of two Comorians has been affected by some natural disaster since 2005. Natural disasters adversely affect the economy in the order of 1-3 percent of GDP every year. As losses are most pronounced in Anjouan where agriculture dominates, these losses also tend to aggravate inequities.

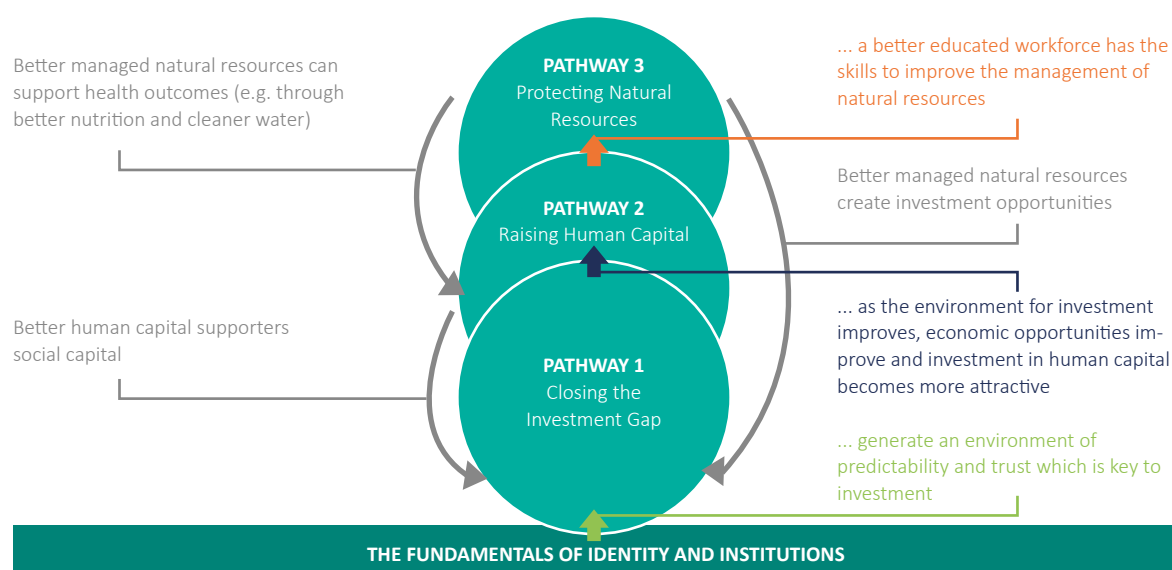
**143. Figure 44 summarizes visually how the foundations of Identity and Institutions and the pathways interact and positively affect each other.** Strengthening the two fundamental factors of *Identity and Institutions* will be key to Comoros' development going forward. They not only are the foundations of social capital and greater political stability, but also have a profound impact on Comoros' ability to attract investment both from within Comoros and the outside. As investments take time they require predictability to allow investors to plan and gauge the risks associated with their investments. When rules change repeatedly

or are not enforced, investors loose heart. Therefore, worldwide investment rates are higher in countries where political stability and strong institutions prevail.<sup>165</sup> If Comoros manages to unlock the first pathway of closing the investment gap, unlocking the other two pathways will be easier because they will have more investment funds to support them. Which does not mean that they should not receive attention already today. Investments in human capital only pay off a generation later, so starting today is important. And, as investment rates go up, Comoros currently very low domestic labor demand will increase, raising the opportunity costs of not getting more and better education. As the level of human capital in Comoros rises higher skills will support innovation in services but also in established sectors like agriculture and fisheries. This can help lift the productivity of these sectors, making them in turn more attractive to investors. Protecting the natural resources that are the foundation of these sectors should be a priority already today as many natural resources take a long time to regenerate once they have been depleted.

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<sup>164</sup> Comoros ranks 65 out of 180 on the Fisheries indicator of the Yale Environmental index, which is composed of a fish stock status indicator (53/180) and a regional marine trophic index (82/180). The fish stock status indicator captures the percentage of fish stocks caught within a country's Exclusive Economic Zone (EEZ) that are overexploited or collapsed. The RMTI measures the extent to which the fishing sector has exploited larger, high-level species and is increasingly catching smaller, lower-level species, negatively impacting ecosystem health. A lower ranking on both indices is associated with a better relative performance.

<sup>165</sup> Bénassy-Quéré et al. (2007); Acemoglu et al. (2001); Alesina and Perotti (1996); Besley (1995); Svensson (1998); Barro (1998); Schneider et al. (1985).

**Figure 44: Summary of how the pathways interact**

## Key Constraints and Prioritization

**144. To unlock the three pathways, several key binding constraints must be removed.** From a long list of required reforms presented in chapters 4 to 6, we identify the 12 most critical binding constraints to the three pathways that we consider having both (i) a stronger effect on growth potential and (ii) a larger impact on

poverty alleviation and greater social inclusion. Other criteria such as spillovers, preconditions, and time horizon of reforms were also considered. Table 6 summarizes the arguments on how removing these key binding constraints to the three pathways can support Comoros' growth potential and serve as a catalyst for further poverty reduction and greater inclusion. These key constraints are discussed below.

**Table 6: Summary of pathways and binding constraints**

Pathways can be unlocked by...	... removing key binding constraints, such as...	... that will spur growth by...	... that will reduce poverty and inequities by...	Supporting literature evidence...
Overcoming the investment gap	Strengthen macro-economic management	Building trust with foreign investors and other external partners that can finance growth-enhancing investment	Changing the budget composition in favor of investment expenditures to provide basic services that reach the poor	World Bank (2015); Gavin and Perotti (1997); Dessus, Diaz-Sanchez, and Varoudakis (2016); Alesina (1996)
	Increase domestic revenue mobilization	Reducing dependence on external donor flows to finance growth enhancing public expenditures	Reducing dependence on remittances for financing of basic service provision	World Bank (2015)

Pathways can be unlocked by...	... removing key binding constraints, such as...	... that will spur growth by...	... that will reduce poverty and inequities by...	Supporting literature evidence...
Overcoming the investment gap	Support financial sector intermediation	Mobilizing more savings and channeling savings effectively into investments	Giving households better access to financing that can help them smooth their consumption during shocks	World Bank (2015); World Bank (2017a); World Bank (2014)
	Create a supportive business environment	Encouraging investment and entrepreneurship, which can raise the productivity of the private sector	Spurring job creation through greater private sector dynamism. This can raise labor income and lessen dependence on transfers	World Bank (2015); Alesina and Perotti (1996); Besley (1995)
Raising Human Capital	Reduce infant and child mortality	Raising the productivity of future generations as more children born grow into productive adults. As more children survive, fertility rates and dependency ratios usually fall, and savings rates go up which gives growth a boost	Lowering fertility preferences downwards which results in smaller dependency ratios, which are associated with reduced poverty in Comoros	Bloom and Williamson (1997a); (Layne, Chamberlin, and Headey (2014); Silva et al. (2016)
	Reduce stunting	Increasing the productivity of Comoros' workforce. Stunting reflects the accumulation of shocks to health during childhood and adolescence.	Benefitting disproportionately the poor who are most affected by stunting	World Bank (2017a); World Bank (2014)
	Improve quality of education	Raising the productivity of individuals and facilitating investment in higher-skilled economic activity	Raising the returns on education of the individual and increasing labor income (while lessening the dependence on transfers)	Filmer et al. (2018); World Bank (2014)
	Close the educational gender gap	Keeping girls longer in school increases their chances to join the labor force. A greater insertion of women into the labor force has a positive impact on long-term growth	Raising the income of women, which will improve both their children's and their own access to health and education	Milazzo and Goldstein (2017); World Bank (2004)
Protecting and leveraging natural resources	Improve water management	Supporting agricultural productivity	Improving the quality of water provided to the poor which will improve health outcomes such as stunting	UNDP (2015); Gassert et al. (2013); World Bank (2018)



Pathways can be unlocked by...	... removing key binding constraints, such as...	... that will spur growth by...	... that will reduce poverty and inequities by...	Supporting literature evidence...
Protecting and leveraging natural resources	Reform agriculture	Increasing competitiveness in the agricultural sector boosting the agroindustry and potentially rising import-substitution	Increasing the income of rural households that can be used for better nutrition, health and education	World Bank (2014); Goyal and Nash (2017); World Bank (2019)
	Protect fishing grounds	Strengthening the capacity to exploit sustainably marine resources	Assuring a more stable revenue source of fishing households	World Bank (2014)
	Manage disasters better	Protecting the already limited productive capital of Comoros	Protecting the livelihoods of poor rural populations which are most exposed to natural hazards	Dilley et al. (2005); World Bank (2017c); NAPA (2006); PRGS (2010); World Bank (2018)

**145. Overcoming the investment gap.** To unlock this pathway attention will have to be paid to four key areas of reform:

In the short run:

- **Improve macro-economic management to build trust with investors.** Closing the investment gap should start with higher rates of the budget being allocated to public investment. To be able to do this with its existing revenue stream, the Comorian government must improve its wage bill management, resist pressures to increase public sector employment and improve the efficiency of existing spending. Improved macro-economic management also means that the budgetary process must become more realistic and predictable and that debt financing be anchored in a medium-term fiscal framework. Currently, budget proposals often lack realism. Submitting them to greater public scrutiny could support a more credible budgetary process. Comoros has one of the least transparent

budgets in the world and parliamentary oversight is often bypassed. Involving local communities through participatory budgeting could support improvements in the quality of basic service provision and build trust with local communities. As part of better macro-economic management more transparency should also be created around the performance of the most important SOEs in the country. Progress on all these fronts would help build trust with private investors at home and abroad and could help raise private investment rates.

- **Expand domestic revenue mobilization.** A significant transformation of revenue administration and policies is needed to lessen the dependence on volatile budget funding from abroad and create more fiscal space for public investment. In the short run this should be achieved, ideally, through a combination of measures that simultaneously promote: i) enforcement of tax policies, ii) facilitation of tax compliance, and iii) trust in government spending. These include:

- **Enforcement:** Improve the land register and taxpayers' registration, increase SOEs' compliance with their fiscal obligations, reduce firm's informality, increase interoperability between the revenues and customs administrations, and continue the reduction of customs' unjustified and discretionary exemptions.
- **Facilitation:** Promote the simplification of tax and customs rate structure, while streamlining procedures to reduce the transaction associated with tax payment. Efforts should also be deployed to roll out tax morale programs and consider the use of low-end technologies to support tax compliance (e.g. SMS tax reminder, mobile payments).
- **Improve Trust:** Adopt policies that promote visible links between government spending and delivery of public goods and services. These efforts, to be carried out particularly at the local level may include initiatives such as: i) local tax contributions earmarked to community-driven projects, ii) central government transfers that incentivize adoption of participatory budgeting practices and local tax mobilization, and iii) periodical budget meetings "assemblies" that review tax contributions and local investments.

In the medium term:

- **Improve financial sector intermediation.** Comoros' financial sector is weak and

needs to be supported by putting in place the requisite financial sector infrastructure so that it can fulfill its role of channeling savings into credit for investments, while also supporting access to financial services for a greater share of the population. Resolving the liquidity and insolvency crisis of the systemically important postal bank SNPSF will be of fundamental importance in the short-term. Addressing the weakness of the financial sector will also require tackling the ability of courts to enforce debt payments, which has been at the root of rising NPLs in the system.

- **Create an enabling business environment.**

To attract investment, investors must trust that the private returns on investment can also be appropriated. In the context of a small domestic market – where returns are already constrained by diseconomies of scale - this can only happen by creating a more business friendly investment climate and ensuring greater protection of property rights. Comoros' performance on international business climate rankings suggests that special attention must be paid to the environment for contract enforcement, paying taxes, business entry and exit, investor protection and electricity. An investment code less prone to adhoc tax and custom exonerations would support fair competition. International trade agreements could be used as external anchors supporting the business environment reform agenda.<sup>166</sup> Under an improved business environment that would favor entrepreneurship and the performance of existing firms, all sectors would benefit.

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<sup>166</sup> During the second semester of 2017, Comoros confirmed its membership in three international organizations, including the Southern Africa Development Community, the World Tourism Organization (UNWTO) and the African Import-Export Bank. Besides, the process of accession to the WTO is progressing as Comoros continues with sustained and constructive engagement in this process as they approach the final stages prior to WTO membership.

**146. Raising Human Capital.** Key areas of reform under this pathway are:

In the short run:

○ **Reduce infant and child mortality.**

The largest drivers of infant and child mortality in Comoros are preventable communicable diseases such as diarrhea and pneumonia, despite a high usage of health care services by mothers and their children. Therefore, addressing this health challenge requires actions on the supply-side of the quality of care. Three policy areas should be prioritized. First, more training of staff in health facilities is needed so that cases can be diagnosed in an accurate and timely fashion. Second, facilities need to be equipped with the right materials and medicines. Third, a robust referral system is currently missing, such that complicated cases can receive the higher-level care needed. Underpinning all of this is the need for better data in the hands of policymakers such that level of quality is better known, and support can be optimally targeted in an evidence-based way.

- **Reduce stunting:** The solution lies largely in getting the right nutrients to the population in the early years of life, when the foundations for human potential are laid. This involves not only having access to a nutritious diet, it also involves educating mothers and families. Community-based platforms for nutrition education and promotion are widely recognized as important strategies to deliver key

maternal and child survival interventions.<sup>167</sup>

A full spectrum of promotive, preventive, and curative interventions can be delivered via community platform and have the substantial potential to improve nutrition outcomes among difficult to reach populations.<sup>168</sup> Further, high coverage of high impact nutrition interventions need to be stepped up (including provision of improved water services) to support this agenda and counter the relatively high rates of stunting that exist among the poorest. In the long run, improved nutrition will boost labor productivity.

In the medium-term:

- **Improve the quality of education.** Better educational attainment of new cohorts entering the labor force is needed. Policies required to attain improved education attainment are three-fold: i) an increased focus on learning, by systematically measuring learning outcomes, and communicating results to schools; ii) paying greater attention to teachers, the most important factor driving student learning; and iii) transforming schools into spaces worthy of the children they serve. Comoros is the regional laggard with respect to the percentage of schools that have gender-separate toilets, with only 11 percent of schools having such basic facilities, as compared to the regional average of over 60 percent.
- **Close the educational gender gap.** The country needs to systematically remove the barriers and push factors that result

<sup>167</sup> Haines et al. (2007).

<sup>168</sup> GHWA. Global experience of community health workers for delivery of health-related millennium development goals: a systematic review, country case studies, and recommendations for integration into national health systems. Geneva: Global Health Workforce Alliance, 2010.

in large populations of out of school girls. Policies that will do so exist on the supply side and the demand side. Aside from infrastructure actions as above, other supply-side policies that will help retain girls in school include recruiting more female role models in schools (as teachers and directors), making schools safer (through e.g. robust grievance redress mechanisms, actions that address the power dynamic between teachers and students, fostering more active school councils). On the demand-side, policy areas around reducing the direct costs of school (through e.g. scholarships, tuition waiver programs, and vouchers), reducing the indirect costs (through e.g. uniforms, school supplies, personal hygiene supplies), and facilitating safe school transport will all help keep girls – and boys – in school longer.

**147. Protecting and leveraging Comoros' natural resource base.** Priority reforms under this pathway include:

In the short-term:

- **Improve water management.** Better water management in terms of quantity and quality is needed to ensure that Comoros' very low per capita water endowment is not squandered. This should range from revisiting or designing water extraction and service delivery policies to specific technical initiatives such as encouraging rain harvesting, more generally water conservation and reducing pollution of sources, as well as ensuring more efficient urban water usage, while pricing water

more economically. Improving the quality of water provided will also help address the challenges of nutrition deficiencies and stunting identified under the second pathway. In many countries, partnering with communities and local units of government, including putting resources under the direct control of community groups, has led to the efficient delivery of basic services, and, when sustained, measurable reductions in poverty. Considering the binding constraints identified in the Comoros, a community driven approach in water management would: (1) fill institutional and capacity voids left by incomplete decentralization especially given the diversity of management arrangements between the different islands; (2) devolve decision making on services and on issues such as watershed protection by farmers themselves; (3) reduce the operational costs of infrastructure through responsive asset management at the local level; (4) provide a local, accessible home for dispute resolution among water users and between them and authorities; and (5) reduce transaction costs for compliance with water resources and water services regulations.<sup>169</sup>

- **Reform agriculture.** Yield-enhancing investments in climate smart technologies (CSA), inputs, and sustainable land and water management practices can deliver both productivity gains and build resilience to environmental risks. The transfer of off-the-shelf resilient and biofortified varieties of the main food crops – maize, cassava, bananas – from regional centers of excellence (RCoE) could enhance adaptation and food security without requiring duplicative financial and

<sup>169</sup> A community driven approach has been tested in Mutsamudu (the second largest city in the country located on Anjouan island) with the establishment of a watershed management committee. Among other things this improved community and particularly women's formal participation in water resources and water services planning and management (UN, 2018).

human resource investments in agricultural R&D. Coupled with the scale-up of practices like low-till agriculture, agroforestry, sustainable soil fertility management, and rainwater harvesting, strategic investments in CSA dissemination have the potential to transform Comorian agriculture and place it on a sustainable growth path.<sup>170</sup> Community-level rural development centers can help accelerate behavior change and adoption of CSA technologies and practices.<sup>171</sup>

- **Develop a sustainable management approach for fisheries.** To limit depletion of the fish stock in Comorian waters, and, especially, depletion of species in the coastal areas and that are of value to the eco-system, fisheries management must focus on increasing the economic benefits of fishing for local communities. This can be achieved by reducing post-harvest losses and increasing value-addition through investment in adequate infrastructure for artisanal fisheries (e.g. landing sites, cold storage, ice-machines, etc.). Fisheries co-management, an approach tested in other countries, holds promise for Comoros. Co-management involves communities in the decision making-process, increases ownership and supports the application and enforcement

of the management measures adopted.<sup>172</sup> Samoa is a good example of an island state like Comoros which has adopted a community-based approach to subsistence fishery management. 44 percent of Samoa's approximately 230 coastal villages have village fishery management plans today.<sup>173</sup>

In the medium-term:

- **Strengthen disaster risk management.** Building resilience to climatic shocks requires taking a comprehensive disaster risk-management approach that encompasses detailed risk assessments, strengthening the legal framework and institutional capacity and the development of a national disaster risk management plan prioritizing critical areas. Enhanced disaster risk knowledge will allow Comoros to improve land use planning, as well as relocation and protection programs for the population living in risk prone areas. To build resilience at the community level combining on-going efforts on social protection and adaptive safety nets with investments in effective early warning systems and community disaster preparedness would contribute to save lives and reduce the impact of disasters shocks on the poor.

<sup>170</sup> Other CSA technologies adaptable to Comoros include small-scale irrigation, terraces, contour bunds, grass bunds, rehabilitation of degraded micro-watersheds, woodlots.

<sup>171</sup> One example of a community level rural development center are farmer field schools championed by the FAO. A Farmer Field School (FFS) brings together a group of farmers, livestock herders or fisherfolk, to learn on how to shift towards more sustainable production practices, by better understanding complex agro-ecosystems and by enhancing ecosystem services. A FFS group meets regularly during a production cycle, setting up experimentation and engaging in hands-on learning to improve skills and knowledge that will help adapt practices to their specific context. The FFS empowers individuals and groups to move towards more sustainable practices and improve livelihoods.

<sup>172</sup> Fisheries co-management is flexible and cooperative management of the aquatic resources is performed by the user groups and the government. In this arrangement, both the community and the government are involved during the decision making, implementation and enforcement processes (Sen and Nielsen, 1996).

<sup>173</sup> Co-management activities in Comoros have already started under the World Bank's Coastal Resources Co-management for sustainable livelihood project, where 17 co-management agreements were signed with communities on Grande Comore, Mohéli and Anjouan, with the objective to improve human and institutional capacity development, design and implement fisheries management plans.



In the medium term, the interdependence between forested areas, agricultural land and coastal zones in Comoros will require an integrated approach for policy-making with close collaboration between the different sectors (water, agriculture, fisheries, forest, energy, etc.).

In the long term:

- **Reform land tenure.** The current overlap of three land regimes prevents land from being sold and rented out and limits farmers ability to collateralize their land to obtain access to financing. The absence of a land registry coupled with an inefficient and corrupt court system leave many land conflicts at stalemate undermining the ability of owners to invest. Reforming land tenure tends to be a lengthy and politically charged process but could be catalytic for land productivity by eventually allowing for the concentration of land and incentivizing investment in the adoption of modern inputs and farming techniques and water management. A clear land tenure system would also support the environment for investment and private sector development more generally.<sup>174</sup> Last, the lack of land tenure security binds poor families to the land they cultivate and limits their abilities to complement their on-farm with off-farm earnings because they must fear dispossession if they distance themselves from their land. Because of its very long-term nature – both in terms of winning support for it and its implementation - this reform area is not included in the list of

priorities in Table 7 below, but because of its significant catalytic effect for development it is mentioned here.

**Finally, two core constraints must be tackled to strengthen the foundational factors of Identity and Institutions:**

- **Support citizen and community participation.** Reform efforts will have to be supported by a proactive engagement with the inclusion of local communities across traditional divides. A natural entry point is to leverage the existence of community-based organizations and village associations that take decisions related to development interventions, and collectively decide on how to spend the funds remitted from the diaspora. These associations have deep knowledge of local context and have the authority and credibility by which to take and carry out decisions. Opening the spaces in which people can engage in dialogue and express their thoughts and ideas—particularly those who currently seek a greater voice in society, such as academics, local NGOs, trade unions, associations, private sector representatives, women, and youth groups, will be essential and will help to open channels of communication for non-traditional voices. An important aspect of this is to elevate the voices of women, who hold informal power within communities and are increasingly involved in the public sphere through women's associations and organizations, but find their roles circumscribed by religious and social norms.

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<sup>174</sup> Greater land tenure security can be achieved if land administration services are strengthened to undertake participatory titling in production basins. This process would consist of consensual demarcation, multi-stakeholder land recognition committees that facilitate a small-scale cadaster census, and land use planning.

- **Strengthen the capacity of key formal institutions.** To build up trust in the central state and its formal institutions, steps towards instituting greater transparency, oversight, and accountability mechanisms need to be taken. Examples include increasing transparency of and consultation on the budget with Parliament, publication of the financial accounts of the most important state-owned enterprises, and greater transparency regarding public procurement contracts (an issue that was widely raised in private sector consultations – see Annex 2). These efforts also need to be paired with measures to reinforce citizen engagement and provide citizens with opportunities to comment on law proposals etc. Only when citizens feel that their voice is being heard will they trust the central state. Ultimately, instituting these type of feedback mechanisms will facilitate the improvement of quality and delivery of services by the central state. Last, the knowledge base for evidence-based decision making needs to be improved by addressing the weaknesses of the statistics system. A general absence of information to inform the design, implementation, monitoring, and evaluation of policies and to produce evidence-based service delivery generates inefficiencies and incoherence (see Annex 11 for an inventory of current data gaps).<sup>175</sup>

**148. Table 7 proposes a prioritization of the different key constraints identified by this SCD based on a measure of urgency of reform estimated as Comoros relative distance to the frontier of the best performing aspirational peer.** To establish the “distance to the aspirational peer” we use a version of a methodology used already for the Colombia and Chile SCD. Within a ranking of zero to one, we compare the value of Comoros's performance today on selected indicators that can signal progress in the policy areas identified to the value of its peers for each of the key indicators. The value of the best performing aspirational peer is set as the “target” value, and that of the least performing fragile country is set as an indication of the minimum value attainable for each indicator. Comoros's position in the ranking is then calculated using the following equation:

$$S_j = \frac{(V_{i,co} - V_{i,wf})}{(V_{i,bp} - V_{i,wf})}, \quad S_j \in [0,1]$$

Where  $V_{i,co}$  is the value of Comoros for indicator  $i$ ;  $V_{i,wf}$  the value of the worst fragile country for  $i$ ; and  $V_{i,bp}$  the value of the best performing aspirational peer for  $i$ . In this setting, the further is Comoros's value from that of the best performing aspirational peer for a given indicator  $i$  – or the lowest is Comoros's score  $S_j$  in the ranking – the higher the level of urgency to reform.

<sup>175</sup> World Bank (2014)

Table 7: Key binding constraints and prioritizations

Pathway	Key binding constraints	Key Performance Indicator	Fragile	Performance of Comoros compared to worst-performing fragile country & best-performing aspirational peer												
				0	1	2	3	4	5	6	7	8	9	10	Aspirational	
Overcoming the investment gap	Strengthen macro-economic management	Wage bill as % of current expenditure (WDI, 2011-2017)	Togo (72%)	Comoros (51%)											Fiji (32%)	
		Ranking in the Open Budget Survey (0-100)	Yemen (0)	Comoros (8)											Fiji (41)	
	Increase domestic revenue mobilization	Tax and Customs revenue as % of GDP (WDI, 2011-2017)	Micronesia (6.6%)	Comoros (71%)												Fiji (24%)
	Support financial sector intermediation	Domestic Credit to Private Sector (% GDP) (WDI, average 2011-2017)	Congo, DR (5.6%)	Comoros (13.9%)												Fiji (81.5%)
	Create a supportive business environment	Base of Doing Business Score (Doing Business, 2019)	Somalia (20.4)												Fiji (63.8)	
Raising Human Capital	Reduce infant and child mortality	Probability of survival to age 5 (HCI, 2018)	Chad (0.88)	Comoros (0.93)											Tonga (0.98)	
	Reduce stunting	Fraction of kids under 5 not stunted	Burundi (0.44)	Comoros (0.69)											Tonga (0.92)	
	Improve quality of education	Learning adjusted years of school (HCI)	South Sudan (2.3)												Tonga (6.5)	
	Close the educational gender gap	School enrollment, female secondary (WDI, 2011-2017)	Mali (27.7)	Comoros (45.8)											Samoa (83.3)	
Protecting and leveraging natural resources	Improve water management	Renewal internal fresh water resources, total (billion cubi meters)	Djibouti (0.3)	Comoros (1.2)												Fiji (28.6)
	Reform agriculture	Average yield of cereals, fruits and vegetables (kg/ha) (FAOSTAT, 2011-2017)	Burundi (38.582)	Comoros (44.497)											Tonga (88.152)	
	Protect fishing grounds	Fisheries current score 0-100 (Yale Environmental Performance Index)	Guinea-Bissau (36.45)												Tonga (76.86)	
	Manage disasters better	Readiness indicator of the ND-GAIN Matrix (2014)	Central Africa Republic (0.17)												Cabo Verde (0.48)	
Identity and institutions	Strengthen capacity of formal institutions	Government Effectiveness Percentile Rank (WGI, average 2011-2017)	Somalia (0)	Comoros (2.8)											Samoa (70.7)	
	Support citizen participation	Voice Accountability Percentile Rank (WGI, average 2000-2017)	Eritrea (1)	Comoros (36.9)											Cabo Verde (76.1)	

# ANNEXES

## Annex 1: Description of indicators used for the Prioritization Table

PERFORMANCE INDICATOR	DESCRIPTION	SOURCE
<b>Wage bill</b> (% current expenditures)	Compensation of employees (all payments in cash, as well as in kind in return for services rendered to the government) as percentage of general government current final consumption expenditure.	World Development Indicators (average 2011-2017)
<b>Ranking in the Open Budget Index</b>	The Index assigns countries covered by the Open Budget Survey a transparency score on a 100-point scale using a subset of questions that assess the amount and timeliness of budget information that governments make publicly available in eight key budget documents in accordance with international good practice standards.	The Open Budget Survey (2017)
<b>Tax and Customs Revenue</b> (% of GDP)	Total compulsory transfers to the central government for public purposes as percentage of GDP.	World Development Indicators (average 2011-2017)
<b>Domestic Credit to Private Sector</b> (% GDP)	Financial resources provided to the private sector by financial corporations that establish a claim for repayment as percentage of GDP.	World Development Indicators (average 2011-2017)
<b>Ease of Doing Business Score</b>	The score captures the gap between an economy's current performance and a measure of best regulatory practice set in Doing Business 2015.	Doing Business (2019)
<b>Probability of Survival to Age 5</b>	Calculated for the HCI by subtracting the under-5 mortality rate (retrieved from the UN Interagency Group for Child Mortality Estimates) from 1.	Human Capital Index (2018)
<b>Fraction of Kids under 5 Not stunted</b>	Calculated for the HCI by subtracting stunting rates (retrieved from the UNICEF-WHO-World Bank Joint Malnutrition Estimates) from 1.	Human Capital Index (2018)
<b>Learning Adjusted Years of School</b>	Calculated for the HCI by multiplying the estimates of expected years of school by the ratio of most recent harmonized attainment on the TIMSS.	Human Capital Index (2018)
<b>School Enrollment, Female Secondary</b>	Ratio of female children of official secondary school age who are enrolled in secondary school to the population of the corresponding official secondary school age.	World Development Indicators (average 2011-2017)
<b>Renewable Internal Fresh Water Resources, total</b> (billion cubic meters)	Internal renewable resources (internal river flows and groundwater from rainfall) in the country.	World Development Indicators (average 2011-2017)
<b>Average yield of Cereals, Fruits and Vegetables</b> (hg/ha)	Simple average of Cereal Yields, Fresh Fruit yields and Vegetables yields.	FAOSTAT (average 2011-2017)

PERFORMANCE INDICATOR	DESCRIPTION	SOURCE
<b><i>Fisheries - Current Score</i></b> <b>0-100</b>	Overall combined score of: fish stock status and regional marine trophic index (RTMI). Fish Stock Status is based on an assessment of the percentage of fish stocks caught within a country's Exclusive Economic Zone (EEZ) that are overexploited or collapsed; RTMI is a measure of the mean trophic level of fish caught by a country, which represents the overall health of the ecosystem.	Yale Environmental Performance Index (2018)
<b><i>Readiness indicator of the ND-GAIN Matrix (2014)</i></b>	The "ND-GAIN Matrix" illustrates the comparative ability of countries to undertake adaptive actions to increase its resilience to climate. The Readiness indicator measures to what degree a country is prepared to deal with climatic and environmental changes.	ND-GAIN Matrix (2014)
<b><i>Government Effectiveness: Percentile Rank</i></b>	The indicator captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank.	World Government Indicators (average 2000-2017)
<b><i>Voice and Accountability: Percentile Rank</i></b>	The indicator captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Percentile rank defined as the previous.	World Government Indicators (average 2000-2017)



## Annex 2: Results of consultations for the SCD

1

### Comoros first SCD consultations (September 18-22, 2017)

Workshops were held during the week of September 18 that were aimed at (i) presenting the SCD process and get first reactions from the audience, (ii) framing the SCD in the World Bank country engagement and (iii) explaining the IDA cycle and the IDA18 portfolio. The workshops have also been an opportunity for the government to present their development strategy for the Comoros "Emergence 2030".

#### *Consultations were held with:*

- the Central Bank
- the Minister of Economy and Finance and key personnel from the same Ministry and other ministries
- key stakeholders from the government, private sector representatives, Civil Society Organizations (CSOs), Chambers of Commerce and other donor organizations.
- the main development partners in the Comoros, who are key counterparts in this scoping phase thanks to the variety of perspectives and knowledge they have on development issues for the country;
- other private sector representatives and the civil society, who suggested a number of big constraints and opportunities for development that Comoros should seize to reduce extreme poverty and promote more inclusive growth;
- the IMF who extensively briefed the Bank team on the macro economic

environment, budget issues, finances and general state of the economy.

#### *What we heard/learned:*

The main discussion points and suggestions for the Bank's consideration raised by the participants during the consultation week can be summarized as follows:

- **Isolation and fragmentation:** The isolated situation of Comoros' geography coupled with limited means of transport among the islands makes living in Comoros very expensive and constrains economic activities. The country's import dependence is one of the highest in the world. Government revenues originate predominantly from import taxes, placing a high cost on local businesses. Reforms to the investment code and customs procedures and efficiency are needed to lessen the burden on the private sector and to bring the country in line with government objectives of regional integration in SADC and COMESA as well as WTO requirements.
- **Private sector participation:** The private sector is interested in an enhanced and more regular dialogue with government on key issues. Access to credit, lack of long-term financing and high electricity costs were raised among the most important constraints. Several participants also raised the adverse effect that a weak contract enforcement environment has on economic activity.

- **Governance:** Inefficiencies in the legal framework and justice system undermine trust and affect local as well as foreign investors negatively and dampen entrepreneurial activity in the country.
- **Jobs, skills and its gender dimension:** High levels of informality and unemployment – especially among the youth – are important preoccupations for the Comoros, with its rapid population growth and high age dependency ratio. Participants voiced concerns regarding a skills mismatch that marks the labor market. Girls are not always given enough chances and support in both education and employment.
- **Diaspora:** All participants suggested that the Bank should try to analyze better the phenomenon of diaspora, as they send

significant levels of remittances back home which serve as social safety nets and for consumption, rather than for productive investment.

The announcement of the public consultations and of the SCD process were published in the World Bank Comoros web page: <https://consultations.worldbank.org/consultation/systematic-country-diagnostic-scd-economic-and-social-situation-comoros>.

Consultations continued online – including on social media (Twitter and Facebook) until October 30th to allow for greater participation. As of the beginning October the page "Banque Mondiale Afrique" on Facebook had already reached 61,112 people (number of unique people who saw the FB post on the consultation), 14,291 Likes, 113 Comments, 82 Shares.

## 2

### Comoros SCD second round of consultations (May 14-18, 2018)<sup>176</sup>

Workshops were held during the week of May 14 that aimed at (i) presenting the preliminary results of the Comoros SCD to the authorities and other stakeholders, (ii) obtain reactions and comments on the preliminary results and collect additional information to improve certain parts of the story line. A WB team preparing the next risk and resilience assessment also joined the discussions.

#### *Presentation of preliminary results of Comoros SCD:*

The SCD consultation started in May 14 with a presentation to government authorities and other stakeholders of the preliminary results of the Comoros SCD. The recently completed

Poverty Assessment was also presented at the event.

#### *Consultations were held with:*

- Representatives of the financial sector
- Parliament (Vice-president of the Parliament and other deputies)
- Consumer association
- Researchers (university professor, President of National Center for Research, and President of "Conseil de Sages")
- Representatives of private sector
- Civil Society Organizations
- University students (a group of students in economics)

<sup>176</sup> The meeting with the youth was held on May 23, 2018.

### *What we heard/learned:*

The main discussion points and suggestions for the Bank's consideration raised by the participants during the consultation week can be summarized as follows:

- **On financial constraints:** There is little financing for long run projects, one of the reasons being the very low long-term savings. Another factor mentioned by participants is the lack of trust of banks on the potential borrowers. Many times, the borrowed money is used in something else that was not agreed in the initial contract (e.g. in Grand marriages). The effective interest rate is much higher than the official maximum interest rate discouraging potential borrowers.
- **On land:** Villages must first agree before investors could acquire land to start their business. Land is most of the time not registered. This is mainly explained by the fact that people think they will have to pay property taxes (even though there are not such a tax in Comoros) and they don't see the need to do it because informal rules are more important than Comorian law in this area.
- **On total investment and local investment:** Villages raise funds to construct social infrastructures (Mosques, roads, schools). Official total investment in Comoros is then highly undervalued.
- **On labor participation:** We learned that the drivers of the low participation rate are different across islands. For instance, in Grand Comore, only white-collar jobs seem to be valorized by society. Thus, the primary sector is especially affected by this cultural feature. In addition, this negative effect on labor participation is amplified by remittances (that drives reservation wages up). Interestingly, university students mentioned that the religious factor explains only little of the low labor participation (instead of the strong role played by religion in MENA countries). Participants however pointed out that the low labor participation rate is also due to low labor demand in all three islands. Indeed, for instance the productive sector is almost inexistent. Finally, it was argued that low labor participation is not equivalent to low work in Comoros since a large part of the work is carried out for the community (without monetary retribution) and much of the work is in fact a non-monetary exchange of services between family members/friends.
- **On remittances:** It was reported that there is a big pressure to send remittances because migrants must give back what they received from their community. It was mentioned that most of remittances are used to build a house for the migrants' daughters, health services, education related expenses, and for Grand marriages. No so much is left for private sector projects. The diaspora seems worried to send money to set up a business because of lack of trust on how funds would be used. One important worry expressed by meeting participants was the sustainability of remittances flows. Indeed, given the current policies (not very migrant-friendly) in Europe, emigrations rates could decrease. Also, they highlighted the fact that the offspring of emigrants will be much less likely to send remittances to Comoros. Besides, the university students mentioned that increasingly, after graduation, the students in foreign countries come back to Comoros.

- **On human capital:** The public service does not have (most of the time) civil servants with the required skills. Many participants mentioned the absence of an entry exam as one of the causes. Besides, there is no stability of the heads of SOEs and ministries (most change every time a new government arrives). In the private sector, there is a lack of skills in many sectors and areas, including in the firm's management. This is happening even though there is a large number of students at the university (around 12-14 thousand).
- **On some cultural differences across islands:** In Grand Comore, obtaining social status within the village is a priority. The "notables" has a predominant role in the villages' decisions. In this island there is a great group solidarity and the group seem to become more important than the individual. Anjouan doesn't share these features and seem to have a more entrepreneurial spirit.
- **On rule of law:** Participants emphasized that the non-respect of the rule of law was one of the main constraints to economic development in Comoros. They pointed out that often ministerial rulings or decrees have more power than laws. The low trust in the judiciary system is an important issue (importantly affecting the financial sector, for instance). Besides, the coexistence of the Comorian law with Islamic and traditional law make things more complex (e.g. for land sells).
- **On domestic firms and procurement contracts:** Foreign firms are preferred for the biggest contracts (especially for large infrastructure projects). This can be explained by the low expertise and capacity of national firms. Consequently, development banks in Comoros work mostly with foreign firms.
- **On the tourism sector constraints:** Participants mentioned the low access to tourism sites as one of the main constraints to the development of the sector. Lack of qualified staff was also mentioned (e.g. professional guides), together with the absence of catering schools and little logistic materials (e.g. there isn't a tourism brochure).
- **On the aviculture industry constraints:** The industry is having difficulties to get a continue supply of inputs such as maize (as the current crisis of eggs production shows). Besides, the lack of proper slaughter facilities was also mentioned as a main constraint for the development of the industry

<b>1974</b>	Three of the islands making up Comoros vote for independence from France, but a fourth island, Mayotte, votes to stay with France.
<b>1975</b>	Comoros unilaterally declares independence, with Ahmed Abdallah as president, who is deposed the same year in a coup and replaced by Prince Said Mohammed Jaffar.
<b>1976</b>	Jaffar is replaced by Ali Soilih, who tries to turn the country into a secular, socialist republic.
<b>1978</b>	Soilih is toppled and killed by mercenaries led by Denard, who restores Abdallah to power.
<b>1989</b>	Abdallah is assassinated by presidential guard under command of French mercenary Denard, who stages a coup. France intervenes and Denard leaves islands.
<b>1990</b>	Said Mohamed Djohar elected president.
<b>1995</b>	Djohar is removed in a coup attempt led by Denard. French troops intervene, Denard surrenders.
<b>1996</b>	Mohamed Abdulkarim Taki elected president, drafts a constitution that extends the authority of the president and establishes Islam as the basis of law.
<b>1997</b>	The islands of Anjouan and Mohéli declare independence from Comoros. Troops from the island of Grande Comore land in Anjouan to try to prevent its secession but are routed.
<b>1998</b>	President Taki dies, apparently of heart attack, and is replaced by an acting president, Tadjidine Ben Said Massounde, pending elections.
<b>1999</b>	Massounde signs an autonomy agreement in Madagascar, but the delegates from Anjouan and Mohéli refuse to follow suit, saying they must first consult their people, thereby prompting violent demonstrations in Grande Comore against people of Anjouan origins.
<b>2001</b>	Massounde ousted in a coup led by the chief of the General Staff, Colonel Azali Assoumani. Azali Assoumani says the country will return to civilian rule in 2002 after new institutions of government had been set up. He also declares he would not stand for election. A "military committee" seizes power in the island of Anjouan with aim of rejoining Comoros. Anjouan suffers from numerous failed coup attempts trying to counter reunification efforts. Voters back a new constitution that will keep the three islands as one country but will grant each one of them greater autonomy.
<b>2002</b>	Azali Assoumani named president of reunited Comoros.
<b>2003</b>	Leaders of semi-autonomous islands reach a power-sharing deal, paving the way for elections.
<b>2006</b>	Ahmed Abdallah Mohamed Sambi, from Anjouan wins federal presidential elections.
<b>2007</b>	The African Union sends troops to help keep the peace in June's elections after Anjouan president Mohamed Bacar refuses to stand down. The crisis escalates when Anjouan holds local elections in defiance of the federal government and the African Union. Mohamed Bacar is inaugurated as Anjouan's president. The African Union starts a navy blockade around the island.
<b>2008</b>	Comorian and AU troops land on Anjouan and recapture it, defeating the separatists.
<b>2009</b>	The island of Mayotte votes to fully integrate with France. The government of Comoros, which lays claim to the island, terms the referendum null and void.
<b>2010</b>	Ikililou Dhoinine wins presidential elections and takes office in May 2011.
<b>2016</b>	Azali Assoumani wins presidential elections after main contender refused to recognize Assoumani's victory. The Constitutional Court ordered a partial re-run that saw Assoumani's victory.
<b>2018</b>	A referendum was held seeking ratification of amendments to the Constitution and resulted in a change of the presidential rotation rules. This resulted in riots by armed protesters in Anjouan and exchanges of gunfire over several days. Military reinforcements were sent in and the Governor of Anjouan was arrested.



## Annex 4: Progress towards the Sustainable Development Goals in Comoros

GOAL NO.1: POVERTY	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	..	..	..	..	..	18.1	..	..	..	..
Poverty headcount ratio at national poverty lines (% of population)	..	..	..	..	..	..	42	..	..	..
Urban poverty headcount ratio at national poverty lines (% of urban population)	..	..	..	..	..	..	42	..	..	..
GOAL NO.2: ZERO HUNGER										
Prevalence of undernourishment (% of population)	..	..	..	..	..	..	..	..	..	..
Prevalence of underweight, weight for age (% of children under 5)	25	..	..	..	16.9	..	..	..	..	..
Prevalence of wasting, weight for height (% of children under 5)	13.3	..	..	..	11.1	..	..	..	..	..
GOAL NO.3: GOOD HEALTH & WELL-BEING										
Immunization, measles (% of children ages 12-23 months)	70	67	72	79	85	85	86	90	90	90
Maternal mortality ratio (modeled estimate, per 100,000 live births)	499	436	388	376	365	354	344	355	..	..
Mortality rate, neonatal (per 1,000 live births)	40.9	40.1	36.9	36.2	35.4	34.7	34.3	33.1	32.3	31.7
Mortality rate, under-5 (per 1,000 live births)	101.1	97.4	85.3	82.7	80.4	77.9	75.5	73.2	71.1	69
GOAL NO.4: QUALITY EDUCATION										
Literacy rate, adult total (% of people ages 15 and above)	68.5	..	..	..	49.2	..	..	..	..	..
Lower secondary completion rate, total (% of relevant age group)	..	..	..	..	..	45.3	48.3	..	..	..
School enrollment, tertiary (% gross)	1.5	..	5.8	8	8.7	8.8	9	..	..	..
GOAL NO.5: GENDER EQUALITY										
Nondiscrimination clause mentions gender in the constitution (1=yes; 0=no)	..	..	..	..	..	..	..	..	..	..
Proportion of seats held by women in national parliaments (%)	..	3	3	3	3	3	3	3	3	6.1

GOAL NO.6: CLEAN WATER & SANITATION	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017
People using basic sanitation services (% of population)	26.8	29.4	32	32.5	33.1	33.6	34.1	34.2	..	..
People using basic drinking water services (% of population)	86.4	85.4	84.4	84.2	84.1	83.9	83.7	83.7	..	..
GOAL NO.7: AFFORDABLE & CLEAN ENERGY										
Access to electricity (% of population)	39.6	51.6	63.1	65.6	69.3	70.5	72.9	75.4	77.8	..
Access to electricity, rural (% of rural population)	29.9	42.9	56	58.7	61.4	64.1	66.8	69.5	72.2	..
Access to electricity, urban (% of urban population)	65.3	72.8	81.4	83.2	85.1	86.7	88.5	90.3	92.1	..
GOAL NO.8: DECENT WORK & ECONOMIC GROWTH										
GDP growth (annual %)	10.8	2.8	3.8	4.1	3.2	4.5	2.1	1.1	2.3	2.7
Unemployment, total (% of total labor force) (national estimate)	..	..	..	..	..	..	..	..	..	..
Unemployment, total (% of total labor force) (modeled ILO estimate)	4.6	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3
Unemployment, youth total (% of total labor force ages 15-24) (modeled ILO estimate)	10	10	9.9	9.9	9.9	9.9	9.9	9.9	9.9	10
GOAL NO.9: INDUSTRY, INNOVATION, & INFRASTRUCTURE										
Investment in telecoms with private participation (current US\$)	..	..	..	..	..	..	..	..	..	..
New business density (new registrations per 1,000 people ages 15-64)	..	..	..	..	..	..	..	..	..	..
GOAL NO.10: REDUCED INEQUALITY										
Personal remittances, received (% of GDP)	8.3	9.8	10.9	11.2	10.9	11.5	13.6	12.8	13.0	
GOAL NO.11: SUSTAINABLE CITIES & COMMUNITIES										
Urban population (% of total)	28.1	27.9	28	28	28.1	28.2	28.3	28.5	28.6	28.8
Urban population growth (annual %)	2.4	2.3	2.6	2.7	2.7	2.8	2.8	2.8	2.7	2.9
Population living in slums (% of urban population)	65.4	68.9	..	..	..	..	69.6	69.9	..	..

GOAL NO.12: RESPONSIBLE CONSUMPTION & PRODUCTION	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017
Renewable electricity output (% of total electricity output)	0	0	0	0	0	0	0	..	..	..
Renewable energy consumption (% of total final energy consumption)	48.3	44.3	46.4	47.8	48	44.1	46.6	45.3	..	..
Water productivity, total (constant 2010 US\$ GDP per cubic meter of total freshwater withdrawal)	..	..	..	..	..	..	59.2	..	..	..
GOAL NO.13: CLIMATE ACTION										
PM2.5 air pollution, mean annual exposure (micrograms per cubic meter)	21.1	20.4	16.8	17.3	17.3	17.5	17.1	19	19.1	..
PM2.5 air pollution, population exposed to levels exceeding WHO guideline value (% of total)	100	100	100	100	100	100	100	100	100	..
CO2 emissions (kg per PPP \$ of GDP)	0.2	0.2	0.2	0.1	0.1	0.2	0.1	..	..	..
Terrestrial and marine protected areas (% of total territorial area)	..	0	..	..	..	..	2.4	..	0.1	0.1
GOAL NO.14: LIFE BELOW WATER										
Aquaculture production (metric tons)	..	..	..	..	..	..	..	..	..	..
Capture fisheries production (metric tons)	12003	10738	63447	38180	36296	43732	9255	12674	16407	..
Total fisheries production (metric tons)	12003	10738	63447	38180	36296	43732	9255	12674	16407	..
GOAL NO.15: LIFE ON LAND										
Forest area (% of land area)	24.2	22.6	21	20.7	20.5	20.3	20.1	19.9	..	..
GOAL NO.16: PEACE & JUSTICE STRONG INSTITUTIONS										
Tax revenue (% of GDP)	..	..	6.7	6.5	6.9	7.1	7.0	6.6	7.9	9.5
Overall level of statistical capacity (scale 0 - 100)	..	56.7	50	50	41.1	43.3	40	42.2	34.4	30
GOAL NO.17: PARTNERSHIPS TO ACHIEVE THE GOAL										
Individuals using the Internet (% of population)	0.3	2	5.1	5.5	6	6.5	7	7.5	7.9	..
Net official development assistance and official aid received (current US\$)	2E+07	2E+07	7E+08	6E+07	1E+09	8E+07	7E+07	7E+07	5E+07	..

## Annex 5: Decomposition of Urban-Rural Inequality

**Table 8: Unconditional Decomposition of Urban-Rural Inequality of Real Monthly Per capita Consumption**

	LOWEST PERCENTILE	MIDDLE PERCENTILE	TOP PERCENTILE
	0.402***	0.367***	0.333***
<b>Total Gap</b>	[0.046]	[0.038]	[0.064]
	0.088*	0.163***	0.099**
<b>Total Endowments</b>	[0.047]	[0.037]	[0.050]
	0.021	0.056***	0.048***
Human capital	[0.019]	[0.014]	[0.015]
	0.129***	0.151***	0.094***
Demographic composition	[0.021]	[0.018]	[0.015]
	0.031*	0.044***	0.039*
Sector of employment	[0.018]	[0.014]	[0.020]
	0.064***	0.033*	0.001
Assets ownership	[0.025]	[0.018]	[0.019]
	0.007	0.070***	0.088***
Access basic Services	[0.030]	[0.022]	[0.033]
	-0.147***	-0.173***	-0.126***
Geographic characteristics	[0.033]	[0.025]	[0.027]
	0.314***	0.204***	0.235***
<b>Total Returns</b>	[0.061]	[0.045]	[0.077]
	-0.008	-0.057	-0.071
Human capital	[0.058]	[0.043]	[0.061]
	-0.363**	-0.481***	0.464***
Demographic composition	[0.161]	[0.118]	[0.166]
	-0.123**	-0.138***	-0.128
Sector of employment	[0.061]	[0.045]	[0.084]
	0.185**	0.017	-0.072
Assets ownership	[0.078]	[0.058]	[0.079]
	-0.794**	0.163	-0.249
Access basic Services	[0.372]	[0.273]	[0.566]
	0.335***	0.588***	0.523***
Geographic characteristics	[0.106]	[0.078]	[0.109]

Note: Numbers in brackets are bootstrap standard deviations based on 100 replications. \* Significant at the 10 percent level; \*\* significant at the 5 percent level; \*\*\* significant at the 1 percent level.

Source: EESIC 2014 and World Bank staff calculations.

## Annex 6: Decomposition of consumption growth

To explore the basic factors behind the observed decline in poverty, changes in consumption have been decomposed into two components. One component is due to improvements in personal characteristics or endowments (for example, increased education levels, ownership of assets, and access to employment opportunities and basic services), and the other component that is attributable to changes in the returns to those characteristics (for example, the returns to education, land productivity, returns to business, and so forth).

These two components are further decomposed to identify the specific attributes that contribute to the changes in consumption. The decomposition is applied at each decile of the consumption distribution to understand the patterns of the changes for the different welfare groups.

The table 9 underlines an improvement of households' endowments for all the population groups, but the improvements are more significant for the poorest 30 percent. The increase in endowments is driven by a significant

expansion of assets ownership, mainly means of transportation and communication, and to a lesser extent agricultural land. The improvements in endowments were coupled with an increase of the returns to their economic activity—essentially nonagricultural businesses. While households' engagements in business activities seem to have declined over time, particularly among the poorest groups, the gains from households' businesses, essentially non-farming activity, appear to have increased quite significantly, particularly for the three lowest deciles. Returns to land seem to have also improved over time, though less significantly for the poorest. The improvement in returns to community infrastructure indicates a higher positive influence of access to local markets and roads on households' living standards in recent years. The demographic structure of households seems to have improved, resulting from the reduction of their sizes and numbers of children, but these appear to be a continuing constraint on household well-being as their negative impact on households' returns appear to have increased.

**Table 9: Decomposition of consumption growth**

	POOR	MIDDLE CLASS	RICHEST
Total	0.118***	0.226***	0.269***
Endowments	0.412***	0.280***	0.249***
Demographic. Structure	0.082***	0.156***	0.146***
Human capital	-0.293***	0.071***	0.057**
Employment sector	0.031*	0.004	0.005
Assets	0.115***	0.039***	0.051***
Access basic services	0.013	0.029*	0.022
Returns	-0.293***	-0.055	0.020
Demographic. Structure	-0.775***	-0.260*	-0.286*
Human capital	-0.242***	-0.157***	-0.083*
Employment sector	0.056*	0.023	0.039
Assets	0.119**	0.034	-0.006
Access basic services	-0.059	0.090*	0.102*

Source: EIM 2004 and EESIC 2014.

Note: The poor are in the lowest two deciles; middle class individuals are in the fifth decile, and the richest ones are in the top decile.



## Annex 7: Inequality decomposition

The static decomposition of inequality enables to explore how the differences in households' characteristics affect the level of inequality and provides important clues for understanding the underlying structure of real per capita consumption distribution in Comoros.

The decomposition follows the approach of Cowell and Jenkins (1995) and consists of separating total inequality in the distribution of consumption into inequality between the different household groups in each partition,  $I_{Betw}$ , and the remaining within-group inequality,  $I_{Within}$ . As the most commonly decomposed measures in the inequality literature come from the General Entropy class, mean log deviation (**Theil\_L**) and the **Theil\_T** indices in real per capita monthly consumption expenditure are used to identify the contribution of between-group differentials to total inequality. The General Entropy inequality measures allow total inequality to be equal to  $I_{Betw} + I_{Within}$  and the amount of inequality explained by households attributes (or group of attributes) is measured by  $I_{Betw}/I_{Total}$ , where between and within group inequalities are defined, respectively, for Theil\_L and Theil\_T indices as

$$I_{Betw} = \left[ \sum_{j=1}^k f_j \log \left( \frac{\mu_j}{\mu} \right) \right] \quad I_{Within} = \left[ \sum_{j=1}^k f_j GE_o^j \right]$$

$$I_{Betw} = \left[ \sum_{j=1}^k f_j \left( \frac{\mu_j}{\mu} \right) \log \left( \frac{\mu_j}{\mu} \right) \right] \quad I_{Within} = \left[ \sum_{j=1}^k v_j GE_1^j \right]$$

with  $f_j$  the population share,  $v_j$  the consumption share, and  $\mu_j$  the mean consumption of subgroup j;  $\mu$  total mean consumption,  $GE_o^k$  Theil\_L index, and  $GE_1^k$  Theil\_T index of subgroup j.

with:  $Theil\_L = 1/n \sum_{i=1}^n \log \left( \frac{y}{y_i} \right)$  and  $Theil\_T = 1/n \sum_{i=1}^n \left( \frac{y}{y_i} \right) \log \left( \frac{y}{y_i} \right)$

$y_i$  is real monthly per capita consumption expenditure for household i and  $\bar{y}$  is mean real monthly per capita consumption expenditure.

**Table 10:** Inequality decomposition

	NATIONAL		RURAL		ANJOUAN	
	Share of inequality explained by (%)		Share of inequality explained by (%)		Share of inequality explained by (%)	
	<i>Theil-L</i>	<i>Theil-T</i>	<i>Theil-L</i>	<i>Theil-T</i>	<i>Theil-L</i>	<i>Theil-T</i>
Education of head	6.52*** (0.01)	7.11*** (0.02)	6.29* (0.03)	7.1 (0.04)	8.60*** (0.02)	9.82*** (0.02)
Gender of head	0.02 (0.00)	0.02 (0.00)	0.31 (0.01)	0.29 (0.01)	0.4 (0.01)	0.4 (0.01)
Age of head	1.04 (0.01)	1.03 (0.01)	1.51 (0.01)	1.46 (0.01)	1.86 (0.02)	1.93 (0.02)
Activity stat. of head	2.04* (0.01)	1.84** (0.01)	4.66** (0.02)	3.85** (0.01)	5.27* (0.02)	4.94** (0.02)
Empl. sector of head	4.65*** (0.01)	4.83*** (0.01)	5.41* (0.03)	5.78 (0.03)	14.60*** (0.03)	15.80*** (0.03)
Family type	5.06*** (0.01)	5.59*** (0.01)	4.38** (0.02)	4.80** (0.02)	4.29* (0.02)	4.97* (0.02)
Urban/rural status	3.33** (0.01)	3.33** (0.01)			12.60*** (0.03)	13.60*** (0.03)
Regional location	0.28 (0.00)	0.27 (0.00)	1.76 (0.01)	1.67 (0.01)		

\* Significant at the 10 percent level; \*\* significant at the 5 percent level; \*\*\* significant at the 1 percent level. Numbers in parentheses are bootstrap standard deviations based on 100 replications.

Source: EESIC 2014. World Bank staff calculations

## Annex 8: The Effect of Remittances on Labor Force Participation

Labor force participation in the Comoros is low, and the proportion of discouraged workers is high. Coupled with this is the fact that the Comoros is one of the three highest remittance-recipient nations in Sub-Saharan Africa, with net private remittances making up approximately 13 percent of Comorian GDP in 2017. This share nearly doubled in the time between 2004 and 2014 (World Bank, 2017), raising the question of whether remittance income could potentially impact on labor force participation. As a form of additional non-labor income for households, it has been suggested that remittances can lower labor force participation from those individuals in remittance-receiving households (Cox-Edwards and Rodríguez-Oreggia, 2009). This could be due to individuals feeling less pressured to participate in the domestic economy and earn a wage, since they are receiving income in the form of remittances from a migrant worker.

A brief overview of the differences in characteristics by household remittance recipient status is shown in Table 11, below. As can be seen clearly, non-recipient households tend to have statistically significantly higher labor force participation (in both the broad and narrow sense) than remittance-receiving households. Individuals in non-recipient households are significantly younger than individuals residing in recipient households, but this may be explained by the fact that it is the younger members of the labor force who migrate for work and remit back to support older family members. Households receiving remittances seem to be slightly smaller than those not receiving remittances, however, this difference is not statistically significant.

Those individuals from remittance-receiving households also seem to be slightly more educated than those from non-recipient households: significantly more individuals have some form of higher education in recipient-

households (16 percent) than those in non-recipient households (14 percent). Recipient households are also mostly clustered on the islands of Ngazidja and Ndouani, with 98 percent of recipient households residing here. Non-recipient households, however, are significantly more prevalent on the island of Ndouani (42 percent), with significantly fewer non-recipient households on the island of Ngazidja (27 percent).

The table below indicates that remittance recipient status is not randomly assigned, and as such, careful consideration should be given to the method used to estimate the effects of remittances on labor force participation. Following the method proposed by Cox-Edwards and Rodríguez-Oreggia (2009), nearest neighbor estimators were used to estimate the effect of remittances on both individual labor force participation, as well as the share of household labor force participation.

Nearest neighbor matching is a type of propensity score matching used to match observations from a treatment group (remittance recipients) and a control group (remittance non-recipients) who, given their underlying characteristics, are closest in predicted probability of receiving the treatment. In practice, a probit model is run to model the likelihood of receiving remittances conditioned on a number of covariates. Thereafter, the probability of receiving remittances, conditional on the individual observation's characteristics is predicted, and those predicted probabilities are used to match observations with roughly equal likelihood of receiving remittances. The effect of remittances on labor force participation can then be estimated by calculating the difference between average labor force participation in the treatment group and the average labor force participation in the matched control group. Mathematically, this is given by:

$$E[Y_{1i}|D_i = 1] - E[Y_{0i}|D_i = 0]$$

where  $Y_{1i}$  is the labor force participation rate for those observations in the treatment group (i.e. those receiving remittances), and  $Y_{0i}$  is the labor force participation rate for those

observations in the matched control group (i.e. those not receiving remittances).  $D_i$  is a dummy indicating whether observation  $i$  received the treatment or not.

**Table 11:** Individual Characteristics by Household Remittance Recipient Status

	RECIPIENT HOUSEHOLD	NON-RECIPIENT HOUSEHOLD	p-VALUE	
Narrow LFP	0.43	0.46	0.00	***
Broad LFP	0.51	0.56	0.00	***
Age	33.82	31.25	0.00	***
Married	0.45	0.47	0.97	
Household Size	5.67	6.00	0.16	
Rural	0.52	0.55	0.00	***
<b>Education</b>				
No schooling	0.33	0.32	0.11	
Primary	0.26	0.29	0.00	***
Secondary	0.25	0.25	0.00	***
Higher	0.16	0.14	0.00	***
	1.00	1.00		
<b>Island</b>				
Moroni	0.24	0.25	0.99	
Grande Comore	0.38	0.27	0.00	***
Anjouan	0.36	0.42	0.00	***
Mohéli	0.02	0.05	0.00	***
	1.00	1.00		

Source: EESIC, 2014

Notes: Adjusted using sampling weights; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 11 can inform the covariates chosen to explain the likelihood of an individual living in a household that received remittance income. These covariates included age (as well as a quadratic in age), education level, a dummy variable for marital status, island of residence, overall household labor participation rate (narrow or broad, depending on the specification of interest) and share of children in the home. When calculating the effect on

labor force participation, the outcome variable of interest was the individual labor force participation – a variable which takes on 1 if the individual is in the labor force, and 0 if not.

At the household level, very similar variables were used, including the age (and age squared) of the household head, the share of the household in different age and education categories, the composition of the family unit

within the household, and the island on which the household is located. In this model, the outcome variable of interest was created by dividing the number of individuals in a household who are active participants in the labor market by the number of individuals in the household who are of working age. This is then a measure of the proportion of the household participating in the labor market.

Table 12, below, gives the results of the nearest neighbor estimator at both the individual and the household level, for both the narrow and broad labor force as estimated from the 2014 EESIC data. The average treatment effect on the treated was estimated rather than the average treatment effect in the population, since those receiving remittances are highly unlikely to be a random sample from the population.

**Table 12: Effect of Remittances on Labor Force Participation**

	NARROW LABOR FORCE		BROAD LABOR FORCE	
	N	Coefficient	N	Coefficient
<b>Individual level</b>	8955	-0.0206*** (0.0014)	8955	-0.0019 (0.0014)
<b>Household level</b>	3129	-0.0508*** (0.0009)	3129	-0.0404*** (0.0008)

Source: EESIC, 2014

Notes: Standard errors in parentheses; adjusted using sampling weights; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Although the effect of remittances on labor force participation is generally statistically significant, the effect is very small. Individuals in remittance receiving households are only 2.1 percentage points less likely to participate in the narrow labor force and they are not statistically significantly less likely to participate in the broad labor force. Households receiving remittances, however, have a statistically lower share of individuals participating in the labor market than households not receiving remittances: the narrow household labor force participation rate is on average 5.1 percentage points lower for recipient households, and the broad labor force participation is on average 4.0 percentage points lower.

A robustness check was run using standard propensity score matching techniques as well, however, nearest neighbor matching provided a more balanced match. Thus, nearest neighbor matching estimates were chosen for estimating the effects of remittances in this investigation. Mean differences and variance ratios describing the balancing for matched observations are presented in Tables 13 and 14 for individuals and households, respectively. It should also be noted that the data available for running this investigation does not include non-cash remittances, and as such, the overall effect on labor market participation may be underestimated in this case.



**Table 13:** Post-diagnostic Mean Differences and Variance Ratios for Nearest Neighbor and Propensity Score Matching Estimators; Individual Level

	NARROW LABOR FORCE				BROAD LABOR FORCE			
	Propensity Matching	Score	Nearest Matching	Neighbour	Propensity Matching	Score	Nearest Matching	Neighbour
	Mean difference	Variance ratio	Mean difference	Variance ratio	Mean difference	Variance ratio	Mean difference	Variance ratio
Age	0.01	1.03	0.02	1.06	0.01	1.03	0.02	1.06
Age squared	0.02	1.00	0.03	1.09	0.02	1.00	0.03	1.09
Married	0.06	1.00	-0.01	1.00	0.06	1.00	0.00	1.00
Rural	0.44	1.19	0.00	1.00	0.44	1.19	0.00	1.00
Share 0-7	0.08	1.27	0.01	1.07	0.08	1.27	0.00	1.06
Share 8-14	0.03	1.13	0.00	1.08	0.03	1.13	0.00	1.09
Household LFPR	-0.01	1.02	-0.02	1.16	-0.01	1.02	-0.01	1.15
EDUCATION (NO SCHOOLING AS BASE)								
Primary education	0.03	1.05	0.00	1.00	0.03	1.05	0.00	1.00
Secondary education	-0.04	0.96	0.00	1.00	-0.04	0.96	0.00	1.00
Higher education	-0.13	0.83	0.00	1.00	-0.13	0.83	0.00	1.00
ISLAND (MORONI AS BASE)								
Grande Comore	0.07	1.04	0.00	1.00	0.07	1.04	0.00	1.00
Anjouan	0.25	1.26	0.00	1.00	0.25	1.26	0.00	1.00
Mohéli	-0.28	0.26	0.00	1.00	-0.28	0.26	0.00	1.00

Sources: EESIC, 2014

**Table 14:** Post-diagnostic Mean Differences and Variance Ratios for Nearest Neighbor and Propensity Score Matching Estimators; Household Level

	NARROW LABOR FORCE				BROAD LABOR FORCE			
	Propensity Matching	Score	Nearest Matching	Neighbour	Propensity Matching	Score	Nearest Matching	Neighbour
	Mean difference	Variance ratio	Mean difference	Variance ratio	Mean difference	Variance ratio	Mean difference	Variance ratio
Age of Head	0.09	0.85	0.05	1.07	0.09	0.85	0.05	1.07
Age of Head Squared	0.05	0.84	0.06	1.10	0.05	0.84	0.06	1.10
Rural	0.67	1.30	0.00	1.00	-0.03	1.30	0.00	1.00
Female Head	-0.10	0.92	0.00	1.00	0.67	0.92	0.00	1.00
Share Female (15-64)	-0.03	0.74	0.04	1.20	-0.10	0.74	0.04	1.20
AGE SHARES OF HOUSEHOLD (SHARE 15-64 OMITTED)								
Share 0-7	0.10	0.87	-0.04	0.97	0.10	0.87	-0.04	0.97
Share 8-14	0.04	1.14	-0.05	1.08	0.04	1.14	-0.05	1.08
Share 65+	0.03	0.72	0.13	1.51	0.03	0.72	0.13	1.51
EDUCATION (NO SCHOOLING SHARE AS BASE)								
Share Primary	0.16	1.01	-0.03	0.98	0.16	1.01	-0.03	0.98
Share Secondary	-0.07	0.73	0.01	1.10	-0.07	0.73	0.01	1.10
Share Higher	-0.19	0.67	0.04	1.03	-0.19	0.67	0.04	1.03
HOUSEHOLD COMPOSITION (SINGLE, NO CHILDREN OMITTED)								
Single parents	-0.05	0.86	0.00	1.00	-0.05	0.86	0.00	1.00
Couple, no children	-0.10	0.82	0.00	1.00	-0.10	0.82	0.00	1.00
Couple, children	0.23	1.01	-0.03	1.01	0.23	1.01	-0.03	1.01
Elderly (65+)	-0.03	0.94	0.01	1.02	-0.03	0.94	0.01	1.02
MARITAL STATUS OF HOUSEHOLD HEAD (SINGLE AS BASE)								
Married	0.22	0.75	-0.03	1.05	0.22	0.75	-0.03	1.05
Widowed/ Divorced	-0.13	0.76	0.02	1.04	-0.13	0.76	0.02	1.04
ISLAND (MORONI AS BASE)								
Grande Comore	0.19	1.09	0.00	1.00	0.19	1.09	0.00	1.00
Anjouan	0.24	1.24	0.00	1.00	0.24	1.24	0.00	1.00
Mohéli	-0.25	0.38	0.00	1.00	-0.25	0.38	0.00	1.00

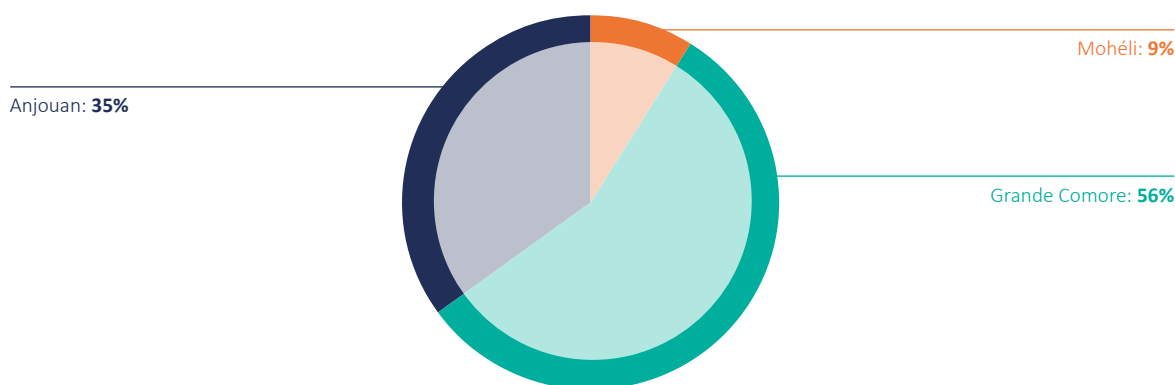
## Annex 9: A profile of the formal private sector in Comoros

The formal private sector of Comoros comprises about 1,300 to 1,400 micro-, small- and medium-size enterprises (MSME)<sup>177</sup> and employs about 50,000 people in Comoros. While there is no official definition of MSME in the country, *L'Union des Chambres de Commerce, d'Industrie et d'Agriculture* (UCCIA) defines the different categories of firms based on the criteria of annual turnover, number of employees and the size of investments made, as follows:

- a micro enterprise employs 1 to 3, has an annual turnover of less than 5 million KMF and an investment not exceeding 3 million KMF. Its taxation regime is the “*taxe professionnelle unique, TPU*” (unic professional tax);
- a small enterprise employs from 4 to 25 people, has an annual turnover of less than 60 million KMF and an investment not exceeding 20 million KMF. Its taxation regime is ruled by the “*Service de la Fiscalité des Entreprises, SFE*”;
- a medium enterprise employs from 26 to 200 people, has an annual turnover of less than 4 billion KMF and an investment not exceeding 1 billion KMF. Its taxation regime is ruled by the “*Service de la Fiscalité des Entreprises, SFE*”;

**Figure 45: Location of firms by region**

Number of firms by island (in thousands)



LOCATION	FIRMS	PERCENTAGE
Anjouan	457	35%
Mohéli	122	9%
Grande Comore	741	56%
Total	1320	100%

<sup>177</sup> Most reliable data and information sources are UCCIA, INSEED and tax authorities' data bases

**Table 15:** Island-level Distribution of Agricultural Value Chains

NATIONAL				GRAND COMORE	ANJOUAN	MOHÉLI
Cloves	Output, 2017 (vol.) Output, 2016 (val.) Growers Producer Org.	3,600 MT \$43M 11,000 – 12,000 5	Production Growers	5% <100	80% 10,000+	15% 1,000 – 2,000
Vanilla	Output, 2017 (vol.) Output, 2016 (val.) Growers Cooperatives Exporters	35 MT \$9.7m 5,000 >3 3	Production Growers Curers	80% 4,300 3-6	NA 300 1 – 3	20% 400 1 – 3
Ylang-Ylang	Output, 2017 (vol.) Output, 2016 (val.) Growers Cooperatives	45 MT \$7.1m 1,150 – 3,200 >18	Production Growers Distillers	22.22% 50-100 3	66.66% 1000-3000 500	11.11% 100 100
Milk	Output Dairy farmers Dairy cows Cooperatives	24.8m lt. 4,140 9,450 >1	Production Dairy Farmers Dairy cows	2% 100 9,000	97% 4000 300	1% 40 150
Poultry meat	Output Broilers	76 MT 16,000	Production* Broilers	75% 12,000	25% 4,000	NA NA
Eggs	Output Layers Semi-industrial units Backyard poultry	72,000 – 80,000 155 several thousand	Production* Layers Semi-industrial units	50% 40,000 – 50,000 60	40% 25,000 – 30,000 80	10% 7,000 15
Fruits (Top 3 – bananas, avocados, mangoes)	Output	>5,000 MT	Intermediate		Highest	Lowest
Vegetables (Top 3 – peppers, tomato, onions)	Output	>8,000 MT	Intermediate		Highest	Lowest

Note: Production estimates refer to island share of annual national output, by volume. Production\* is an estimate based on number of animals

## Annex 10: Statistical capacity summary

Comoros scored **32.55** out of 100 for 2016 on the Bank's recently developed Statistical Performance Index (SPI), which measures a country's statistical performance around four dimensions.

The first dimension, Methodology, Standards and Classifications (MSC), reviews whether countries follow internationally recommended methodology and standards in collecting and producing data. Comoros gained a score of **20.83** in this dimension. The country could capture its national economy more accurately by adapting the national accounts to SNA 2008 and adopting the annual chain linking method for both the national accounts and CPI base year. Also, Comoros could further improve its score by following the international standards on employment status, and classification of national industry; and by adopting the latest government finance statistics manual and non-cash recording basis for consolidated central government accounting.

The Censuses and Surveys (CS) section examines whether countries have conducted major censuses and surveys in internationally recommended form and frequency. Comoros received a score of **20.00** in this dimension. No information was available to confirm that a business/ establishment census was conducted. Information was also unavailable to confirm if any agriculture surveys, labor force surveys or business/ establishment surveys were conducted independently as recommended internationally. The score for this section can be improved by collecting the above mentioned key surveys.

In terms of Dissemination Practices and Openness (DPO) that assesses the dissemination capacity of national statistical systems, Comoros received a score of **0**. There is no website available for the National Statistical Office of Comoros. The sub-score can improve significantly if Comoros develops a website that could ideally provide a list of surveys and microdata sets (mNADA), and metadata. The website could also be used to share an advance release calendar, develop and provide a data portal with access to time series data in a reusable format and conduct a user satisfaction survey.

The fourth dimension, Availability of Key Indicators (AKI), checks the availability of selected core indicators in the international organizations and databases. We prepared the country score using World Development Indicators database as of March 2017. Comoros received a score of **58.33** with data for 2016. The score shows that Comoros has the latest available data on child immunization, child mortality rate, primary completion rates, adult literacy rate, water and sanitation, and national accounts. However, more recent data on undernourishment, unemployment, and poverty are missing.

The total score of 32.55 indicates that there is a significant need for improvement of the statistical system in all areas; methodology, standards and classification, dissemination capacity and openness, and newly-endorsed Sustainable Development Goals, to properly inform evidence-based decision-making process as well as monitoring and evaluating the development progress in coming years.

**Table 16: Detailed Scoring Matrix of the SPI for Comoros**

METHODOLOGY, STANDARDS & CLASSIFICATIONS						
#	INDICATOR	SCORE 1	SCORE 0.5	SCORE 0	WEIGHT	WEIGHTED SCORE
1	System of National Accounts in use	SNA2008/ESA 2010	SNA1993/QNA Manual 2001/ ESA 1995	Otherwise	1	0
2	National Accounts base year	Annual chain linking	Within past 10 years	Otherwise	1	0
3	Classification of national industry	Latest version is adopted (ISIC Rev 4, NACE Rev 2 or a compatible classification)	Previous version is used (ISIC Rev 3, NACE Rev 1 or a compatible classification)	Otherwise	1	0
4	CPI base year	Annual chain linking	Within past 10 years	Otherwise	1	0
5	Classification of household consumption	Follow Classification of Individual Consumption by Purpose (COICOP) Follow International	N.A.	Otherwise	1	1
6	Classification of status of employment	Labour Organization, International Classification of Status in Employment (ICSE-93)	N.A.	Otherwise	1	0
7	Central government accounting status	Consolidated central government accounting follows noncash recording basis	Consolidated central government accounting follows cash recording basis	Otherwise	1	0
8	Compilation of government finance statistics	Follow the latest Government Finance Statistical Manual (2014)	Previous version is used (GFSM 2001)	Otherwise	1	0
9	Compilation of monetary and financial statistics	Follow the latest Monetary and Finance Statistics Manual (2000) or Monetary and Finance Statistics: Compilation Guide (2008)	N.A.	Otherwise	1	1
10	SDDS/e-GDDS subscription	Subscribing to IMF SDDS standards	Subscribing to IMF e-GDDS standards	Otherwise	1	0.5
11	CRVS				1	0
12	Business Process (GSBPM)				1	0
Maximum category score:					12	2.5
MSC Country Score = Weighted Score / Maximum Category Score X 100						20.83
Country Score:						20.83



CENSUSES AND SURVEYS - CENSUSES						
#	INDICATOR	SCORE 1	SCORE 0.5	SCORE 0	WEIGHT	WEIGHTED SCORE
1	Population & Housing census	Population census done within last 10 years	Population census done within last 20 years	Otherwise	1	0.5
2	Agriculture census	Agriculture census done within last 10 years	Agriculture census done within last 20 years	Otherwise	1	0.5
3	Business/ establishment census	Business/establishment census done within last 10 years	Business/establishment census done within last 20 years	Otherwise	1	0

CENSUSES AND SURVEYS - SURVEYS							
#	INDICATOR	SCORE 1	SCORE 0.6	SCORE 0.3	SCORE 0	WEIGHT	WEIGHTED SCORE
4	Household Survey on income/ consumption/ expenditure/ budget/ Integrated Survey	3 or more household surveys done within past 10 years;	2 household surveys done within past 10 years;	1 household survey done within past 10 years;	None within past 10 years	1	0.3
5	Agriculture survey	3 or more agriculture surveys done within past 10 years;	2 agriculture surveys done within past 10 years;	1 agriculture survey done within past 10 years;	None within past 10 years	1	0
6	Labor Force Survey	3 or more labor force surveys done within past 10 years;	2 labor force surveys done within past 10 years;	1 labor force survey done within past 10 years;	None within past 10 years	1	0
7	Health/ Demographic survey	3 or more health surveys done within past 10 years;	2 health surveys done within past 10 years;	1 health survey done within past 10 years;	None within past 10 years	1	0.3
8	Business/ establishment survey	3 or more business/ establishment surveys done within past 10 years;	2 business/ establishment surveys done within past 10 years;	1 business/ establishment survey done within past 10 years;	None within past 10 years	1	0
						5	0.6
Maximum category score: 8						8	1.6
CS Country Score = Weighted Score / Maximum Category Score X 100							20.00
Country Score:							20.00

DISSEMINATION PRACTICES AND OPENNESS - 1. DISSEMINATION CAPACITY OF NSO					
#	INDICATOR	SCORE 1	SCORE 0	WEIGHT	WEIGHTED SCORE
1	NSO has an Advance Release Calendar and it is published	Yes	No	1	0
2	NSO has a listing of surveys and microdata sets (or NADA)	Yes	No	1	0
3	NSO has a data portal	Yes	No	1	0
4	Time series indicators are available for download in reusable format for free	Yes	No	1	0
5	Metadata is available providing definition, methodology, standards or classifications for existing data series	Yes	No	1	0
6	NSO has conducted a user satisfaction survey	Yes	No	1	0
7	Geospatial data available on NSO website	Yes	No	1	0
	<b>Maximum score for sub-category: 7</b>			<b>7</b>	<b>0</b>

DISSEMINATION PRACTICES AND OPENNESS - 2. OPENNESS OF DATA					
#	INDICATOR	SCORE		WEIGHT	WEIGHTED SCORE
8	Open Data Inventory: na	ODIN Score/100: na	ODB Score: na		
	<b>Maximum score for sub-category: 0</b>			<b>7</b>	
	<b>Maximum category score: 7</b>				<b>0</b>
	DPO Country Score = Weighted Score/ Maximum Category Score X 100				<b>0.00</b>
	<b>Country Score:</b>				<b>0.00</b>

AVAILABILITY OF KEY INDICATORS					
#	INDICATOR	SCORE 1 - DATA AVAILABLE FOR THE LATEST 3 YEARS	SCORE 0	WEIGHT	WEIGHTED SCORE
1	Poverty headcount ratio at national poverty lines (% of population)	Yes	No	1	0
2	Mortality rate, under-5 (per 1,000 live births)	Yes	No	1	1
3	Immunization, measles (% of children ages 12-23 months)	Yes	No	1	1
4	Primary completion rate, total (% of relevant age group)	Yes	No	1	1
5	Literacy rate, adult total (% of people ages 15 and above)	Yes	No	1	1
6	Improved water source (% of population with access)	Yes	No	1	1
7	Unemployment, total (% of total labor force) (national estimate)	Yes	No	1	0
8	Manufacturing, value added (% of GDP)	Yes	No	1	0
9	Gross capital formation (% of GDP)	Yes	No	1	1
10	Inflation, GDP deflator (annual %)	Yes	No	1	1
11	Net trade in goods and services (BoP, current US\$)	Yes	No	1	0
12	Prevalence of undernourishment (% of population)	Yes	No	1	0
<b>Maximum category score: 12</b>				<b>12</b>	<b>7</b>
<b>Maximum category score: 7</b>					58.33
Availability of Key Indicators Country Score = Weighted Country Score / Maximum Category Score X 100					
<b>Country Score:</b>					<b>58.33</b>
<b>Total SPI score</b>					<b>32.55</b>

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