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A Post-Pandemic Growth Strategy for Southern and Eastern Mediterranean Countries



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Executive Summary



The global pandemic has resulted in some lasting scars for many Emerging Market Economies, but it has also prompted a re-examination of existing development strategies for growth and development. The countries of the Southern and Eastern Mediterranean (SEMCs) have seen their development trajectories dimmed, and in order to provide for more sustainable and equitable income generation for their populations, a reset of growth strategies is essential.

The aim of this report is to provide some new ideas and policy directions for SEMCs and to do so in light of changes in the global economy that were already well underway but that have been made more prominent by the recent events. The main message is that there is no time to waste in resetting public policy for the coming few years.

The urgency that drives this policy reset is the fact that growth prospects for many have been seriously affected, meaning that it will take a number of years to regain per capita income levels that existed in 2019. Fiscal space has shrunk, export supply chains have been disrupted, new technologies and ways of doing business electronically have been accelerated, and debt levels have risen. At the same time, pre-existing challenges related to inadequate employment, an overbearing role of the state, and limits in private sector development have become more acute. It is therefore fair to say that the structural reform agenda is now of paramount importance and that status quo sets of policies will be inadequate given the challenges facing SEMCs.

This report examines the current situation of SEMCs, highlighting where the greatest shortfalls of policy exist using the concept of heatmaps that compare countries in various dimensions. To this has been added a thorough review of what diagnostics already exist, and there is no dearth of them, indicating some lapses of past policy as seen by outside agencies, institutions, and academics. The aim of this report is to not repeat the same diagnostics once again, but rather to use them as building-blocks for the presentation of some new views and

identification of new opportunities. This exercise has been deepened and enriched by policy consultations with key thought-leaders and expolicymakers in three SEMCs, namely, Egypt, Morocco, and Tunisia. The basic conclusions of the report are as follows. There are numerous areas where changes in current policy would yield high dividends, none more important than the role of the state. In many countries, the role of the state needs to change to allow for the private sector to emerge and flourish. The state has too many advantages, crowds out competition and garners credit. In some countries, this challenge is compounded by the role of dominant firms, which are able to stifle new entrants, a dynamic that limits gains in productivity, employment, and export potential. The role of SMEs is crucial in this regard as is the necessity of improving the level of digitalization in economies. Whereas most countries have a handle on the basics of macroeconomic management, there are areas of inefficiency that preceded Covid-19 that are now urgent to address.

Most SEMCs are insufficiently connected to global trade. While it is undoubtedly true that there are major shifts in global chains occurring, the lack of connectivity to higher-value added exports of goods, and increasingly services, cannot go unattended. Whether the response is more intra-regional trade, or higher quality foreign direct investment or new links to the AfCFTA, governments can take away lessons from other regions where it has proven to be the case that international competitiveness is not likely when domestic markets lack vibrant competition. An export focus is all the more necessary inasmuch as many countries have borrowed extensively and will need to generate export earnings to repay; others have suffered temporary losses from tourism or remittances. New trade arrangements and more strategic approaches to FDI are areas where governments are well placed to act. These points are discussed in the report and policy suggestions are offered, particularly for the countries of intensive focus.

An aspect of development that is critical for success in attracting better quality FDI, in promoting the acquisition and use of new technologies, and in helping new segments of the economy to innovate is the area of education and skills. Moreover, skills are the key to improving productivity and the earnings capacity of burgeoning populations. The keys to new job creation, an indispensable outcome to maintain social cohesion, includes both the supply side, where reforms are needed, as well as the demand side, where new private sector jobs need to emerge. Public sector employment limits what economies can do and limits the needed investment that governments are required to undertake in important areas of infrastructure and logistics, health and education, and new areas of sustainability, water and food security. (Many of these latter issues are addressed in a separate Technical Paper on Water and Food Security accompanying the main Report).

Sustainability is of course one of the key determinants of longer-term growth. Managing the effects of climate change on agriculture, on the



energy mix for countries, and on livelihoods is a major new challenge for governments. Creating the necessary fiscal space to undertake these efforts derives from the greater efficiency of public spending and the retreat of the public sector from unviable SOEs and unproductive employment. Countries will have new demands placed on them to handle domestic debt service since indebtedness has risen due to the pandemic. Hence the future competition for public funds will be fierce. Reforms in water pricing, land use, and energy generation will be more important than ever for most SEMCs.

The social compact in societies that allows for greater cooperation between the private and public sectors as well as the discussion surrounding appropriate development models and strategies, as seen in the Moroccan Special Commission, can be crucial. Without gains in governance, countries such as Tunisia will find it difficult to undertake the reform agenda. In the absence of a shrinking state presence, Egypt will find it difficult to create new firms, new jobs, and new trade links.

Governance indicators that are reported show that there hasn't been sufficient progress, and that stagnation of other measures of efficiency, innovation, digitalization, and attractiveness to business are stumbling blocks to progress. In each of the countries reviewed in this Report, an attempt is made to identify binding constraints to growth and more equitable development.

The Table of Contents will provide a clear roadmap of what is being covered in this Report. The audience for the Report is primarily the governments themselves, although European partners interested in enhanced forms of cooperation may also see avenues for further engagement. There are in our view opportunities in renewable energy, in educational twinning and skills acquisition, in further connection between FDI and the local economies, and in technology transfer, where more is achievable. Of course, strategic partnerships require a clear vision on the part of SEMCs as to where they are headed and what reforms governments are willing and able to undertake to remove bottlenecks to effective cooperation.

The final message is that the post-pandemic outlook is an uncertain one in which nimble governments will fare better. In order to undertake new initiatives and new investments to help propel new drivers of growth, governments will need to exit areas where they are not needed and focus on those where they are indispensable. To facilitate progress towards a more digital economy, the public sector can enable the private sector. It can also help develop a knowledge-based economy through policies that empower and attract new economic actors. Improvements in governance, including a strong societal consensus, are indispensable, and that consensus is aided by a sense of fairness, opportunity, and hope that we wish to see embedded in the futures of SEMCs.

Part 1

An Overview of the Current Global Economic Environment

Introduction

The Current Global Outlook

**Short-term Relief and Policy
Options in the Southern
and Eastern Mediterranean**

**Issues of Global Trade
and Investment
in the Mediterranean**

**The New Normal
and the Revised New Normal**



Introduction

The COVID-19 pandemic has exposed pre-existing fissures in the global economy that have been present since the Great Recession of 2008-2009. These can be seen in the areas of international trade, including the flow of goods and services via global value chains (GVCs) that represent about half of total international trade. Overall, growth in world trade has suffered since 2009 as compared with the period before the global financial crisis. Whereas attention has normally been focused on the macroeconomic consequences, the decade preceding COVID-19 forced governments to deal with microeconomic implications, as income became more highly concentrated and new digital platforms made regulatory practices obsolete. The pandemic has had two immediate effects on the global economy and its management: first, it has exacerbated some of the previous trends that were damaging the global system of cooperation and fostering a sense of nationalism that can be antithetical to globalization; and second, it has reinforced the importance of government as the only economic actor that could act counter-cyclically in the pandemic world and also provide safety nets to the many whose livelihoods and incomes were damaged.

In the context of the post-pandemic world, we are also witnessing some fundamental shifts that can affect Emerging Market Economies (EMEs), both directly and indirectly. The most obvious implication of the massive stimulus packages that have been put in place is that US\$14 trillion of additional debt has been placed on the books and these debts will need to be paid off in advanced and emerging economies alike. However, for the latter, the additional fiscal burden has shifted to external debt markets as a new round of borrowing has emerged to help finance both domestic and balance of payments imbalances. Indirectly, we can anticipate that further debt issuance in rich countries will eventually raise interest rates and foster a repatriation of capital that can further reduce access to and/or costs of EME financing.

The Current Global Outlook

Whether one looks at the IMF's World Economic Outlook or similar projections from the World Bank, the Economic Intelligence Unit, or private forecasters, it is clear that the global collapse of GDP in 2020 will only slowly regain its past trajectory in 2021, but that for many EMEs it will take years to regain their 2019 levels of per capita income. Moreover, there is great uncertainty and variability across countries. The level of uncertainty on a number of indices, such as the subjective Economic Policy Uncertainty Index or the more objective CBOE VIX, places the current economic environment on a razor's edge. No forecast is immune from further COVID-19 related spikes and the fat tail of negative outcomes is large. What this implies is that countries need to seek all measures to improve their resilience and need to use policy instruments wisely.

How is this type of admonition different from normal? In the first instance, never before have we witnessed the IMF preaching additional public spending without any discernible limits. The advice “to spend but keep receipts,” offered by the Managing Director of the IMF, is clearly intended to tell governments that with all other sources of aggregate demand in shock, namely consumption, private investment, and exports, it is only public spending that can sustain output or limit its decline. This position is mirrored in the views of the World Bank, whose Chief Economist and recognized financial crisis expert has noted that you “first fight the war and then worry about paying for it.” This seemed to open the door for expansive counter-cyclical fiscal policy, which was of course paired with extraordinary levels of liquidity by central banks worldwide. This very expansionary monetary policy has kept interest rates very low, a situation that cannot last.

We will return to the issue of public spending; however, the clear position of the IFIs is that the downside risks are enormous; that employment and incomes needed protection, particularly for the most vulnerable, and that poverty levels can be expected to surge due to the global downturn. This situation is likely to persist at least through 2023 and will be difficult since many EMEs were already facing a bulge in external debt service and repayments on debt contracted in previous years at low interest rates (Kharas and Dooley 2020). These repayments will come at a time when exports are depressed, remittances are low, and capital is exceptionally fickle and subject to reversals as advanced economy debt rises and costs rise. To this needs to be added the recent additional borrowing by many EMEs, which were faced with the prospect of declining output and little fiscal space to restore demand. Debt to GDP ratios are high, a mortgage on the future of many countries.

Short-term Relief and Policy Options in the Southern and Eastern Mediterranean

While it is too soon to speculate on the speed of recovery to such a highly relevant sector as travel and tourism, what is clear is that there will need to be new health protocols, changes in the tourism infrastructure, and additional training to impart service-sector critical skills. Government will have to work closely with the private sector and will have to improve monitoring of the health of national workers in addition to incoming tourists. The cost of COVID-19 variant resurgence is too great not to make these investments.

In the immediate future, it seems that most Southern and Eastern Mediterranean countries will be faced with double-digit fiscal deficits in 2020-2021, and that in order to avoid a resurgence of inflation (and subsequent depreciation of the currency), it was preferable to tap capital markets, as some have already done with considerable success

(e.g., Egypt).¹ This strategy for the short term can be supported if the exchange rate can be maintained and if new sources of export growth can be identified. Since many export elements such as commodities or intermediate inputs are determined by exogenous factors, export revenue generation remains highly dependent on travel and tourism. Of course, the development of successful vaccines that can become travel certificates is crucial, but largely outside of Mediterranean countries' control.

Countries in the region have benefitted from financial flows from both the IMF and the World Bank and other multilateral sources. This support is much needed and desirable; however, it merely helps bridge the funding needs of 2020 and will not be sufficient to tackle the financing needs that are likely to emerge. Moreover, it should be noted that a considerable amount of external borrowing, admittedly at relatively attractive rates of interest is short to medium term and not long-term financing of the type that the multilateral development banks (MDBs) can provide. The last piece of the future financing puzzle concerns the future of exchange rates; generally speaking EME currencies have lost ground in recent years and the outlook for a reversal is not bright, thus adding to the debt repayment burden.

The observed country-specific responses take into account the severity of the shock, on average quite dramatic in terms of a 2020 downturn in GDP and some recovery in 2021; possible sources of domestic and external financing; as well as the COVID-19 responses. As seen in Table 1.1, **Morocco** is facing a seriously enlarged fiscal deficit along with recession, but it has been able to put an IMF program in place and also borrow on capital markets (1 billion euros) at very reasonable rates for both 5-year and 10-year tenors. This should provide some relief for 2021 when recovery is expected.² In addition, Morocco is somewhat more diversified, and it has a reasonable dialogue with its European partners.

In the case of **Egypt**, although growth has diminished, it is still positive; however, the fiscal deficit of 7.9% is high and gross debt has already reached 90% of GDP in 2020. Thus, the IMF program in place needs to seriously address structural issues that have long been identified despite Egypt's ability to finance itself with at least \$5 billion in bonds issues in May 2020 at rates ranging from 5.75% to 8.875% and additional borrowing of \$3.75 billion in early 2021. This access should not delay reforms, particularly on governance and private sector activity, since short-term inflows are fickle and can suddenly stop to the detriment of the exchange rate and reserves, putting pressure on repayments.

1. See the EIU's Egypt Economic Outlook: <https://country.eiu.com/egypt>.

2. See the EIU's Morocco Economic Outlook: <https://country.eiu.com/morocco>.

In Tunisia, as seen in Table 1.1, the economy experienced a sharp downturn and only a partial recovery is expected in 2021. Fitch has downgraded Tunisia to a B rating, while debt to GDP is around 88% and the fiscal deficit is expected to reach 10.6% of GDP in 2020.³ The government has been slow to reach agreement with the IMF the short term and as a result, yields on existing bonds have almost doubled in 2020, casting doubt on renewed access to capital markets. This downward decline needs to be arrested.

Turning to Jordan, we saw a sharp GDP decline in 2020, expected to be reversed in 2021, but a fiscal deficit that has risen in 2020 to 8.9% of GDP, while debt to GDP tops 88%. The good news is that an IMF program is in place and a \$500 million bond issue was successful in July 2020 with yields on 5-year bonds below 5%. The less-good news in the near term is that the fiscal deficit is still expected to be 7.7% in 2021 and that structural issues are legacy issues.⁴

Table 1.1 Economic Outlook For 2021

| Country\Aspect | Morocco |
|-----------------------|--|
| GDP (%) | <ul style="list-style-type: none"> • Sharp decline (-7.0) • Modest recovery (4.5) |
| Fiscal | <ul style="list-style-type: none"> • Enlarged deficit to 7.6% in 2020 |
| New Borrowing | <ul style="list-style-type: none"> • €1b bond issue 9/2020 1.495% (500m. 5yrs) 2.175% (500m. 10yrs) |
| IMF Support | <ul style="list-style-type: none"> • Precautionary and Liquidity Line for \$3 bn agreed in April 2020 |
| COVID Policies | <ul style="list-style-type: none"> • 3% of GDP fund created to cover medical facility upgrades and supporting impacted businesses/households • Informal sector supported through monthly direct payment scheme (DRH 800-1200) • DRH 120 billion "Fund for Strategic Investment" created to sustain capital and equity requirements. |
| Country\Aspect | Egypt |
| GDP (%) | <ul style="list-style-type: none"> • Reduced yet positive (3.6) • Continuing downward trajectory (2.5) • Gross debt to GDP ratio @ 90% in 2020 |
| Fiscal | <ul style="list-style-type: none"> • Enlarged deficit 7.9% of GDP in 2020 |

³. See the WB Tunisia Overview, October 2020: <https://www.worldbank.org/en/country/tunisia/publication/economic-update-october-2020>.

⁴. See the EIU's Jordan Economic Outlook: <https://country.eiu.com/jordan>.

| Country\Aspect | Egypt |
|-----------------------|---|
| New Borrowing | <ul style="list-style-type: none"> • \$5b bond issue 5/2020 • 5.75% (\$1.25b, 4yrs) • 7.625% (\$1.75b, 12yrs) 8.875% (\$2b, 30yrs) • \$3.8 bond issue 2/2021, 3.875% (\$750m, 5yrs) 5.875% (\$1.5b, 10yrs) 7.5% (\$1.5b, 40yrs) |
| IMF Support | <ul style="list-style-type: none"> • Rapid Financing Instrument of \$2.8b agreed in May 2020 • Stand-by Arrangement of \$5.2b agreed in June 2020 |
| COVID Policies | <ul style="list-style-type: none"> • Stimulus package equal to 1.8% of GDP Majority of package directed to the business sector, with 50% going to the tourism industry alone, through low-cost loans and grants, with preferential interest rate reduced to certain business sectors from 10% to 8%, and lowered energy prices. Also, the government cancelled 5.3 billion pounds of manufacturing sector debt, cut taxes on dividends by 50%, and temporarily exempted some sectors from real state and value added taxes. • Pensions increased by 14%, alongside targeted monthly cash grants: 500 Egyptian pounds for 3 months for irregular workers, and 332 million pounds dispensed to 288 thousand regular workers in the tourism sector and textile industry by the end of July, to compensate for lost wages, roughly equal to 1,200 pounds per recipient. |

| Country\Aspect | Tunisia |
|-----------------------|--|
| GDP (%) | <ul style="list-style-type: none"> • Sharp decline (-8.8) • Modest recovery (3.8) • Fitch downgrade to B • Debt to GDP @ 88% |
| Fiscal | <ul style="list-style-type: none"> • Enlarged deficit to 10.6% in 2020 |
| New Borrowing | <ul style="list-style-type: none"> • Bond prices have fallen with almost doubling yields to 10% on 2026 bonds, complicating new issuance |
| IMF Support | <ul style="list-style-type: none"> • Rapid Financing Instrument for \$754m agreed in April 2020 |
| COVID Policies | <ul style="list-style-type: none"> • Emergency fiscal measures equal to 2.3% of GDP • Indirect credit support to impacted sectors |

| Country\Aspect | Jordan |
|-----------------------|--|
| GDP (%) | <ul style="list-style-type: none"> • Decline in 2020 (-2.0) • Reversal in 2021 (2.0) • Debt to GDP tops 89% in 2020 |
| Fiscal | <ul style="list-style-type: none"> • Enlarged deficit of 8.9% in 2020, and 7.7% expected in 2021 |
| New Borrowing | <ul style="list-style-type: none"> • \$500m bond issue July 2020 at \$4.95% (5 years) |
| IMF Support | <ul style="list-style-type: none"> • Rapid Financing Instrument for \$396m agreed May 2020 • Extended Fund Facility for \$1.3b agreed in March 2020 |
| COVID Policies | <ul style="list-style-type: none"> • Indirect measures related to essential medical products • Coronavirus relief fund created to support eradication efforts • Temporary cash transfer program |

| Country\Aspect | Algeria |
|-----------------------|---|
| GDP (%) | <ul style="list-style-type: none"> • Sharp decline 2020 (-6.0) • Oil price dependent • Partial recovery 2021 (2.9) |
| Fiscal | <ul style="list-style-type: none"> • Enlarged deficit to 7.7% in 2020 |
| New Borrowing | <ul style="list-style-type: none"> • Plans to issue Islamic (sukuk) bonds |
| IMF Support | <ul style="list-style-type: none"> • Strong resistance to an IMF program |
| COVID Policies | <ul style="list-style-type: none"> • Supplementary finance law amounting 70 billion dinars to mitigate health and economic impacts • Household and enterprise payment obligations relaxed |

Finally, in the case of **Algeria**, the most oil-dependent of the countries with 90% of export revenue derived from oil, the sharp decline of 2020 has been accompanied by an almost doubling of the fiscal deficit to 15% of GDP. With the government's resistance to an IMF program of reforms and diversification, and with talk only of an Islamic bond issue, the outlook for a short-term turnaround is clouded by both internal and external factors, limiting government's options.⁵

Issues of Global Trade and Investment in the Mediterranean

While it is currently forecast that the 2020 downturn in world trade of 10.4%, according to IMF projections, will be reversed in 2021 by perhaps 8.3%, the net impact is that trade will, under the best of circumstances, not be back to the new-normal until 2022. An important fact to recall, however, is that the "new normal" post-2008 trade outlook was far different than before the Great Recession. Some researchers like Evenett and Baldwin (2020) argue that this is in part due to the failure to reverse many of the trade restrictions imposed in 2008-2009, but also that the contours of global trade have shifted significantly over the past two decades. This can be seen in the fact that advanced economies' shares in both world trade and GDP have fallen significantly between 2000 and 2017, the former from 48% to 30% and the latter from 65% to 45%; the gainers have obviously been EMEs, principally China. Overall, these shifts do not serve developing countries well since they are losing advanced economy markets and not gaining developing markets with equal pace.

For developing countries, one implication of this changing global configuration combined with low commodity prices and weak

⁵. See the EIU's Algeria Economic Outlook: <https://country.eiu.com/algeria>.

diversification performance is that without adequate domestic savings and facing an uncertain trading future, they will rely more on capital markets for financing. This reality, made more acute by the pandemic, comes again at an unfortunate time since many EMEs have borrowed extensively over the past five years in particular, when rates were low. The urgency of attracting foreign direct investment (FDI) could not be clearer for Mediterranean countries. Access to external capital markets is a fillip suitable for the pandemic, but not the preferred way to supplement domestic savings.

Indeed, the World Bank (2020) argues that changing GVC patterns caused in large part by new disruptive technologies and a leveling off of logistical gains in transport, offers new opportunities, but only for those well positioned to take advantage of them. Since GVC growth stalled after 2009, its resurgence will require policy predictability and a reduction in uncertainty. Some factors are exogenously determined, but others reside within the realm of public policy. The notion of regional value chains (RVCs) emerging is an attractive concept that will require both major internal reforms and much stronger political efforts at cooperation. And some would argue that RVCs can be given a practical boost by virtue of strategic foreign investment from traditional or new trade partners.

Examining the fundamentals, the World Bank argues that four sets of factors influence the ability of countries to attract FDI. These include endowments, markets, geography, and institutions. Drilling down in each rubric leads us to the view that, as currently positioned, SEMCs⁶ are not that well positioned to attract FDI, although Egypt was the largest recipient of FDI in Africa in 2019 and 2020, and we will argue later that FDI is the most reliable path to break out of the current state of affairs. Within endowments, economies need to be strong in (i) access to finance, (ii) technical and managerial skills, and (iii) highly productive labor in comparison to labor costs. Included in the category of markets are (i) access to inputs with minimal import protection, (ii) standardization of products, and (iii) trade agreements to ensure access. Among the sub-factors of geography are (i) trade infrastructure, (ii) advanced logistics, and (iii) superior information and communication technology (ICT) connectivity and broadband access. And finally, in the institutional arena, countries will do better if they have (i) better governance in terms of stability and predictability of policy, (ii) the ability to certify standards, and (iii) adequate contract and intellectual property enforcement.

Existing evidence, e.g. on many of the sub-factors noted above, point to major lapses in the SEMCs. Access to finance by SMEs is poor in most countries examined and in many state-owned enterprises (SOEs)

⁶. The Center for Mediterranean Integration (CMI): <https://www.cmimarseille.org/>.



crowd out the private sector, while in others oligopolistic firms do the same. Surveys, done by the WEF's Global Competitiveness Report, show SEMCs to be lagging in the areas of skills and managerial talent. Trade regimes tend to be less open and countries, although trying to establish new FTAs, fall far short of major trading countries such as Chile or Vietnam. The World Bank's Logistics Perception Index tracks the ease of transport and the Doing Business Report does the same for ease of operations for foreign firms.⁷ ICT surveys also show major shortfalls and the rankings on Global Governance Indicators, although in some cases improving, are still in the lower half of the countries surveyed.⁸



The New Normal and the Revised New Normal

Many of the aforementioned factors have been covered in previous assessments, and the list of "things to do" is formidable. The fact that there has only been limited progress in the last decade reveals both the difficulty of some of the policy undertakings as well as the relatively less auspicious external environment. The major point to stress is that, while many of the challenges are not new, the policy space to act on them has narrowed and the alternatives have become fewer. External borrowing, which has provided relief and breathing space, is closing as external indebtedness levels rise. The shocks associated with debt distress and debt rescheduling are traumatic, as shown by Reinhart and Rogoff (2011), and the factors leading up to crises are fairly well known and easily identifiable. So yes, governments find themselves between "a rock and a hard place," and none of the escape routes are easy.



The key is to undertake policies that provide the best chance of success and the most resilience to future uncertainty. To be concrete, a long-standing goal of many middle-income countries has been export diversification and the creation of linkages to activities in export processing zones (EPZs). To make these goals a reality, successful countries in other regions have dedicated resources to strengthen the private sector, steering credit their way in exchange for progress on the export goals. This is money well spent and is preferable to subsidies to undeserving economic activities. To be more effective, governments need to be able to work with the private sector in a clear quid pro quo manner. This requires enhanced political and economic dialogue that can perhaps be assisted by outside actors like the EBRD and the EIB and it can be aided by bilateral efforts that are forward-looking.

⁷ See rankings on LPI at worldbank.org/logistics as well as in Doing Business, 2019 World Bank.

⁸ See ICT rankings in the WEF's Global Competitiveness Report 2019 (WEF 2019) and governance indicators in the World Bank's Global Governance Indicators for 2019 (<https://info.worldbank.org/governance/wgi/>).

The “revised new normal” adds to the “new normal” that El-Erian (2016) described after 2008 Great Recession, namely, new global circumstances in which fiscal space was more limited, trade more constrained, and a low-interest rate regime persisted for a long time, and he was largely right in this assessment.

What has the “revised new normal” added? First and foremost, the weak fiscal positions of many countries have become weaker still as public spending has taken up the need to maintain economic activity, especially consumption. Second, the weaknesses in world trade, although somewhat reversible, are not possible to offset and return to pre-2008 levels, and the pace of digitalization has only accelerated past trends affecting GVCs. Third, quantitative easing has led to a huge expansion of central bank balance sheets and the provision of massive amounts of liquidity, resulting in even further reductions in interest rates for privileged borrowers and reasonable rates for others.⁹

There are other pandemic-related aspects that affect revisions to the new normal. First, we know that only those countries that can efficiently connect to trimmed-down GVCs and those able to adapt to new technological realities will benefit. Part of that adaptation also entails reacting to the desires of some multinational corporations to outsource less or to outsource closer to home. This can provide new opportunities in the region. Second, since fiscal space has eroded and debt levels have risen, governments will be hard pressed to maintain incomes and employment, while at the same time reigning in over-indebtedness. Borrowing from IFIs can only provide a fraction of the relief needed, so that debt dynamics look fragile and re-profiling while interest rates are low is advisable. And finally, central banks have largely exhausted their arsenal of tools, meaning that despite massive liquidity injections, there will be more NPLs and bankruptcies. To the extent that state-owned banks continue to protect SOEs that are highly leveraged, it means that Schumpeterian forces will be blocked, and the low-growth trajectories will be maintained.

In the revised new normal situation that is likely to dominate the global economy over the coming years, the role of government becomes more, rather than less, vital; however, the role of government, that was already undergoing a major transformation, needs to be accelerated. As governments as diverse as Vietnam or Uzbekistan or Kenya have discovered, the government’s role becomes one of regulator, innovator, goal-setter, policy establisher, and redistributor and less a producer of things or allocator of credit or generator of employment.

⁹. As the OECD (2020) has argued, however, some financing is going to zombie firms, NPLs are rising, small businesses have suffered the most, and employment patterns favoring working at home are changing the way economies operate and where and how goods and services are produced.

This is a fundamental shift in roles, and only if the state moves out of its past configuration will it be able to help lift private sector activities; and as many have observed, this is a sine qua non for greater regional integration.¹⁰

In this report, we examine the factors that impede this transformation of economies using a modified binding constraints analysis (Hausmann, Rodrik, and Velasco 2005). This approach looks at the major bottlenecks to growth and development. It is consistent with the Spence Commission Report and its major findings (Commission on Growth and Development 2008); however, for each country it seeks to find those major factors that need to be addressed to break free from the shackles of unfulfilled aspirations. Part II begins to examine where countries stand on the various aspects necessary to make progress in this more challenging post-pandemic environment.



¹⁰. See CMI (2020).



Part 2

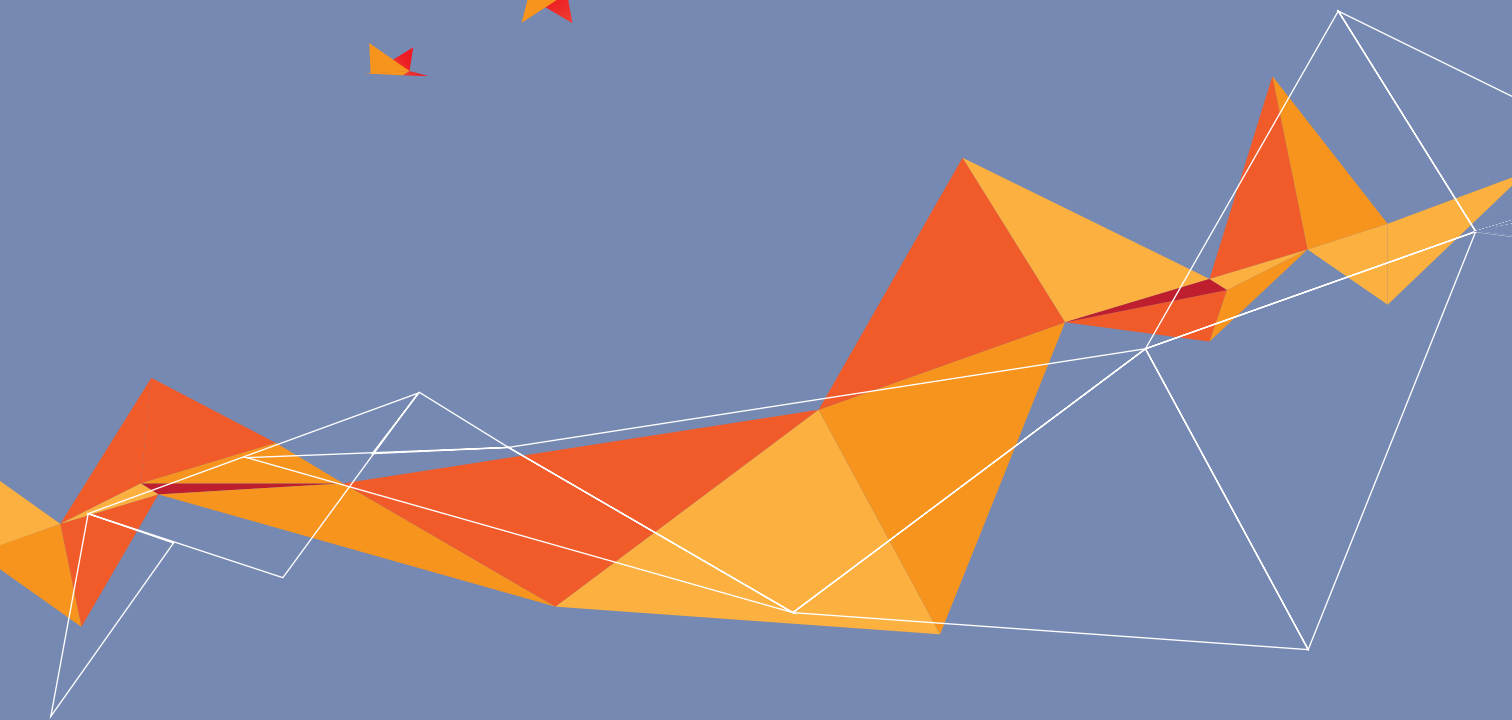
Pre-Existing Conditions in Seven SEMCs



- The Macroeconomic Indicator
- The Trade Integration Indicator
- The Domestic Savings and Investment Indicator
- The Market Efficiency Indicator
- The Governance Indicator
- Poverty and Inclusion Indicators
- The Environmental Indicators



Conclusions Based on the Heat Map Assessments

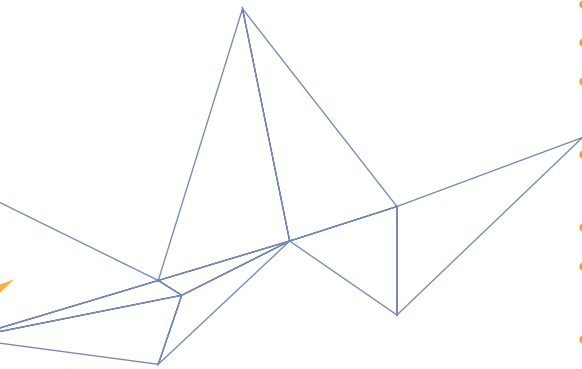




Southern and Eastern Mediterranean countries have many pre-existing conditions that have been extensively analyzed in multiple studies by national governments, international organizations, and international consultants. Unfortunately, an analytical review indicates that, although many are considered as middle-income countries, they lack some of the characteristics of high-growth countries. The COVID-19 pandemic has further undermined the factors underlying these conditions, including putting pressure on social stability. Furthermore, climate change is already negatively affecting water and food security in many countries, trends that will only worsen over time.

Pre-existing conditions, faced by most countries in the region, include:

- GDP growth rates below potential because of distortions in market prices;
- Rapid population growth, high unemployment, and labor market stress;
- Negative current account balances for most countries, increasing reliance on foreign capital;
- Disconnect between educational attainment and job prospects;
- Relatively high subsidies and inefficient government expenditures;
- Large role of the state in the economy through regulation combined with SOEs that receive preferential access to finance and other benefits;¹¹
- Lack of competition as seen in monopolistic or oligopolistic domestic markets;
- Poor governance and a weak business environment;
- Little trade integration with the global economy and very little intraregional trade; and,
- Large pressures for increased emigration.



To give more granularity to the analysis, this report will focus exclusively on seven Southern and Eastern Mediterranean countries, part of the greater MENA region: Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, and Tunisia. It is instructive to examine how these countries fare in terms of some of the characteristics that have been found to be associated with high growth, as identified by the work of the Growth Commission. The studies undertaken by the Commission found that countries that had experienced high growth had the following five characteristics (Commission on Growth and Development, 2008):

1. They maintained macroeconomic stability and exhibited excellent macroeconomic management;
2. They fully exploited the world economy by raising their exports into higher valued-added products, raising productivity, and integrated into the global trading system;

11. The IMF reports that the SOE footprint is larger than it should be, that SOEs exhibit weak performance, and that operational losses in the region (as defined in the report) cost the fisc 2% of GDP.

See Olugbade, O. A., Anderson, G., Atamanчук, M., Ioannou, I., Kass-Hanna, T., Shi, W., & Wong, J. (2021). State-Owned Enterprises in Middle East, North Africa, and Central Asia: Size, Costs, and Challenges, Departmental Papers, 2021(019), A001. Retrieved Sep 23, 2021, from <https://www.elibrary.imf.org/view/journals/087/2021/019/article-A001-en.xml>

3. They mustered high rates of saving and invested in both infrastructure and human capital;
4. They let markets allocate resources, utilizing the efficiency of the private sector; and,
5. They had committed, credible, and capable governments combined with visionary leadership.

Further, indicators that are related to each of the five rubrics of characteristics of high performing economies, identified by the Growth Commission, are presented in Tables 2.1.A to 2.1.E below. An additional indicator related to poverty and inclusion has been added as Table 2.1.F. An indicator for environmental sustainability, an important part of Sustainable Development Goals (SDGs), appears in Table 2.1.G.

Indicators for all variables have been coded into five colors to produce a heat map of how these seven countries compare to the world. The color codings are constructed using the following comparative criteria. Color codes for most variables reflect a relative positioning of countries according to quintiles with red being the weakest position and green being the strongest. The intermediate quintile among countries would be yellow, with light green somewhat better and amber somewhat worse. There is always some overlap in data, so that it is best to consider rankings as either in the top, middle, or lowest category.

Table 2.1.a Quality of Macroeconomic Management

| Country | Indicator | Value |
|-------------------------------------|----------------------|---------|
| Morocco | GDP Growth 2010-19 | 3.48 |
| | Unemployment % | 9.20 |
| | Fiscal Balance | (4.09) |
| | Gross Debt/GDP | 65.16 |
| | External Debt/GNI | 46.83 |
| | Debt Service/Exports | 9.19 |
| | Remittances/GDP | 5.69 |
| | Inflation | 1.03 |
| Algeria | GDP Growth 2010-19 | 2.67 |
| | Unemployment % | 11.38 |
| | Fiscal Balance | (5.58) |
| | Gross Debt/GDP | 45.77 |
| | External Debt/GNI | 3.29 |
| | Debt Service/Exports | 0.51 |
| | Remittances/GDP | 1.11 |
| | Inflation | 2.43 |
| Tunisia | GDP Growth 2010-19 | 1.94 |
| | Unemployment % | 14.89 |
| | Fiscal Balance | (3.86) |
| | Gross Debt/GDP | 71.83 |
| | External Debt/GNI | 100.76 |
| | Debt Service/Exports | 15.74 |
| | Remittances/GDP | 4.45 |
| | Inflation | 6.08 |
| Egypt | GDP Growth 2010-19 | 3.90 |
| | Unemployment % | 8.61 |
| | Fiscal Balance | (7.99) |
| | Gross Debt/GDP | 84.21 |
| | External Debt/GNI | 39.40 |
| | Debt Service/Exports | 16.10 |
| | Remittances/GDP | 6.72 |
| | Inflation | 9.36 |
| Jordan | GDP Growth 2010-19 | 2.39 |
| | Unemployment % | 19.08 |
| | Fiscal Balance | (6.01) |
| | Gross Debt/GDP | 78.02 |
| | External Debt/GNI | 75.67 |
| | Debt Service/Exports | 19.17 |
| | Remittances/GDP | 9.24 |
| | Inflation | 0.68 |
| Lebanon | GDP Growth 2010-19 | 1.16 |
| | Unemployment % | 6.23 |
| | Fiscal Balance | (10.49) |
| | Gross Debt/GDP | 174.32 |
| | External Debt/GNI | 144.93 |
| | Debt Service/Exports | 88.21 |
| | Remittances/GDP | 36.20 |
| | Inflation | 6.96 |
| Palestine | GDP Growth 2010-19 | 4.26 |
| | Unemployment % | 25.35 |
| | Fiscal Balance | (4.48) |
| | Gross Debt/GDP | 34.47 |
| | External Debt/GNI | |
| | Debt Service/Exports | |
| | Remittances/GDP | 15.03 |
| | Inflation | 1.27 |
| Current Account Balance/GDP 2010-19 | | |
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The Macroeconomic Indicator

For *macroeconomic management*, eight indicators were used, ranging from growth and employment to fiscal balance, debt, inflation, and current account balances to GDP (Table 2.1.A). Except for Lebanon and Palestine, countries were better than their peers on most of the macro stability indicators. The exception was in current account balances, where they were in the two lowest quintiles, an indication that this group of countries is heavily dependent on external capital inflows. Moreover, all macro variables have been negatively impacted by the effects of the pandemic in 2020 and can be expected to remain weak in 2021, particularly current account imbalances.

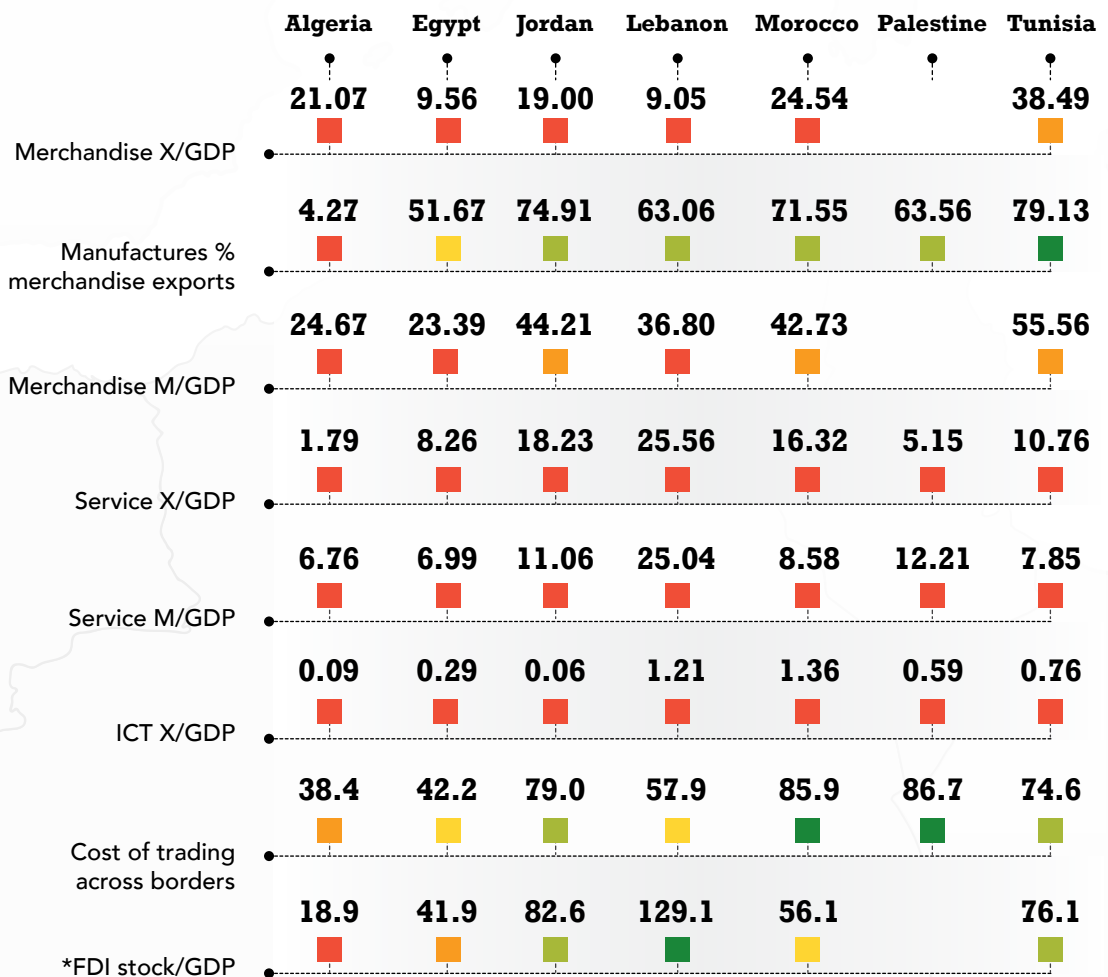
| Country | Indicator | Value |
|-------------------------------------|----------------------|---------|
| Morocco | GDP Growth 2010-19 | 3.48 |
| | Unemployment % | 9.20 |
| | Fiscal Balance | (4.09) |
| | Gross Debt/GDP | 65.16 |
| | External Debt/GNI | 46.83 |
| | Debt Service/Exports | 9.19 |
| | Remittances/GDP | 5.69 |
| | Inflation | 1.03 |
| Algeria | GDP Growth 2010-19 | 2.67 |
| | Unemployment % | 11.38 |
| | Fiscal Balance | (5.58) |
| | Gross Debt/GDP | 45.77 |
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| | Debt Service/Exports | 0.51 |
| | Remittances/GDP | 1.11 |
| | Inflation | 2.43 |
| Tunisia | GDP Growth 2010-19 | 1.94 |
| | Unemployment % | 14.89 |
| | Fiscal Balance | (3.86) |
| | Gross Debt/GDP | 71.83 |
| | External Debt/GNI | 100.76 |
| | Debt Service/Exports | 15.74 |
| | Remittances/GDP | 4.45 |
| | Inflation | 6.08 |
| Egypt | GDP Growth 2010-19 | 3.90 |
| | Unemployment % | 8.61 |
| | Fiscal Balance | (7.99) |
| | Gross Debt/GDP | 84.21 |
| | External Debt/GNI | 39.40 |
| | Debt Service/Exports | 16.10 |
| | Remittances/GDP | 6.72 |
| | Inflation | 9.36 |
| Jordan | GDP Growth 2010-19 | 2.39 |
| | Unemployment % | 19.08 |
| | Fiscal Balance | (6.01) |
| | Gross Debt/GDP | 78.02 |
| | External Debt/GNI | 75.67 |
| | Debt Service/Exports | 19.17 |
| | Remittances/GDP | 9.24 |
| | Inflation | 0.68 |
| Lebanon | GDP Growth 2010-19 | 1.16 |
| | Unemployment % | 6.23 |
| | Fiscal Balance | (10.49) |
| | Gross Debt/GDP | 174.32 |
| | External Debt/GNI | 144.93 |
| | Debt Service/Exports | 88.21 |
| | Remittances/GDP | 36.20 |
| | Inflation | 6.96 |
| Palestine | GDP Growth 2010-19 | 4.26 |
| | Unemployment % | 25.35 |
| | Fiscal Balance | (4.48) |
| | Gross Debt/GDP | 34.47 |
| | External Debt/GNI | |
| | Debt Service/Exports | |
| | Remittances/GDP | 15.03 |
| | Inflation | 1.27 |
| Current Account Balance/GDP 2010-19 | | |
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Source: Growth Dialogue compilation

The Trade Integration Indicator

To measure how well countries are *fully benefitting from the global economy*, nine indicators were used. They ranged from the participation of the economies in world trade to the share of ICT exports in their GDP and the stock of FDI in their economies (Table 2.1.B.). Most of the countries ranked in the bottom quintile among all countries in the world in their degree of integration into the world economy as measured by imports and exports of goods and services as a share of GDP. Overall, it is clear that unlike high-performing economies, these economies are not using the benefits of global specialization and exchange to sell to the world what it wants and to get from the world what it needs, which was the key characteristic of high-performing economies found by the Growth Commission.

Table 2.1.b Heat-Map for Fully Benefitting from the Global Economy

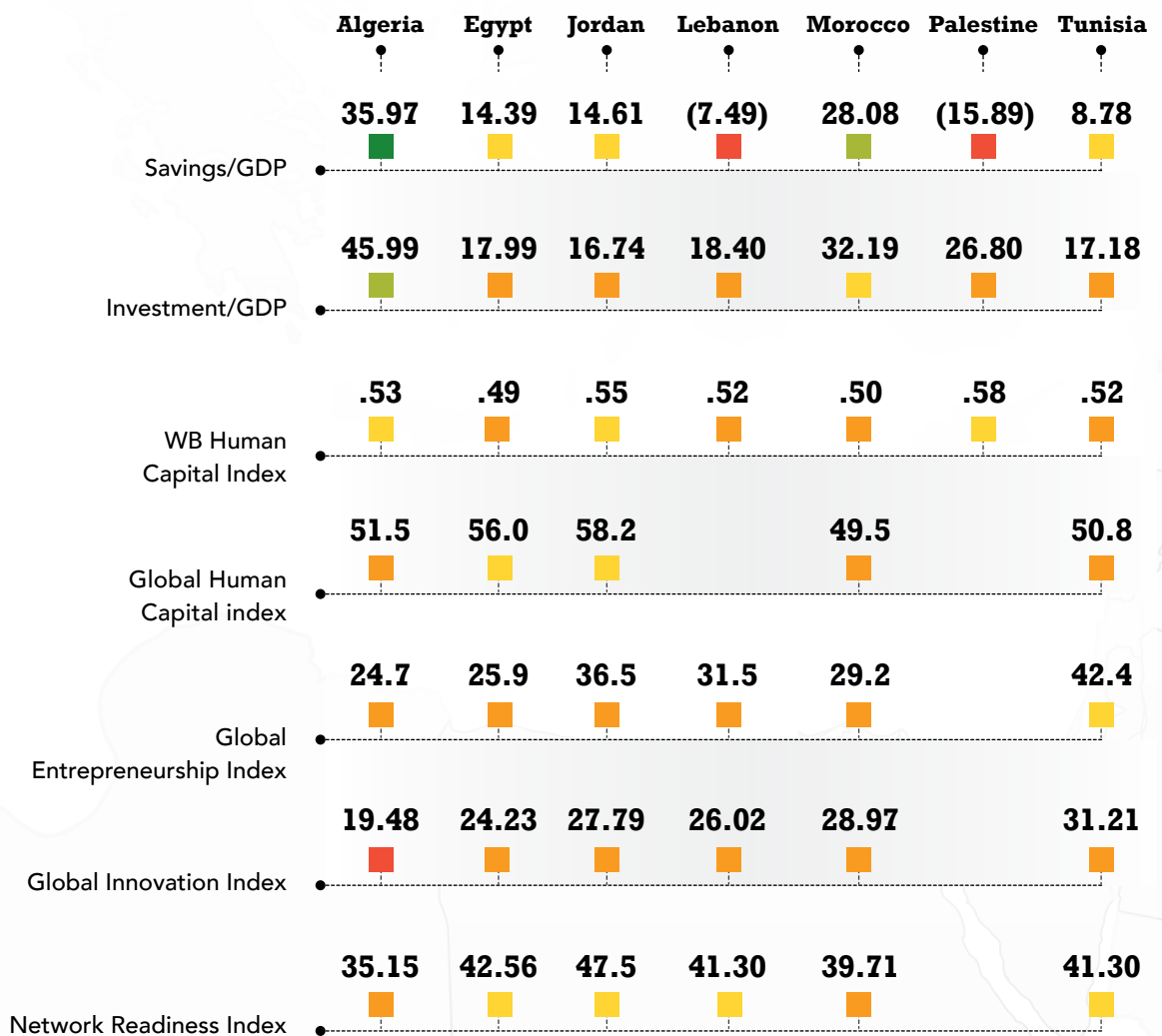


Source: Growth Dialogue compilation

The Domestic Savings and Investment Indicator

In order to measure *rates of savings and investment (or future orientation)*, the set of indicators used range from actual savings and physical investment to human capital, entrepreneurship, innovation, and readiness for the digital economy (network readiness index), Table 2.1.C. On these indicators the performance of the economies was more mixed. Algeria and Morocco did better than most of the world on savings and investment, but all tend to do worse than the world on human capital, entrepreneurship, innovation, and network readiness. These countries clearly need to invest more in the human intangibles and digital infrastructure that can position them to have better future performance.

Table 2.1.c Heat Map on High Savings and Investment



Source: Growth Dialogue compilation

The Market Efficiency Indicator

In terms of measuring how well markets allocate resources, we relied on indirect indicators (Table 2.1.D.). Proxies used included the index of economic freedom from the Heritage Foundation, domestic credit to the private sector as a share of GDP, market capitalization as a share of GDP, the World Bank's cost of doing business, and the World Economic Forum's Global Competitiveness Index (although this is obviously broader than just letting the market allocate resources). Although imperfect, these indicators do help to give some idea of the effectiveness of market allocation. The performance of the seven economies is again mixed, with Jordan and Morocco doing better than the others, and Algeria doing the worst. Overall, the economies still need to improve their market allocation efficacy through improving economic freedoms, lowering costs of doing business, and increasing competitiveness.

Table 2.1.d Heat Map of Market Allocation Indicators

Morocco

| | |
|--|--------------|
| ● Government Expenditure/ GDP% | 29.73 |
| ● Econ Freedom Index | 63 |
| ● Domestic Credit to Private Sector/GDP% | 87.75 |
| ● Market Capitalization/ GDP% | 54.65 |
| ● Cost of Doing Business | 71.02 |
| ● Global Competitiveness Index | 60.0 |

Tunisia

| | |
|--|--------------|
| ● Government Expenditure/ GDP% | 31.60 |
| ● Econ Freedom Index | 56 |
| ● Domestic Credit to Private Sector/GDP% | 86.56 |
| ● Market Capitalization/ GDP% | 21.92 |
| ● Cost of Doing Business | 66.11 |
| ● Global Competitiveness Index | 56.4 |

Algeria

| | |
|--|--------------|
| ● Government Expenditure/ GDP% | 37.82 |
| ● Econ Freedom Index | 47 |
| ● Domestic Credit to Private Sector/GDP% | 25.90 |
| ● Market Capitalization/ GDP% | 0.21 |
| ● Cost of Doing Business | 49.65 |
| ● Global Competitiveness Index | 56.3 |

Jordan

| | |
|--|--------------|
| ● Government Expenditure/ GDP% | 30.31 |
| ● Econ Freedom Index | 66 |
| ● Domestic Credit to Private Sector/GDP% | 76.90 |
| ● Market Capitalization/ GDP% | 47.27 |
| ● Cost of Doing Business | 60.98 |
| ● Global Competitiveness Index | 60.9 |

Egypt

| | |
|--|-------------------|
| ● Government Expenditure/ GDP% | 28.28 |
| ● Econ Freedom Index | 54 |
| ● Domestic Credit to Private Sector/GDP% | 27.03 (WB) |
| ● Market Capitalization/ GDP% | 14.58 |
| ● Cost of Doing Business | 58.56 |
| ● Global Competitiveness Index | 54.5 |

Palestine

| | |
|--|--------------|
| ● Government Expenditure/ GDP% | 27.08 |
| ● Econ Freedom Index | 52 |
| ● Domestic Credit to Private Sector/GDP% | 45.05 |
| ● Market Capitalization/ GDP% | 22.95 |
| ● Cost of Doing Business | 59.11 |
| ● Global Competitiveness Index | 56.3 |

Lebanon

| | |
|--|---------------|
| ● Government Expenditure/ GDP% | 31.53 |
| ● Econ Freedom Index | 52 |
| ● Domestic Credit to Private Sector/GDP% | 106.34 |
| ● Market Capitalization/ GDP% | 14.88 |
| ● Cost of Doing Business | 54.04 |
| ● Global Competitiveness Index | 56.3 |

The Governance Indicator

For *committed, credible and capable government*, the World Bank's Global Governance Indicators provides a set of useful metrics. They include voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption (Table 2.1.E.). All seven countries generally do poorly on all these indicators, although Jordan and Morocco do better than the others. As in the case of future orientation, this is another area in which these countries need to make considerable progress in order to improve their development prospects.

Table 2.1.e Heat Map of Governance

| | Algeria | Egypt | Jordan | Lebanon | Morocco | Palestine | Tunisia |
|-------------------------------------|---------|-------|--------|---------|---------|-----------|---------|
| Voice & Accountability | 20.20 | 8.37 | 28.57 | 32.51 | 29.56 | 21.18 | 56.65 |
| Political Stability/ No Violence | 13.81 | 12.86 | 33.33 | 7.62 | 32.38 | 4.76 | 17.14 |
| Government Effectiveness | 33.65 | 36.54 | 56.73 | 17.79 | 47.60 | 23.08 | 48.56 |
| Regulatory Quality | 7.69 | 18.75 | 57.21 | 36.54 | 46.15 | 56.73 | 35.58 |
| Rule of Law | 20.67 | 37.98 | 58.17 | 19.71 | 48.56 | 33.65 | 55.77 |
| Control Corruption | 29.33 | 27.88 | 60.58 | 12.02 | 45.67 | 46.63 | 52.88 |

Source: Growth Dialogue compilation

Poverty and Inclusion Indicators

For *inclusiveness* four sets of indicators were used (Table 2.1.F). Five were on income distribution and different measures of poverty. Two were indicators of inclusive health outcomes—maternal mortality and under-five child mortality. One was urban versus rural internet access and eleven were on gender (the global gender gap index produced by the World Economic Forum, percent of seats held by women in parliament, the Women, Business and the Law Index produced by the World Bank which measures how laws and regulations affect women's opportunities, female vs male adult literacy rates, and various indicators of female vs male unemployment rates, and labor force participation rates). The countries do better than most of the world in having relatively low Gini coefficients and high shares of income of the bottom 20% of the population. They also do well on having relatively low maternal and under-five infant mortality rates. However, all these indicators will be negatively affected by the COVID-19 pandemic and this will raise major challenges of social stability. In addition, all do poorly on gender equality, although some of them (such as Morocco and Tunisia) have laws and regulations that on paper appear to be more favorable to gender equality than reflected by the actual situation of women.

Table 2.1.f Heat Map of Poverty and Inclusiveness

| | Algeria | Egypt | Jordan | Lebanon | Morocco | Palestine | Tunisia |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Gini coefficient | 27.6 | 31.5 | 33.7 | 31.8 | 39.5 | 33.7 | 32.8 |
| Income % lowest 20% | 9.4 | 9.0 | 8.2 | 7.9 | 6.7 | 7.3 | 7.8 |
| International poverty rate /\$1/90 | 0.4 (2011) | 3.8 (2015) | 0.1 (2011) | 0.0 (2011) | 0.9 (2013) | 0.8 (2016) | 0.2 (2015) |
| International poverty rate \$3.20 | 3.7 | 28.9 | 2.0 | 0.1 | 7.3 | 4.5 | 3.0 |
| International poverty rate \$5.50 | 28.6 | 72.6 | 17.5 | 1.7 | 30.2 | 21.9 | 17.5 |
| Urban population % internet access | | | | | | | |
| Rural population % internet access | | | | | | | |
| *Maternal mortality rate | 112 | 37 | 46 | 29 | 70 | 27 | 43 |
| < 5 year. mortality rate | 23 | 20 | 16 | 7 | 21 | 19 | 17 |
| Global gender gap | .633 | .639 | .638 | .638 | .612 | | .649 |
| Women % of seats in parliament | 25.76 | 27.41 | 11.54 | 4.69 | 20.51 | | 24.88 |
| Women business and law index | 57.50 | 45.00 | 46.88 | 52.50 | 75.63 | 26.25 | 67.50 |
| Male adult literacy rates (2010-19) | 87 | 89 | 99 | 97 | 83 | 99 | 86 |
| Female adult literacy rates (2010-19) | 75 | 87 | 98 | 93 | 65 | 96 | 72 |
| Male labor force participation rates | 67.76 | 71.17 | 63.88 | 72.15 | 70.14 | 70.11 | 68.92 |
| Female labor force participation rate | 17.01 | 18.46 | 14.59 | 23.11 | 21.59 | 18.18 | 24.89 |
| Male unemployment rate % male labor force* | 9.67 | 6.73 | 15.29 | 4.84 | 8.54 | 21.32 | 12.39 |
| Female unemployment rate, % of female labor force* | 20.44 | 21.33 | 23.81 | 9.77 | 10.47 | 41.14 | 22.41 |
| Male youth unemployment rate % male labor force 15-24* | 26.41 | 18.21 | 34.25 | 15.49 | 22.10 | 34.62 | 34.76 |
| Female unemployment rate % Female labor force 15-24* | 45.55 | 53.35 | 50.71 | 21.02 | 22.88 | 66.79 | 38.19 |

Source: Growth Dialogue compilation

The Environmental Indicators

For *environmental sustainability*, three sets of indicators were used (Table 2.1.G.). Two were on CO₂ emissions. Three were on energy. Three were on land and water—arable land per capita, freshwater availability, and water efficiency because of the importance but relatively scarcity of these two resources in MENA countries. Finally, three were on food security, availability, and natural resource resistance to shocks, taken from the Economist Food Security Index. All have low CO₂ emissions per capita and per GDP, but that is mainly because of their low levels of industrialization. On the other hand, though some efforts are noted in countries such as Egypt with the “Benban Solar Park” mega-project, most have low energy efficiency (GDP/energy), and a very low share of renewable energy in total energy use. In addition, they have low arable land per capita, low or very low domestic freshwater availability, and low and very low water efficiency. For the time being, the countries seem to do relatively well on food availability and food security, but they are likely to face major challenges on water availability and food security as the result of climate change.

Table 2.1.g Heat Map of Environmental Sustainability

Morocco

| | |
|-----------------------------------|--------------|
| ● CO ₂ /capita | 1.74 |
| ● CO ₂ kgs/GDP | 0.24 |
| ● GDP/energy | 12.64 |
| ● *Energy import % | 90.72 |
| ● Renew energy/energy | 11.32 |
| ● Arable land /capita | 0.21 |
| ● *Water/internal availability | 36.46 |
| ● GDP/meter ³ of water | 11.30 |
| ● Food availability sub index | 64.2 |
| ● Food security index | 62.8 |
| ● Natural resource resilience | 47.9 |

Tunisia

| | |
|-----------------------------------|---------------|
| ● CO ₂ /capita | 2.65 |
| ● CO ₂ kgs/GDP | 0.25 |
| ● GDP/energy | 11.05 |
| ● *Energy import % | 36.20 |
| ● Renew energy/energy | 12.56 |
| ● Arable land /capita | 0.23 |
| ● *Water/internal availability | 113.66 |
| ● GDP/meter ³ of water | 10.42 |
| ● Food availability sub index | 58.0 |
| ● Food security index | 60.1 |
| ● Natural resource resilience | 49.5 |

Algeria

| | |
|-----------------------------------|-----------------|
| ● CO ₂ /capita | 3.70 |
| ● CO ₂ kgs/GDP | 0.32 |
| ● GDP/energy | 8.67 |
| ● *Energy import % | (177.12) |
| ● Renew energy/energy | 0.06 |
| ● Arable land /capita | 0.18 |
| ● *Water/internal availability | 87.13 |
| ● GDP/meter ³ of water | 20.24 |
| ● Food availability sub index | 55.8 |
| ● Food security index | 59.8 |
| ● Natural resource resilience | 48.3 |

Jordan

| | |
|-----------------------------------|---------------|
| ● CO ₂ /capita | 2.63 |
| ● CO ₂ kgs/GDP | 0.27 |
| ● GDP/energy | 11.21 |
| ● *Energy import % | 96.81 |
| ● Renew energy/energy | 3.23 |
| ● Arable land /capita | 0.02 |
| ● *Water/internal availability | 132.49 |
| ● GDP/meter ³ of water | 35.78 |
| ● Food availability sub index | 54.8 |
| ● Food security index | 61.0 |
| ● Natural resource resilience | 54.9 |

Palestine

| | |
|-----------------------------------|--------------|
| ● CO ₂ /capita | 0.74 |
| ● CO ₂ kgs/GDP | 0.13 |
| ● GDP/energy | |
| ● *Energy import % | |
| ● Renew energy/energy | 10.47 |
| ● Arable land /capita | 0.01 |
| ● *Water/internal availability | 50.25 |
| ● GDP/meter ³ of water | |
| ● Food availability sub index | |
| ● Food security index | |
| ● Natural resource resilience | |

Lebanon

| | |
|-----------------------------------|--------------|
| ● CO ₂ /capita | 3.69 |
| ● CO ₂ kgs/GDP | 0.23 |
| ● GDP/energy | 14.18 |
| ● *Energy import % | 97.87 |
| ● Renew energy/energy | 3.65 |
| ● Arable land /capita | 0.02 |
| ● *Water/internal availability | 37.75 |
| ● GDP/meter ³ of water | 23.95 |
| ● Food availability sub index | |
| ● Food security index | |
| ● Natural resource resilience | |

Egypt

| | |
|-----------------------------------|-----------------|
| ● CO ₂ /capita | 2.53 |
| ● CO ₂ kgs/GDP | 0.23 |
| ● GDP/energy | 12.51 |
| ● *Energy import % | (7.39) |
| ● Renew energy/energy | 5.71 |
| ● Arable land /capita | 0.03 |
| ● *Water/internal availability | 6,420.00 |
| ● GDP/meter ³ of water | 4.23 |
| ● Food availability sub index | 70.2 |
| ● Food security index | 64.5 |
| ● Natural resource resilience | 58.9 |

Source: Growth Dialogue compilation

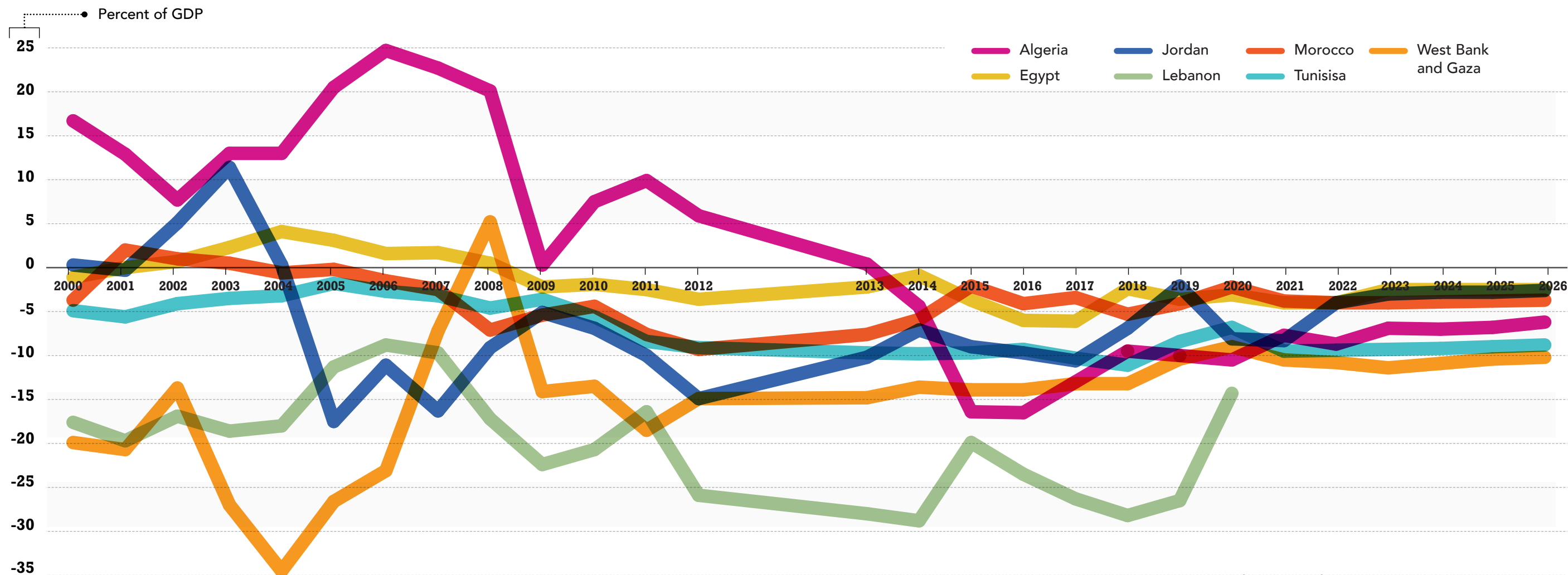
Conclusions Based on the Heat Map Assessments

The basic conclusion of this heat map analysis is that SEMCs were not well positioned prior to the pandemic with respect to some of the fundamental requirements needed to generate favorable and sustainable development outcomes. Despite scoring relatively well in overall macroeconomic management, they are weak on some key characteristics identified by the Growth Commission for successful long-term economic growth. In particular, the rankings are weak with respect to trade integration, poor with respect to the role of the private sector, and below par on logistics and doing business, and on the employment of women. In addition, they are weak on key elements of inclusiveness and sustainability, with opportunities to build better for the future. Aspects of food and water security stand out as being problematic and likely adversely affected by future climate change trends.

Furthermore, the position of this group of countries is being negatively affected by the COVID-19 pandemic as in other emerging market economies. As seen in Figure 2.1, which shows actual data for 2005 to 2019 and IMF projections for 2020-2025, the balance of payments will continue to be challenging for most countries examined. The implications are that recoveries will be slower, the costs borne by society larger, and the cost of ignoring structural impediments and delaying reforms will continue to mount. This has adverse impacts on development outcomes and it means that going back to the status quo ante will not work. A dramatic shift in thinking will be required.

In the subsequent section, Part III, we examine in greater detail the structural challenges facing individual countries. Many of the issues raised will have been noted in other assessments; however, the fact that they are long-standing impediments to development does not detract from their importance. Quite the contrary, in the post-pandemic environment in which the generation of economic progress will be more difficult, it behooves countries to attack their most binding constraints to economic growth.

Figure 2.1 Current Account Balance as Percentage of GDP (2000-2020 Actual, 2021-2026 Estimated)



Note: No projected data for Lebanon after 2020.
Source: IMF Datamapper April 2021.

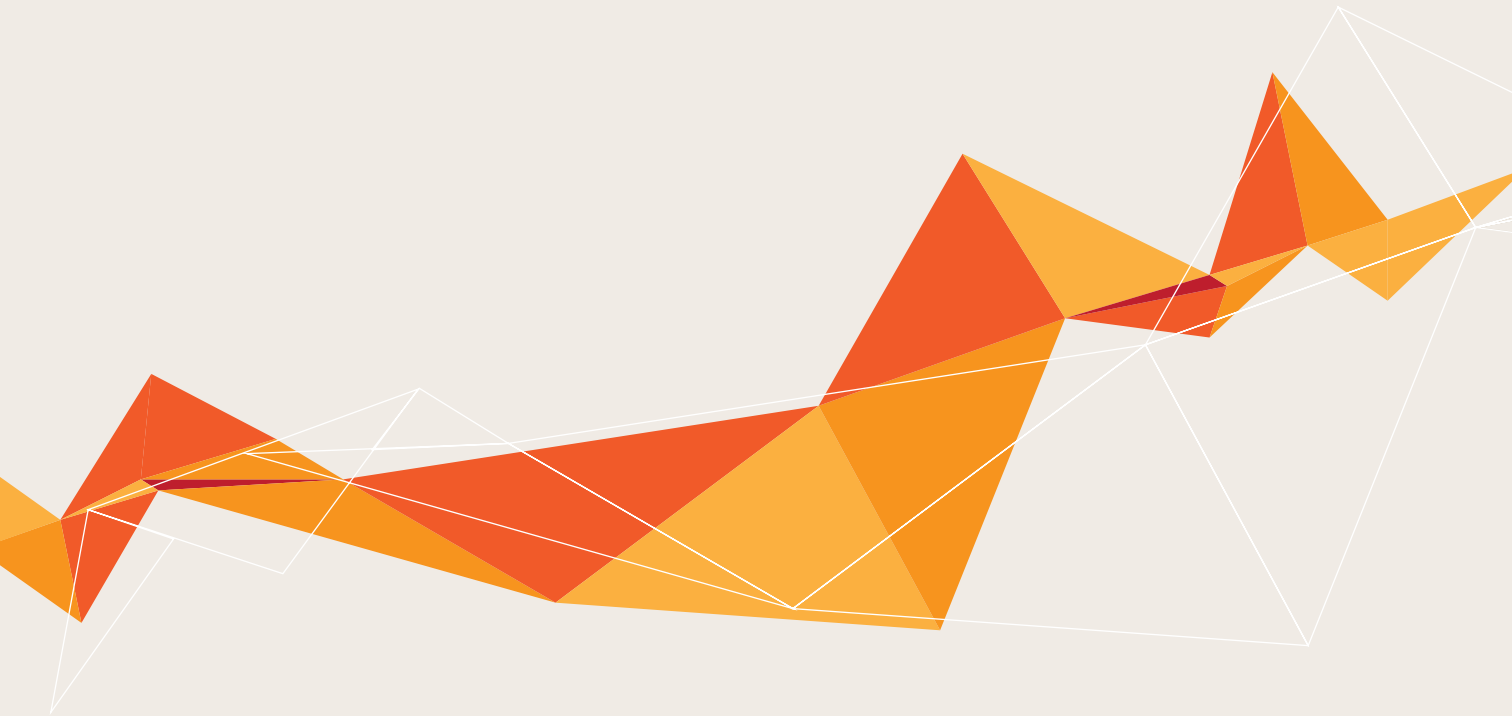
Part 3

Impact of Covid-19 Pandemic and the New Global Context

**Impact of Pandemic on
Southern and Eastern
Mediterranean Countries**

The New Global Context

Policy Implications



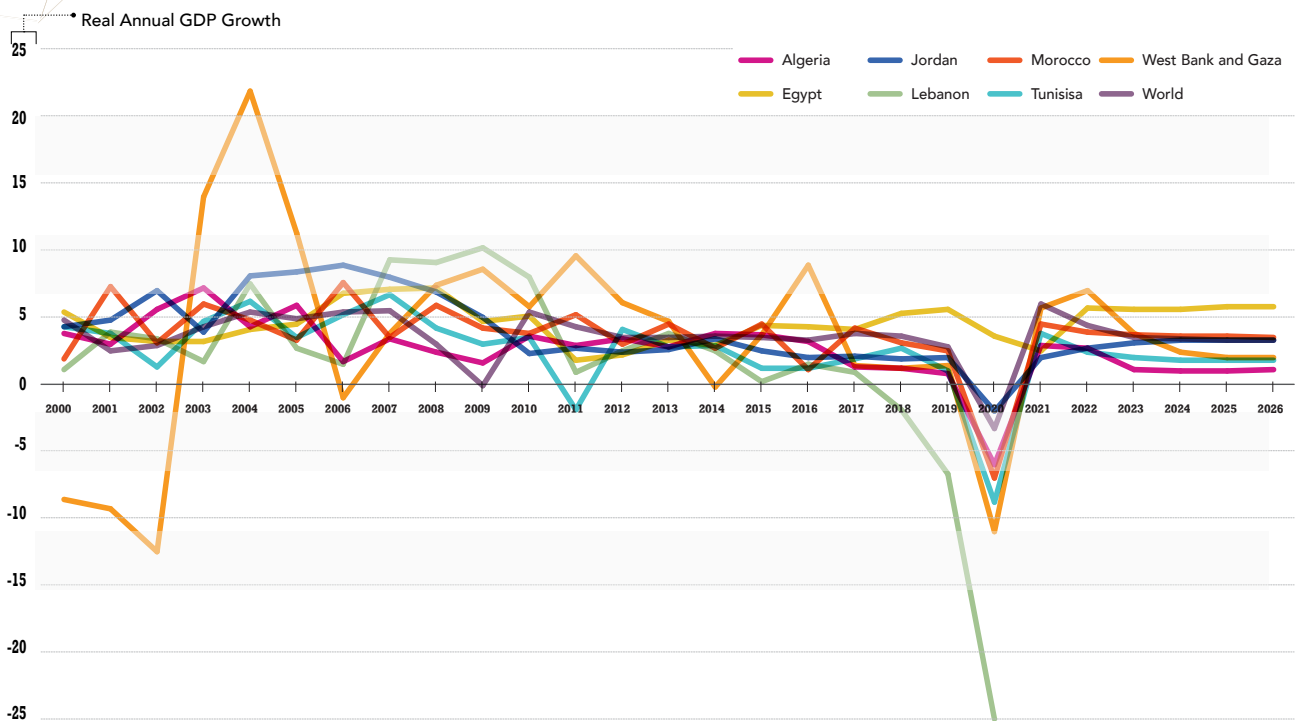
Impact of Pandemic on Southern and Eastern Mediterranean Countries

COVID-19 has been a game changer. It has caused the largest global recession since the Great Depression of 1929. It has also made clear that the world is not well prepared to deal with these types of shocks. The effects of the pandemic on developing countries is going to be longer lasting than currently projected by most analysts. Even though several vaccines have been developed and are starting to be deployed in March 2021, it will probably take at least until 2022 or even 2023 when enough of the world is vaccinated to provide herd immunity.

The fiscal costs of dealing with the health emergency and the fiscal stimulus to support economic activity and extend social protection are large and growing as the toll of the pandemic continues into 2021-22. Even with these large fiscal outlays, the pandemic is increasing poverty, inequality, insecurity, and spurring social disruption (World Bank 2020e). It is also diverting resources from usual investments and thus setting up difficult trade-offs between using resources to fight the pandemic and resources to invest for the future.

Figure 3.1

Real Annual GDP Growth Rates
(Actual 2005-2020, Projected 2021-2026 estimated)

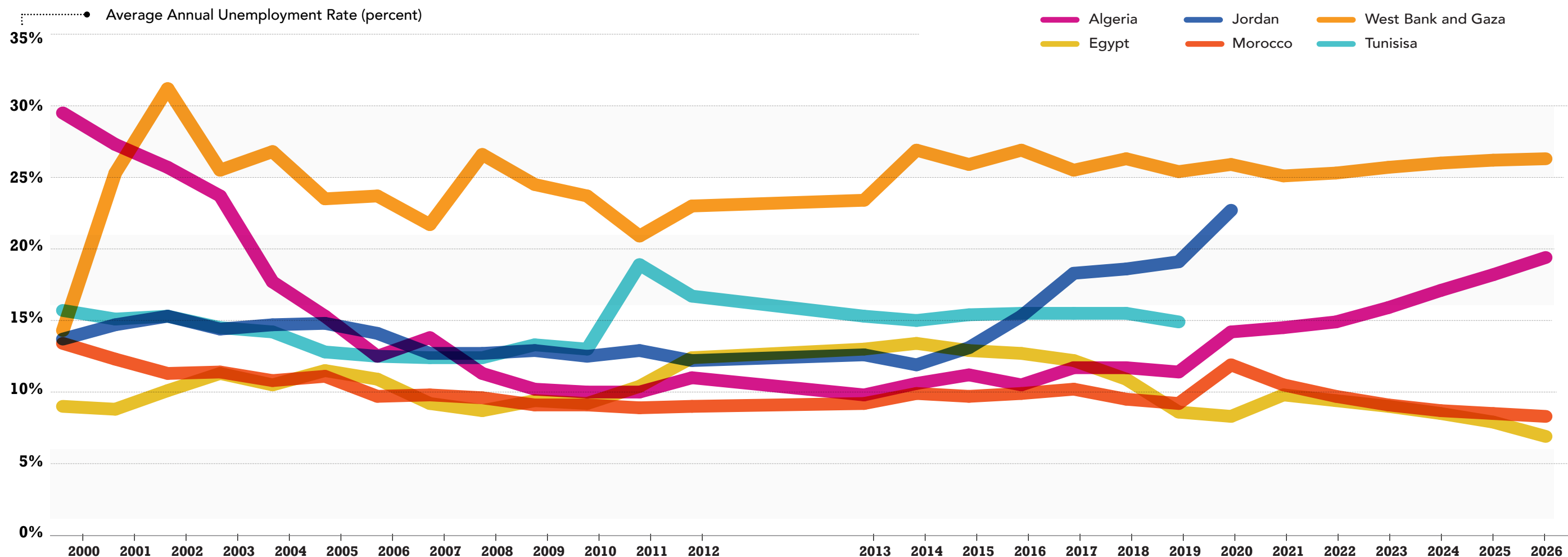


Note: No data for Lebanon after 2020.
Source: IMF Datamapper Oct 2020 data.

Mediterranean countries have been negatively affected by the pandemic in terms of health and economic impacts from the domestic lock downs, as well as from the fall in foreign revenues (World Bank 2020d). Figure 3.1 shows historical growth rates since 2005, as well as the April 2021 IMF projections for 2020-2026 for the selected Mediterranean countries and for the world. With the exception of Egypt, which was the only country in the region to achieve positive economic growth during the pandemic in 2020, the Mediterranean countries have not had high sustained growth rates. They only did better than the world average during the 2008–2009 financial crisis. However, all of them (except Egypt) have had worse performance than world average since 2018 and are not projected to do better than the world average for 2020-2025 (although the West Bank and Gaza is projected to do relatively better for 2021-2022 because it is expected to be recovering from a greater fall in 2020). Oil exporting countries like Algeria have been severely hit by the fall in global demand for oil. The other countries have been hit by a general decline in exports, and from a fall in tourism and remittance revenues, which have been critical sources for foreign exchange.

All the selected countries have had perennially high unemployment rates, but are expected to a rise in unemployment in 2020-21 (Figure 3.2). Algeria's is expected to jump from around 10% for most of period to 14% in 2020 and to keep rising to 18% by 2025. Egypt and Morocco have had unemployment rates of around 10% throughout, with Morocco expected to peak at 12.5% in 2020, and then gradually fall to 8.5% by 2025. Egypt had had unemployment of around 9% from the second half of 2000s, which rose steadily to 13.4% in 2014 before falling gradually to an expected 8.3% for 2020 and rising steadily to almost 10% 2021-2023. Jordan had unemployment rising steadily from 12% in 2014 to 19% in 2019 and is expected to be 22.5% in 2020. Tunisia had peak unemployment of 19% in 2011 and has hovered around 15% since 2013 with expectations it will worsen because of the pandemic. The West Bank and Gaza have had unemployment of around 25% but the rate is expected to jump to 26 % in 2020. However, the IMF projections appear overly optimistic for both growth prospects as well as for unemployment due to the longer effects of the pandemic now expected.

Figure 3.2 Annual Percentage Unemployment Rate
(2000-2020 Actual, 2021-2026 Estimated)

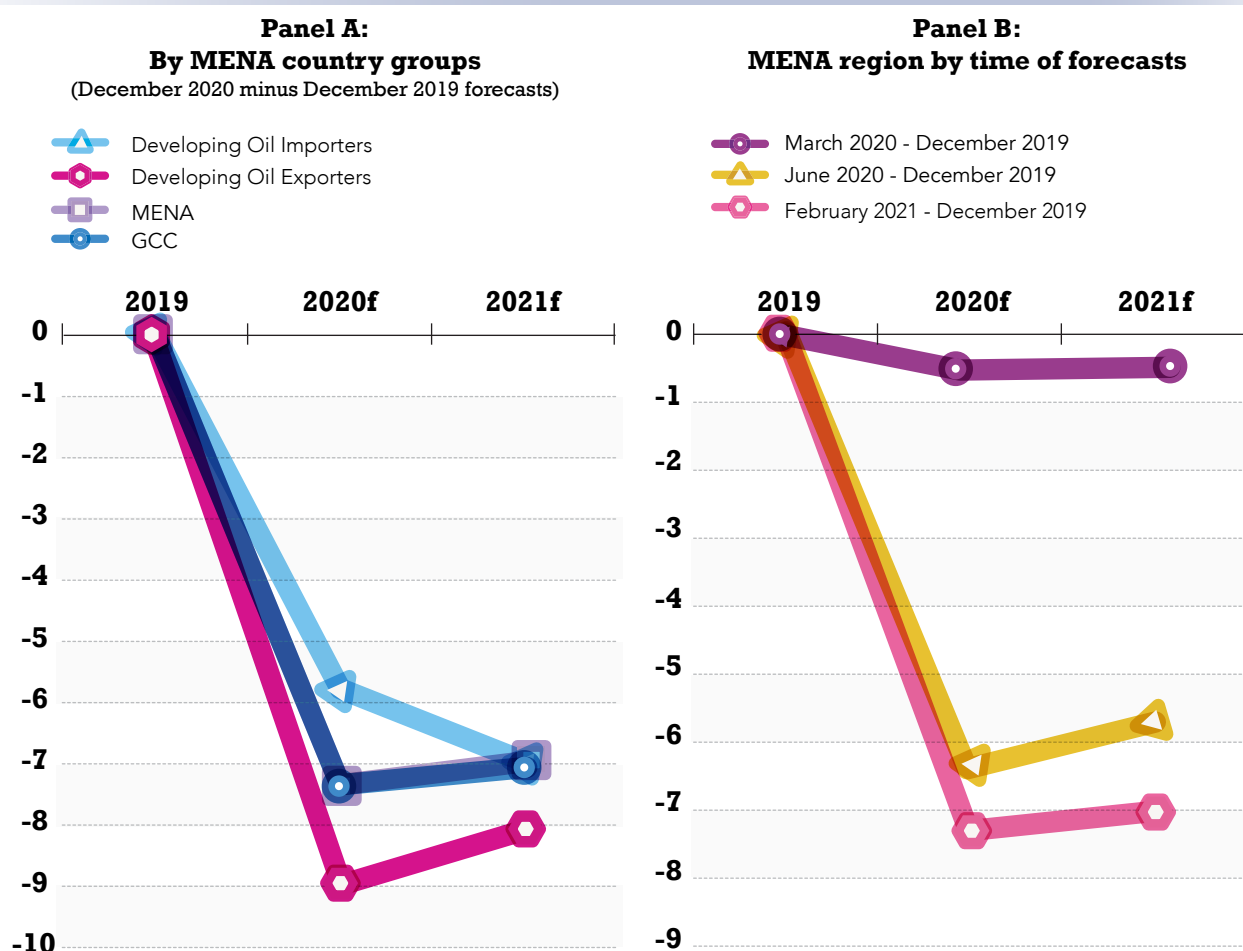


Note: No data for Morocco after 2020, nor for Tunisia after 2019.
Source: IMF Datamapper April 2021.

Panel A in Figure 3.3 below shows the growth forecasts for three different subgroups of MENA countries. Comparing the forecasts made in December 2019 to those made in December 2020 the largest downward adjustments are for the developing oil exporters that include Algeria. Panel B shows how the forecasts for growth in 2020 and 2021 have consistently been adjusted downward compared to December 2019, March 2020, June 2020, and February 2021.

Figure 3.3 Forecasted Fall in GDP for MENA Countries for 2020 and 2021 versus Counterfactual of No Crisis by Comparing More Recent Growth Forecasts with those of December 2019

Not a V-Shape recovery relative to the counterfactual of no crisis:
The expected GDP losses of the crisis



Source: World Bank Staff calculations based on data from Focus Economics.

Notes: "GCC" includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE. "Developing Oil Exporters" includes Algeria, Iran, Iraq and Yemen. "Developing Oil Importers" includes Egypt, Jordan, Lebanon, Morocco and Tunisia. "MENA" includes countries in all three groups. Data for Egypt correspond to its fiscal year, running from July 1 to June 30 in Egypt.

Table 3.1 presents lower-bound estimates of the increase in poverty head count for various countries. The estimates are based on the assumption that the impact is inequality neutral, which is clearly not the case. We know that the pandemic's impact has disproportionately affected low-income persons. They tend to be self-employed, in jobs in the informal sector where they do not have social protection benefits, or in industries such as tourism, retail sales, garments, and textile that have been disproportionately negatively impacted by the pandemic.

Thus, the pandemic has increased the number of poor in Mediterranean countries, but it has also increased income inequality: both through the direct job effects noted above, but also because richer households have been able to continue to work by switching to telework, while those in poorer households are in employment which cannot be performed at a distance. Moreover, workers in the formal sector tend to have employment insurance and social protection and health benefits, whereas those at the lower part of the income distribution do not benefit from unemployment insurance or social protection. It is for this reason that these are likely underestimates since the impact of income shifts tends to be augmented by worse Gini coefficients, producing more absolute poverty.

Table 3.1

Estimates of Increase in Poverty Headcount Due to Crisis Based on Private Sector Growth Forecasts as of February 2021 Using Varying Elasticities Across Countries of Impact of Growth Downturn on Poverty (Percentages of Pre-crisis Poverty Rates)

| Country | Change in forecasts (%) | % Changes in Poverty Headcount Due to Expected GDP Losses from the Crisis | | |
|----------------|-------------------------|---|--|--|
| | | 2021 | International poverty rate (\$1.9 in 2011 PPP) | International poverty rate (\$3.2 in 2011 PPP) |
| Algeria | -8.5 | 26.50 | 44.52 | 25.53 |
| Egypt | -4.3 | 16.31 | 11.32 | 3.51 |
| Iran | -4.3 | 17.50 | 11.45 | 7.67 |
| Iraq | -15.1 | 99.41 | 47.09 | 20.97 |
| Jordan | -4.3 | 31.28 | 19.74 | 11.16 |
| Lebanon | -31.3 | | | 199.89 |
| Morocco | -8.4 | 28.41 | 27.05 | 19.60 |
| Tunisia | -8.6 | 47.70 | 34.96 | 24.82 |

Source: World Bank Staff calculations based on data from Focus Economics and varying poverty-GDP elasticities. "—" indicates that pre-crisis poverty rates at the indicated thresholds were estimated at zero.

The direct human impact of the pandemic in Mediterranean countries is still at a very early stage. Although there is great variance across countries, as of early 2021, the infection rates were still at low levels and the number of deaths per million population were low. This reflects in part the exposure of the different countries to the infected persons as well as the different lock down measures imposed. However, both the infection rates and the cumulative number of deaths have been increasing in most countries. Moreover, except for Morocco, the percentage of the population that has received COVID-19 vaccines is significantly below one percent. In addition, as in most developing countries, sufficient supplies of vaccines have not been secured. Therefore, the numbers of people infected and the death rates can be expected to increase significantly until a substantial share of the population can be vaccinated. This is likely to extend into 2022. In addition, because of the development and spread of new variants, it is quite likely that new vaccines or booster shots will be necessary, further straining health systems and government budgets.

Table 3.2 COVID-19 Data as of May 24, 2021

| | Algeria | Lebanon | Egypt | Jordan | Morocco | Tunisia | West Bank + Gaza | MENA region |
|---|---------|---------|-------|--------|---------|---------|------------------|-------------|
| Percent of population tested | 0.52 | 64.62 | 2.71 | 70.79 | 17.44 | 12.37 | 35.09 | 29.9 |
| Percent cases to total population | 0.29 | 7.95 | 0.25 | 7.15 | 1.39 | 2.90 | 5.93 | 2.01 |
| Percent change in cases last week compared to previous week | 28 | -5 | -2 | 53 | 93 | 52 | -6 | -10 |
| Cumulative deaths per million population | 77 | 1,129 | 141 | 910 | 245 | 1,026 | 666 | 383 |
| Percentage change in deaths last week compared to previous week | -4 | -57 | -7 | -35 | -8 | -8 | -40 | 13 |
| Percent of population that has received COVID-19 vaccine | 0.17 | 9.74 | 1.84 | 13.92 | 33.78 | 6.48 | 9.30 | n.a. |

Source: World Bank (2021), including MENA aggregates.


The New Global Context

Moreover, the negative impacts from the COVID-19 crisis are likely to be compounded by other adverse global trends (see Box 3.1). Trade is not expected to regain its pre-crisis levels because of shrinking global value chains, increasing protectionism, technological change, and the perception of increased risk of trans-border trade. In the social area, besides increasing inequality and risk of social unrest, there is further deterioration in trust in government and official institutions, as well as a growing anti-globalization movement. On the technological side, as will be developed further below, rapid advances in digital technology are leading to increased technological convergence with both positive and negative effects. These are disrupting economic and social order and contributing to an increase in inequality.

On the environmental side, the COVID-19 pandemic is just the current example of a major global shock. Other pandemics are expected, as well as other global economic and environmental shocks, including the impact of climate change on extreme weather and rising sea levels. These trends will increase water shortages and negatively impact food security (see Technical Paper by Barghouti [2021] on this topic).

The COVID-19 crisis and the new global context means that it will be harder for countries to meet the five characteristics of successful countries as well as the challenges of inclusiveness and environmental sustainability. Let us review these factors in light of recent evidence.

- ***The Role of the State.*** This area is extremely critical for dealing with pandemics and similar shocks. It is also essential to reform the state in many countries we examined because success in other areas of economic management and leadership depends on capable governments that are “fit for purpose.” More specifically, the state needs to move from being a producer to being the regulator, the convener, and strategic catalyst for FDI. It must engender the trust of the citizenry by being efficient, honest, and accountable in the exercise of its key functions. In addition, a committed and capable government is necessary to provide a key strategic vision for future development.
- ***Macro Management Even More Vital.*** It will be hard to maintain macro stability given the aftershocks of the COVID-19 crisis. Revenues are down, expenditures are up, and, as a result, fiscal deficits are rising. SEMCs are going to need significant external financing to help deal with the increased fiscal and balance of payments deficits and to build up fiscal and foreign exchange buffers. More will need to be done with respect to external indebtedness, which in many cases will become unsustainable.

- 
- ***The Changing Nature of the World Economy.*** As noted in the heat map exercise in Part II, SEMCs were not fully exploiting the world economy before the crisis. The crisis has reduced exports and lowered foreign exchange remittances, prompting lockdowns and causing domestic recessions. However, there is still ample scope for exploiting the world economy by increasing exports and by removing distortions to trade. This will require fundamental reforms, however, of the kinds long advocated by analysts, donors, and advisors alike.
 - ***Higher Rates of Investment.*** The necessary levels of investment cannot be attained even were domestic savings to be bolstered, which is unlikely in an environment of tepid economic growth. This implies that new sources of foreign capital need to be identified and attracted, such as strategic FDI and enhance capital flows from dedicated partner countries.
 - ***Inefficient Allocation of Resources Can No Longer be Tolerated.*** As noted in the heat map analysis, this was a major weakness for SEMCs. The severity of the pandemic has forced governments to intervene even more in the economy in order to save lives and livelihoods. As the pandemic is brought under control, governments will have to remove distortions in factor and product markets to stimulate greater economic efficiency. In principle, many areas can be improved just by removing distortions or other constraints that governments have put in the way of efficient allocation of resources.
 - ***Inclusiveness is Essential.*** Inclusiveness has become more important because of the increase poverty and rising inequality caused by the pandemic noted above. Countries that are unable to deal with these challenges are likely to face major social disruption. Increased social protection measures, particularly if well targeted, can make a difference, but there are opportunity costs of diverting spending from growth-generating investments. Hence, the role of foreign capital inflows becomes even more vital.
 - ***Sustainability is the Newest Challenge.*** Including sustainability in development strategies has become ever more important. The pandemic showed the urgency to build SEMCs resilience to external shocks. Future shocks may not be health related, but surely will affect outputs, livelihoods, and migration patterns. They will require government planning and effective interventions. The pandemic has been a warning shot for what will be coming from climate change, especially regarding water issues.

Policy Implications

The implications of these trends are two-fold. First, past weaknesses that have been ignored for decades need urgent attention since the room for maneuver has shrunk. Second, although there are many aspects of the previous growth paradigm that still are valid, and we



have pointed them out, there are new considerations that will also shape the future outlook. The returns to the previous export-led growth strategy are still present; however, the actual gains will depend on new disruptive technology diffusion and the digital economy. Those countries that can attract new industries and new service industries will still be able to benefit from global integration even though physical proximity will no longer be the main cost advantage. The nature of manufacturing will change.

For manufacturing exports, the changing global pattern is clearly influenced by the rise of China and the very rapid expansion of its manufactured exports due to its dominance and competitiveness. It is also due to the rapid advances in technology and the convergence revolution, both of which are diminishing simple labor costs advantages of developing countries. Technology and perceived risks to locked-in capital investments are also restructuring global value chains and reducing offshore production in developing countries. These trends coincide with the reduced demand for commodities arising from slower global growth. In addition, for oil exporters, the pandemic crisis is an early warning of the fall in demand that will come from an inevitable switch to other fuel sources, and from efforts to reduce fossil fuel use more generally in order to curb CO₂ emissions.

One positive note might be the Africa Continental Free Trade Agreement (AfCFTA) that has been endorsed by 54 countries and could provide some greater impetus for intra-regional trade. A beginning point could well be better integration among countries of north Africa and the Levant if new political arrangements can be fashioned and sufficient outside financial support can be mustered. This places a challenge at the feet of the wealthier partner countries, but it places an even larger challenge to the affected countries themselves. There is no dearth of analysis as what needs to be done to better integrate the sub-region; however, there has been very little concrete action. Perhaps the pandemic and its after-effects can prompt a political resurgence of interest combined with some basic reforms that are the sine qua non for effective trade integration.

Finally, in the geopolitical area there are increased frictions between the United States and China, which may be dividing the world into two economic and technological blocks. There are also increased tensions in the Middle East, particularly between Israel with new allies and Iran, as well as continuing conflict in Syria, Yemen, and other countries that affect the security and stability of the region. More broadly, there has been further erosion in the international economic order. This implies that governments that are more nimble and more strategic will manage to thread their way better than those that are mired in the past and unable to reform. Box 3.1 outlines some of the new trends that governments will need to contend with. If the pandemic has taught us anything, it is that governments need to be capable of abrupt changes in policy and this is unlikely to change anytime soon.



Box 3.1



Key Global Trends

Economic

- Continued global slow growth for 2020-2021
- Forecasts for better growth 2022-2025, but seem overly optimistic and growth not likely to reach levels of last decade
- Weak global markets and fall in trade
- Continued protectionism
- Altered global value chains
- Deteriorating fiscal positions

Social

- Increasing inequality with-in and across countries exacerbated by the COVID pandemic
- Growing risk of social unrest
- Deterioration of trust in governments
- Growing anti-globalization movement

Technological

- Rapid technological development with positive and negative effects, but disruptive economic and social impact
- Increasing importance of digital technology accelerated by the COVID-19 pandemic
- Digital divide and disruptive technologies contribute to increase inequality unless special efforts are made to offset this negative effects

Environmental

- COVID-19 just current example of major global shock
- Expect even stronger negative effects of global warming
- Water shortages and food security
- Need to reduce use of fossil fuels, move to renewables, and increase energy efficiency

Geopolitical

- Increasing frictions between United States and China may be dividing world into two economic and technological blocks
- Increased regional tensions in the Middle East
- Further erosion of the international economic order

Part 4

Key Elements of Post Pandemic Development Strategies

Short Run

Recovery and Transition



There is a need to rethink post pandemic development strategies for the Southern and Eastern Mediterranean countries. These have to include a focus not just on growth, but social inclusion and sustainable development. The needs are greater because the pandemic is undoing years of progress on poverty reduction and it is increasing income inequality. It has also depleted the fiscal and foreign exchange buffers and degraded human capital. Moreover, while the challenges of negative pre-existing economic conditions are still there, simply put, tolerance for them has perforce been reduced by the exigencies countries are facing.

Short Run

There are no magic solutions here. In the short run, countries need to continue to address the health emergency and to protect livelihoods. They also have to line up foreign financing to help them deal with increased fiscal and balance of payments deficits, as well as to rebuild fiscal stability. The latter requires increasing the efficiency of public expenditure in order to make space for the new demands on the fiscal budget of dealing with social safety nets but also directing resources to the disadvantaged in society. To do this entails cutting wasteful fiscal subsidies, better targeting of fiscal support programs, and getting government out of lines of business that are not based on either the provision of public goods or offsets to undesirable market outcomes.

Recovery and Transition

For the recovery and transition to longer-term strategies, countries need to address the new challenges as well as remedying pre-existing constraints to better economic performance. The key new challenges are how to reignite growth, making it more inclusive than it was in the past in order to deal with increased unemployment, increased inequality, and increased mistrust of government. But addressing these new challenges also requires dealing with many of the extant conditions that were inhibiting economic development. This includes the problems of weak governance, poor incentive regimes, unstable financial flows, low human capital outcomes, insufficient interaction with the global system, and insufficient technological capability.

One key element that can help is to take advantage of the potential offered by the technology revolution, the digital economy in particular. For the longer term, countries also need to address key issues of environmental sustainability. For many SEMCs, the most immediate need is to address water scarcity (see the technical paper by Barghouti

[2021] that accompanies this report). Other issues are food security, renewable energy extreme weather events, and pollution control, all seemingly longer term, but if ignored, perhaps producing undesirable impacts in the nearer term.

Table 4.1 presents a list of some of the key elements that countries can consider in developing post-pandemic development strategies. It identifies which are most relevant for selected SEMCs, and summarizes some of the key policy actions that need to be undertaken. This list should be interpreted as a menu of areas that countries may wish to develop as part of their revised development strategies.

Table 4.1. Key Elements of Post Pandemic Development Strategies for SEMCs

1. Improve governance and the economic incentive regime

Strategic Options

Two of the key characteristics of fast-growing countries are strong leadership and good governance and economies driven by market incentive. The first is important to attract domestic and foreign investment, and to provide direction for economic development. The second is critical to provide a level playing field and to improve economic efficiency and competitiveness.

Country Relevance

As seen in the heat map in Part II, governance and market allocation are very weak areas in SEMCs. In addition, in Algeria, Egypt, Morocco, and Tunisia, state-owned enterprises dominate large parts of the economy and receive favorable access to credit and protection from competition. In most there are also high costs for doing private business.

Key Actions

Strengthening the rule of law, reducing corruption, and improving regulation are challenging for political economy reasons because entrenched interest groups tend to block reform. The same is true for removing red tape and supporting the efficient functioning of markets. However, crises often offer the opportunity to undertake significant reforms. The COVID 19 crisis and the threat of social instability because of increasing poverty and income inequality may provide openings for undertaking reforms needed to improve governance strengthening the rule of law, reducing corruption, and improving regulation when there is strong leadership capable of addressing the challenges and building coalitions to push through necessary reforms.

2. Strengthen the financial system

Strategic Options

Effective financial systems are critical to fund the growth and diversification of economies. This includes not just the formal banking system, but also the capital market. It also includes funds and institution to help finance SMEs that have difficulty accessing credit. To improve social inclusion, it is also necessary to develop new methods to reach the unbanked.

Country Relevance

The financial system is not very well developed in SEMCs. The banking system in most of these countries allocates too much credit to SOEs. The share of loans to the private sector and market capitalization to GDP is particularly low in Egypt, where domestic credit to the private sector represents 27.3% of GDP (WB).

Key Actions

SEMCs need to provide a more equal playing field for the private sector to get access to bank credit. More financing needs to be directed to small and medium enterprises (SMEs). Fintech can be used to extend banking services to the unbanked population. The capital market has to be deepened. Venture capital institutions need to be developed to fund new start-up enterprises, particularly new technology digital enterprises, which the banking system does not finance because new firms do not have physical assets to use as collateral.

3. Strengthen human capital

Strategic Options

There are three key components to human capital. One is education and skills. Lockdowns because of the pandemic have interrupted traditional face-to-face education and prolonged unemployment is also likely to lead to deterioration of skills. The second is health, which has also been negatively affected by the pandemic. The third is social protection which is both critical to help people cope with the income losses from the pandemic as well as with the restructuring of economic activity due to the recession and job displacement. More financing needs to be directed to SMEs. All three are critical for competitiveness and social inclusion. Investments in human capital are critical to enable people to make effective use of new technologies and to improve social welfare.

Country Relevance

All seven SEMCs were average to low on quality of education (when adjusted for quality), health, and social protection, key components of human capital. The pandemic has increased the weakness in education and made clear the need to improve the health and social protection systems. While there has been some move to deliver education and health digitally in most countries, there is much more than could be done.

Key Actions

Improving education and skills requires a major reform of the education system. The problem is not just the low quality but the mismatch between the content of education and the needs of the economy. There is not enough of a focus on science technology and math in the curricula. In addition, new skills are needed to make effective use of new technologies such as biotech and digital technologies. The health system needs to be expanded to deal with response to the current COVID pandemic as well as future pandemics which are likely in the future. The social protection system has to be expanded to provide income support to those negatively affected by the pandemic as well as those that did not have social protection even before the pandemic because they were in informal employment. Digital technologies can be used to extend the reach and reduce the costs of improving human capital.¹²

4. Expand trade

Strategic Options

Increased trade improves efficiency and exchange. Increasing exports will be challenging, but there are opportunities to build on their comparative advantage by strengthening their competitiveness as well as by making more effective use of global and regional inputs of products, services, and knowledge.

Country Relevance

All seven countries are not very well integrated into global trade. All could expand the share of trade in their economies to benefit from economies of exchange and specialization according to comparative advantage.

Key Actions

Requires reduction in tariff and non-tariff barriers but also improving business environment, education and skills, innovation capability, and physical and ICT infrastructure. With the increased importance of services and digitalization it also requires more liberalization of service trade as well as agreements on digitally enabled trade.

¹². See Bashir et al. (2021, forthcoming) for a discussion and examples of how digital technologies can improve human capital outcomes, based on the experience in South Asia.

5. Increase diversification and upgrading

Strategic Options

Diversification of the economy is part of economic growth. There is potential to increase and diversify manufacturing and agriculture by moving up to higher value-added products. The greatest potential, for developing countries, however, may be in increasing the size of the service sector by diversification and moving to higher value-added business and knowledge services. This also includes diversification of exports and export partners to increase trade revenues and to create greater resilience to down turns in product and country markets.

Country Relevance

All seven countries have opportunities to move to higher value-added sectors in agriculture, industry, and especially in services. The service sector in all but Lebanon is roughly about 60% of their economies whereas it is more than 75% in developed economies.

Key Actions

Diversification of the economy and of merchandise and service exports requires attracting FDI and improving education and skills plus innovation capability, physical and ICT infrastructure. Opportunities for diversification in agriculture involve moving to higher value-added crops that are not very water intensive such as dates and fruits, and using the foreign exchange earnings to import water intensive crops such as cereals. In manufacturing it involves moving into more technologically complex products as part of global value chains that generally require more service inputs and more stringent compliance with technical standards and timeless so logistic service critical. In services it requires increased technical knowledge, and digital skills.

6. Increase FDI

Strategic Options

FDI can provide not just capital but management, technology, and access to markets. All these are in short supply in the SEMCs.

Country Relevance

Algeria and Egypt have very low FDI stocks to GDP. Morocco has average and Tunisia and Jordan have higher. In Lebanon it is over 100%. However, most FDI in countries in the region are in extractive industries and in tourism, not in manufacturing or knowledge services. The latter in part because of restrictions on service trade.

Key Actions

Attracting strategic FDI requires improvements in business climate that includes macro stability, reduction in red tape and improvement in human and physical infrastructure. The effectiveness of FDI as a strategy for development depends on many factors, from the heterogeneity of local firms' productivity to institutional environment, the structure of ownership of a foreign firm, etc. For FDI to produce positive externalities, it is incumbent on SEMCs to create a sufficiently strong internal "absorption capacity" (which includes quality of their human capital, their infrastructures, their financial system, their institutions and their public services, customs procedures etc.), to promote establishment of ecosystems around multinationals in key sectors. Here is scope to get increased investment from European and Asian countries.

7. Develop domestic and regional markets

| Strategic Options | Country Relevance |
|---|---|
| <p>Developing domestic markets is an important strategy given the difficulty and uncertainty of increasing trade in a more protectionist world. Smaller countries will be more constrained than larger countries unless a regional strategy is implemented. The key will be to improve the competitiveness of their production of goods and services. This may be constrained by domestic monopolies or oligopolies including a large presence of inefficient and protected SOEs, and many SMEs constrained by excessive red tape, low technological capability, and difficult access to credit. All countries can try to develop the physical and virtual infrastructure and critical social areas such as housing, education, and health.</p> | <p>Egypt, Algeria, and Morocco have the largest domestic markets, and so have the advantage of larger scale economies. Jordan, Tunisia, Lebanon, and especially Palestine are more limited by their small population and GDP. Most have excessive state intervention in the economy including SOEs and a poor business environment.</p> |

Key Actions

Larger countries may have big enough market to competitively exploit scale economies in some products and services. Smaller countries still need to specialize more according to comparative advantage and integrate better with their neighbors in the region. All countries can do more to improve their business environment and to reduce the cost of doing business. They can also do more to develop their non-traded sector. All will need technology and to strengthen their education and skills. There may be a need for industrial policy but there is risk of poor performance by limited government capacity and poor governance. Industrial policy may not need heavy government intervention but for government to give a strategic view of what is necessary to achieve

development plans, planned government investments in physical and human infrastructure, and incentives for the private sector. These countries will need to strengthen fiscal and financial support for new enterprises and SMEs, plus removing laws and regulations hurting them and promoting SMEs that can operate across the Mediterranean region.

8. Take advantage of the potential of disruptive technologies and the digital economy in particular

Strategic Options

Rapid advances in technology are leading to a convergence revolution of disruptive technologies that offer tremendous opportunities but also bring great risks. SEMCs need to take advantage of existing as well as of the emerging technologies. In particular, they need to take advantage of digital technologies to improve the efficiency and competitiveness of production and distribution, including the cost-effective delivery of services to marginal populations.

Country Relevance

All seven SEMCs have weak R&D infrastructure and innovation capability. They are also weak in their readiness to effectively exploit the digital economy. This includes digital infrastructure, access to internet, content, digital skills, use by people businesses and government, and digital applications.

Key Actions

To strengthen general innovation capability, countries have to strengthen education and skills as well as broader business environment and technology support infrastructure. Taking advantage of digital economy will require investments in ICT infrastructure, digital skills, updating of regulatory regime, development of digital platforms, supporting digital entrepreneurship, and increasing trust in government and digital finance. This will require efforts not just at the national level but also regional cooperation initiatives. Developing the digital economy can help improve economic efficiency across the board and also to increase ICT-enabled service exports, which are a miniscule share of GDP in the SEMCs.

9. Improve inclusiveness

Strategic Options

Improving inclusiveness is critical to counter the falling trust in governments and globalization that is leading to increased social unrest. Compared to world, the seven countries do relatively well on income distribution and income of bottom 20%. SEMCs also do very poorly on gender parity (highest ranking is Tunisia which is 124th in world). Improving gender equality is important not only for moral reasons but also for economic ones as greater participation of women in education, economic and economic activity will increase output and welfare.

Country Relevance

The pandemic is increasing unemployment, poverty, and inequality, and has increased already high unemployment among youth and women. All seven countries need to do much more to improve gender equality. In the legal and regulatory system, Morocco and Tunisia rank much better on gender equality, but Palestine and Jordan rank very poorly, and the others are in between.

Key Actions

To counter the inequality increasing effect of pandemic as well as of disruptive technologies countries need to strengthen their social protection system. This requires going beyond the formal social protection in order to reach the many millions in the informal sector and those outside the labor force. Expansion of digital social registries can help but understanding how to finance the expansion of services will have to be addressed. Countries will need to do much more than just improving the legal and regulatory environment, as can be seen by the large gender gaps in Morocco and Tunisia. In spite of high scores in the regulatory environment as indicated by the Women, Business, and Law index, their gender gaps are large. Besides strengthening laws and regulations where they are weak, this will require more enforcement of laws as well as more education and involvement of civil society to overcome cultural obstacles.

10. Improve environmental sustainability

Strategic Options

It has become clear that environmental sustainability is a critical element of development as the effects of climate change and depletion of key resources are constraining development. There is an urgent need to move towards greener growth. There are increasing risks of food insecurity because of water shortages in the MENA region.

Country Relevance

The seven SEMCs rate well on CO₂ emissions/capita and per unit of GDP, partly because they are not very industrialized. But they rank very poorly on energy efficiency. Most countries are also very water constrained. Tunisia, and Algeria are very fresh water constrained; Egypt, Jordan, Lebanon, and Palestine have very little arable land/capita.

Key Actions

There is great potential in developing the green economy. This will require improved regulation as well as greater technological capability. It also includes public procurement policy with the right mix of public procurement, grant, and tax incentives to correct for distorted market signals (such as prices not reflecting environment costs) and

promoting more environmentally sustainable firms. Much can be done to improve water and food security, particularly as the nexus between water, energy, and food security is likely to get worse over time. This requires reducing fossil fuel subsidies, more pricing of water to reflect its economic costs, better policy and regulation, as well as more environmentally friendly technology.¹³

11. Increase resilience to shocks

Strategic Options

There are likely to be more pandemics in future. There will also be future global economic shocks from financial crises to trade wars and geopolitical competition. Climate change will have large negative effects on the energy/water/food nexus in all of them, as will other impacts of climate change such as rising sea levels and increased heat and disease burden.

Country Relevance

As shown by impact of COVID-19, all countries are vulnerable to external shocks. While at present they all are average by world indicators on food security, they will be at risk from other pandemics and economic shocks as well as from climate change. Algeria, Morocco, and Tunisia have the lowest natural resource resilience.

Key Actions

All countries need to increase their resilience to shocks. Key elements of increased resilience are: increased education and skills; stronger technological capability; stronger and more effective government preparedness and execution; greater business and personal capability, better contingency planning; larger energy, water food, and emergency medical supply buffers; better urban planning and development; stronger infrastructure.

¹³. See discussion in Arezki et al. (2020).

Part 5 - A

Developing A Post-Covid Development Strategy for Egypt¹⁴

**Impact of the COVID
Pandemic**

**Key Elements of a Post
COVID-19 Development
Strategy**

**Conclusions on Moving
Forward**

¹⁴. Appreciation is expressed to those taking part in the informal policy consultations for Egypt. The views expressed in the report do not necessarily reflect views of any panelists and are solely those of the Growth Dialogue Institute team.

Impact of the COVID Pandemic

Egypt has weathered the COVID-19 pandemic better than most countries inasmuch as its GDP grew 3.6% in 2020 (IMF WEO 2021), while the rest of the world went into a deep recession. Some attribute this to government's imposition a strict lock-down; however, part of the reason for the better than average performance rests with strong macroeconomic management and a pro-active stance dealing with external financing needs. The latter has included large external bond issues, a new IMF Stand-by Agreement as well as some debt re-profiling with regional creditors. Thus, despite a drop in tourism revenue, which accounts for 12% of GDP and 8% of foreign exchange earnings, the exchange rate has not shown much decline and the outlook for 2021 is generally favorable. The banking sector, reasonably well capitalized, has shown resilience, and the current account deficit of 16% of GDP in 2020-2021 appears manageable. The main macroeconomic concern revolves around debt, now close to 100% of GDP, although the bulk is domestic rather than external debt. There are some short-term concerns centered on restoring hard-won fiscal space (viz., Egypt gained 2-3% of GDP in fiscal space with its pre-COVID-19 fuel price reform), and on the future servicing of domestic debt; however, the key and most binding constraints concern the pace of structural reforms. A second phase of structural reforms was launched in April 2021.

Unlocking Egypt's growth potential for the medium-term will not be easy insofar as there are vested interests, both public and private, that are roadblocks. To unleash the dynamism of the private sector will require more than specific loan windows at the Central Bank and other welcome relief measures. In order to be successful, the role of the state will have to change, bureaucracy made more efficient, SOEs and incumbents will need to face contestable markets, innovation will need to be fostered, and external trade will need to be both increased and its composition changed. The status quo will not suffice and a revised development strategy is required.¹⁵ Some the key elements of such a strategy are detailed below.

Key Elements of a Post COVID-19 Development Strategy

The Challenge of Increasing Productivity

The need to increase productivity stems from the basic fact that with further bulge in youths, the economy will need to grow at 6-7% in order to create the potential of positive per capita GDP growth. Moreover,

¹⁵ See Ikram (2018) for an excellent long-term perspective on the policy economy challenge in Egypt.

trends over the past decade show smaller employment elasticity with respect to GDP than is necessary to create the desired quantum of new jobs. In order to increase labor productivity in particular, changes on both the supply and demand side are needed. On the demand side, low quality construction jobs, agricultural employment, and informal service jobs will not satisfy the needs of the Egyptian economy to generate incomes for a large swath of the population. And SMEs, the largest employers, will need substantial assistance in leveling the playing field versus incumbent firms and SOEs. On the supply side, gains in skills acquisition, discussed below can help prepare new entrants into the work force for productive employment.

Moreover, sectoral decompositions also reveal small contributions from TFP to total growth, an indicator of inefficiency of resource allocation. Productivity gains do not result from stroke of the pen reforms, but rather from a comprehensive effort to move the economy closer to its potential growth rate and to reduce its reliance on capital accumulation for increases in economic growth. Some of the major reform areas that would contribute to a revitalized development strategy are noted below.

Strengthening competition and Improving the Incentive Regime.

Egypt has made limited efforts to reduce the direct participation of government in the economy, and as a result, the business environment is still inadequate to promote the entry of new, more productive firms. Recent evidence points to the major role of SOEs, economic authorities, and government as controlling a dominant share of the markets for capital goods, utilities, transportation, consumer durables, materials, and energy.¹⁶ According to the IMF, there are 300 SOEs in Egypt with SOE assets valued at close to 50% of GDP. The percentage of total assets in the country held by the largest SOEs rose substantially between 2015-2019 and now stands at 60% of the total.¹⁷ The role of the military in construction gives it clear advantages in access to inputs and subsidized labor, and examples of crowding out competition is seen in some key industries, such as cement. It is reported that employment rates have fallen by 10 percentage points in the last decade as over 800,000 new potential workers join the labor force annually.¹⁸ Thus, leveling the playing field is a sine qua non for dealing with the jobs challenge and reducing the active role of government as a direct producer is long over-due.

¹⁶. See Financial Times, Big Read: How Egypt's Army Became an Economic Force (June 7, 2021)

¹⁷. See Figure 5 of Olugbade, O. A., Anderson, G., Atamanchuk, M., Ioannou, I., Kass-Hanna, T., Shi, W., & Wong, J. (2021). State-Owned Enterprises in Middle East, North Africa, and Central Asia: Size, Costs, and Challenges, Departmental Papers, 2021(019), A001. Retrieved Sep 23, 2021, from <https://www.elibrary.imf.org/view/journals/087/2021/019/article-A001-en.xml>

¹⁸. Ibid.

Strengthening competition policy is a delayed agenda item, but a crucial one if the private sector is to take up a leading role in driving future economic growth in the economy. At present, the private sector gets less than a quarter of domestic credit, often at terms that are less desirable than state enterprises, and SMEs, the main employment engines, receive only a fraction thereof. Market dominant firms must either be challenged and be dislodged or they must face incentives that force them to become more efficient and also engage more in export activities. The latter requires technology upgrades and more effective linkages with globally successful firms. Supporting new dynamic parts of the private sector also requires strengthening the rule of law and reducing corruption and cronyism in the economy in order to provide more equal business opportunities.

Participating More Actively in the Global Economy

In addition, as noted in the heat map, Egypt does not participate as much in international trade as other countries at similar levels of per capita income, so it does not benefit from international competition or the access to technology and knowledge that comes from greater participation in global commerce. Egypt has ample scope to benefit from increased merchandise exports that were just 9.6% of GDP and were also highly concentrated.¹⁹ Egypt has scope to increase its export diversification and upgrade itself into higher value-added activities. Egypt can both further diversify the number of export products,²⁰ boost the volume of exports to existing markets as well as adding new ones.²¹ There is scope to increase exports to other countries in the Mediterranean region, as well as to the rest of the world. (See Moreno – Dobson, 2020). However, to accomplish this objective, Egypt needs to reduce barriers to import, increase its technological capability, and the skills of its labor force. Egypt still has lots of trade barriers for companies outside special economic zones and its overall trade restrictiveness index in using applied tariffs was 0.33 (WITS). Thus, greater integration, often hard for larger economies, is a sine qua non for reducing Egypt's dependence on foreign capital.

A new and well implemented Customs Law is pending and is a necessary reform along with governance improvements. Attracting new trade

19. Three of the ten most important exports at the four-digit level were petroleum oils, and petroleum gases (23.8%), two were fertilizers and polymers of ethylene (5.9%); two were metal based 6.5% gold and iron or non-alloy steel), two were electrical products (3.9%) and last was fresh or dried citrus fruit (2.61%)

20. Egypt exports 2,583 products at the six-digit level to 178 countries. Its HH concentration index is 0.04, compared with China's 0.06 so its exports are quite diversified by country. Its index of export market penetration is just 7.0% compared to China's 47.41% which suggests it can expand further in foreign markets

21. Four of the top ten countries exported to were European (22.9%), two were Gulf countries (12.6%); others were U.S. (5.9%), India (3.9%), China (3.5%) and Algeria (3.4%).

partners involves several inter-related elements: a vibrant and externally oriented domestic private sector, institutions that are competitive and able to attract best practice partnerships, and government-led efforts to forge new trade alliances. There is also scope for expanding trade in services supported by digital technologies. This includes virtual migration enabled by digital services. This requires improvement in digital infrastructure, digital skills, regulation, and finance. A key point in the reform agenda is that piecemeal reforms will not work—they need to encompass many areas that are constraining new private sector economic activity, and they should ideally be coordinated and focused on improving the efficiency of the economy.

Developing the Domestic Market

While Egypt has a large domestic market, it lacks openness, and the private sector is constrained by the presence of large state-owned enterprises which benefit from trade protection and favorable access to finance, and other special incentives.²² Thus, there is large internal market that can be developed, but it will be important to improve the competitiveness of products and services by stimulating more domestic competition as well as by further trade liberalization.²³ Given the large market there are many sectors where Egypt can develop competitive industries, some with export potential. The greater adoption of existing technologies as well as of digital technologies can improve the efficiency and the reach of many activities. In addition, Egypt can do a lot more to support new technology-based firms that are using new digital technologies to develop new products and services.

Egypt has some clear advantages among countries in the region, including its sheer size and location, but it also faces many legacy issues that have not been tackled sufficiently in the past. Going forward, the country has to decide whether it wants to continue supporting its SOE sectors to the detriment of new economic activities that can move Egypt forward or not. This is not an all or nothing decision, but it also is not an incremental decision. It is not all-or-nothing because it can take some time to shift resources from SOEs and state banks that support them to the private sector. This needs to be accompanied by regulatory reform to prevent market capture. It is at the same time not a

22. See IMF, Article IV Consultation (July 2021), Country Report 21/163 in particular, Box 1 on The Role of SOEs in Egypt, pp. 24-25.

Report available at:

<https://www.imf.org/-/media/Files/Publications/CR/2021/English/1EGYEA2021002.ashx>

23. In the most recent WB enterprise surveys (12/19-4/20) firms report that the three biggest obstacles (out of 12) are: taxes (24.4%), political instability (17.4%), and corruption (14.6%). However, access finance is also a major problem as Egypt is largely a cash-based economy. According to the survey only 10.3 percent of firms used banks to finance investment, and on average banks financed only 6.7% of investments. Due to the large domestic market few firms are engaged in international trade. Only 7.5% of the firms in the survey exported directly or indirectly, Egypt market is relatively closed.

reform program that can be addressed by piecemeal approaches, both because the existing binding constraints are long-standing and interests well entrenched, but also because reforms need to cut across various areas that are constraining competition, greater export performance, and development of new sources of growth. Coordination among ministries, leadership from the top, and a clear set of goals are crucial as are strategic partners who can jump-start new industries, bring in new technologies, and help integrate Egypt more with the global system.

Strengthening Human Capital

The problem of skills emerges as a constraint in the World Bank's Enterprise Surveys and in the WEF's global competitiveness rankings. In addition, there are mismatches between the kind of education received by students and the needs of the labor market. Egypt like many middle-income countries spends a lot on education, but gets very poor returns on that investment.²⁴ Using the World Bank's Human Capital Index as a reference point, it should be noted that while expected years of schooling are 11.2 years, learning adjusted years of schooling score 6.3 years, which is completion of primary school. Of course, these are national averages; however, to move into the digital age, much improved acquisition of skills will be required.

With a per capita income in 2019 essentially slightly above that of Vietnam, the latter has an average of 10.2 adjusted years of schooling, making it more attractive to the Samsung's of this world when deciding on where to locate their plants. Another major challenge will be to reduce the gender gap to provide equality of opportunities for women in order to enable them to contribute more to household incomes and to the economy more broadly. The participation rate of women in the formal labor force is only 22% compared to 71% for men. Hence, there is more room for better utilization of Egyptian human capital to further expand the economy.

Given that, as noted by UNICEF, the quality of education remains a major challenge, some observers would argue that Egypt needs considerable efforts in improving in its education system and a rethink of national efforts to measure educational outcomes and to link schooling to the needs of the workplace. Productivity gains through improved labor outcomes have been shown to be major drivers of future economic growth.²⁵ There are various ways to attack this problem, but one method of short-cutting the reform agenda is to initiate twinning arrangements with foreign academic providers of skills, providing certifications that are internationally accepted, and investing in training institutions that better serve the labor market interest of the private sector. There are

24. See: <https://www.unicef.org/egypt/education>

25. See Hanushek and Woessmann (2020), for example, on educational outcomes, labor productivity, and growth.

many aspects to reform in this area, but it is worth noting that investing in skills not only offers potential benefits for the quality of the work force, but it also is a sine qua non for attracting higher quality FDI and moving Egypt forward in the digital age.²⁶

Improving the Allocation and Efficacy of Finance

Finance is a major constraint in four ways. First, the rates of saving and investment to GDP have been low in Egypt and even lower since the pandemic as the government has to allocate more resources to provide income support to businesses and individuals. Second, the bulk of credit goes to the state-owned sector. Credit to the private sector is only 24% of GDP (red in heat map). The World Bank Enterprise Surveys and WEF World Competitiveness Report identify access to finance as a key constraint. Third, the equity market is significantly underdeveloped as can be seen by the 15% ratio of market capitalization to GDP (red in the Heat Map). In that regard, it seems efforts have been undertaken for the revival of the Egyptian government's IPO programme. Fourth, the economy, as others in the region, is largely structured along cash payments with insignificant development of an electronic payment system. Recently, Egypt has been moving ahead with its digital transformation agenda. Furthermore, there is still a large unbanked population with a lot of room for advances in savings and access to small-scale credit.

Strengthening Technology Acquisition and Innovation

Egypt can strengthen its capability to use new knowledge and to make use of relevant knowledge that already exists and which it can acquire through imports of capital goods, components and parts, technology licensing and FDI. Using the framework of Aghion, Egypt in many areas needs to imitate and adapt the global technologies that exist and then selectively begin to innovate in areas once its gets closer to the technological frontier.

For industry and services, most innovation is likely to come from improved international linkages. Egypt can substantially benefit from increasing the role of FDI in its economy. It has been making progress recently in improving its foreign investment climate. However, its FDI stock to GDP is still just 42%. The sectoral distribution is 74% in the oil sector, 6% in real estate, and only 5% in manufacturing, 3% in financial services, and 2% in construction.²⁷ Egypt has ample room to strategically attract more FDI into manufacturing and services. This is where its large domestic market can be attractive, and it should explore opportunities to attract more useful FDI from the EU and East Asia. As noted, Egypt is

26. South Korea has been very successful with its Meister Schools, technical vocational high schools linked explicitly with firms that hire their graduates.

27. The main foreign investors are the UK (41%), Belgium (15%) U.S., (14%), UAE (6%), France (4%), and Saudi Arabia (3%).

ranked relatively low with respect to innovation and research capability, technical human capital, and business sophistication, according to WEF data categories.²⁸ In terms of network readiness, it is weakest in the technology area, which includes access, content, and the readiness to use new technology (See Annex 2).

Taking Advantage of the Digital Economy

There are widely acknowledged impediments to moving Egypt forward in the digital world. The role of the state can be helpful in promoting digitalization if it is accompanied by complementary policies to reduce state monopolies and by public investment programs that collaborate with the newer elements of the private sector. As seen in the Box 5.1 on *Egypt's ICT Strategy*, government has made some pronouncements and limited progress on the first part of this policy initiative. That said, it has been slow to reform other aspects that would incentivize the private sector, such as providing financing through the banking system for start-ups; this is obviously a product of the role of state banks and crowding out of credit for new economic activities.

Along with these constraints, the public sector, the state, can in fact be helpful in investing or attracting investment in digital infrastructure and in regulating these activities to prevent private monopolies. The state can take a leading role in promoting digital education and can work with the private sector in skills acquisition that can make Egypt more attractive to strategic foreign investors. The World Bank is currently doing a country digital economy diagnostic report for Egypt. This will provide guidance on the key priorities for helping Egypt take advantages of the opportunities and to mitigate some of the risks. This will require a high-level coordinating agency with powers to monitor implementation and adjust to changing circumstances.

Increasing Sustainability and Resiliency to Shocks

Sustainability constraints include serious shortages of freshwater, heavy reliance on imported energy, though efforts are undertaken in establishing renewable energy parks, and high use of fossil fuels in the electricity and transport sectors, and the increasing risks of coastal flooding from rising sea levels. Freshwater is already a binding constraint for consumption and for agriculture, and it creates a difficult trade-off for countries trying to improve piped water access while also increasing agricultural exports. The heavy reliance on imported energy is a security concern, but also creates volatility due to large fluctuations in the price of oil. The heavy use of fossil fuels is a broader environmental concern because of the negative impact on climate change. Once again, solutions require fiscal resources, and this requires a re-allocation of resources away from less productive uses.

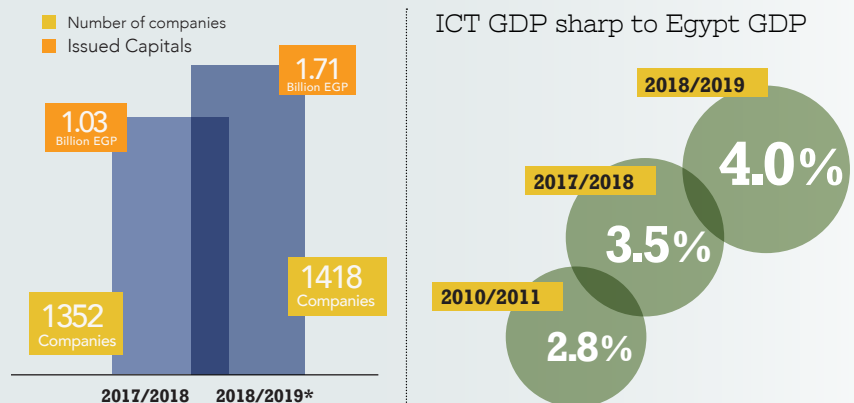
²⁸ See WEF, World Competitiveness Report, 2019.

Box 5.1

Egypt's Digital Development & ICT 2030 Strategy

Digitization and ICT infrastructure have propelled modern society to achieve levels of socioeconomic development unthinkable even a half century ago. Interestingly, Egypt has a longstanding tradition of public policy aimed to leverage private sector innovation in ICT infrastructure dating back to 1985²⁹. From 1985-1995, a series of public-private partnership projects ranging from financial technology to informatic centers were created to lay the foundation both in terms of physical infrastructure as well as an ICT literate population. By the end the 1990's the sector was one of the highest policy priorities, culminating in the creation of a new cabinet position and the Ministry of Communications and Information Technology (MCIT). Since its inception, MCIT has been pivotal for domestic growth and attracting multinational cooperation, particularly from Europe.

In December of 1999, there were approximately 870 IT related companies operating in Egypt³⁰, which grew to over 2,500 by the end of 2008. In 2018-2019 alone, there were 1,418 newly established ICT companies, most of which were small-to-medium sized enterprises³¹. In terms of share of GDP, notable increases have also taken place. In 2010-2011 ICT annual share of GDP was 2.8% and by 2018-2019 up to 4%³². Although a myriad of factors contributed to its growing stature as a sector, this trend looks set to continue due to recent efforts by MCIT to build a competitive and innovative national ICT industry.



29. Kamel, Sherif and Dina Rateb, 'ICT Strategy for Development: Lessons Learnt from the Egyptian Experience in Developing Public Private Partnerships', page 7 (2012).

30. Kamel, Sherif and Dina Rateb, 'ICT Strategy for Development: Lessons Learnt from the Egyptian Experience in Developing Public Private Partnerships', page 7 (2012).

31. <http://www.egyptictindicators.gov.eg/en/Pages/default33.aspx>

32. <http://www.egyptictindicators.gov.eg/en/Pages/default33.aspx>

In 2016, the Egyptian government and MCIT announced their ICT 2030 strategy, under the umbrella of Egypt's vision 2030 and Digital Egypt. ICT 2030 was designed to facilitate investments, capacity building/training programs, digital government services reform, as well as infrastructure upgrades³³. Within government services, the plan specifically targets improvements to education and healthcare. Moreover, a range of programs was focused on individuals, households, and the private sector. For example, "Future Work is Digital" provides skills training for high demand jobs including website design, data analytics, and digital marketing for 100,000 Egyptians entering the workforce.³⁴

SMEs are another key focus and MCIT is developing a series of technology parks that will be opened as part of the COVID-19 recovery effort with the aim to "gradually transform the country into a leading regional center in the telecommunications and IT industry."³⁵ Furthermore, an ambitious \$45 billion "New Administrative Capital," 50 miles east of Cairo, has been in the works since 2015.³⁶ ICT investments are a core pillar of the project, with the end goal being a full integrated 'Smart City' complete with a \$750 million 'Knowledge City' to further facilitate ICT related ventures.³⁷ Given the free trade agreement with Europe, suppliers share a comparative advantage when getting involved with these types of projects. North-South Mediterranean integration should be bolstered in the context of ICT infrastructure, a robust investment pipeline and history of delivering on ICT projects, creating an interesting opportunity for multinationals. Clearly, the productivity gains will be felt on both sides of the Mediterranean and could fulfill Egypt's goal to become a regional center for ICT innovation.

33. https://mcit.gov.eg/en/ICT_Strategy


34. <https://itida.gov.eg/English/Programs/future-work-is-digital/Pages/default.aspx>

35. <https://dailyfeed.dailynewsegypt.com/2020/06/16/6-technology-parks-to-be-completed-this-year-cit-minister/>

36. <https://www.trade.gov/country-commercial-guides/egypt-information-and-communications-technology-and-digital-economy>

37. <https://www.trade.gov/country-commercial-guides/egypt-information-and-communications-technology-and-digital-economy>

Two of Egypt's key environmental issues are making more efficient use of water as well as moving towards greater use of renewable energy. Renewable energy accounts for only 5.8% of Egypt's energy use. There is also significant scope for increasing the efficient use of water for producing high value crops that are not water intensive. Egypt has an opportunity to do more to mitigate and adapt to climate change, including rising sea levels. There is scope for increasing solar energy



given Egypt's abundant sun and the falling cost of solar power. Moving towards a green economy can also provide much needed employment opportunities. These are areas for increased cooperation with Europe and with neighboring countries.

One clear recommendation to address water scarcity is to increase the price of water closer to its real economic cost. This will encourage a shift from water intensive crops to higher value, less water intensive crops (See Barghouti's Technical Paper). For medium and longer term some of the key recommendations are more investments in desalination and wastewater treatment, switch for more renewable energy, better urbanization and relocation to deal with rising sea levels. Egypt is already moving in this direction, but it needs to do more, including more research and innovation to help address these environmental challenges.

Conclusions on Moving Forward

Egypt has weathered the pandemic better than most despite its heavy reliance on tourism for 12% of GDP, 10% of employment and 8% of foreign exchange earnings. Despite its rising debt-to-GDP ratio, its external debt appears manageable, although it is reported that debt refinancing requirements this year will amount to 38 percent of GDP, and will likely be at higher rates of interest.³⁸ In this context, it is important to note that the IMF reports in its most recent Article IV Consultation Report that one-third of planned government expenditure will be for interest payments alone.³⁹ Egypt's burgeoning current account deficit is still filled by external borrowing and some voluntary reprofiling of debt service. A greater concern may be the disappearance of some fiscal space due to pandemic-related spending and an over-reliance on tight monetary policy to both curb any inflationary pressures as well as to keep the exchange close to its target rate. Some observers might feel that this "obsession" with the strong Pound comes at a price that includes both high interest rates that deter investment and an exchange rate that does not favor exports.

The fact that exports are less than 10% of GDP is a signal that there are domestic resource allocations that favor non-tradables. Indeed, growth is driven too much by construction and by subsidized agriculture. This bias towards non-tradables also leads to jobless growth, which has de-linked GDP expansion from permanent job creation. As demographic factors evolve into more youth joining the labor market search, the employment picture will suffer even further. Job opportunities for

³⁸. Financial Times, US Inflation Poses Threat to Developing Economies (June 8, 2021)

³⁹. see IMF, op. cit, 2021, p.11.

women are poor and preclude work in many of the existing growth sectors (e.g., construction, tourist services) and jobs continue to be both temporary and low productivity. This bodes poorly for the future and for social stability.

The policy solutions may be obvious since many structural and institutional impediments have persisted for decades; however, with changes in technology and global value chains, with unfulfilled economic expectations, and with a new demographic bulge, these drawbacks can become fatal binding constraints. Apart from previously mentioned reforms in the business climate, in the bureaucracy, and in SOEs, areas consistently identified as constraints in World Bank reports, a major new push to allow the private sector to flourish is required.⁴⁰ Entry points may be access to credit and enhancement of skills, but the main stumbling block is lack of effective competition and implicit protection of inefficient parts of the economy. An economy that does not foster competition at home will not be competitive in international markets.

The key to free up the private sector may be through more strategic FDI, which is currently focused on the construction and extractive sectors. To bring newer, more modern technology to the economy may require outside impetus, given the low level of domestic competition. With new lines in manufacturing utilizing new technologies, there is a chance to create new jobs and to produce higher value-added products for export. Special programs to support SMEs, such as those offered through subsidized credit from the Central Bank, while useful, are no substitute for the attraction of new entrepreneurial partners. Those inducements now offered to inefficient state enterprises⁴¹ could be redirected to attract more beneficial FDI.⁴² Those aspects that deter non-extractive FDI, such as red-tape, issues at customs, licensing requirements, and land acquisition concerns need to be removed as a sine qua non for generating new sources of growth.

The need to generate more labor-intensive exports to deal with BOP as well as job challenges is not new. But the reform path runs through

40. See, for example, Systematic Country Diagnostic: Egypt, November 2019.

41. According to the IMF, of 278 Egyptian SOEs reporting, 107 or 38% of them were loss-making. This means they were costing the government money in fiscal support (in addition to any other subsidies).

See Figure 10 of See Figure 5 of Olugbade, O. A., Anderson, G., Atamanchuk, M., Ioannou, I., Kass-Hanna, T., Shi, W., & Wong, J. (2021). State-Owned Enterprises in Middle East, North Africa, and Central Asia: Size, Costs, and Challenges, Departmental Papers, 2021(019), A001. Retrieved Sep 23, 2021, from <https://www.elibrary.imf.org/view/journals/087/2021/019/article-A001-en.xml>

42. The government has announced (Minister of the Public Business Sector Tawfik) a new law that specifies that loss-making SOEs have three years during which to restructure to become profitable or they will be closed.

state-controlled powerful interests and a private sector used to lobbying government for its survival. What may have changed, post-pandemic, is the urgent need to replace lost revenue from tourism and to limit further losses in reserves used to protect the exchange rate. Less dependence on the IMF regarding the needs of the external sector is required to happen gradually. Meanwhile, the exchange rate cannot be managed through a tight money policy and high interest rates in the medium term if Egypt is to attain a growth path commensurate with its demographic needs.

The experiences of Malaysia 1980-1995 and Vietnam 2000-2015 are illustrative of what strategically managed FDI can produce in lower middle-income economies. Getting FDI into manufacturing was a key policy objective and attracting firms with the latest technology was another. Both economies were transformed into export powerhouses as a result. FDI that goes into oil and gas and into real estate development is not strategic for 2021 and beyond. On the other hand, there may be opportunities for alternative energy investments that would also help Egypt's carbon footprint. And investments in water management, water pricing, and desalination can also help the country's medium-term binding constraints in water and food security.

Most economic policy assessments, such as those of the World Bank and the IMF concur that the starting point for a revised growth strategy lies in institutional areas and in the reform of the state. Indeed the most recent IMF Article IV Consultation Report notes in its Executive Summary that " Deepening and broadening structural reforms will be required to maintain medium-term growth...This will require sustained efforts to improve resource allocation by reducing the role of the state and enhancing governance, strengthening social protection, improving the business environment, deepening financial markets, and increasing integration into the global economy.⁴³ A well-designed program of reforms with discernable benchmarks that attacks state controls, bureaucracy, and excessive market concentration and that liberates the private sector is the most promising forward. With this promotion of the private sector and with new entrants, Egypt can attract a new group of foreign investors who can bring new technologies and with them the prospect of new external markets. The confluence of good possible outcomes exists. These goals of creating more and high higher productivity jobs along with new export markets and a reduced reliance on external debt are achievable in the medium term. The bloom is off Egypt's pre-pandemic growth performance, and it will not be regained with status quo policies. A new direction is required, and there is some urgency in removing the bottlenecks to enable that new approach to take hold.

⁴³ IMF, op. cit July 2021, p. 7.



Part 5 - B

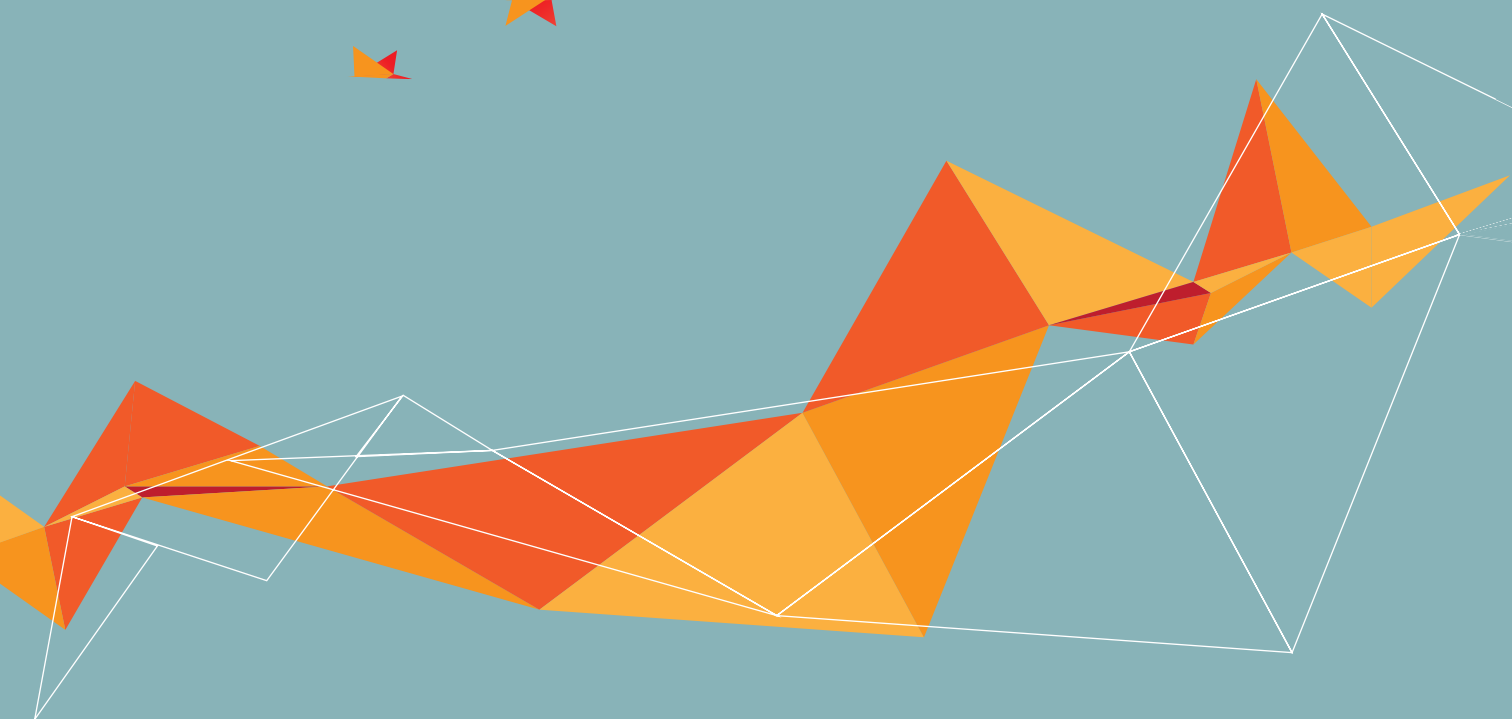
Developing A Post-Covid Development Strategy for Morocco⁴⁴

**Impact of the COVID
Pandemic**

**Morocco's New
Development Model**

**Key Elements of a Post
COVID Strategy**

**Conclusions on Moving
Forward**



⁴⁴. Appreciation is expressed to those taking part in the informal policy consultations for Morocco. The views expressed in the report do not necessarily reflect views of any panelists and are solely those of the Growth Dialogue Institute team.

Impact of the COVID Pandemic

Morocco had some advantages entering the pandemic, namely, its macroeconomic position was more favorable than that of comparator countries, and its external debt profile less worrisome. That said, it suffered a dramatic decline in GDP in 2020 (negative 6.3% according to HCP) and will only partially recover in 2021. This is the first recession in Morocco's recent history of 25 years of GDP growth. While its debt-to-GDP ratio has risen from 66% in 2019 to 76% in 2020 (IMF WEO 2021), it still (despite a downgrade by Moody's) enjoys capital market access at attractive rates and its exchange rate has survived the pandemic well. In fact, the BOP has been less worrying than for other countries, despite a large drop in exports and some firm closure (1.8% according to HCP).

The government has already outlined a recovery program that foresees more investment in PPPs via equity and guarantees, a further set of industrial policy actions aimed at joining more advanced Global Value Chains, support for SMEs and a consolidation of SOEs, and further actions aimed at better positioning the country and its comparatively vibrant private sector. Thus, it has both the macroeconomic stability and the policy focus to move forward briskly with a newer development strategy. Some elements of such a strategy are discussed below.

Morocco's New Development Model

In May 2021, Morocco announced a new development model "designed by Moroccans, with Moroccans and for Moroccans," that had been 18 months in the making. Even before the pandemic, it was clear that Morocco needed to update its development model. This had been publicly stated starting in 2017 by His Majesty, the King, and emphasized again in his speech at the 20th Anniversary of Accession to power. He formalized a Special Commission for the Development Model of Morocco (SCDM) in November 2019. The 35-member commission was tasked with developing a plan that incorporated five goals: (i) providing a strategic vision; (ii) integrating institutional, economic, social, regional, and environmental dimensions with the principles and values of the 2011 Constitution; (iii) being forward-looking, integrating national and global trends; and (iv) being citizen centered in coherence with the reality of Morocco. The commission's report, *The New Development Model: Releasing Energies and Regaining Trust to Accelerate the March of Progress and Prosperity for All*, was presented to and endorsed by His Majesty on May 27th, 2021. Given its importance, and relevance for this study, the report is summarized in Box 5.2.

The report is comprehensive and ambitious. It starts with a hard-hitting analysis of Morocco's strengths and weaknesses, provides a vision for Morocco in 2035, identifies key priority areas for transformation, and provides a broad sketch of how it is to be implemented. The ambition

set out in the new development model is a Morocco that is “thriving and prosperous, skilled, inclusive, sustainable, and bold.” It can be considered a response by the Kingdom to the calls for change started by the Arab Spring, which led to a new constitution in 2011, but which has not yet been able to deliver needed improvements in income, governance, and inclusiveness; furthermore, it responds to the new challenges, including rapid technological change led by the digital revolution, greater global uncertainty and economic power shifts, as well as the new realities of climate change and the post- pandemic world.

Box 5.2

Morocco’s New Development Model Announced May 2021

*The report has three parts. The first, titled “Morocco and the World Today” is an inventory of the country’s strengths and weaknesses including shortcomings of the past development model. It acknowledged that although the 2011 reform of the constitution increased the powers and responsibilities of government, “successive government coalitions have marked by recurring tensions and a political dynamic that is not conducive to the convergence of stakeholders around a vision of economic and social development that places citizens in center stage. This situation contributed to the slowdown in the pace of reforms and the creation of a climate of mistrust within a context that was marked by sluggish economic growth and a deterioration of public services” (p. 3). It identifies **four systemic recurring obstacles to Morocco’s development**: lack of vertical coherence between the development vision and announced public policies; slow pace of structural transformation because of high factor costs and an environment that is not conducive to the entry of new players, thus restricting competition and innovation; limited capacity of the public sector; and a sense of judicial insecurity and unpredictability which inhibits new initiatives*

*The **second part, “The New Development Model: Morocco in the Future.”** envisions a Morocco that is thriving and prosperous; skilled, inclusive, and sustainable. It sets out 15 targets to achieve by 2035. They include: doubling GDP per capita, ensuring that more than 90% of pupils master elementary skills and competencies by the end of primary school, increasing healthcare workers from 1.65 per 1000 inhabitant to 4.5, reducing informal employment from 59% to 20%, boosting women labor force participation rate from 22% to 45%, increasing share of renewable*

energy in total energy consumption from 11% to 40%, and increasing the satisfaction rate among citizens with respect to the administration of public services to 80%.

It proposes a **new frame of reference for development** that advocates a new organizational doctrine based on complementarity between a strong state and a strong society. It emphasizes the need for convergence and synergy among stakeholders through an open mobilization of partnerships. It translates this doctrine into four principles of action: focusing on citizen outreach, adopting a systemic approach, developing capacities of all development actors, applying the subsidiarity principle whereby decisions are made at the local level, and ensuring environmental and financial sustainability. To accomplish this, it calls for a framework for building trust and accountability to strengthen the legal and moral security of all stakeholders and ensuring the primacy of common interest by strengthened justice, clear laws, transparent rules applicable to all, stakeholder accountability through regular performance reviews, and strict compliance with values of ethics and morality.

The Commission recommends **four strategic transformation priority areas**. The **first** is a **productive and diversified economy** that creates value added and quality jobs. This is to be attained by unleashing private initiatives and entrepreneurship through a transparent and predictable business environment; improving competitiveness by reducing energy and logistics costs; directing private investment (including large private sector investment and from SMEs) towards high value growth sectors through a suitable incentive framework, access to diversified finance and support for managerial, organizational and technological capacities; establishing a macroeconomic framework dedicated to growth, and establishing the social economy as a pillar of growth. The **second** priority area is **enhancing human capital consisting of education and health care**. Education includes education for all; and a system of university education, vocational training and research centered on performance and spurred by autonomous governance that promotes responsibility. Health includes quality health services and health protection as fundamental rights of citizens. The **third** priority area is **inclusion and solidarity**. This includes empowering women and ensuring gender equality and participation; promoting the inclusion of young people and their fulfillment by multiplying opportunities and means of participation; building on cultural diversity as a lever for openness, dialogue, and cohesion; and developing a common base for social protection that enhances resilience

and inclusion, and give substance to solidarity among citizens. The **fourth** priority area is **territorial and sustainability**. This includes decentralization to strengthen the role of regions and local ecosystems; to improve housing and the living environment and improve connectivity and mobility; and to safeguard water resources through better use of the resource and more rigorous management of its scarcity.

The Commission also identified **five ambitious bets for a bold Morocco** to make it one of the most dynamic and attractive economic and knowledge hubs in the region. These are: digital platforms and high-speed broadband coverage; regional hub for higher education, R&D, and innovation; regional champion of low carbon energy; regional financial center; and the “Made in Morocco” label as a hallmark for quality, competitiveness, and sustainability.

The third part, “**Levers of Change,**” is about implementation. The Commission identified **five transformative projects to launch the New Development Model**. These are: **digital transformation** of the economy with a strong focus on e-government; **modernizing Morocco’s administration**, with an emphasis on quality of services and simplification of procedures; **financing** the additional required by the new development mode from national and international resources; **harnessing the Moroccan Diaspora** as asset of skilled individuals, connectors to world, and source of remittances; and the **mobilization of international partnerships**, both to strengthen investment and to consolidate the transfer of technology and know-how in the framework of technical and strategic cooperation and partnerships and in the context of a co-development approach.

For the **implementation of the plan**, it proposed two mechanisms. The first is a **National Compact for Development** that would be a consensual commitment among all stakeholders that would define the fundamental choices for development and the strategic priorities for the allocation of resources. The second is a **mechanism to monitor the new development model** under the authority of the King to give impetus to strategic projects and drive change.

Source: Morocco, Special Commission on the Development Model (2021).

In the financing section, the report recognizes that implementing the new development model will require additional public resources, estimated at 4% of GDP annually during a “seed” phase from 2022 to 2025, and about 10% from 2030. It notes that the objectives for human capital and inclusion (viz., education for all, higher education, health, social protection and youth) will require significant recurrent public expenditure as they are expanded. It also notes that other elements of the model, such as structural reforms, transformation of the economy, and the development of regional ecosystems (including regional projects, support funds, research and development, training clusters, etc.) also need to be started in 2022. The report assumes that a successful launch of the initial seed phase, driven by the state and aimed at providing conditions for the private sector to take over, “will generate a positive dynamic that will enable the [new development model] to partially fund itself by contribution to an increase in resources.” Growth is projected to average 6% from 2022 and to 7% from 2030, and that increased tax revenues from that increase will reduce the states financing needs.

The report notes that the implementation of the model requires strengthening the strategic management, monitoring, and change management functions of the government. To that end, it proposes the development of a social compact among all key stakeholders to undertake the priority reforms and initiatives, and a mechanism to monitor results and support change management. Importantly, the issue of matching the bold expectations of the plan with the ability of government to implement the necessary measures will be challenging. Given the history of reforms in the past, as noted in the report, the proposal to develop a social compact is a sound one. The question is the extent to which an effective social compact can be developed among the key stakeholders. There are already some critics, who note that the model does not sufficiently address issues such as inequality, redistribution of wealth, the role of political elites and networks that meddle with appointments and corrupt good governance.⁴⁵

Key Elements of a Post COVID Strategy

Although the report is very comprehensive, and sets out a clear vision, further granularity of analysis and observations may be helpful in moving the plan’s ambitions closer to fruition. In that spirit, various areas for policy action are identified below.

⁴⁵ See, for example, Alaoui (2021), citing Moroccan economist Idriss el-Feineh.

Continuing to Expand Trade

Morocco has increased its trade in goods and services from 75% of GDP in 2010 to 87% in 2019. Merchandise exports in 2019 were 24% of GDP. In contrast to other countries at similar levels of income, 71% of Morocco's merchandise exports are manufactures, a third of which are electrical and electronic parts, vehicles, and airplane parts) so it has successfully diversified out of agriculture and resource-based products. Service exports are 16% of GDP, dominated by tourism that has virtually disappeared during the pandemic and may be slow to revive. Of its top 10 export destinations, 7 European countries account for 60%, the other three are United States (4.7%), India (3.8%), and Brazil (2.6%).

Morocco's simple average tariffs are 4.3% and its weighted average tariff is 3.86%. Its overall trade restrictiveness index is 0.23 based on MFN tariffs and 0.15 based on applied tariffs (WITS).⁴⁶ Morocco can benefit from greater access to capital goods and inputs at world prices by reducing its tariff and non-tariff barriers. There is ample scope to diversify the markets to which it exports and its boost its export market penetration rate.⁴⁷ Morocco's exports are currently concentrated on European ten markets where just Spain and France account for 46% of merchandise exports, and six of the top export destinations are European. It should try to diversify its exports to East Asia and Sub-Saharan Africa.

To be able to diversify its exports it will need to increase its technological capability. Also improving its digital infrastructure and digital skills could permit it to increase export of ICT services that currently account for only 1.4% of GDP.

Harnessing the Strategic Value of FDI

Morocco is an attractive FDI destination and it ranks comparatively well in various indices. And its stock of FDI to GDP is 54%. Morocco should try to attract more FDI that can contribute to its economic and social development. The challenge is to strategically attract FDI that can help government in its goal to join more advanced GVCs (see Box 5.3). Its plan for selective industrial policy interventions has some merit insofar as it is based on private sector initiatives, supported by government guarantees and access to credit. Compared to others in the region, it appears that SOEs don't crowd out the private sector as much as in other SEMCs.

⁴⁶. <https://wits.worldbank.org/>.

⁴⁷. Its HH market concentration index is 0.11 (compared to China's 0.06) and its market penetration index is 6.13 (compared to China's 47.41).



Box 5.3

FDI, Trade, & Technology: Morocco's Noor Ouarzazate CSP Plant

Morocco is an emerging global leader for sustainable infrastructure. The country has not only been an early mover but also adopted some of the most ambitious targets globally, with the aim to have 52% of its energy come from renewable sources (20% solar, 20% wind, 12% hydro) by 2030. Morocco is on target to hit 42% from renewable energy sources by the end of 2020.^a In addition, Morocco's energy policy pivot has brought pragmatic changes to their regulatory regime, particularly through the creation of entities such as MASEN to expedite delivery of such projects, on top of embracing private sector participation for both funding and technology.

An important project of the Kingdom is the 580-megawatt Noor Ouarzazate concentrated solar power (CSP) plant that was developed in four phases, the first coming online in 2016.^b The technical specifications for each phase have combined to create what is arguably the most advanced in the world and even incorporate a solar thermal energy storage component as of 2020. Morocco now boasts the world's largest plant as well as a blueprint for global implementation.

Morocco's renewable push has had profound implications for its economy. Positives include: (i) reducing Morocco's energy dependence; (ii) reducing the negative impacts of fossil fuels on the budget and trade balance; (iii) shifting the country from a net electricity importer to net exporter; (iv) providing a bankable investment pipeline for the international business community; and (v) an economic development plan for rural areas, notably remote desert communities. An example of positive impact is that Morocco's electricity exports to Spain increased 670% from 2018 to 2019. Another is the international participation in Morocco's renewable energy projects. Stakeholders range from multilateral financiers (African Development Bank, Clean Technology Fund, European Investment Bank, France's AFD, Germany's KfW, the World Bank, etc.) to global corporations (Azelio, Enel Green Power, Sener, Siemens, TSK, etc.).

Morocco's focus on renewable energy has provided a new source of growth for its economy. With ESG investments becoming a serious asset class, the country is well positioned to capitalize on the international search for yield by green finance investors. Although renewable energy development has attracted foreign investment, created employment, and boosted Moroccan industry, much remains

to be done. A lot of the progress has been limited to the power sector, archaic regulations stemming from a rigid bureaucracy are still widespread, and estimates suggest \$30 billion in funding will be needed to fulfill the ambitious 2030 goal. Nevertheless, Morocco's focus on sustainable infrastructure can serve as a powerful example of a potential new source for growth for its regional peers who share the natural capacity to replicate their success.

Sources:

- a. <https://www.masen.ma/en;>
<http://helioscsp.com/morocco-arab-leader-in-electricity-generation-from-renewable-energy/>
- b. <https://www.climateinvestmentfunds.org/CIF10/morocco/ouarzazate>

If Morocco can effectively coordinate its own industrial development plans with a strategic FDI approach, it may be able to further distinguish itself and become a trade hub for both Europe, the sub-region, and possibly for Sub-Saharan Africa via the AfCFTA (see Box 5.4). This could potentially mesh with the government's "near-shoring" ambitions if the new investor can bring the latest technologies with them. There are opportunities to attract FDI from East Asian economies, particularly China, Korea, and Malaysia that are looking for opportunities to export to Europe and to Sub-Saharan Africa.

Box 5.4

Integration in Action—Tanger Med Port

Although Morocco's Tanger Med Port physically sits between several key geographical areas, it symbolically serves as perhaps the best illustration of North-South Mediterranean integration. In 2003 King Mohamed VI stated, "This new Tanger Med port that we consider as the core of a large port, logistics, industrial, commercial and touristic complex... It values its mission as a trade hub between Europe and Africa, the Mediterranean and the Atlantic... allowing it to develop its rich potential and make it an integrated regional development model."^a In hindsight, the strategic importance of Tangier Med has surely exceeded even the King's lofty expectations and in just two decades is now a powerhouse not only regionally, but globally.

Since the Tanger Med project was announced in 2003 and the first port opened in 2007, it has continued to grow as a focal point for global logistics. The €8.8 billion export complex is comprised of four main components: the Tanger Free Zone, the Tanger Automotive City, the Tetouan Shore and Tetouan Park.^b By the end of 2019 of, it handled 9 million annual containers, 7 million annual passengers, and was home to 1000 companies as well as

90,000 jobs. Its entrenched position was further proven when it processed 81 million tons (23% y-o-y increase) and handled 5.8 million TEUs (20% y-o-y increase) in 2020,^c amidst the global pandemic. Similarly, Tanger Med ranks 35th (of 500) in Lloyd's List^d of top international ports and 2nd in the Financial Times FDI Intelligence "Global Free Zones."^e Beyond accolades for economic output, Tanger Med is also the only African port recognized as an "Ecoport" by the European Sea Ports Organization, for its compliance with environmental standards.^f

Tanger Med has received over \$10 billion in total investment, with over half coming from private sources, including several European multinationals. Groupe Renault, Groupe PSA, Magnetti Marelli, Siemens Gamesa, Valeo have flocked en masse to Tanger Med. Beyond commercial partnerships all of the container terminals are operated in some capacity by European companies. APM Terminals (Netherlands) Tanger signed a 30-year concession in 2005 to operate the first container terminal (TC1), EUROGATE (Germany) Tanger operates TC2 through another 30-year concession agreement signed in 2006, MAERSK APM (Denmark) will operate TC4, and a consortium of Masra Maroc (Morocco)/EUROGATE (Germany)/Hapag-Lloyd (Germany) will operate TC3. The Moroccan-German ties were further cemented when Tanger Med signed a partnership agreement at the end of 2020 with the Hamburg Port Authority to strengthen ties on port management, logistics, and the digitization of trade.^g

Tanger Med is an exemplary example of how infrastructure can facilitate host country development through foreign direct investment and public-private partnerships. The port now ranks as the best on the continent and continues to act as a pivotal bridge for North-South Mediterranean integration. Strengthening these ties will only serve to empower Tanger Med and bolster its position as a serious player in global connectivity. It appears its development is now starting to pay back on its investment as the Tanger Med Zone set up a €35 million COVID related relief fund for SMEs and start-ups.

Sources:

- a. <https://www.tangermed.ma/en/pole-portuaire/>; <https://www.tangermed.ma/en/vision/>
- b. https://www.tangermedzones.com/en/zone_activites/tanger-free-zones/
- c. <https://www.maritime-executive.com/editorials/the-meteoric-rise-of-morocco-s-tangier-med-port>
- d. Lloyd's List
- e. Financial Times FDI Intelligence "Global Free Zones."
- f. European Sea Ports Organization
- g. <https://www.moroccoworldnews.com/2020/10/324300/moroccos-tangier-med-to-partner-with-germanys-hamburg-port/>

Developing the Private Sector and Increasing Competition in Domestic Markets

Developing the domestic market is somewhat limited by its relatively small size; however, if Morocco can continue to develop its private sector and can attract foreign investor as noted above, it can “punch above its weight.” A key group are SMEs (defined as less than 200 workers) which account for the bulk of formal employment. The most recent World Bank Enterprise Survey (05/19-01/20) finds that firms report that the three biggest obstacles (out of 12) are corruption, tax rates, and tax administration (14.2%).⁴⁸ The good news is access to credit is not noted and it seems that 70% of credit has gone to SMEs and that they are being further supported by regional investment centers. However, 30% of firms identified an inadequately educated labor force as a major constraint. Morocco can develop more competitive sectors if it can improve its technology capacity and the education and skill of its workers.

Strengthening Human Capital

Like most lower-middle-income developing countries, the country spends a fair amount on education and a fraction of GDP perhaps 6% annually. According to the World Bank’s Human Capital Index calculations, the average expected years of schooling is roughly 10, whereas, when adjusted for learning outcomes, it falls to 6.2. This is essentially the completion of primary school.

Of course, this is a national average, and there are clusters of educational excellence; however, when compared to other countries with a similar level of per capita income, say the Philippines, the latter shows learning-adjusted years of schooling equal to 8.4 years of education. This is simply to make the point that there is considerable scope to improve the quality of education as well as the acquisition of 21st century skill, especially digital skills.

Morocco’s future potential output will be driven by its investment rates (both domestic and foreign capital), its labor force participation rates (and here employment requires requisite skills) and productivity (which again is dependent on endogenous factors). Investment in technology must be accompanied by skills acquisition, and twinning arrangements, certification programs, and professional exchanges can help boost skills. European partners can assist in this process of skills acquisition as can firm-to-firm connections with major trade and investment partners.

48. <https://www.enterprisesurveys.org/en/enterprisesurveys>.

Clearly, job creation opportunities need to increase in a virtuous cycle with improvements in local business climate and gains in innovation, where Morocco sits in the middle of the pack. Boosts in local entrepreneurship could reduce the brain-drain, and even more vitally, encourage a return of skilled workers and managers who have emigrated. The success of the new development model can be assisted by this return of expatriates with newer, more modern skills and the potential of linking to newer global supply chains.

Exploiting Technology, Especially Digital Technology

In order to diversify its economy and improve its competitiveness, Morocco needs to strengthen its innovation capability. It also needs to take advantage of the opportunities offered by the digital economy. Announced plans to simplify and digitalize firm registration, facilitate digital payments and provide more support to SMEs are steps in the right direction since, according to the WEF, Morocco scores relatively poorly on entrepreneurship, digitalization, and network readiness. In the short run, Morocco can acquire relevant technology that already exists abroad through imports, technology licensing, and especially FDI. But even to do the later it has to improve the level of skills of its labor force, as is noted above, and prioritize its public spending to support future drivers of growth. In addition, Morocco needs to do much more to exploit the potential offered by digital technologies as is the case of the other SEMCs. It would benefit from a detailed assessment of the situation and recommendation on what it can do to exploit digital technology more effectively such as the analysis done by the World Bank for Tunisia (see Box 5.6).

Improving Inclusiveness

Rising unemployment and increasing inequality and increasing poverty from the COVID pandemic threaten inclusiveness. Unemployment is expected to rise from an average of slightly above 9% for the last 15 years to 12.5% in 2020. Government must continue to provide support to affected populations. Thus, it is facing a difficult trade-off between dealing with the immediate needs and investing for the future. Therefore, it must find ways of dealing with immediate pressures and investing to improve its longer run competitiveness and future social welfare. This will require greater external financing, as well as strategies that can also increase employment. Although Morocco has a relatively good laws and regulations on gender equality as indicated by its relatively good Women, Business and the Law Index, its overall gender equality index is quite low, indicating that there is still a long way in implementing that favorable legal and regulatory structure. Participation of women in the labor force is just 22% compared to 70% for men. Improving gender equity will require not just stronger enforcement, but more focus on this issue in education campaigns and in the educational curriculum.

Strengthening Environmental Sustainability

Although Morocco has been developing solar energy it is still heavily dependent on imported energy and the share of renewables in its energy use is very low. There is great opportunity for Morocco to develop solar energy more and perhaps even to export solar energy to Southern Europe as technologies for long distance transmission of electricity improve. Morocco also has to improve its energy efficiency. Thus, there is much that Morocco can do for the green economy which can also be a source of job growth. While Morocco is not as water constrained as other countries in the region, it does have room to improve water productivity, especially with respect to agriculture.

Increasing Resilience to Shocks

Morocco has been badly battered by the COVID-19 pandemic, but it has handled the shock relatively well in terms of new programs of support to businesses and households. Government has used the opportunity to press ahead with reforms in social protection, consolidation of SOEs in limited liability companies, and support for SMEs. It can continue to prepare for future shocks by accelerating its diversification program and by rebuilding its fiscal buffers. It also needs to keep tabs on its contingent liabilities, such as those associated with a myriad of guarantee programs. An important element of improved resilience is based on ramped up technological capability, education and skills in order to give its economy more flexibility to adjust to shocks. Finally, its industrial policy program needs to have clear limitations in terms of the nature of support, protection, and the enforcement of competition policies if it is to positively contribute to the future transformation of the economy.

Box 5.5

Key Sectoral Considerations

Agriculture. *The agriculture sector in Morocco still accounts for 11.4% of GDP, 29% of male employment, and 55% of female employment, so it is a very important sector for the wellbeing of a large part of the population. There is tremendous scope for increasing the productivity of the agricultural sector that is just US\$3,405 (in 2010 US\$) per worker compared to US\$86,090 for North America. Although Morocco's agricultural sectors is not as constrained as much as other countries in the region by*

low arable land per capita and water shortages, it needs to increase its agricultural productivity and make more efficient use of water by moving to higher value added and less water intensive crops. This will increase incomes, release excess labor from the agricultural sector, and allow the sector to take better advantage of specialization. It can help promote further trade in agricultural products to the EU, and if high enough value-added, to other regions including East Asia where demand is high.

Tourism. Tourism has great potential for expansion in Morocco. The travel and tourism industry were 8.3% of GDP and 7.2% of employment before the pandemic. Tourist revenues have fallen significantly as a result of the pandemic. In the WEF Travel and Tourism index, Morocco ranked 66th in 2019, having lost 4 positions since 2015. Its three strongest pillars were: safety and security, price competitiveness, and prioritization to the travel and tourism sector by the government. The three weakest pillars were: cultural resources and business travel (where despite doing well on number of world heritage sites and cultural heritage, it did poorly on hosting international meetings), international openness (where it did poorly was on openness to international bilateral air service agreements), and natural resources (where despite doing well on natural tourism and protected areas, it did poorly on number of world heritage sites and number of known species). Like other countries, to revive its tourist industry Morocco has to adopt more stringent COVID 19 safety protocols and improve its health infrastructure, but tourism will only return to previous levels when the world recovers from COVID. However, to develop the potential of the sector, Morocco will have to improve its tourism infrastructure and bilateral air transport agreements.

Source: Deen et al. 2020 (Morocco Economic Monitor).



Conclusions on Moving Forward

The policy observation that “Morocco does not run, but neither does it fall” is an apt description of the challenging decisions that the country will face in the coming years. It may not need to run, but it will need to move faster to meet the expectations of its citizens. Among its regional peers, Morocco has managed to forge stronger economic ties to Europe and has established some manufacturing capacity, while at the same time managing well its macro-economic situation. Despite a sharp drop of GDP in 2020 and a burgeoning current account, it was still able to maintain capital market access and utilize both fiscal and monetary measures to soften the economy’s downturn.

The pandemic management may in the next two years show ripple effects as it will take 2021-2022 to regain past GDP levels and to hopefully restore some added fiscal space. In the monetary realm, while NPLs will undoubtedly rise, especially if lending guarantees are called, the financial system seems strong enough to sustain these pressures. The bigger issue concerns the level of ambition for future growth and the implications of key policy choices for the chances of attaining that substantially higher level of per capita income. This is a political choice, of course, and one to be decided at home. The creation of a Special Commission on Morocco’s Future Development Model indicates at least a desire to have a conversation about policy options and to allow an honest re-examination of the status-quo.

One over-riding issue concerns the design or lack thereof of the most useful set of policy incentives. As a credit-driven economy, who gains access to credit matters a great deal.⁴⁹ Should it be the large firms, often well connected; should it be SOEs or more broadly the state, since with debt/GDP approaching 100%, the mere financing of debt service on domestic debt will crowd out other borrowers; or should more be directed at SMEs or, even more importantly, at younger, newer (and perhaps more productive firms). If credit is not available domestically, either at the firm or state level, there is a tendency to look at external sources. That carries with it risks, however, since global rates will inevitably be rising, exchange rates rate may be harder to

⁴⁹ It should be noted that, alongside with the requirements of managing the effects of the health crisis, the financial regulatory authorities in Morocco continued to implement the projects included in the financial stability roadmap, covering the period 2019-2021. The methodological framework for conducting macro stress tests in the banking sector has been updated with technical assistance from the IMF to take into account the specificities of the health shock.

At the same time, in terms of macroprudential instruments, Bank Al-Maghrib has defined the risk monitoring mechanisms related to the real estate and household sectors, in particular through the analysis of quarterly reports received from banks and making it possible to follow the evolution of “loan to value” and “debt service to household income” ratios.

maintain, and foreign exchange earnings may not rise commensurately with newly acquired debt. These are risks to be managed through the continuation of prudent policies.

The big question is how to propel Morocco's growth rate above its pre-pandemic levels, how to create the necessary jobs to employ those entering the labor market, and how to raise the technological capacity of the economy. This then revolves around the level of ambition of the powers that be as well as on the relationships between government, business, and society more generally. In a world in which GVCs are shortening and becoming more digitally driven, standing still means falling behind. That said, Morocco has many features, such as political stability and strong macro-economic management, that serve the country well and serve to attract foreign direct investors. One issue to be considered is how to improve the strategic content of FDI and how to make it more beneficial for the Moroccan economy as a whole.

There seem to be opportunities that can be exploited to move the economy into the "green space" by virtue of its climate, its proximity to Europe, and its central organization. Projects that can capitalize on this could also expand into production that is classified as net-zero on carbon, and which could make the country more competitive internationally and able to establish a new "brand." Experience has shown that countries, whether government directed or not, are most likely to be successful in penetrating external markets if they are subject to effective competition at home. Just looking at Korea's successful chaebol, or conglomerates, reveals that they competed ferociously for credit and that they were obliged to meet global standards in developed country markets. Large incumbents and politically connected firms, which are quite comfortable in their local markets, may not see the payoff in investing in new export activities.

One area for policy focus is employment. This relates both lack of effective demand for formal employment, as well as the quality of education and the provision of skills for 21st century. Going into the details of education reform and training is beyond our scope, but it is worth mentioning that even among graduates there is a lack of jobs, which leads us to the demand side. Observations on the relatively low efficiency of publicly invested capital as well as constraints on the fostering of a more dynamic private sector lead to the view that the status quo may not suffice to create new jobs and will not be beneficial for social stability. Of course, outward emigration is always possible; however, remittances are not a strong substitute for local income generation.

The issue of speed of change is an important one, resembling in an odd way the choice between big bang reforms and gradual adjustments. The problem with the former is that they are dislocating and destructive of existing institutions (however flawed), and with

the latter that gradual often means doing very little. As one former (and non-Moroccan) policymaker opines, one needs to develop a framework for major policy reform and have the basic design in mind, and then one needs to move step-by-step in the implementation of those reforms. In the case of Morocco, the identification of new strategic areas for competitiveness that may guide FDI, the fostering of new areas of economic activity and their financing, and an honest re-assessment of the relationship between government and business may well lead in the right direction. The new National Social Compact may well provide the necessary new blueprint if it provides for a national consensus of reforms. The next steps for transforming the vision into a set of coordinated and implementable policy actions will be critical. Along with its admirable stability, an additional dose of dynamism could go a long way.



Part 5 - C

Developing A Post-Covid Development Strategy for Tunisia⁵⁰

**Impact of the COVID
Pandemic**

**Key Elements for a Post
COVID Strategy**

**Conclusions on Moving
Forward**

⁵⁰. Appreciation is expressed to those taking part in the informal policy consultations for Tunisia. The views expressed in the report do not necessarily reflect views of any panelists and are solely those of the Growth Dialogue Institute team.

Impact of the COVID Pandemic

Tunisia was once considered an Arab Spring success story. The events that followed the self-immolation of a young street vendor on December 17, 2010 in protest against inequality and the lack of opportunity sparked a revolution. By January 14, 2011, the Jasmine Revolution (as it was called in the foreign press), driven by high unemployment, high food prices, corruption, lack of political freedom and poor living conditions toppled the regime and gave hope for a new period of democracy and inclusive growth, not only in Tunisia, but also in the region. However, the period following the toppling of President Ben Ali was tumultuous. Different groups struggled for power and the development of a new constitution. GDP fell 1.9% in 2011, the first negative growth rate since an economic crisis in 1986. The turbulence spawned the Tunisian National Dialogue Quartet which brought together the main labor union, the main private sector association, the Tunisian Human Rights League, and the Tunisian Association of Lawyers. The Quartet worked to restore political stability and to write a new constitution that was enacted in 2015. The Quartet won the 2015 Nobel Peace Prize for "its decisive contribution to building a pluralistic democracy in Tunisia in the wake of the Jasmine Revolution of 2011" (Announcement, The Nobel Peace Prize 2015) However, while growth GDP growth had averaged 4.3% per year between 2000 and 2009, it averaged just 1.9% between 2010 and 2019 (Figure 3.1)

However, political challenges continued in spite of the democratic constitution of 2015 and greater political freedom. The economy struggled to garner investor confidence. Growth relied increasingly on consumption, while investment and exports remained significantly below pre-revolution levels and unemployment stubbornly high at 15%. even before the pandemic (Figure 3.2). As growth stagnated, a social contract that saw the public sector as a provider of jobs, in the absence of private opportunities, led to a ballooning public sector wage bill and dwindling fiscal space to invest in the economy. As in other countries in the region, as a result of the pandemic growth stagnated, and unemployment and inequality increased.

The COVID-19 pandemic hit Tunisia hard. GDP fell 9% in 2020 from the downturn in external demand for Morocco's exports, including tourism and a fall in foreign remittances The current account imbalance fell slightly from negative 8.4% to negative 6.8% (Figure 2.1). because while exports fell, imports fell further because of the severity of the domestic downturn. Tunisia has been hit by three COVID 19 waves (see Table 3.2). The government responded with fiscal and monetary measures. Government fiscal measures amounted to 4.3% of GDP. Of these about 2.3% of GDP were direct fiscal measures. These included contributions to finance COVID related health expenditures, to procure medical supplies and to established specialize units in hospitals, to support affected business sectors (such as tourism), and unemployment

payments and direct cash transfers to low-income households. Indirect fiscal measures included a guaranteed repayment mechanisms to affected enterprises, and off-budget funds to business in priority sectors. Monetary and financial measures included a cut in the Central Bank of Tunisia policy rate by 100 basis point in March 2020, and by 50 in October 2020, as well as having banks defer repayments on loans from enterprises, and allowing banks to go beyond the maximum loan to deposit ratios. In addition, the CBT transferred the equivalent to 2.5% of GDP to the government budget, interest free for a period of five years (IMF COVID Policy Monitor, and IMF 2021 Article IV Staff Report February 2021).

As a result of these measures and the fall in tax revenues, Tunisia's fiscal deficit and public debt increased sharply. The former increased by 7.4 percentage points to negative 11.5% compared to 2019, and the latter increased by 15.8 percentage points compared to 2019. The loss-making state enterprise sector worsened the fiscal situation dramatically. In addition salaries for an increase of 40% in health personnel increased government expenditures on salaries; this only worsened the already large proportion of government spending dedicated to salaries, the latter being among the highest in the world.

After 9% contraction in 2020, growth is temporarily expected to rebound to 6% in 2021 as the pandemic's effects abate (World Bank 2020g). But, after this short-term uptick, growth is expected to return to a more subdued trajectory at around 2%, reflecting Tunisia's weak investment climate and slow structural transformation. In line with this, the current account deficit is expected to improve as export industries begin to recover, but at a sluggish pace given persistent structural constraints and political uncertainty. The fiscal deficit is expected to increase to 12% of GDP in 2020 and decline gradually to 4.5% by 2022, with downside risks emanating from a growing public wage bill, which, according to the World Bank, captures 14% of GDP (World Bank 2020g). At the same time, debt to GDP has risen from 72% in 2019 to 87% in 2021.

The outlook for reforms to support the recovery is challenging. Structural reforms to address SOE performance, increase market contestability and clamp down on corruption are evermore necessary, but will depend on the extent to which the new government, formed in September 2020, can garner consensus to implement the needed reforms in support a viable development strategy.

The government faces four major challenges. The first is in dealing with the direct impact of COVID, which is likely to continue to reduce economic activity and drain resources to fight the health emergency until increased vaccinations can bring the pandemic under control. The second is to support the recovery. This includes supporting businesses negatively affected by the pandemic as well as increasing social protection for those who lost their jobs, were already unemployed, or

were underemployed in the informal sector. The third is developing a strategy for more inclusive and sustained growth. Inclusiveness is particularly important in the Tunisian context of the Jasmine Revolution which includes strong public reaction against inequality, poverty, and unemployment, all of which have been exacerbated by the pandemic, but which predate it. The fourth is to respond to the above challenges, while restoring fiscal and external sustainability.

One of the main constraints in dealing with these challenges is the political economy of reform in light of the difficulty of undertaking reforms in a very fragmented and polarized social and political context. A second is the lack of a compelling development vision combined with some weaknesses in the implementation capability of the government, particularly as there has been increased frustration and increase lack of trust in government. A third includes some difficult macro and micro issues. On the macro side, the country faces the high fiscal deficit, high government debt, and low attractiveness to FDI; linked this is high perceived uncertainty. On the micro side, there are issues of low productivity and a low competitiveness. A critical dilemma is that undertaking some of the reforms necessary to deal with the difficult economic constraints that run into the political economy constraint. In addition, to successfully weather the pandemic and to put the country back on a path to recovery, Tunisia will need to access international finance, not just loans, and grants, but also foreign investment, and these are not likely to be forthcoming in sufficient volume if there is concern about the creditworthiness and stability of the country.


The list of areas for reform have been extensively outlined by outside advisors and include issues of domestic capture, lack of competition, poor governance of the financial sector, distorting incentives for the agricultural sector based on a model of food security rather than competitive agriculture for export, and labor markets that discourage employment.⁵¹ However, the over-riding constraints are institutional in nature, and many revolve around the role of the state. Below, we examine some areas that require attention for any reform agenda to succeed. In Part C, we deal more directly with the institutional and governance issues that appear to be the sine qua non for progress in Tunisia.

Key Elements for a Post COVID Strategy


Revising the Paradigm for the Role of the State

Tunisia needs to rethink the role of the state. The state should focus on the key areas of public goods, such as the overall economic and

⁵¹. See "The Unfinished Revolution" (World Bank 2014) for an extensive review of policy challenges.



institutional regime, macro stability, the rule of law, effective public administration, efficient provision of public services like education, health, social protection and security and the efficient functioning of factor markets including labor and finance. It needs to increase domestic competition to public and private monopolies, where new private entrants can provide goods and services at lower prices and can stimulate innovation. The state should divest itself of inefficient state-owned enterprises that are being kept afloat through subsidies and directed credit, crowding out more efficient new entrants, such as small and medium enterprises. It also has to reform its stifling bureaucracy to reduce the cost of doing business in order to attract new forms of investment. Without new external sources of productive capital, Tunisia's educated young population will find little employment, and its private sector will continue to be dominated by rent-seeking dominant firms, crowding out new entrants that may be more innovative, more digitally savvy, and more capable of exporting services. Tunisia also needs to open up key service sectors like telecoms, logistics, and transport to the private sector in order to increase competition and improve the delivery of these services.



Building on the Private Sector and SMEs

More generally, Tunisia has to attract and build on the private sector to create new, higher productivity jobs in order to deliver on its political and social promises. This is the reality of the situation, now made even more dire by the pandemic that has worsened the macro picture, which until recently, was a brighter spot than the rest of economy. This starts with providing greater support for small and medium enterprise (SMEs). SMEs account for just 58% of total employment (2016), indicating that there are some large firms, that are large employers. The most recent World Bank Enterprise Surveys (2019-2020) find that firms see their three biggest obstacles as lack of access to finance (39.9%), corruption (15.0%), and political instability (11.5%). Moreover, close to 35% of firms identified an inadequately educated workforce as a major constraint, reflecting the observations noted below. Thus, the country has to improve access to finance for private firms and help facilitate the development of a more skilled work force; find incentives to support new private sector start-ups and redirect credit from SOE so the private sector can flourish.

Expanding and Diversifying Trade

Although the share of merchandise exports to GDP in Tunisia is greater than that of other SEMCs it is still only in the fourth quintile in the global context and it is in the bottom quintile in share of service exports to GDP (Table 2.2). Six European countries take two-thirds of Tunisia's exports. Two of the top ten merchandise exports at the 4-digit level are insulated wires and electrical apparatus for electrical circuits (15.4%), two are suits and track suits (7.3%), two are motor vehicle and airplane parts (5.1%), two are petroleum oils (5.2%), and two are olive oil and

fruits (6.8%). This picture epitomizes the low value-added nature of the export bundle. Shifting this export pattern will not occur without new trade partners who are willing to invest in higher value-added products. Progress on this front will require a shift in policy thinking, however, as is developed below.

There has been sufficient analysis of Tunisia's potential comparative advantages, whether using the RCA (Revealed Comparative Advantage) approach or the new product space approach pioneered by Hausmann and others, to identify areas such as textiles, leather, and footwear where wage advantages and relatively low skill requirements dominate. These sectors have promoted high growth rates in Indonesia in the past and in Cambodia today; however, these footloose industries gravitate to locales that offer the right set of factors. At the moment, government would have to invest in its EPZs to make them attractive without excessively subsidizing these activities and whilst improving linkages to the rest of the economy. This latter point means that the local private sector would have to be encouraged and be connected to these export activities in meaningful ways.

Other areas that hold some promise, if reforms can be mustered, are the electronic assembly area, which could benefit from proximity to European final markets. But again, this requires major steps on the part of government to get its house in order so that it can both attract these industries and so that it can negotiate well to maximize benefits. At the moment, European and other investors are concentrated in energy and simple manufacturing and see little to be gained from shifting to new product lines. The way to import newer technology and to impart skills to the workforce is to attract higher value-added production from foreign investors, either traditional ones or newer ones from other parts of the world, namely, East Asia.

On the international trade policy front, Tunisia also has to renegotiate its trade agreement with the EU to include agriculture. It should also increase trade with its neighbor, Libya as there are many complementarities in their production structures. Another area worth investigating is new work-migration agreements with the EU. Although this is complicated, there should be scope for some creative policymaking with European partner countries to take advantage of younger, skilled workers. If the domestic environment improves, these expatriates will return with newly acquired skills and with connections to other firms and industries.

Attracting New FDI Requires Better Human Capital

Although the stock of FDI to GDP in Tunisia is relatively high at 76%, Tunisia could benefit from attracting more strategic FDI especially into manufacturing and elements of the digital economy. A major constraint is the large presence of SOE, high tariff and non-tariff barriers to imports of capital goods and components, and a large bureaucratic burden that is said to cost those firms that are not well connected upwards of

13% of revenue. This could change with a major new set of pro-private sector policies that could then attract some newer types of FDI. The agent of change, however, will be domestic reforms.

In terms of human capital, there is a dichotomous situation with many well qualified university leavers seeking employment and not finding it, a bloated public service that does more damage than good, and average human indicators that are worrying. According to the World Bank's Human Capital Index, Tunisia ranks in the middle of the pack of countries; however, despite having a target of 10 years of schooling for its population, the actual adjusted years of learning is equivalent to 6.3 years of schooling. In terms of attracting FDI for manufacturing, this is too low as compared with the Philippines (8.2 learning adjusted years of schooling) or Vietnam (10.2 LAYS), both countries also being lower-middle income countries by virtue of per capita incomes. This dichotomy of poor human capital in the majority of the population and poor job prospects for those at the upper end epitomizes the frustrations and dysfunction of the labor market.

Acquiring Technology and Taking Advantage of the Potential Offered by Digital Technologies

To improve its productivity and competitiveness and to diversify its economy Tunisia also needs to strengthen its innovation capability not just to create and use new knowledge, but especially to make use of relevant knowledge that already exists and which it can acquire through imports of capital goods, components and parts, technology licensing and FDI.

It also needs to take advantage of the opportunities offered by the digital economy. The World Bank did a diagnostic of the digital economy in Tunisia and found that the country was not yet taking advantages of the many opportunities that it offered. Its main recommendations were the need to have coordination of all relevant activities across different sectors and public and private partners to develop and implement an effective strategy to exploit the digital economy. See Box 5.6 for details on the assessment and the key recommendations.

Developing New Markets

Because of the small size of its domestic market, it may be difficult for Tunisia to competitively develop many new competitive manufacturing industries that require scale. However, it has developed some specialized niches in manufacturing (e.g., exports of car and airplane parts and electrical cables) and may be able to develop more with more strategic FDI. These actions cannot happen in isolation and are intrinsically imbedded in the operations of the State. Building on existing comparative advantages in agriculture and tourism in a post-pandemic world may also offer new opportunities.

Agriculture. Agriculture is roughly 10% of national GDP, but there is tremendous scope for increasing the productivity of the agricultural sector by eliminating wasteful and distorting subsidies. The World

Bank has argued that a) there is a difference between food security and self-sufficiency, and that a shift from domestically consumed crops to exportable crops could yield sizeable economic benefits, b) that government intervention in the form of price supports, input subsidies, marketing boards, and protection against agricultural imports distorts what is produced to the detriment of the economy and its consumers, and c) that there is scope to increase agricultural exports to Europe and the region if land use was shifted to crops like citrus, tomatoes, and olive oil.⁵² Looking at the example of Uzbekistan, reforms that altered the way land use permits were allocated resulted in a shift out of wheat production and into exportable agricultural products to markets in the region and as far away as the Republic of Korea. To improve agricultural productivity, there is scope to use better technology and produce higher value crops, the focus of government policy needs to be export revenue, especially since its current interventions favor wealthier landowners rather than small farmers.

Tunisia is not as constrained as some other countries in the region in arable land per capita, but it suffers from low availability of freshwater from domestic resources. Therefore, it needs to produce a reduced number of crops that require large amounts of water to those where it has a comparative advantage in and import more water intensive crops like cereals. For a discussion of the trade-offs involved in the use of water, see the Technical Paper attached to this report.

Tourism. Tourism has great potential in Tunisia. The travel and tourism industry were 8.0% of GDP and employed 7.4% of the labor force before the pandemic. Tourist revenues have collapsed as there have elsewhere due to the COVID-19. To reactivate the sector Tunisia will have to strengthen health policies and security procedures, and improve other areas, particularly related to tourist infrastructure. Clearly social stability and governance issues also play a large role in the selection of tourist destinations as do local impediments related to the service sector. Government bureaucracy and challenges experienced in other areas of economic activity spill over into the tourist sector as well. A rethink of what the binding constraints are to greater exports of goods and services is perhaps a fruitful policy path.

Utilizing Local Skills to Expand the Service Sector

Why are there so few calls centers in Tunisia when the population has the advantage of speaking both Arabic and French, and where education among the young is not a barrier for many? According to past assessments that are still valid, the failure to allow for competition and the lack of liberalization of the sector has essentially kept services out of Tunisia and retarded the potential development an export-oriented service sector. Of course, lack of competition and efficiency in the telecoms sector may also



impede development of call centers; and restrictions in labor markets to protect professions will also limit the country's attractiveness to outsiders. But if Tunisia is not open to services from abroad, it will not develop itself into a potential service exporter. It is for this reason that simply looking at the digital space without considering the policy environment is insufficient.

These are some prerequisites to take advantage of the opportunities offered by the digital economy. The World Bank carried out a diagnostic of the digital economy in Tunisia and found that the country was not taking sufficient advantage of existing opportunities. Its main recommendations were the need to have coordination of all relevant activities across different sectors, including efforts of public and private partners, and to develop and implement an effective strategy to exploit opportunities in the digital economy (see Box 5.6 for a review of Tunisia's digital status and areas for positive action). It should be noted that many of the constraints mentioned with respect to the service sector apply equally in this context. Moreover, as in many areas of economic policy, these recommendations must be seen as part of a broader, more comprehensive program of reform that begins with the role of the state. To promote sectoral reforms, whether in the digital arena or elsewhere, government effort and public spending must be shifted from doing the unnecessary and the damaging to doing the necessary and the beneficial.

Box 5.6

Tunisia: Findings and Recommendations for the Digital Sector

The main findings of the Digital Economy Diagnostic Report on Tunisia were:

- *Tunisia was halfway between an emergent and a moderate position on the digital economy foundations, with an average score of 2.4 on a scale of 1 to 5. A critical weakness was the weak coordination at a high level of government of the digital transformation of government as well as more generally of the many activities and multiple stakeholders that are necessary for the digital transformation of the economy.*
- *A critical weakness was insufficient development of digital finance that is fundamental for leveraging digital transactions between government, business, and citizens. This was the result of citizens' lack of trust in digital financial transactions, as well as of outdated regulations of digital payments and perceived risk about the soundness of such systems.*
- *Digital skills shortages were a constraint on the use of digital technologies in government, business and the population at large. This was due to insufficient domestic development as well as by the emigration of qualified persons to higher paying markets.*

- *The uptake of digital technologies by the private sector was also constrained by heavy bureaucracy, access to finance, and access to markets.*
- *The development of public and private digital platforms was constrained by the lack of coordination among the stakeholders as well as rules and regulations for interoperability.*
- *As a result of the constraints on the fundamental pillars, Tunisia was not taking full advantage of the opportunities offered by the digital technologies to improve its use.*

The main recommendations were:

- *Install leaders at the highest level to coordinate and monitor across government agencies and sectors the digital transformation strategy.*
- *Accelerate the adoption of digital technologies, including access to fixed-line Internet through better infrastructure and lower rates and review taxation of Internet services, and rethink the use of the Telecom Fund.*
- *In the short term, link the private sector to the governance of ICT training programs and improve the conditions to retain ICT personnel by improving pay and career paths. For the longer term, develop a vision for the digital competencies needed for the development of the digital economy, including developing programs for retraining and reskilling, and the rapid development of digital competencies for higher education graduates.*
- *In the short term, strengthen trust in digital financial services through targeted actions such as protection of personal information, digital payments, resolution mechanisms, and at the same time develop the use of digital payments for commercial purchase as well as for payment of public services. For the longer term, support access to the supply of digital financial services, especially for non-financial suppliers, and fin-tech innovation.*
- *In the short term, improve coordination for the development of public digital platforms that go across administrative agencies and put in place the regulatory and institutional regimes across government agencies. The ultimate objective is to develop public services online and to improve the trust of citizens in digital payment for transactions to inspire the best international practices.*
- *Support international cooperation and partnership conventions between Tunisian and foreign research centers in the key domains of digital technologies. Reinforce this through public private cooperation in R&D by putting in place interface mechanisms as well as the ecosystem to support and follow-up on technological start-ups.*

Source: World Bank (2020), Tunisia Country Digital Economy Diagnostic.



Improving Environmental Sustainability

Like some of its neighbors, Tunisia does very well in low CO₂ emissions per capita and per unit of GDP, but that is because it is still not very industrialized. However, it has low energy efficiency and a very low share of renewable energy in its energy basket. It is also relatively water scarce and has low water efficiency. Therefore, there is significant space to improve its environmental sustainability. In addition, as it has ample solar energy, and the price of solar energy is decreasing rapidly through technological advance there are great opportunities to developing the green economy, which can be an important source of jobs.

Conclusions on Moving Forward

What the pandemic has shown is that even Tunisia's traditional strength, macroeconomic management, will be sorely tested as debt levels have risen and fiscal deficits have exploded. In a country that has become accustomed to government employment and government subsidies, much of government spending has become even less affordable than before. A thorough review of expenditures, including the use of Public Expenditure Reviews (PERs) and metrics provided by exercises such as Public Expenditure and Financial Accountability (PEFA) need to accompany any development strategy rethink.

Making the economy more efficient is the over-riding challenge. Reducing the state's presence and removing the yoke that burdens the emergent private is a necessary policy goal. Improving competition by removing distortions that misallocate resources or allow for rent generation is another priority. It has often been argued that with vigorous domestic competition economies do not become globally competitive. The basic point is that before Tunisia can effectively engage the rest of the world with a viable development strategy, it must first fix the many impediments that economic activity faces at home.

Based on our work and informed by an extremely useful policy consultation with Tunisian experts, we conclude that the political and societal gridlock that has existed in recent years has not abated, but that the pandemic has worsened many aspects of the economy. At the macroeconomic level, we see double-digit fiscal deficits, a debt-to-GDP ratio above 90%, and persistent downgrades by credit-rating agencies. This latter point is extremely troubling given both the external borrowing requirements of the country and the general upward trend in global interest rates. After two failed IMF programs, the outlook for undertaking the necessary set of structural reforms is clouded by lack of political consensus, lack of vision, and vested interests.

At the micro level, the situation isn't much more optimistic as unemployment continues to plague households, encouraging outward migration of skilled professional, and even hastening outward-bound

investments to neighboring countries. Firms, especially smaller and younger firms, that could be the engines of higher productivity jobs and more digitally connected activities have suffered disproportionately. They are crowded out of credit markets and established firms with market power and SOEs dominate the scene. Despite prospects in some manufacturing areas, post-pandemic, viable new growth engines are unlikely without a major change in the political landscape.

The policy consensus appears to be that the reasons why past reforms have failed still dominate and conventional approaches will not move the dial. So, what's to be done? Of course, the status quo can continue, and it will result in continued economic and social deterioration.

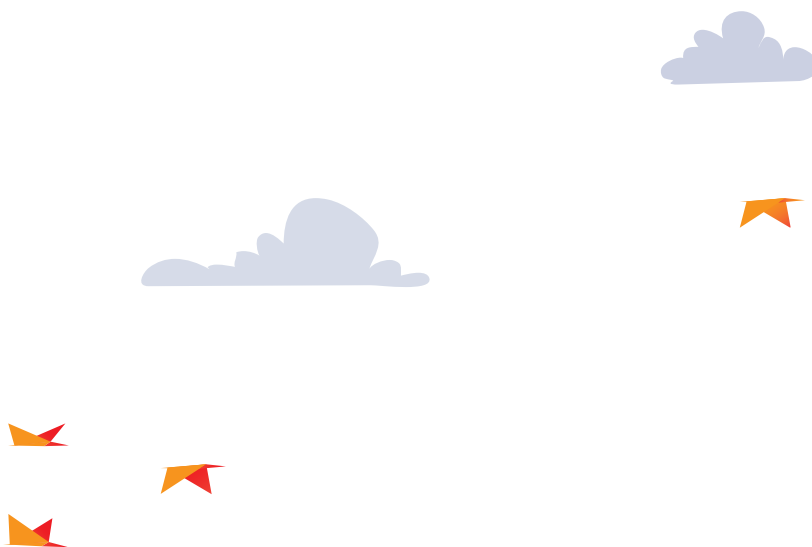
Alternatively, much in the spirit of countries attempting to rebuild their institutions, Tunisia also needs to revisit the role of the state and rebuild itself. There is no shortage of diagnostics as to what the state should not be doing; there is less advice on what a revamped role of the state might look like. One proposal for concrete action would be the formation of a high-level commission to promote reforms that could be spearheaded by a strengthened government. The goal of the commission would be to promote a new national dialogue to identify critical reforms that have to be undertaken, and get buy-in from the different stakeholders to implement. The commission would also need to reach out to the international community to for support. The positive element is that there is precedent for such a commission.

The need to address its political and economic was recognized even by the IMF in its February 2021 Article 4 Consultations with Tunisia, in light of Tunisia's failure to implement the structural reforms outlined in two adjustment operations. It saw merit in setting up a nationally driven dialogue on a new development strategy and the key reforms necessary to achieve it. Building on the experiences of Tunisia's National Dialogue Quartet in the years following the Jasmine Revolution, and the example of the New Development Strategy announced by neighboring Morocco in May 2021 after a nearly two-year consultation process (see Box 5.2), Tunisia could set up a broad consultative dialogue to design a new development strategy. This should include key stakeholders in government, the private sector, and civil society to analyze the key constraints and opportunities for inclusive and sustainable development of the country. To involve Europe more centrally, consideration could be given to a joint Chair of the Commission from Europe, perhaps a former Head of State.

Key elements of this national consultation are that it should be domestically driven, that it be broad and participatory involving central and regional government, the private sector, and civil society. It should include a clear assessment of binding constraints; it should identify what is blocking needed reforms (including vested interests; incentives; regime; market and public sector failures; legal and regulatory

constraints to private sector development); and it should attempt to gain consensus on a package of immediate and longer-run actions to improve the efficiency of the economy and reduce the inequities in society. To be effective, it should also include the commitment of the key stakeholders to implementing the reforms, which then revolves around the importance of political consensus.

The reality is that the pandemic has simply served to reduce policy space and to make the urgency of reform efforts more apparent. There are many possible detailed recommendations that can be introduced by government, by well-meaning partners, and by international institutions; however, the country will need to move into the driver's seat on reforms. The pandemic has shown that the role of government is essential, that international cooperation is a scarce commodity, and that pre-existing conditions (unemployment, inequality, and state capture) will only become worse in the absence of concerted policy effort to overcome these binding constraints. Developing this new strategy and reaching the necessary social compact described above will take time. The sooner the process starts, the better.





Part 6

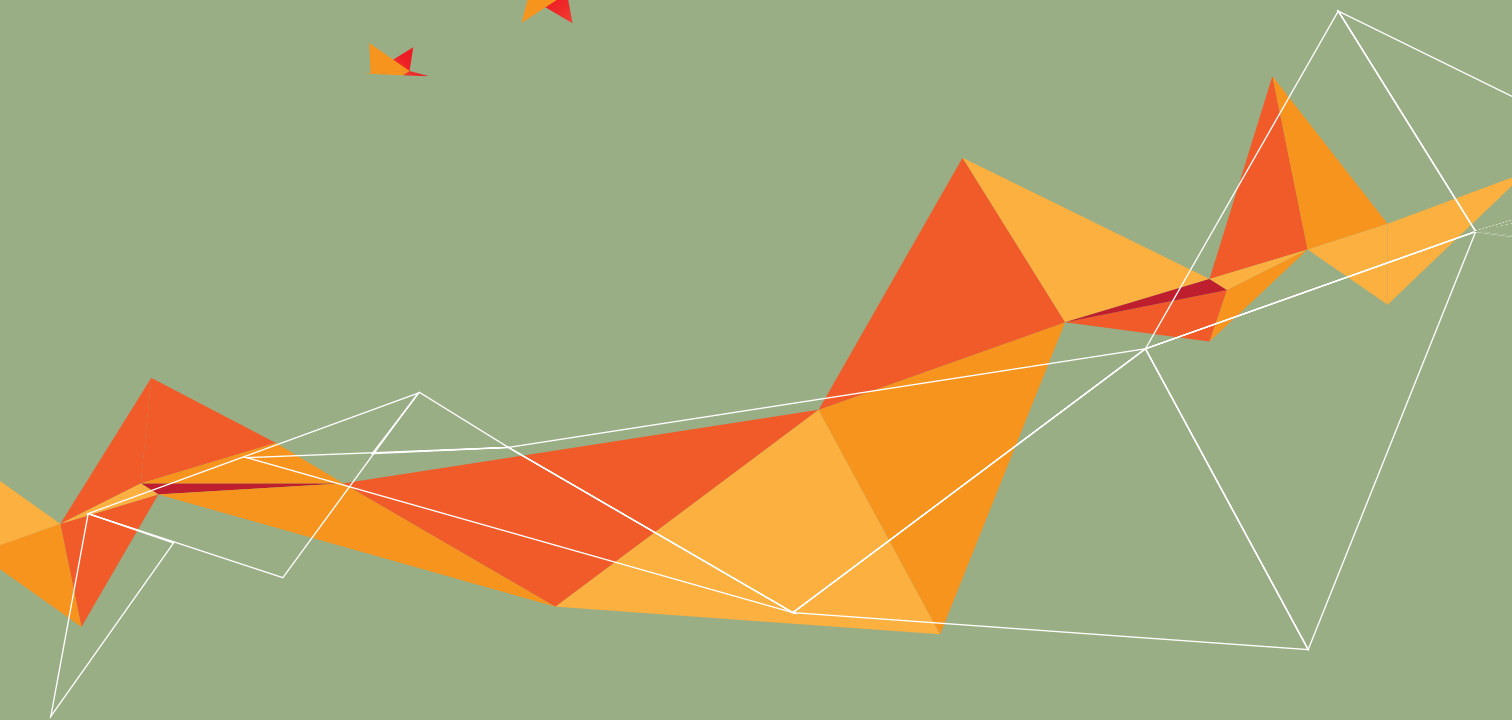
Regional Integration and International Collaboration

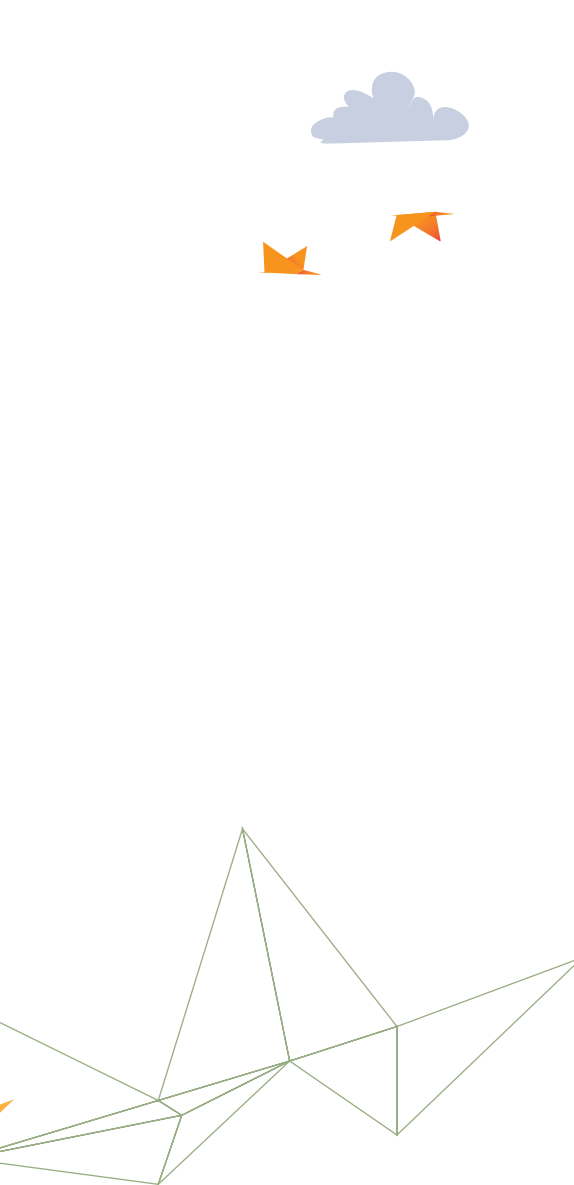
**Trade, Foreign Investment,
Security, and Finance**

**Health, Education,
and Migration**

**Digital Economy, and Research
and Innovation**

**Environment and Green
Energy**





Looking forward, there is a great potential for more regional and international integration and collaboration for the SEMCs. The pandemic has made it clear that cooperation across borders is essential to defeat the virus. But there are also many other areas where greater regional integration efforts as well as strengthened international collaboration can contribute significantly to economic development in the region.

There are opportunities in particular for expanded *regional integration of trade in goods and services*. Currently the MENA region is one of the least integrated regions in the world (Arezki et al. 2020). The reconfiguration of global value chains offers opportunities for increased sourcing for companies supplying the EU from Southern and Eastern Mediterranean countries. Greater liberalization of trade in goods and services could be built on existing regional trade agreements between countries in the sub-region and into bilateral agreements between the EU and countries of interest.⁵³

Trade, Foreign Investment, Security, and Finance

A recent study of six Euro-MED free trade agreements (FTAs) that were signed with Algeria, Egypt, Jordan, Lebanon, Morocco, and Tunisia between 1995 and 2002 concluded that while the agreements had helped to increase trade, they had not accomplished as much as planned because they (a) focused too narrowly on reducing tariff barriers of product trade, (b) had not included agricultural products, and (c) had not been accompanied by intra-SEMCs tariff reductions. In addition to the costs that tariffs impose on GVCs, the majority of costs are due to the indirect burdens of non-tariff measures, procedures, logistics, other trade supporting services, the business environment and other regulatory barriers, and availability and use of ICT services. The recommendations of the report are that all parties to such agreements should reduce non-tariff barriers; improve the business environment; extend the coverage of trade agreements to include agriculture, services, and FDI and intellectual property; support women's empowerment to allow them to take full advantage of trade liberalization; and pay more attention to the implications of trade for sustainable development (ECORYS, CASE, and FEMISE, 2021).

Commitments to well-structured regional trade agreements can help to drive the domestic reform agenda and can help promote liberalization and competition. Trade liberalization needs to be beyond tariff and non-tariff reductions to sectoral reforms including the removal of

⁵³. For more detailed recommendations on how greater Mediterranean integration can be achieved through international collaboration see CMI (2020).

burdensome constraints on private sector development, as well as investments in infrastructure and logistics. In addition, to increase the scope of potential benefits, liberalization can be complemented by temporary income support and retraining for workers affected by the reforms. Those countries in Europe with experience in the design and implementation of flex-security programs should be called upon to provide advice. Regional agreements can be stepping-stones to broader trade liberalization and assuming that protectionist forces subside and there is a stronger move towards a more open global trading system, they can still generate large national benefits (CMI 2020).


Foreign direct investment. A larger, more integrated market would be a strong incentive for foreign investors since it would provide opportunities for specialization, greater economies of scale, and larger local and reachable foreign markets. Countries such as Morocco and Tunisia are well positioned between the EU and Sub-Saharan Africa to act as gateways to Sub-Saharan Africa. New foreign investors seeking to enter the AfCFTA may well consider SEMCs as a bridge between Europe and expanding Sub-Saharan markets. However, to attract foreign investors there needs to be more than greater market integration. Countries seeking more foreign investment also have to improve their investment climate, infrastructure and trade logistics, education and skills; and to provide greater clarity of policy.

Security is a critical issue for Mediterranean countries. Real and perceived regional instability dampens domestic as well as foreign investment. In a region rife with rivalries and strife, investing in stable economies can be in everyone's geo-political interests. Countries that have shown their ability to weather changes and achieve socio-political consensus have the potential to anchor economic stability and international cooperation.




On **finance** there is scope for liberalizing and harmonizing rules and regulations regarding FDI, portfolio investment, and the provision of a digital finance and payments system by institutions other than banks. The latter is important for improving financial inclusion for poorer, marginalized populations that are not served by banks. There is also scope for creating regional venture capital funds to help finance new technology start-ups, including digital start-ups. Obtaining state-to-state advice from those who have tackled these challenges can be useful. Chile is a country that has invested heavily in this area. It also has managed to integrate well into the global economy, signing a record number of FTAs in order to overcome its geographic isolation and commodity-dependence.

Health, Education, and Migration

In **health** there is much that can be done. Since the virus knows no borders, it is critical to cooperate on measures to control its spread.



This includes agreements across countries on testing and requirements for international travel as well as for international cargos. It includes EU countries helping SEMCs get access to personal protective equipment, vaccines, and treatment medications. This can take the form of increased provision of essential supplies by countries that have production capability. The faster this type of assistance can be forthcoming, the quicker the economic recovery. This may well be the time to frontload assistance in the health and health-related sectors.



Consideration should also be given to strengthening the health sector in SEMCs more generally since it is unlikely that this is the last pandemic countries will experience. For this reason, strengthening the drug making capacity of SEMCs, including capacity for producing vaccines to fight pandemics should be a medium-term goal. In addition, an important opportunity to exploit is to use digital technologies to improve the reach and effectiveness of health systems by developing digital health portals as well as integrating health service front line providers with health suppliers and users (see Bashir, 2021, for the potential for this to improve the efficiency and reach of health systems in developing countries.) This is a fruitful area for global collaboration to share innovations and learn from the experience of countries in different settings.

In **education** there is huge scope for collaboration in improving educational practices, curriculum reform, and educational outcomes. Too much attention is devoted to inputs and too little to actual results in terms of acquired skills. There is also scope not only for greater international student exchange, and greater internationalization of the curriculum (World Bank 2020f), but also for the use of ICT for providing education across borders. There is also scope for partnerships for skill upgrading, particularly between Southern Mediterranean countries and companies from EU countries that need workers with specific skills. Twinning arrangements that bridge the divide between formal and vocational training need to be bolstered and acquisition of practical digital skills enhanced. Concrete steps by European partners can provide mutually beneficial gains in vocational and related training as we have seen in the case of Korea's Meister High Schools, where business demands for skilled technicians links education to the labor market.⁵⁴

Migration is another area where there is scope for greater international cooperation beyond policies to deal with refugees and asylum seekers and family reunification. Most EU countries have shrinking populations, while most SEMCs have rapidly growing populations.

⁵⁴. See Ju-Ho Lee, Meister Schools in South Korea (2021).

In addition, a large share of migration into the EU comes from the latter (particularly Syria) or from those transiting through SEMCs from Sub-Saharan Africa. Therefore, there is a strong interest for European countries to help deal with the root causes of migration as well as to take advantage of the positive potential of migration. The European Union Emergency Trust Fund for Stability addresses some of the root causes of irregular migration and displaced persons in Africa through its four objectives of creating employment opportunities in African countries, strengthening resilience, improving migration management, and improving governance and conflict prevention. While this a step in the right direction, more has to be done to open pathways for regular migration.

As many studies have shown, migration is an important source of remittances, knowledge and business networks which are important contributors to development (IOM 2021). Thus, more has to be done to improve regular migration flows that can be beneficial to both origin and home countries. This includes agreements for economic migration which can benefit both home and host countries, temporary migration, circular migration, policies to support integration of migrants in host countries, policies and mechanisms to reduce the cost of sending remittances, portability of pensions, policies to make more effective use of Diasporas, policies to prepare persons for emigration as well as to assimilate returning migrants. Most of these policies apply not only to emigrants from SEMCs to Europe (including migrants in transit from other countries) but also to immigrants from other countries in Africa and MENA into SEMCs. In addition, there is need for improving the quality of migration data as well as more research on the causes and effects of migration on home and host countries, and the effectiveness of different policies affecting migration, either directly or indirectly.

An overarching concern is to help SEMCs to implement successful development strategies. Much of this report aims to discover new paths for sustainable and more equitable development. There are various ways in which European countries can help foster this process. To increase worker productivity and the contributions of SEMC workers to their economies, they can do more to help prepare, empower, and develop skilled labor in SEMCs while also skilling potential migrants by helping to strengthen the educational and training systems in SEMCs. This can also include training programs financed by European firms in SEMCs, structured exchanges, certification programs run jointly by northern and southern educational institutions, language instruction, and digital programs. The advent of distance education and remote learning makes this both affordable and feasible.

Another important area than can be developed further is supporting virtual migration through ICT-enabled services. For this, there needs to be investments in SEMCs to increase investments in the ICT infrastructure, digital skills, and finance for digital-economy-based

start-ups and an update of the domestic regulatory regime, all areas where EU countries can help. However, both SEMCs and European countries have to reduce restrictions on cross-border digital services. While comparative data on trade restrictions in digital services are not readily available for Southern Mediterranean countries, OECD data on restrictions on trade in digital services show that there is high variance among countries. Further analytic work by the EU and other relevant organs is advisable.

Digital Economy, and Research and Innovation

On the *digital economy* there are four distinct areas for regional and international cooperation:

The first is regional cooperation for ICT infrastructure and ICT services. Cross-country agreements covering these investments are important for reducing costs and achieving economies of scale from larger markets for investments in infrastructure, such as fiber optic cables and internet exchange points, as well as cross-border provision of roaming services.

A second area of cooperation is greater digital trade facilitation within future trade agreements. Most regional trade agreements now include digital trade facilitation measures to reduce trade costs. These include online registration of trade documentation, the creation of electronic single windows to reduce processing time, and paperless cross-border trading systems (World Bank 2020h, p. 138; Arezki et al. 2020, p. 66).

The third area of cooperation is trade in digital services. This includes measures related to information and communication infrastructure as it relates to trade in digital services. Here we are speaking of interconnections among digital networks, measures blocking or limiting digital communication services, and measures that affect connectivity, such as data flows and localization requirements for data storage. This area also includes discriminatory measures affecting electronic transactions such as granting e-commerce licenses, recognition of electronic signatures, and electronic payments. The EU began development of a single market in many of these digital services in 2015 and has already achieved considerable integration (Box 6.1). Southern Mediterranean countries such as Egypt, Morocco, and Tunisia are participating in efforts by the African Union to achieve similar digital market integration (FEMISE 2019). Negotiations on some of these issues and a Pan-African Payment and Settlement System are scheduled for negotiations starting in 2021 (AUC/OECD 2021, p. 58). These countries should also consider extending international agreement to countries in the Levant as well as developing agreements with the EU.



Box 6.1

Development of the Digital Single Market in the EU

The EU Digital Single Market strategy, launched in 2015, was followed by a dedicated resolution by the European Parliament in 2016. Key achievements of this strategy have included:

- The end of roaming charges since June 6, 2017 which allows EU citizen to use their phones for calls, SMS, and data in any of the member countries for the same price as in their home country.
- The removal of country barriers to e-commerce since March 2018 which ensures that consumers can access goods and services online without concerns for geographically based restrictions to e-commerce, or cross-border transaction.
- Cross-border portability of online content since April 2018 which allows EU citizens to access their online subscriptions to data, films, sporting events, e-books, video games, and music services while in any of the member countries.
- Cross-border portability of online content since May 2018 that allows EU citizens to access online subscriptions and entertainment services when travelling in other member states.

Source: AUC/OECD 2021 p. 59.

The fourth area of cooperation is a complex set of issues that include digital taxation, digital security, privacy, personal data protection, and cross-border data flows. Currently there are competing perspectives and approaches to these issues among countries as well as globally between regions. An important subset of trade in digital services, important in the context of virtual migration, is restrictions on digitally enabled professional services such as accounting and auditing, architecture, engineering, legal services, educational services, and data analytics. These kinds of restrictions raise costs and impede competition.

In *research and innovation* there are many opportunities for collaboration across Southern Mediterranean countries as well as between them and the EU. These opportunities may perhaps be clearer in the areas of agriculture, and environment, although they also exist for industry and services as well. The rationale for more cooperation in agriculture and environment stems from the fact that many SEMCs face common challenges of water scarcity and dry climates, and excessive reliance on fossil fuel energy. Thus, there is scope for cooperation on

more water efficient agricultural desalination, waste-water treatment, and renewable energy technologies. Good examples of efforts in this direction are the partnerships among research institutions in the Mediterranean and between them and beyond (Box 6.2.)

Environment and Green Energy

Besides the traditional areas of trade and foreign direct investment and infrastructure and education, there is also strong potential for collaboration on the **environment**. This includes not only greater North-South environmental integration on green energy, but also on controlling pollution into the Mediterranean from countries on both shores, as well as on other actions to deal with negative regional externalities for the environment. Climate change concerns are by their very nature cross-border issues.

In light of global commitments and the pivotal role being played by European countries, one of the most promising untapped areas for cooperation is the potential of new clean and renewable energy. The benefits would include those captured by respective countries as well as by the global commons. Since the beginning of the 21st century, there have been initiatives aimed at North-South clean energy integration such as the 2008 Mediterranean Solar Plan⁵⁵ which have produced benefits but largely yielded more talking points than results. Although it's hard to spin the COVID-19 crisis as a positive, it has provided an opportunity for both mature and emerging markets to bolster investment in renewable energy. This investment will not only help their economic recovery, but could also establish the sector as a prominent source of growth for years to come. It is hard to imagine the architects of the European Green Deal⁵⁶ foresaw what was coming in 2020, but the aims set out under its mandate could serve to support both North-South growth, further strengthen synergies in sustainability, and ultimately produce positive environmental impacts. Beyond the benefits related to the prior points, "Green Deal Diplomacy" could also aid host-country economic development and mitigate push factors for migration⁵⁷ Encouraging examples do exist and now is the time to double down on creating these interdependencies, which will require leadership at the highest level from both Europe and its Southern partners.

55. <https://africa-eu-partnership.org/en/success-stories/mediterranean-solar-plan-links-north-africa-europe>

56. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX:52019DC0640>

57. <https://ecfr.eu/publication/power-surge-how-the-european-green-deal-can-succeed-in-morocco-and-tunisia/>

Box 6.2

Partnership with the Mediterranean and CGIAR Research Networks and the National Stakeholders

All countries in North Africa have established partnerships with the Mediterranean Agricultural Research networks such as The International Center for Advanced Mediterranean Agronomic Studies (CIHEAM) and Coordination of the Agricultural Research in the Mediterranean (CORDIS) and with the 15 international centers of excellence members of the Consultative Group for International Agricultural Research (CGIAR). The European Union funded CIHEAM and CORDISa and the World Bank and more than 50 donors funded CGIARb to implement research programs in the North African countries in partnership with the national research organizations in North Africa. Their joint work includes improving the performance of food and nutrition policies; on enhancing the productivity of strategic food crops such cereals (wheat barely, maize and rice and food legumes); livestock and fisheries; and root crops and water management. These partnerships are also promoting fundamental changes in expanding inclusive research to include strong engagement by the stakeholders and the private sector.c National research organizations in Egypt and Tunisia and Morocco are expanding their research and development programs for food systems and agricultural strategy to better address mounting challenges facing national food security and to refocus concerns on employment and regional development.

Egypt is the host country of one of the 15 centers (International Center for Agricultural Research in Dry Areas—ICARDA) and hosts the regional programs of the International Food Policy (IFPRI). Tunisia hosts several centers to conduct research in improving the performance of main food crops in the country. Recent reports and data confirm that Morocco, Tunisia, and Egypt have partnered with international research networks of the Mediterranean and the CGIAR to increase crop yields. This includes work to generate and test new varieties resistant to disease and pests and tolerant to rising temperature and drought and other challenges caused by climate change. In addition, these partnerships provide platforms for the exchange of information and lessons learned among donor countries in Europe and the countries of Middle East and North African, which could guide and inform research on food security related to COVID-19 and beyond. Indeed, these international research networks are main drivers in helping national research organizations strengthen regional research partnerships, specifically in areas related to the building food systems and security resilient to global challenges of climate change and pandemics such as COVID-19.

Sources:

- a. *Patricia Augier et Pierre Blanc, Chapitre 1. La sécurité alimentaire en Méditerranée à l'heure de la crise sanitaire de la Covid 19. See also <https://cordis.europa.eu/project/id/219262/reporting>.*
- b. *CGIAR Covid-19 Hub, A CGIAR COVID-19 Hub, brings together agriculture and health research in collaboration with the London School of Hygiene & Tropical Medicine, has been established to ensure that a research-informed response to COVID-19 effectively reaches the world's most vulnerable.*
- c. *Kassim et al. 2018.*

Among other things, the European Green Deal aims to achieve carbon neutrality by 2050 and strengthen the European Union's position as a global leader in sustainability.⁵⁸ With regard to the latter, the decree explicitly states the EU is "envisioning a number of strong environment, energy and climate partnerships with the Southern Neighborhood." Given its high demand and lack of natural resources, Europe has relied on fossil fuel energy from the Southern Mediterranean for decades. In some regard, the region is arguably better suited for renewable developments given the high quantities of sunlight and wind. Morocco and Tunisia currently have large renewable projects with heavy European involvement (see Box 5.3 on the Noor Ouarzazate CSP, and Box 5.4 on Tanger Med) that are integrating value chains and positively contributing to sustainable growth. Nevertheless, despite their geographic advantage, the Noor Ouarzazate CSP complex is a perfect example of the geopolitical competition taking place, as a Chinese SOE was heavily involved in phases II and III. EU trade still dwarfs that of China, with total volume approximately 7.5 and 12 times larger with Morocco and Tunisia respectively; however, it is fair to say that, if Europe does not fill the investment vacuum others will.⁵⁹ These synergies are not limited to the two countries above and can be expanded to Egypt (electricity grid integration) and Jordan (green hydrogen), among other Southern neighbors. The European Fund for Sustainable Development Plus (EFSD+), with nearly €30 billion budgeted for climate developments (30% of total budget), is coming online in 2021 and could go a long way to incentivize investment into the Southern Mediterranean.⁶⁰

Another high-growth clean energy segment garnering attention is green hydrogen, with the 2020 agreement between Germany and Morocco as a concrete example. Germany intends to invest €9 billion in clean fuel advancement and €2 billion will be funneled into foreign

58. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX:52019DC0640>

59. <https://ecfr.eu/publication/power-surge-how-the-european-green-deal-can-succeed-in-morocco-and-tunisia/>

60. [https://www.europarl.europa.eu/legislative-train/theme-europe-as-a-stronger-global-actor/file-european-fund-for-sustainable-development-\(efsd\)](https://www.europarl.europa.eu/legislative-train/theme-europe-as-a-stronger-global-actor/file-european-fund-for-sustainable-development-(efsd))

projects. Two such developments currently underway are the Moroccan Solar Energy Agency's "Power-to-X" project and the corresponding research platform through the Institute for Research in Solar Energy and New Energy for knowledge transfer.⁶¹ Although Morocco currently holds a comparative advantage for these developments given a sizable portion of its power generation comes from renewable sources, other regional peers could follow suit. Dii Desert Energy, a nonprofit focused on improving market conditions for clean energy across MENA, has published extensive research on the potential for green hydrogen across North Africa.⁶² Finally, based on the fact green hydrogen is capable of being transported through existing gas pipelines (Maghreb-Europe Gas Pipeline, Trans-Mediterranean Pipeline, etc.), this type of repurposing of existing infrastructure currently in place is an ideal multipurpose solution for the region.⁶³

Harmonizing sustainability frameworks and clean energy developments will not only help hit climate targets but also improve North-South integration. Renewable energy projects have been and will continue to support job creation and economic growth on both sides of the Mediterranean. Furthering these interdependencies is of critical importance for economic development, combating climate change, and geopolitical considerations. Now is the time to expand and formalize many of the existing partnerships currently in place between the Northern and Southern Mediterranean.

Finally, there is a strong rationale for broader and deeper greater *regional North-South integration*. This is particularly relevant now in the context of greater uncertainty and great power competition. There is a strong rationale for a stronger EU, MENA, and Sub-Saharan regional bloc makes sense (Arezki et al. 2020). The EU has a comparative advantage in technology and finance, but is constrained by a rapidly ageing population. MENA and Sub-Saharan Africa have natural resources and rapidly growing populations. There is also a strong link through migration, especially to Southern EU countries and Turkey. Most of the migrants that come to these countries are from MENA and Sub-Saharan Africa. Historically the flow of migrants increases when economic conditions or security issues deteriorate in the latter regions, and this will likely resume in the aftermath of the pandemic. Thus, there is also a strong strategic interest for the EU to support greater development in MENA and Sub-Saharan Africa. MENA can also play an important intermediary role.

⁶¹. <https://ghorfa.de/de/bundesregierung-unterzeichnet-wasserstoff-abkommen-mit-marokko/>

⁶². <https://dii-desertenergy.org/publications/>

⁶³. <https://ecfr.eu/publication/power-surge-how-the-european-green-deal-can-succeed-in-morocco-and-tunisia/>

Part 7

Moving Forward and Facing the Post-Pandemic Challenges:

The Need for A New
Development Model
With Focus on Future
Growth Drivers

**The Pre-Pandemic Context
Shapes the Landscape**

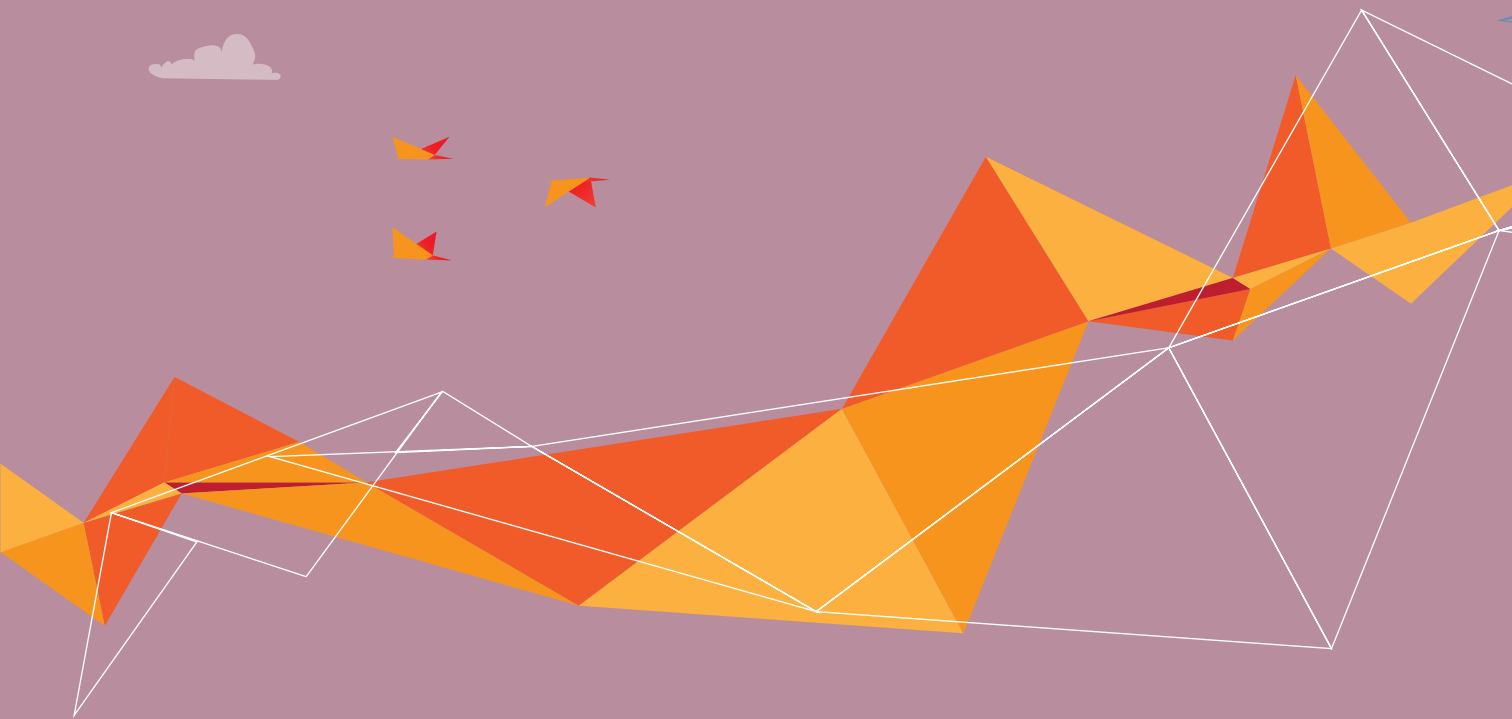
**The Challenges Facing SEMCs
have Multiplied**

**Improving Medium-term
Economic Management**

**The Important Issues of
Reform, Policy Coordination,
and Implementation**

**The Critical Role of Foreign
Partners: One Possible Avenue
in Moving Forward**

Final Policy Considerations



The Pre-Pandemic Context Shapes the Landscape

Many countries of interest in this review shared a number of important characteristics and similar binding constraints to growth. These have already been highlighted elsewhere;⁶⁴ however, what is striking is that there are major similarities in the development strategies that were being proposed pre-pandemic. Looking at development plans for Egypt, Morocco, and Tunisia, and the proposed approaches designed by the EBRD, for example, one sees a major focus on the fostering of SMEs as future growth drivers.⁶⁵ All countries attempted to improve the productivity of their manufacturing sectors; they were concerned about the lack of credit access (and related issues of collateral) within the context of imperfect business environments, and hoped for improvements in competitiveness and greater connectivity to global value chains. At the same time, the countries of interest, here including Jordan and Algeria, had aspirational goals of improving the quality of human capital, the employability of young and female workers, and the improved provision of skills.

The pandemic has not changed these priorities. If anything, it has made these goals all the more crucial as employment levels that were already weak have become weaker yet, access to credit by fledgling private sectors has been more constrained as public borrowing has crowded them out further, and fiscal pressures have made it more difficult for governments to undertake new programs of skills acquisition. The dominance of state-owned enterprises and presence of a few large industrial firms has meant that the aim of SME development is being short-circuited and that many goals that were hard to attain pre-pandemic are now even tougher to achieve today.

Specifically, in the case of **Egypt**, where SMEs face limits on available credit, and where collateral issues dominate, it will require a major reform program to both re-allocate resources to SMEs and to take a long, hard look at the efficiency and productivity of SOEs and other government-linked firms. To foster national development goals, there is a large agenda to be tackled. Moreover, domestic value chain creation is slowed down by a weak contractual environment, informality, poor safety and quality standards, and a general dearth of required skills and capital.⁶⁶ One way in which these interwoven set of constraints can be broken is through a concerted FDI strategy and accompanying governance gains in the business environment that enhance the ability of the private sector to become competitive and reduces the role of SOEs.

In the case of **Morocco**, the EBRD notes that better protection for the foreign investor and improvements in an uncondusive business environment are

⁶⁴. See CMI (2020) and World Bank (2020e).

⁶⁵. See EBRD reports at <https://www.ebrd.com/>.

⁶⁶. See Egypt's EBRD country strategy:
<https://www.ebrd.com/where-we-are/egypt/overview.html>.

necessary conditions to attempt to realize gains in entrepreneurship. Many hurdles impede private sector development, and access to finance is a binding constraint for SMEs and others, limiting their ability to connect to GVCs.⁶⁷ Looking at Tunisia, one sees again that poor infrastructure, a state-dominated financial sector with large NPLs, and low levels of financial inclusion add to the common themes of skills needs and upgrading the business environment to attract the right kind of FDI.⁶⁸

We can add the unique circumstances of Algeria, where in addition to energy diversification and transformation, the goals likewise include industrialization, improved competitiveness, and the building of value chains in addition to changes in governance.⁶⁹ Last, we can note that in the case of Jordan, very similar goals of SME growth, greater integration in regional value chains, increased private sector and capital market development, and enhanced skills are basic elements for viable development strategies.⁷⁰ Lebanon is of course a special case, where the macro-financial crisis now dominates and where the instability of the political situation makes medium-term planning more distant.

The basic message is that the goals of the relevant SEMCs are broadly similar, the constraints are common, and the outlook was daunting pre-pandemic. There are nuances of course that make each country different, particularly when it comes to issues of governance. These differences indicate that some will be better able to undertake reforms and embrace newer strategies than others. That said, it is not an understatement to reflect on the basic uniformity of views of the World Bank, the EBRD, and other donors, and the fact that country performance has in many cases fallen short of country aspirations. Realism dictates, therefore, examination of the post-pandemic outlook and consideration of possible alternative pathways to achieve some of the aforementioned goals. Since more of the same is unlikely to bear fruit, new strategies, focused on opportunities for growth, may well warrant consideration.

The Challenges Facing SEMCs have Multiplied

There is no shortage of country and regional diagnostics for SEMCs. The major focus of recent analytic work has been to point out the dearth of inter-regional trade, the slow pace of export diversification, the weaknesses of foreign direct investment, the slow pace of job creation,

⁶⁷. See Morocco's EBRD country strategy:
<https://www.ebrd.com/where-we-are/morocco/overview.html>.

⁶⁸. See EBRD Tunisia Country strategy:
<https://www.ebrd.com/where-we-are/tunisia/overview.html>.

⁶⁹. See African Development Bank's Algerian Country Strategy, 2018:
<https://www.afdb.org/en/documents/project-operations/country-strategy>.

⁷⁰. See EBRD's Jordan Country Strategy 2020-2025, January 2020:
<https://www.ebrd.com/where-we-are/tunisia/overview.html>.

and the inability of the states to reform themselves. None of this is new, but what is troubling is that all these areas of limited progress on reforms are ways in which resilience could be improved. Now, in the wake of the pandemic, when the outlook is highly uncertain, there may be an opportunity to re-think where countries find themselves and to question their policy trajectory.

One of the difficult developments associated with the pandemic has been the collapse in *international tourism*. Between January and June 2020, tourist arrivals fell by 93 percent worldwide and according to UNCTAD this has meant 440 m. fewer arrivals and a loss estimated to be \$460m. for a six-month period.⁷¹ According to the OECD, tourism losses will reach \$1.2 trillion in 2020 (2.8% of global GDP). Among the most affected countries is Morocco, where the OECD estimates the loss at 4% of GDP and associated jobs and impacts on SMEs (OECD 2020a). The immediate impact was even greater for Egypt., where losses of GDP, jobs, and incomes were even higher. Note, however, that some predict that a return to normal may not come until 2024.⁷² The outlook will obviously be shaped by the availability of vaccines, not only for travelers, but more importantly, for those in the tourist-receiving countries. The implication is that merely waiting for a return of this source of revenue and foreign exchange may not be advisable. Hence, the search for new sources of growth becomes more urgent.

Some point to *digitalization* as a possible medium-term opportunity since it can overcome geographic and logistical shortcomings and can reckon with the realities long-ago pointed out by Rodrik (2014) that manufacturing will in many cases no longer be the key to EMDE success. The possible opportunities that the digital economy may offer are discussed in Part II of this report. That discussion points to the need to dramatically upgrade the service sector as well as the gray area between it and export production. While these potential avenues exist, when looking at the status of learning as reported by the World Bank's Human Capital Index as well as relevant WEF's Competitiveness rankings, it is clear that significant country challenges currently impede technology absorption. That said, there are some opportunities that can be exploited if European countries can show renewed interest in university twinning arrangements, in providing EU incentives to stimulate back-office activities, and if orderly work arrangements can be instituted to both train SEMC country nationals as well as fill some employment shortages in the Eurozone.

For the reasons mentioned above, governments find themselves between "a rock and a hard place" in their search for growth drivers. Export growth has slowed, and global value chains have both slowed

71. UNCTAD (2020) also speculates that without a dramatic turnaround in 2021, the loss will rise to \$3.3 trillion globally.

72. See Tourism Economics, 2020: <https://www.tourismeconomics.com/>.



down and shifted (World Bank 2020h), which has led some governments to more seriously consider domestic sources of growth and flirtations with industrial policies, a historically controversial approach that has failed more often than it has succeeded (Leipziger 2019). There is no doubt that *greater inter-regional trade* could be a useful fillip in the search for growth, and renewed efforts in this direction would be welcome. While there are lessons to be learned from unsuccessful regional trade integration efforts in Central America and the Andean group of countries, what is really required is a fresh start at increasing the efficiency of some firms that can become larger and more efficient in the sub-region. Financial and technical support could be considered for such attempts if proper governance can be assured.



Another underused source for future economic growth would be strategically directed attempts to attract *FDI* from those who possess both the financing and the technological know-how to push countries up the frontier of high value-added production. This approach was employed successfully earlier on by Malaysia, by Thailand, exceptionally well by Singapore, and more recently by Vietnam and others in East Asia. We will return to this policy lever shortly, which may seem to be overreaching; however, one recommendation of this report is to explore new avenues to drive economic growth, to accept some of the positive lessons from other parts of the world, and frankly to encourage more ambitious economic thinking.



Another element of a post-pandemic strategy would be to enhance the role of the *private sector* in a part of the world where the state-owned sector has had the upper hand. In saying this, we leverage on the work already done by Arezki et al. (2019) and we also are clear that we are not advocating the replacement of state monopolies by private monopolies.⁷³ However, many middle-income countries face serious bottlenecks when it comes to increasing the private sector's role. Major constraints include the limited size of firms, low productivity, and the dearth of competition at home. A further constraint is access to capital, which favors incumbents and those with connections, such as SOEs. How to quickly get the institutional framework ready for private sector enhancement and how to manage the foreign private sector are real challenges, but ones that need to be addressed to help countries break out of low-growth traps.

Improving Medium-term Economic Management

For the medium-term, assuming only a moderate GDP recovery in the 2022-2025 period, what will distinguish countries is both the *quality of*

⁷³. There is ample evidence, for example from the telecoms sector in Mexico, that privatization without strong regulation and competition policy simply leads to market outcomes that are not in the national interest. For the MENA region, see Arezki et al. (2019).

revenue generation, but even more so the *quality of public investment*. In most SEMCs, public investment levels dwarf private investment, and yet the quality of those investments needs to be improved. A quick look at Public Expenditure and Financial Accountability (PEFA) scores for SEMCs shows that there are leakages in public spending, problems of targeting, and most decisively issues of public investment execution.⁷⁴ Better project analysis is one avenue of reforms with a major payoff, and MDB expertise can be requested to assist in this effort. External reviews of public investment programs can be seen as political intrusion, but they can also be harnessed to save resources and put them to better use. In the fiscally constrained period ahead, this policy observation may have considerable merit.

Another area of public spending that needs review is in the *quality of social spending*. The gaps between nominal years of schooling and educationally documented levels of school in the World Bank's HCI are significant.⁷⁵ These disparities are undoubtedly gender specific as well. To use one example, if in Country X 30% of GDP is public spending and 30% of public spending is for education (and assuming the bulk thereof is for wages and salaries of teachers), if absenteeism in school runs even 20%, then the government in question is losing 1.8% of GDP each year. This is intolerable when growth rates have dropped in post-pandemic scenarios and when population growth is still moderately high. This same analysis can be applied to other sectors with sector-specific metrics. The basic point is that a good deal of public spending is wasteful spending, and in the growth constrained post-pandemic world, this is even more unaffordable than it was before. There are ways of capturing these losses, through Public Expenditure Reviews (PERs), PEFA assessments, and other tools. Such diagnostics could prompt national efforts to gain better returns from increased public spending.

A final priority area for medium-term management falls into the *regulation and competition* rubric, and into the relationship between government and the private sector. SEMC countries do not score well in areas of regulation and competition (WEF 2019). This saps national resources, limits the benefits to the citizenry, and is a deterrent to export drives.⁷⁶ Moreover, if the governments are to pursue a strategic FDI policy as previously suggested, it will require viable private sectors to partner successfully with foreign investors. Countries that cannot cultivate linkages with foreign investors, and which, for example, rely predominantly on Export

⁷⁴. Note PEFA scores for relevant countries.

⁷⁵. HCI scores for 7 CMI countries show expected years of schooling between 10.2 and 11.8; however, learning adjusted years of schooling average between 6.3 and 7.7. See World Bank (2020c).

⁷⁶. See Leipziger (2018) on the inverse relationship between the level of competition at home and export success in the case study "Argentina, in Opening Up Argentina to the World," Working Paper #11, The Growth Dialogue.

Processing Zones, will not benefit sufficiently from FDI. Key lessons can be learned from Vietnam, a very successful case of attracting substantial FDI but mostly in EPZ enclaves. The World Bank's *Vietnam 2035* report (World Bank/Vietnam 2016), based on the government's stated aim of reaching Malaysia's 2015 level of per capita income by 2030, emphasized that competition must be enhanced, SOEs must be curtailed in their business lines, and the private sector encouraged outside of the EPZs. These observations are equally valid for SEMCs, where EPZs are not the panacea if there are weak linkages to the local economy.

Some countries have had success with Government-Business Councils in terms of agreeing on future directions. This can be especially effective if access to financing becomes available through these plans. These forward-looking consultations need not fall into the narrowly defined ambit of industrial policy, where subsidized credit and tariff protection are used, but rather could fall into the Singaporean model of providing greater certainty of policy and ensuring that the government makes necessary parallel public investments to pursue common goals. Technical assistance from planning agencies that have handled this type of coordination well may yield good results.

An additional advantage of *a well-structured planning process* that is widely accepted and credibly implemented is that it can help direct bilateral and multilateral development funds more strategically. Stories of bilateral assistance programs that do not connect well with domestic programs are legendary. And even MDB lending can fall into this trap. A well-designed medium-term development plan that enjoys political support at the highest levels and is backed by a capable technocratic team can help identify binding constraints and can help allocate investment projects to particular donors. In the same fashion, partnerships with more advanced economies that can leverage private-public partnerships with country-to-country development assistance are also to be encouraged. This approach, which can be fostered by external groups with broad connections, requires governments to think strategically, and act in a coordinated fashion. Policy assistance to those governments that see merit in the approach can be very worthwhile and should be actively considered.

The Important Issues of Reform, Policy Coordination, and Implementation

It is often claimed that policymakers shouldn't waste a good crisis, but rather should use the opportunity to undertake meaningful reforms. While this is a useful adage, and while it has some truth in this case, it also does not do justice to the seriousness of the challenges facing individual countries or the crisis facing the global economy more broadly. The policy actions undertaken thus must combine some features that can immediately help offset the recession and new debt

levels, must be able to generate more jobs, must be able to shelter the most seriously affected, and must generate enthusiasm for the country's future prospects—a tall order for sure. And, where to begin.

Studies of what has worked in the past with respect to policy making, such as the work of the Commission on Growth and Development (aka the Spence Commission) referenced earlier provide some answers (Commission on Growth and Development 2008). These are supplemented by best-practice cases in policy making and implementation, such as was seen in the Republic of Korea, Malaysia, and Singapore. These lessons can be derived from elsewhere; however, the noteworthy feature is all three of these countries are capital-surplus higher-middle-income countries facing their own challenges of rising labor costs, slowing demographics, and generally dismal returns on their Sovereign Wealth Funds. Some, such as Korea, have made large efforts to increase their ODA, and to find offshore locations for global exports. Other capital-rich countries, such as China, have selected partners (either through the Belt and Road Initiative or other means) with high-growth prospect countries in the region, such as Ethiopia.

Capital-rich countries that seek to invest abroad are not only looking for raw materials or at capable and well-priced labor or at local and sub-regional demand, but they are also looking at the capability of government; at the country's ability to plan, execute, and implement; and at the predictability of policy. The ability of the government to undertake successful policies not only depends on their design, but even more so on their execution and their being embedded in a constellation of supportive and complementary policies. As an example, export success depends not only on the wage-productivity relationship and on the exchange rate, but also on logistics, on the availability of credit, on marketing and the setting of product standards that are credibly enforced, and the ability to train the work force and have them gain new skills and adopt new technologies. Putting together packages of complementary policies is what many successful economies did well and what aspiring EMDEs will need to do.⁷⁷

Many countries have Five or Ten-year Development Plans that are aspirational in nature, but do not either connect to the budget and/or are not overseen by a coordinating ministry and are thus not implemented well. The countries already mentioned had this type of policy coordination, at times through a super-ministry (as is nowadays the function of the Ministry of International Cooperation in Egypt), and/or placing the coordinating function under a DPM so that polices could

⁷⁷. Recent advisory work by the Growth Dialogue in Uzbekistan, a major reformer, has included the establishment of an Economic Policy Council that is cross-ministerial in order to better coordinate policy measures, get ministries to speak with one another, and fashion policies that can attract foreign investors.

be implemented across ministries.⁷⁸ Single-focus reforms seldom guarantee success and are at best necessary but not sufficient. For this reason, packages of reforms that are re-enforcing stand a better chance of success. Monitoring progress to spot bottlenecks and policy errors is another characteristic of a successful policy regime. Good governance is obviously a prerequisite for success, since one can ill-afford rent-seeking or influence-peddling when trying to reshape incentives. But apart from being necessary for smart development strategies at home, this type of strategic policy making is what foreign direct investors crave before they make major investments, especially if these are to be in the non-extractive sectors and if these investments are to include capital and technology as part of the package.

The Critical Role of Foreign Partners: One Possible Avenue in Moving Forward

The post-pandemic world will be a less hospitable one in terms of trade prospects and it will accelerate existing global trends, such as disruptive technologies that favor digitalization. The speed with which new technologies will take hold is increasing, and since the pandemic (and indeed the decade preceding it that began with the Global Financial Crisis of 2008-09) has stalled new fixed investments; it is easily predictable that new ways of producing things and new locations to produce things (including services) are coming. Whether the pandemic will accelerate the on-shoring of some vital products, such as pharmaceuticals and foods, remains to be seen; however, national production will be given greater incentives due to worsening employment and income distribution considerations in many advanced economies. For these reasons, slow and steady adaptations and small or limited scope reforms in SEMC countries will not be sufficient to make the leap forward that countries and their citizenry desire. Major new thinking and innovative solutions are therefore needed.

Since many binding constraints to growth entail, to use the current vernacular, pre-existing conditions, the government must think big and act swiftly. To do so and to see some concrete results, there may be a premium on doing two things simultaneously. First, starting a new investment conversation with traditional European partners based on a much more ambitious economic agenda. That agenda could include EU incentives that can effectively transfer technology and jobs to Mediterranean countries and can promote private sector-to-private sector collaboration. At the same time, there is merit in exploring

⁷⁸. See the structure and functions of the Economic Planning Board, KDI School as well as Kim and Leipziger (1993).

strategic alliances with reliable partners. To be clear, all such partners seek their own profits and new markets, and they act in their self-interest. But those interests can be married with strategic national goals, provided that the latter are well thought out and clearly expressed. Demonstration projects that show such collaboration have value and can also prompt further action by established partners.

Singapore was the darling of FDI for many decades, yet it had a clear strategy of what it wanted from FDI, what types it wanted to encourage, how it wanted its domestic economy to contribute and learn from the FDI and how it wanted over time to climb the value chain into higher technology products. To do so, it provided clear incentives to firms, made clear parallel investments in innovation and education, and was always thinking one generation ahead in terms of technologies. Singapore helped establish one of the first EPZs in China. Malaysia has also done well in the nexus of FDI-technology-skills and it has empowered domestic firms to benefit from FDI through its vibrant private sector. In another successful context, the Republic of Korea's government policy enabled the conglomerates like Samsung, Hyundai, and LG, among others, to become world-class companies on the global market.

SEMC countries need to distinguish themselves in their search for FDI partners. The prerequisite is to set out a strategic FDI vision (see Box 7.1) and to seek them out partners can be sources of capital and technology; they can help establish training centers and innovation labs; and they can help establish for certain sectors local hubs that can sell and service the region. These are alliances may already exist with some European partners; however, they need to be both strengthened and re-invigorated. Moreover, since competition is valuable, the possibility of East Asian partners may help improve traditional inter-European linkages. Certainly, these relationships can be encouraged and fostered by outside groups with the contacts and expertise to nurture them, but they first require a coordinated strategically led government effort.⁷⁹

⁷⁹. See the policy advisory efforts of the Growth Dialogue in Côte d'Ivoire, Guatemala, and Uzbekistan, for example at www.growthdialogue.org.

Box 7.1

Strategic Foreign Investment

In the two previous sections, we have discussed the importance of foreign partnerships in overcoming some of the binding constraints to development as well as the internal coordination and implementation challenges that face many SEMCs and how they might be managed. Combining these aspects, we can now propose a strategic approach to attracting and dealing with foreign investors on a comprehensive basis.

- 1. The first observation is that foreign investors abhor uncertainty and shifts in policies. This argues for consistency and continuity of policy actions, be they reforms, or measures aimed to ensure that the domestic private sector and foreign private sector have clear rules of engagement.*
- 2. The second observation is that governments need to be unified in their policy stances with clear goals and clear paths of implementation.⁸⁰ This kind of coordination and alignment of policies works best when there is a single conductor of economic policy in the country.*
- 3. Third, governments need to undertake sufficient research to know what it is that they want from FDI, what they are willing to offer by way of concessions, but also how to hold the investor accountable for delivery in areas of technology transfer, skills acquisition, and export development.*
- 4. Fourth, the foreign investor needs clear rules of engagement with both government and the local private sector, and government needs to deliver on complementary investments in infrastructure or human capital to enable the foreign investor to succeed and to be able to work with local entrepreneurs to advance their contributions to export activities.*
- 5. Fifth, countries need to seek continuous institutional improvement in the business environment, in regulation, and the operation of local institutions while reducing if not eliminating anti-competitive behaviors and corruption.*
- 6. Sixth, governments need to seek a domestic consensus for their actions and these collaborative steps are best achieved when there are clear efforts at more equitable growth and social policies that are broadly inclusive.*

⁸⁰. We are reminded of a recent Presidential address in a major emerging market economy where the promise was made to open up the energy sector to additional PPPs, only to have the Minister of Energy indicate on the very next day that this would be a long process with many hurdles to overcome.

Final Policy Considerations

It is no exaggeration to say that when the global economy is faced with a once-in-a-century pandemic that the aftershock will be monumental. One needs only look at the destruction to firms and the income losses of households in advanced economies and the damage done to balance sheets to gauge the nature of the impact. Under these conditions, the legacy issues that have impeded more rapid development progress in SEMCs can no longer be viewed through pre-existing policy prisms. They now become overriding constraints. Depending on the nature of the political consensus and the quality and commitment of government, many binding constraints need to be addressed on an emergency basis. Some of these measures may be required in order to re-profile debt, should that prove necessary. Others will necessitate stronger bilateral actions to help improve growth prospects of SEMCs. And still other lead to a revised dialogue among Mediterranean countries themselves and with their neighbors. The status quo is not a viable one for SEMCs.

The deciding factor in the recovery and strategy for growth renewal will depend, however, on whether countries can diverge from their past. This means that the repeated litany of what isn't working is less useful than concrete actions on some of the binding constraints to future growth. This places a large policy burden on SEMCs. An equally large policy burden falls on the wealthier European partners who must be dissatisfied with the status quo, and who need to dedicate more resources and more political capital to fostering change in SEMCs. Incremental actions will be insufficient to make a difference. In this context, the proposal to engage meaningfully in parallel with capital-surplus, technology-rich, successful developers may sound fanciful. However, in current circumstances, only some governments will show the foresight and resolve to embark on new development paths, ones that engage the foreign private sector and energize the domestic private sector. COVID-19 doesn't merely offer the opportunity for a new approach; it makes new approaches indispensable if countries are not to regress in their development sagas.

To sum up, maintaining the status quo and making incremental reforms will not put SEMCs on a higher and more inclusive and sustainable growth path. The pandemic has exacerbated the pre-existing problems of poverty, inequality, and unemployment. Pre-existing constraints of poor governance; dominance of the economy by SOEs and privileged private groups who get preferential access to credit and protection from competition through government support, weak competition policies, and an unfavorable policy environment for new entrants have stymied reforms necessary to achieve higher and more inclusive growth. Also, the awareness and the mass social movements awakened by the Arab Spring, now fed by the devastating impact of the pandemic on social well-being and frustrated by the lack of sufficient reform to achieve higher and more inclusive growth make undertaking some necessary reforms difficult.



In order to regain fiscal space through measures such as reducing the size of the public employment, reducing subsidies, and raising prices on fuel, electricity, and water to reflect real economic costs will all negatively impact large swaths of the population. These can only be addressed in parallel with other reforms that free up the economy to create more private sector jobs, reduce the privileges afforded to some, and demonstrate that governments go beyond rhetoric in their goals of creating more economically equitable societies.

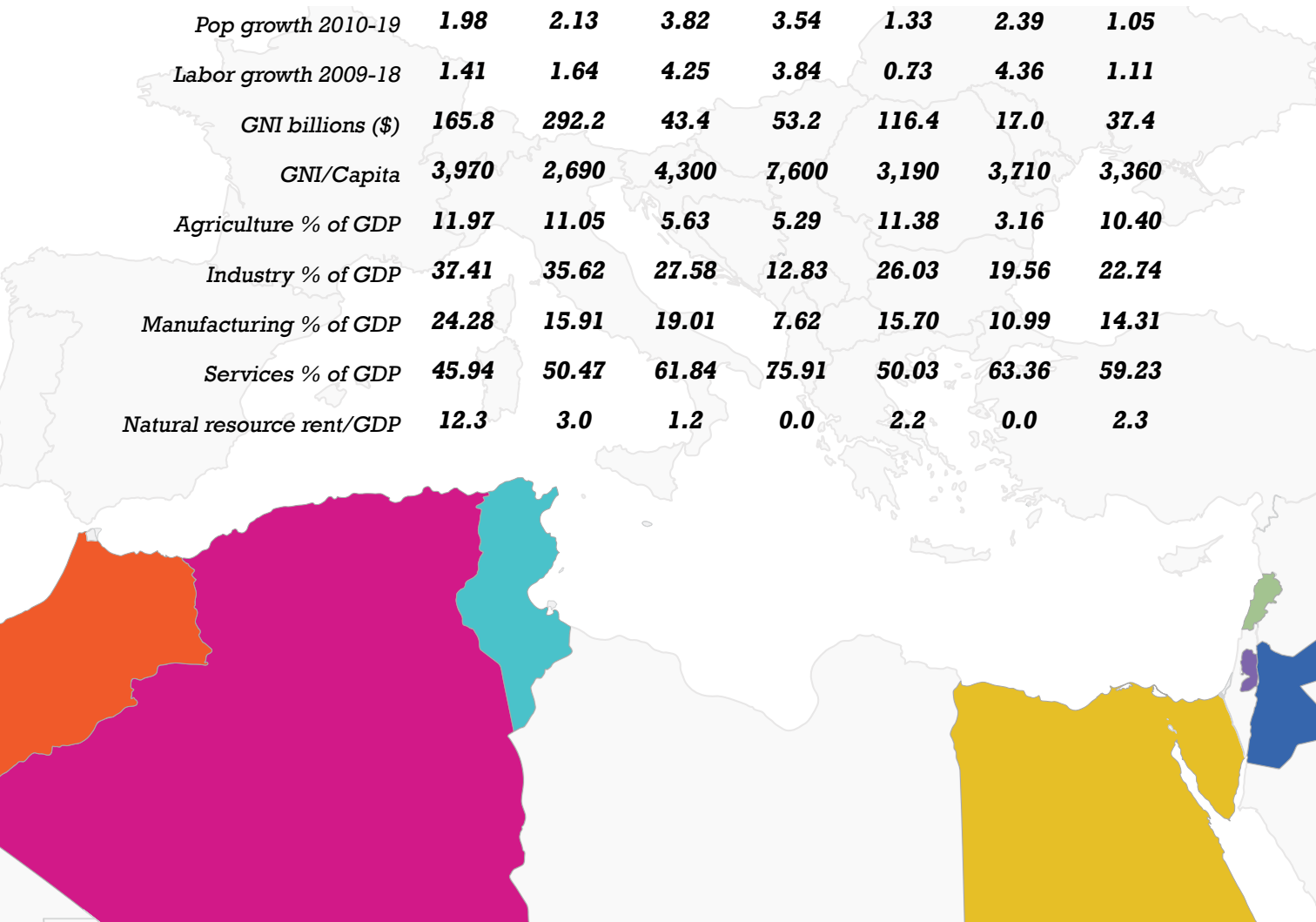
In addition, the global environment has become more demanding. There are some increased protectionist pressures, increased competition, and rebalancing of economic power away from the U.S. and Europe, traditional partners, towards China. Furthermore the rapid development and diffusion of new converging technologies offer new opportunities for those who can exploit them, but great challenges with detrimental impacts on employment, established exports, and growth for those countries which do not successfully reposition themselves.

Major reforms across many areas are needed as part of new and improved development approaches supported by national consensus for a social compact, as proposed in Morocco's New Development Model. Improving economic and social inclusion is no longer an option, but rather an imperative. This may require a revised economic model in many countries. Furthermore, SEMCs need to invest for the future. This includes investment in infrastructure, logistics, technical and higher education, research and development and innovation, and digital technologies to support growth. In addition, it is necessary to strengthen sustainability and resilience, because the current pandemic is just a wake-up call to the future challenges that are going to come from new pandemics, and even more significantly from climate change.

All this requires additional resources as well as significant improvements in the economic and institutional underpinnings. The challenge is how to finance all this, while at the same time rebuilding fiscal and external balances in order to obtain international finance and attract foreign investment. This requires strong policy coordination at the top, monitoring and evaluation. It also requires the capacity to quickly adapt strategies and policies to self-correct what is not working, as well as to react to unforeseen domestic and external challenges. Making progress will require not only a strong domestic effort, but also international financial and technical assistance. The spirit of cooperation that the sub-region has long been identified with can be marshalled along with efforts by those partners who are deeply committed to the future of SEMCs in order to put them on a new and improved footing for future equitable and sustainable economic growth and social progress.

Annex 1

Basic Economic Characteristics for Southern and Eastern Mediterranean Countries



| | Algeria ● | Egypt ● | Jordan ● | Lebanon ● | Morocco ● | Palestine ● | Tunisia ● |
|----------------------------------|---------------------|-------------------|--------------------|---------------------|---------------------|-----------------------|---------------------|
| <i>Population millions</i> | 43.1 | 100.0 | 10.1 | 6.9 | 36.5 | 4.7 | 11.7 |
| <i>Pop growth 2010-19</i> | 1.98 | 2.13 | 3.82 | 3.54 | 1.33 | 2.39 | 1.05 |
| <i>Labor growth 2009-18</i> | 1.41 | 1.64 | 4.25 | 3.84 | 0.73 | 4.36 | 1.11 |
| <i>GNI billions (\$)</i> | 165.8 | 292.2 | 43.4 | 53.2 | 116.4 | 17.0 | 37.4 |
| <i>GNI/Capita</i> | 3,970 | 2,690 | 4,300 | 7,600 | 3,190 | 3,710 | 3,360 |
| <i>Agriculture % of GDP</i> | 11.97 | 11.05 | 5.63 | 5.29 | 11.38 | 3.16 | 10.40 |
| <i>Industry % of GDP</i> | 37.41 | 35.62 | 27.58 | 12.83 | 26.03 | 19.56 | 22.74 |
| <i>Manufacturing % of GDP</i> | 24.28 | 15.91 | 19.01 | 7.62 | 15.70 | 10.99 | 14.31 |
| <i>Services % of GDP</i> | 45.94 | 50.47 | 61.84 | 75.91 | 50.03 | 63.36 | 59.23 |
| <i>Natural resource rent/GDP</i> | 12.3 | 3.0 | 1.2 | 0.0 | 2.2 | 0.0 | 2.3 |

Annex 2

Heat Map Scoring Notes

1. Macroeconomic stability

| | | | | | | |
|---|----------------|----------------|---------------|---------------|---------------|---------------|
| GDP Growth, 2010-2019 (IMF WEO, April 2021) | (8.78) | (5.06) | (1.35) | 2.37 | 6.09 | 9.81 |
| Unemployment, 2019 (IMF WEO, April 2021) | 1.0 | 6.5 | 12.1 | 17.6 | 23.2 | 28.7 |
| Fiscal Balance, 2019 (IMF WEO, April 2021) | (25.62) | (16.34) | (7.07) | 2.21 | 11.49 | 20.77 |
| Gross Debt/GDP, 2019 (IMF WEO, April 2021) | - | 46.97 | 93.94 | 140.92 | 187.89 | 234.86 |
| External Debt/GNI, 2019 (WB, WDI May 2021) | 3.29 | 53.25 | 103.20 | 153.15 | 203.11 | 253.06 |
| Debt Service/Exports, 2019 (WB, WDI May 2021) | 0.05 | 26.66 | 53.27 | 79.87 | 106.48 | 133.08 |
| Inflation, 2019 (IMF WEO, April 2021) | (3.33) | 8.74 | 20.81 | 32.87 | 44.94 | 57.01 |
| Current Account Balance/ GDP, 2010-2019 (IMF WEO, April 2021) | (30.81) | (8.15) | 14.50 | 37.15 | 59.81 | 82.46 |

2. Heat-map for fully benefitting from the global economy

| | | | | | | |
|--|--------|--------|--------|-------|---------|--------|
| Merchandise X/GDP, 2019 (WB, WDI May 2021) | 2.29 | 31.08 | 59.88 | 88.67 | 117.46 | 146.26 |
| Manufacturing % merchandise Xs, 2019 (WB, WDI May 2021) | 0.35 | 19.50 | 38.64 | 58.78 | 76.93 | 96.07 |
| Merchandise M/GDP, 2019 (WB, WDI May 2021) | 10.02 | 39.62 | 69.21 | 98.81 | 128.41 | 158.00 |
| Service X/GDP, 2019 (WB, WDI May 2021) | 0.28 | 31.33 | 62.38 | 93.43 | 124.489 | 155.52 |
| Service M/GDP, 2019 (WB, WDI May 2021) | 2.75 | 25.84 | 48.93 | 72.02 | 95.11 | 118.20 |
| ICT X/GDP, 2017 (WB, WDI May 2021) | 0.00 | 4.71 | 9.42 | 14.13 | 18.85 | 23.56 |
| Index Econ Complexity, 2018 (Harvard) | (2.40) | (1.44) | (0.48) | 0.47 | 1.43 | 2.39 |
| Cost of Trading Across Borders, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| FDI Stock/GDP, 2019 (UNCTAD) | 0 | 20 | 40 | 60 | 80 | 100+ |

3. Heat-map on high savings and investment

| | | | | | | |
|--|---------|--------|-------|-------|-------|-------|
| Savings/GDP, 2019 (IMF WEO, April 2021) | (20.00) | (6.26) | 7.48 | 21.22 | 34.96 | 48.70 |
| Investment/GDP, 2019 (IMF WEO, April 2021) | 4.03 | 12.42 | 20.82 | 29.21 | 37.60 | 45.99 |
| WB Human Capital Index, 2020 (WB) | .35 | .45 | .55 | .65 | .75 | .85 |
| Global Human Capital Index, 2017 (WB) | 35 | 45 | 55 | 65 | 75 | 85 |
| Global Entrepreneurship Index, 2019 (GEDI) | 9.0 | 23.9 | 38.8 | 53.8 | 68.7 | 83.6 |
| Global Innovation Index, 2020 (WIPO) | 13.56 | 24.06 | 34.57 | 45.07 | 55.58 | 66.08 |
| Network Readiness Index, 2020 (WEF) | 12.33 | 26.39 | 40.46 | 54.52 | 68.59 | 82.65 |

4. Heat-map of market allocation indicators

| | | | | | | |
|---|--------------|--------------|---------------|---------------|---------------|---------------|
| *Government Expenditure/ GDP%, 2019 (IMF WEO, April 2021) | 9.65 | 33.58 | 57.50 | 81.43 | 105.35 | 129.28 |
| Econ Freedom Index, 2020 (Heritage Foundation) | 0 | 50 | 60 | 70 | 80 | 100 |
| Domestic Credit to Private Sector/GDP%, 2019 (WB, WDI May 2021) | 3.23 | 49.73 | 96.23 | 142.73 | 189.22 | 235.72 |
| Market Capitalization/ GDP%, 2019 (WB, WDI May 2021) | 0 | 60.70 | 121.41 | 182.11 | 242.82 | 303.52 |
| Cost of Doing Business, 2019 (WB) | 20.04 | 33.35 | 46.66 | 59.97 | 73.28 | 86.59 |
| Global Competitiveness Index, 2019 (WEF) | 35 | 45 | 55 | 65 | 75 | 85 |

5. Heat-map of committed, credible and capable government

| | | | | | | |
|---|----------|-----------|-----------|-----------|-----------|------------|
| Voice & Accountability, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| Political Stability/No Violence, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| Government Effectiveness, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| Regulatory Quality, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| Rule of Law, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |
| Control Corruption, 2019 (WB) | 0 | 20 | 40 | 60 | 80 | 100 |

6. Heat-map of poverty and inclusiveness

| | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Gini Coefficient, 2019 (WB, WDI May 2021) | 25.30 | 30.92 | 36.54 | 42.16 | 47.78 | 53.40 |
| Income % Lowest 20%, 2019 (WB, WDI May 2021) | 3.10 | 4.52 | 5.94 | 7.36 | 8.78 | 10.20 |
| International Poverty Rate \$1.90, 2019 (WB, WDI May 2021) | 0 | 9.98 | 19.96 | 29.94 | 39.92 | 49.90 |
| International Poverty Rate \$3.20, 2019 (WB, WDI May 2021) | 0 | 12.76 | 25.52 | 38.28 | 51.04 | 63.80 |
| International Poverty Rate \$5.50, 2019 (WB, WDI May 2021) | 0 | 16.72 | 33.24 | 49.76 | 66.28 | 82.80 |
| Maternal Mortality Rate, 2017 (WB, WDI May 2021) | 2.0 | 231.6 | 461.2 | 690.8 | 920.4 | 1,150.0 |
| < 5 Year Mortality Rate, 2019 (WB, WDI May 2021) | 1.7 | 24.8 | 47.9 | 71.0 | 94.1 | 117.2 |
| Global Gender Gap, 2021 (WEF, Global Gender Index March 2021) | 0.4940 | 0.5706 | 0.6472 | 0.7238 | 0.8004 | 0.8770 |
| Women % of Seats in Parliament, 2020 (WB, WDI May 2021) | 0 | 12.25 | 24.50 | 36.75 | 49.00 | 61.25 |
| Women Business and Law Index, 2020 (WB, WDI May 2021) | 26.25 | 41.00 | 55.75 | 70.50 | 85.25 | 100.00 |
| Male Adult Literacy Rates, 2019 (WB, WDI May 2021) | 31.0 | 44.8 | 58.6 | 72.4 | 86.2 | 100.0 |
| Female Adult Literacy Rates, 2019 (WB, WDI May 2021) | 14.0 | 31.2 | 48.4 | 65.6 | 82.8 | 100.0 |
| Male Labor Force Participation Rates, 2019 (WB, WDI May 2021) | 45.18 | 55.04 | 64.91 | 74.77 | 84.64 | 94.50 |
| Female Labor Force Participation Rates, 2019 (WB, WDI May 2021) | 11.53 | 26.00 | 40.47 | 54.95 | 69.42 | 83.89 |

| | | | | | | |
|---|-------------|--------------|--------------|--------------|--------------|--------------|
| Male Unemployment Rate % Male Labor Force, 2019 (WB, WDI May 2021) | 0.07 | 5.41 | 10.75 | 16.10 | 21.44 | 26.78 |
| Female Unemployment Rate % Female Labor Force, 2019 (WB, WDI May 2021) | 0.16 | 8.36 | 16.55 | 24.75 | 32.94 | 41.14 |
| Male Unemployment Rate % Male Labor Force 15-24, 2019 (WB, WDI May 2021) | 0.19 | 10.87 | 21.55 | 32.23 | 42.91 | 53.59 |
| Female Unemployment Rate % Female Labor Force 15-24, 2019 (WB, WDI May 2021) | 0.35 | 13.96 | 27.57 | 41.17 | 54.78 | 68.39 |

7. Heat-map of environmental sustainability

| | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| CO2/Capita, 2016 (WB, WDI May 2021) | 0.03 | 7.80 | 15.58 | 23.35 | 31.13 | 38.90 |
| CO2 kgs/GDP, 2016 (WB, WDI May 2021) | 0.02 | 0.28 | 0.53 | 0.79 | 1.04 | 1.30 |
| GDP/Energy, 2015 (WB, WDI May 2021) | 2.94 | 7.38 | 11.83 | 16.27 | 20.71 | 25.16 |
| Energy Import %, 2015 (WB, WDI May 2021) | (581.35) | (445.82) | (310.28) | (174.75) | (39.22) | 96.31 |
| Arable Land/Capita, 2018 (WB, WDI May 2021) | 0.00 | 0.33 | 0.65 | .98 | 1.30 | 1.63 |
| Renew Energy/Energy, 2015 (WB, WDI May 2021) | 0 | 19.16 | 38.33 | 57.49 | 76.65 | 95.82 |
| Water/Internal Availability, 2017 (WB, WDI May 2021) | .02 | 1,284.02 | 2,568.01 | 3,852.01 | 5,136.00 | 6,420.00 |
| GDP/Cubic Meter of Water, 2017 (WB, WDI May 2021) | .86 | 140.78 | 280.69 | 420.61 | 560.53 | 700.44 |

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Part 8

**FOOD AND WATER SECURITY:
IMPORTANT POST-PANDEMIC
DRIVERS OF ECONOMIC**

**GROWTH AND SOCIAL
DEVELOPMENT IN THE MENA
REGION: A TECHNICAL PAPER**

**Shawki Barghouti, Senior Adviser
The Growth Dialogue Institute**



The Alarming Urgency of Water and Food Security Issues

Among the economies across the Middle East and North Africa (MENA) hit hard by the impact of COVID-19, water and food security are important drivers of economic growth and social development. They are at a crossroads and urgent action needs to be taken to avoid an impending crisis. In addition to increasing challenges caused by climate change, COVID-19 has compounded the burden of addressing the increasing demand for water and food in the region where managing these commodities was already encountering economic and political challenges.

Simple hygiene practices to limit the spread of COVID-19, e.g., handwashing, are adding additional pressure on already scarce and fragile water resources in most countries in the region. According to a recent World Bank Report “13% of the population – over 74 million people – still lack access to handwashing facilities, and another 87 million people lack access to improved water sources in their homes. This situation forces them to congregate at crowded public sources to collect water, immediately increasing the risk of contracting the virus. Refugees and internally displaced persons in the region are also particularly vulnerable to the virus; 26 million of them have no adequate water supply and sanitation services (World Bank 2020)”¹.

The alarming discovery that traces of COVID-19 were found in wastewater treatment plants requires urgent action to develop guidelines and tools for keeping such infrastructure and its services safe and secure, especially that many countries in the region’s countries such as Egypt, Jordan, Palestine, and Tunisia, are using treated effluent for their agricultural activities. This paper features the key issues that influence the fragile contribution of the water sector to economic growth and social development in the MENA Region. These issues go beyond managing scarce water resources to including other components of the complex water system. While the public sector is responsible for managing and developing and monitoring water resources, the role of main stakeholders and the private sector is crucial in delivering water services and other components of the water system.

We proceed to explore several key issues that preceded the pandemic, but which have become ever more important due to the new stress placed on the region and the increased competition for domestic resources. There is a tendency to see water and food security issues in a longer-run context; however, both the urgency of the issues and the costs of continuing to ignore them will make both recovery and long-term economic growth objectives harder to attain. It is for this reason that a separate Technical Report has been prepared as part of the larger project on Post-Pandemic Outlook.

¹. Nonay, C., and Advani, R. World Bank Blogs: “MENA, the time to act is now.” August 2020.

A discussion of the eight key issues follows:

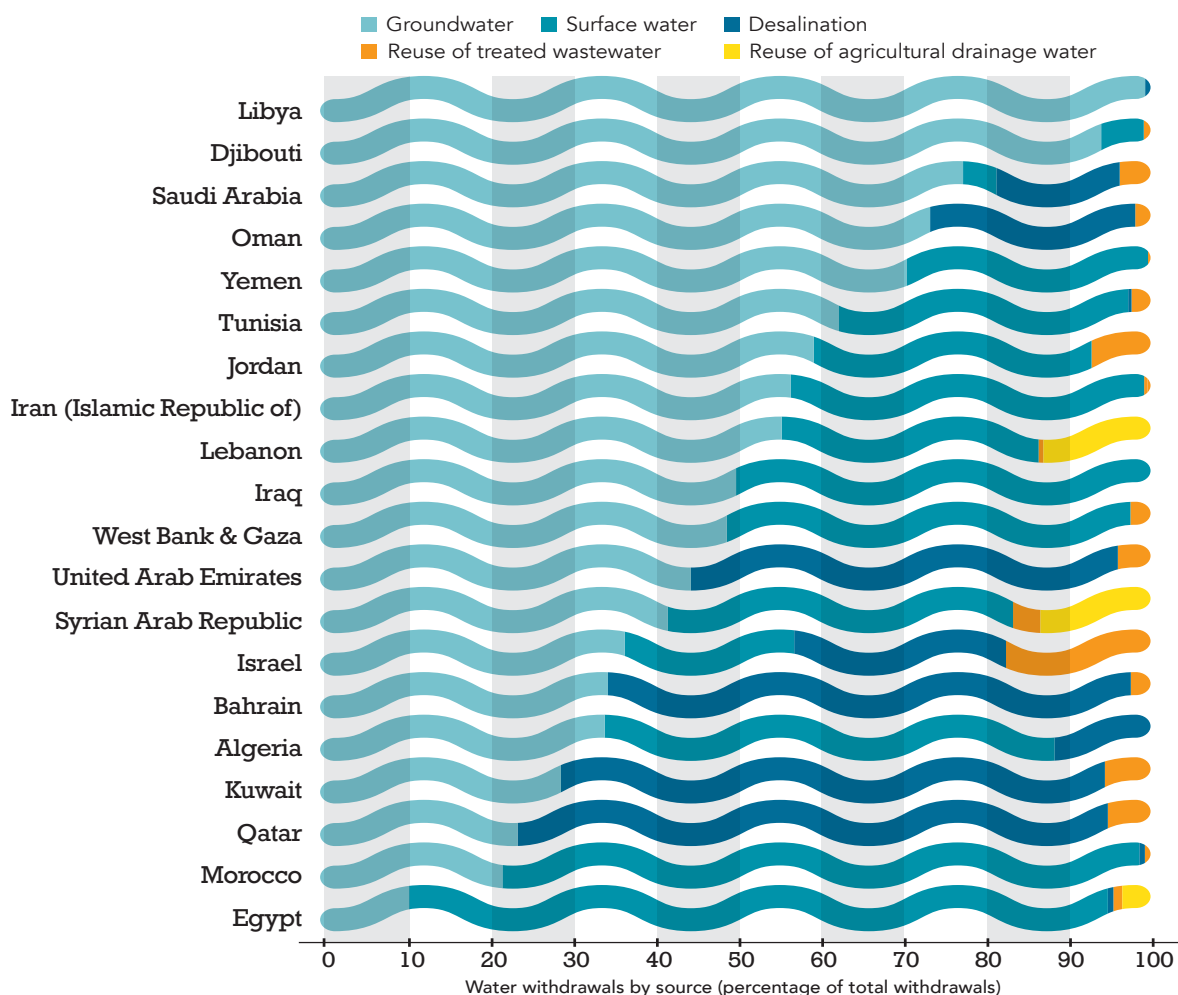
Issue 1

Water security is at risk: current water resources are limited and new sources are expensive.

MENA countries have different water resource endowment that shape their broader water challenges (See Figure 1). Some countries rely most heavily on groundwater, while others are more reliant on large and medium transboundary rivers.

Figure 1

Water Withdrawals by Source as a Percentage of Total Withdrawals, by Country and Economy, 2010



Source: Data on desalination capacity come from AFED (2010), Arab Forum for Environment and Development, Arab Environment: Water - Sustainable Management of a Scarce Resource with the exception of Israel, whose data were taken from MIT Technological Review. Data for all other categories was sourced from FAO AQUASTAT and World Bank 2018².

² Beyond Scarcity: Water Security in the Middle East and North Africa. MENA Development Report. World Bank 2018.

More countries in the region are investing in non-conventional water resources such as desalination and recycling used water for non-potable uses as alternatives to the continued withdrawal of non-renewable 'fossil' groundwater.

Understanding the range of potential water resources in the region is essential. The state of water resources and management in most Arab countries is precarious. Table 1 below summarizes the water situation in most Arab countries, including the main sources of water (surface and groundwater, desalination, and treated wastewater).

Table 1 Water Availability and Usage in Middle East and North Africa Countries

| Country | Annual Availability | | | | Annual Water Usage | | % Use by Sector | | |
|-----------------------------|-----------------------------------|------------------------------|--------------------------|---|--------------------|---------------------------------|-----------------|----------|-------------|
| | Natural Renewable Resource Bm3/yr | Desalinated End Water Bm3/yr | Waste water Reuse Bm3/yr | Per Capita Renewable Availability M3 2000 | Bm3 | As a % of Total Water Resources | Domestic | Industry | Agriculture |
| Algeria | 12345 | 0.07 | Nag. | 380 | 4.59 | 40 | 25 | 15 | 60 |
| Bahrain | 0.11 | 0.14 | Nag. | 214 | 0.25 | 170 | 26 | 3 | 71 |
| Djibouti | 0.02 | 0.00 | Nag. | 24 | 0.02 | 113 | 88 | 0 | 12 |
| Egypt | 61.90 | 00.06 | 5.90 | 1060 | 73.10 | 108 | 6 | 8 | 86 |
| Iran | 129.00 | 0.11 | Nag. | 2028 | 70.30 | 54 | 6 | 2 | 92 |
| Iraq | 80.00 | 0.03 | n.a. | 3441 | 42.80 | 48 | 3 | 5 | 92 |
| Jordan | 0.87 | 0.00 | 0.07 | 193 | 0.98 | 104 | 26 | 7 | 68 |
| Kuwait | 0.11 | 0.65 | 0.12 | 438 | 0.76 | 87 | 37 | 2 | 60 |
| Lebanon | 3.20 | 0.00 | n.a. | 740 | 1.29 | 40 | 28 | 4 | 68 |
| Libya | 0.80 | 0.03 | n.a. | 157 | 3.89 | 469 | 9 | 4 | 87 |
| Morocco | 20.00 | 0.02 | 0.07 | 700 | 16.84 | 84 | 5 | - | 95 |
| Oman | 1.60 | 0.12 | 0.02 | 687 | 1.22 | 74 | 9 | 1 | 93 |
| Qatar | 0.05 | 0.12 | n.a. | 293 | 0.28 | | 23 | 3 | 74 |
| Saudi Arabia | 2.50 | 2.28 | 0.15 | 162 | 17.00 | 506 | 9 | 1 | 90 |
| Syria | 18.70 | 0.00 | 0.26 | 1122 | 14.70 | 78 | 9 | 1 | 87 |
| Tunisia | 3.35 | 0.00 | 0.14 | 365 | 2.53 | 72 | 12 | 4 | 84 |
| UAE | 0.20 | 0.95 | 0.14 | 307 | 1.60 | 180 | 24 | 10 | 67 |
| West Bank & Gaza | 0.76 | 0.00 | 0.01 | 260 | 0.44 | 57 | 51 | | 49 |
| Yemen | 2.50 | 0.02 | 0.03 | 145 | 3.20 | 126 | 5 | 2 | 93 |

Source: Water: Sustainable Management of a Scarce Resource. AFED (2010), Arab Forum for Environment and Development

Population growth and expanding urbanization and associated demand for water in the region have reduced per capita supply to one-fourth of its 1960 levels. Without fundamental change in policies and practices in land and water use, the situation will get worse with both political and economic ramifications.

MENA countries are already in the midst of a water crisis. All countries are below the level of severe water scarcity at less than 500 cubic meters per capita per year; nine countries will be below 200 cubic meters, six of which below 100 cubic meters. Climate change will worsen the situation. Studies show that water flow in the Euphrates may decrease by 30% and in the Jordan River by 80%. An average increase in temperature of 2°C may decrease the flow in the Nile by 50%. Over 85% of fresh water is used for agriculture, with more than half wasted due to unsustainable practice. Efficiency levels of water for human use are low, even in countries depending almost entirely on desalination. Although the region produces more than two thirds of the world's desalinated water, it depends entirely on imported technologies and equipment³.

Issue 2

Conflict over shared scarce natural resources is increasing.

Conflict is common in the region and is creating a vicious cycle of insecurity. Half of the top ten countries with the highest internally displaced people due to conflict in 2015 were located in the Arab world⁴. MENA has the largest refugee population in the world⁵. Countries such as Lebanon and Jordan are hosting large numbers of refugees resulting in further pressure and demand on their already vulnerable resources⁶. The majority of the populations in the Middle East and North Africa lives in high or very high water stressed areas, compared to a global average of about 35 percent (See Figure 2). Over 70% of the region's GDP is generated in areas with high to very high surface water stress, compared to a global average of some 22% (World Bank 2018).⁷

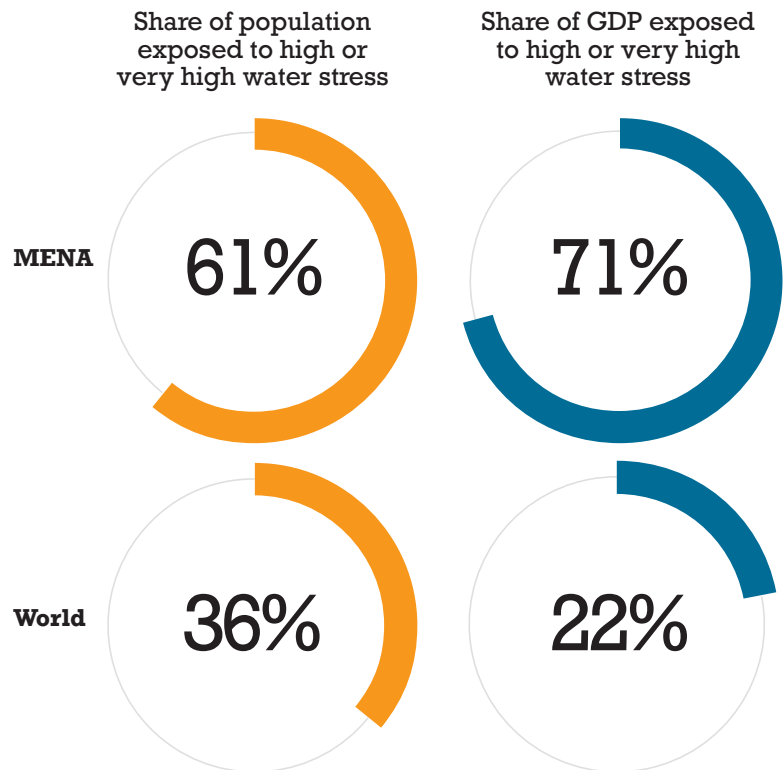
3. Water: Sustainable Management of a Scarce Resource. AFED 2010. Arab Forum for Environment and Development.

4. Internal Displacement Monitoring Center, Global Internal Displacement Database, 2016.

5. Population Reference Bureau PRB, Population Trends and Challenges in MENA, 2001.

6. Lebanese Ministry of Environment, European Union and United Nations Development Program, Lebanon Environmental Assessment of the Syrian Conflict and Priority Interventions, 2014.

7. Beyond Scarcity: Water Security in the Middle East and North Africa, World Bank 2018.

Figure 2**MENA's exposure to high or very high water stress is greater than global averages**

Source: Beyond Scarcity: Water Security in the Middle East and North Africa, World Bank 2018 and "Estimates for the Middle East and North Africa from the World Bank". World averages were taken from Veolia Water and IFPRI 2011

Water resources per capita is just one-sixth of the world average (FAO, 2015). The road ahead to increase water availability is difficult and expensive. Countries in the region have developed a higher proportion of their available water resources and have constructed more water dams and storage per capita than any other region in the world⁸. The region has always coped with water scarcity. But today the region is at a crossroads. Conflict is taking a severe human and economic toll, fueling massive displacements of populations. What water remains available is dwindling, under pressure from rapid population growth and urbanization combined with climate change. Governments in the region have introduced new water policies and water laws to address the risks of increasing water security throughout the water cycle from water resources management to water transfer, treatment and utilization and water recycling for reuse. They also increase investment in water infrastructure and in scaling up water technologies designed to increase water productivity (World Bank 2018).

⁸. Making the Most of Scarcity Accountability for Better Water Management in the Middle East and North Africa, World Bank 2007.

Issue 3

Cooperation in managing transboundary water resources is limited.

a. **Surface water resources are fully utilized.** A large portion of water resources in the Middle East and North Africa is transboundary. About 60% of surface water flows across international boundaries, and all countries share at least one aquifer with a neighboring nation (World Bank, 2017). All major surface water bodies are shared: eleven riparian countries share the Nile, Tigris-Euphrates between Turkey, Syria and Iraq and the Gulf countries, the Yarmouk river is shared amongst Syria, Jordan and Israel, and the Jordan amongst Lebanon, Syria, Jordan, Palestine and Israel. Tunisia and Algeria share the waters of several transboundary rivers, notably the Medjerda River, which accounts for 37% of Tunisia's surface water and 22% of its renewable water resources. And yet not a single formal agreement for joint management of shared water resources exists in the region. Only seven Arab states have ratified the UN Convention on the Non-Navigational Uses of International Watercourses, which codifies the core principles of International Water Law and is often used to conclude joint management and water sharing agreements. This situation is in contrast with the agreements reached in the 1960s between India and Pakistan for sharing the waters of the Indus Basin or the European countries legal agreements for sharing the management of the Danube and the American and Mexico agreement signed in the 1940 to manage and protect the Colorado and Tijuana rivers in the border region.

Dams and storage infrastructure have been built along the main international rivers of the region: The Nile, the Tigris and Euphrates, and the Jordan rivers share surface resources with limited collaboration among the riparian countries. The latest example is the conflict between Egypt and Ethiopia over the construction of the Grand Renaissance Dam close to the Sudanese border with limited consultation with Egypt or Sudan. In addition to sharing surface water running through international rivers, all countries in the region share at least one aquifer with a neighboring country with no agreements for joint management of shared groundwater resources⁹.

b. **Groundwater resources are under increasing pressure of abstraction.** The competition of groundwater both within national boundaries and transboundary aquifers has become a significant source of agricultural water across the region. Groundwater forms the basis for the rapid growth of new agricultural economies of most countries in the region. Egypt is expanding cultivation in the Western Desert to ease population pressure in the narrow Nile basin and its delta. Every country in the region is now experiencing the challenge of groundwater depletion, and

⁹. Transboundary aquifers of the world (2015), The international Groundwater Assessment Center) UNESCO.

the overall very high rates of withdrawal of both surface and groundwater make agriculture vulnerable to claims from other sectors in addition to the risks of climate change that do not recognize national boundaries.¹⁰

Many governments in the region have managed groundwater as an open-access resource, which suffers from the tragedy of the commons caused by loose governance and from traditional demand for easy access to this common resource¹¹. This is one of the greatest obstacles to optimal and sustainable management of groundwater resource, because users of the resource may not consider the effects of their use on the future availability and cost of the resource to other users. Conflict over groundwater sharing and allocation is spreading among the competing users. The over-exploitation is usually the result of a complex process of incentives and subsidies to the energy sector combined with decentralized procedures of drilling wells without adherence to a national water plan. Such a plan would require careful monitoring and data gathering, and regulations that would guide drilling and define priority water use and allocations¹².

Many countries have recognized this problem and introduced regulations for the groundwater sector and are addressing the subsidy to energy within a complex framework responsive to the difficult political economy of the energy sector. But the implementation of these regulations needs further enforcement as groundwater, like surface water, is a fluid that recognizes no national boundaries. Conflict is common over groundwater use between both private owners as well as sharing nations. Criteria for establishing rights and equity in sharing groundwater resources are not adequately clear or well defined in many countries. Where groundwater flows naturally from one state to another, cooperation is needed in areas such as the exchange of information and data required to better monitor and manage both water quality and quantity, and to enforce agreements reached. Especially important is the sharing of information on water recharge, and other changes in water tables in order to coordinate and adjust withdrawal rates among the riparian owners or states. The over-extraction of groundwater beyond safe yield levels has resulted in the

10. GEF 2015. Global Diagnostic on Groundwater Governance. GEF/FAO. Rome. And FAO 2016. Global Diagnostic on Groundwater Governance. Rome: Policy Brief 2017. Enhancing regional cooperation in the Middle East and North Africa through the Water-Energy-Food Security Nexus.

11. Shah, T., 2009, "Taming the Anarchy. Groundwater Governance in South Asia". Resources for the Future Press, Washington DC.

12. The effects of energy subsidies on water withdrawals and depletion illustrate the consequences of unmanaged trade-offs in the water-energy-food nexus. A study on energy subsidies in MENA (Commander, Nikoloski and Vagliasindi 2015) suggests that countries with lower than average diesel prices are characterized by much higher (and statistically significant) water withdrawal to availability ratios. In other Middle Eastern and North African countries where desalination is not a major supply source, subsidized fuel causes high water withdrawal to availability ratios (and thus unsustainable water use) by driving uncontrolled groundwater pumping.

pollution of existing groundwater aquifers, due to intrusion of saline seawater and the upcoming of brackish and saline water supplies from lower aquifers. Throughout the region considerable public and private investments have also been made in groundwater irrigation without paying heed to the sustainability of the resource.

Large aquifers are also transboundary. The Nubian Sandstone Aquifer System (NSAS) shared by four countries in northeast Africa (Chad, Egypt, Libya and Sudan) is the world's largest "fossil" groundwater aquifer, covering some two million square kilometers. Its vast freshwater reserves have the potential to meet growing water demands in the countries. In 2013, the Governments of Chad, Egypt, Libya and Sudan formalized an agreement for joint management of the shared aquifer. The regional agreement (Strategic Action Program) provides a framework for agreed collective actions to manage the aquifer. Specifically, it outlines the necessary legal, policy and institutional reforms needed to address the key transboundary concerns affecting the aquifer and their root causes at both the regional and national level. These countries are allocating significant investment to extract water from this large and deep aquifer to expand water services such as the Man-Made River in Libya and the large-scale desert farming in Egypt to supply water and generate employment to the growing urban populations. The major North-Western Sahara Aquifer System covers over one million km², of which 700,000 are in Algeria, 80,000 in Tunisia and 250,000 in Libya. It includes the two main aquifers in the region: The Intercalary Continental and the Terminal Complex. The riparian countries are developing groundwater resources to expand cultivation of high value crops. The over-exploitation of groundwater may cause serious problems of saline intrusion or ground subsidence.

Recovery of the aquifers, even with the introduction of appropriate measures, may take generations. The responsibility of public water agencies is to ensure that public water resources are much better protected and sustained for future generations. The main drivers in utilizing these aquifers are engineering firms and infrastructure project managers. The expansion of unrestricted use of non-renewable groundwater supplies in many countries demonstrates the impact of inadequate policies and misguided investment in this sector.

The absence of a strategic national water framework to protect the non-renewable water supplies, especially for future generations, is causing many Arab countries to waste precious water resources on activities cultivating low value crops, which have not received adequate economic or environmental assessment and evaluation. This situation could be addressed through carefully developed and articulated integrated water management approaches specifically designed to change the way groundwater is being abstracted and used. This requires an appreciation that groundwater is part of the integrated water cycle in the country, and that it is part of the river basin that



includes both surface and below ground water flow networks. This recognition is essential to harmonize water use among high priority social and economic objectives, within a framework that also takes in considerations the water needs of future generations. Efficient management of groundwater resources recognizes that some of the tapped aquifers are connected with the national hydrological network of both surface and underground, and thus may also be recharged by the irrigation networks distributing surface water to the fields. As such, managing groundwater becomes an integral part of national water plans.

Some governments have initiated serious steps to reform water laws to better regulate the groundwater including licensing well construction and pumping water for personal use. The open access nature of the resource, coupled with its invisibility, makes governance difficult. Public policies and institutions should enhance permanent monitoring of quality and quantity of local and regional aquifers and regulate development and abstraction. Water laws are important to protect these open access resources and to ensure that poor households and consumers have equal access, and to prevent the powerful and politically connected members of the communities to have appropriated water rights¹³.

Most countries are modeling data on vulnerability of ground water resources to monitor groundwater reserves and to study groundwater depletion and possible exhaustion of water resources at local or national levels. Main challenge facing such analysis is the lack of a detailed understanding of when a depleting resource becomes unviable for further exploitation. The question is not simply how much water is physically available, but when the financial costs and environmental and water quality impacts of extracting more groundwater render the resource unviable for human applications. Scientists and modelers employ a global and local data set to specify the cost of groundwater extraction as a function of depletion and to test if future rates of groundwater depletion could be reduced by higher extraction costs. Regions that deplete water to costly levels lose competitive advantage for crop production, which shifts to regions where water resources are cheap and plentiful.¹⁴

Cities such as Amman rely heavily on over-abstracted groundwater in Jordan. As this source is depleted, the government invested in expensive solutions to transfer water from the Disi fossil aquifer, a transboundary aquifer with Saudi Arabia more than 300km south of Amman. Substantial number of residents in the surrounding communities and rural areas of Jordan rely on private providers of services water tankers

13. Closas, A., & Molle, F. 2016. Groundwater Governance in the Middle East and North Africa. IWMI Project Report No 1. IWMI, Colombo.

14. Turner, S., Hejazi, M., Yonkofski, C., Kim, S., Kyle, P. "Influence of Groundwater Extraction Costs and Resource Depletion Limits on Simulated Global Nonrenewable Water Withdrawals Over the Twenty-First Century Earth Future", 2019.

at relatively high cost. Other shared groundwater resources include the Western Mountain Aquifer (between the West Bank and Israel). The expansion of groundwater exploitation and the resulting serious decline of renewable and nonrenewable aquifers have been caused by cheap prices for energy needed to pump water especially from fossil aquifers. The complex relationship between groundwater extraction and energy subsidy is addressed under the water-food-energy section listed below as Issue #5.

In order to improve access to these shared resources, the governments in North African countries have updated their water regulations and established a joint technical commission for water resources planning and management, exchange of information and data management, including monitoring water use, pollution and environmental conditions. To date, the riparian countries have not approved legal agreements. Despite a long history of shared water management in the region, there have been limited cooperative agreements for joint management of transboundary water. Absence of cooperative agreements on transboundary water resources has had severe consequences on livelihoods and ecosystems. Cooperation over transboundary waters is especially complex when conflict and fragility affect riparian countries.

Countries affected by fragility, conflict and violence are poorly placed to defend their interests or to enter into cooperative arrangements. Thus, they bring additional complexity to transboundary water management. In this context, International efforts to enhance cooperation in managing shared waters are seriously needed.

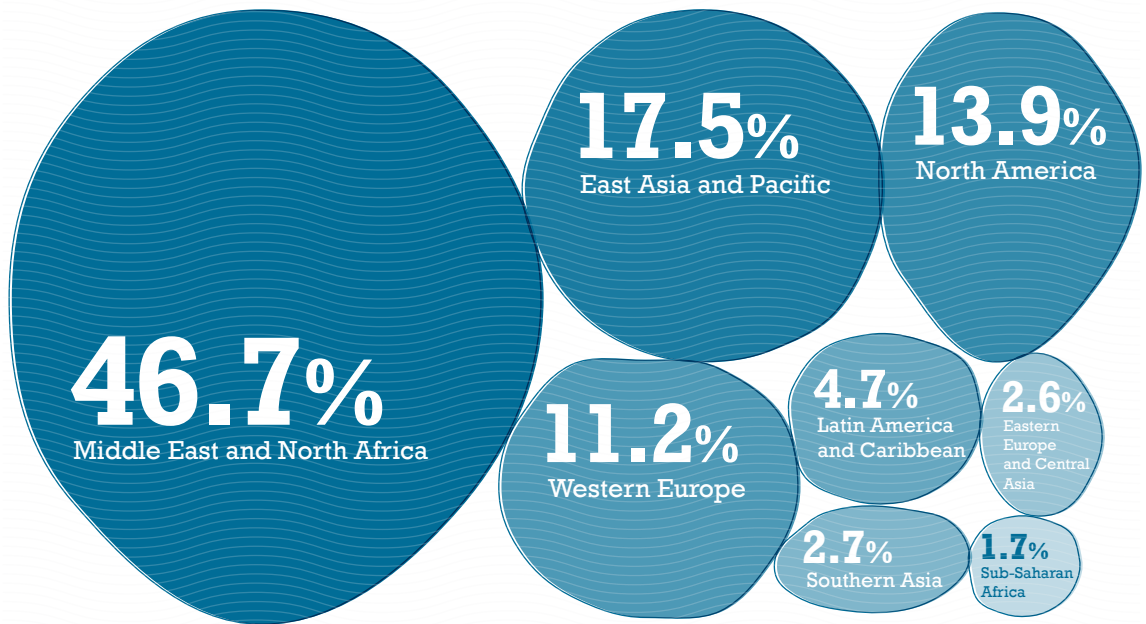
Working together within countries and across boundaries is essential for collective management of transboundary water resources and associated issues like challenges caused by climate change including increasing floods and droughts in the region. Although there are joint actions plans in the large aquifers in North Africa, unfortunately, no legal agreements have been signed along the transboundary rivers or in regulating groundwater aquifers in the region. By contrast, the Pakistan/India agreement governs sharing of the Indus Basin or there are also more than 170 legal agreement among the riparian countries along the Danube river. Efforts by international organizations should be made to encourage cooperation to sign binding agreements among the riparian countries in the region.

c. Non-conventional water resources are expensive: Most counties in the region are exploring options of water desalination to augment declining natural water resources to augment naturally available resources. The six countries of the Gulf Cooperative Council (GCC Bahrain, Kuwait, Oman, Qatar, United Arab Emirates and Saudi Arabia) and Israel have invested heavily in advancing desalination technology to augment water supply for drinking to the increasing and urbanizing population. Seventy percent of desalination plants in the world are located in this area. However, while the plants produce water needed for the arid region, they can manufacture problems for health and the

environment. The seawater used most in desalination plants has high amounts of boron and bromide, and the process can also remove essential minerals like calcium. Also, the concentrated salt is often dumped back into oceans where the increased salinity affects the ocean's environment. The plants harm local wildlife and add pollutants to the region's climate. In addition, costs of desalination are extremely high. In addition, the desalination most countries are treating uses water for recycling. Countries are investing in modern infrastructure and in water treatment technologies to utilize this expensive non-conventional water resource. Several hurdles are slowing the scaling up of using this resource including cultural barriers and health and quality risks that have to be addressed as important components of the resource¹⁵.

Figure 3

Desalination Capacity by World Region, 2016



Source: Data from Global Water Intelligence 2016.

Issue 4

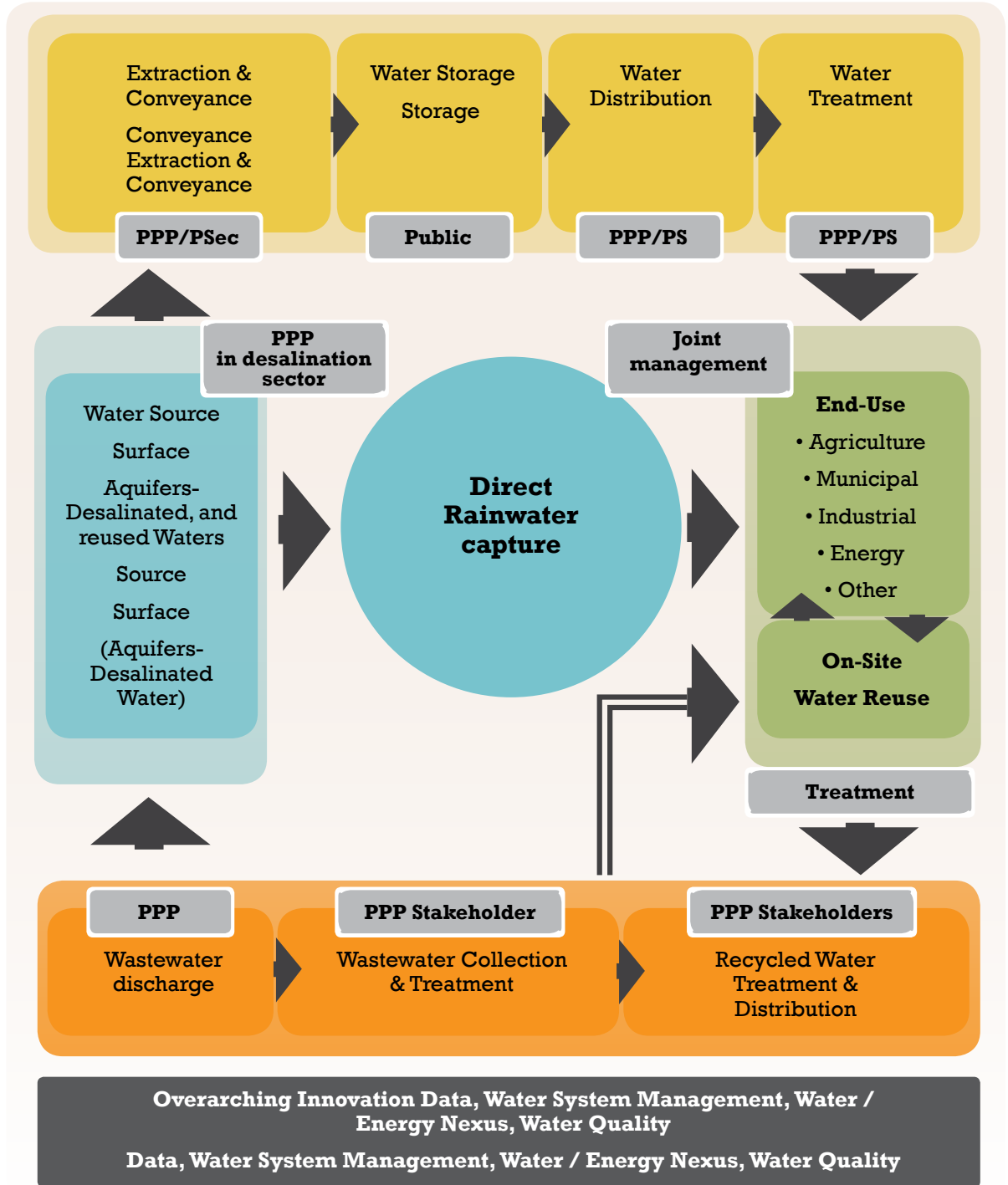
Public Private Partnership (PPP) is increasing in the water sector.

Most countries in the region have expanded implementing public-private partnerships (PPPs) in managing several components of the water system as described below (See Chart 1). The most common PPP is in managing water utilities to tackle financial constraints in water service delivery.

15. Kfour, C., et al., "Water Reuse in the MENA Region: Constraints, Experiences and Policy Recommendations: in Water in the Arab World, World Bank 2009.

Chart 1

Overarching Innovation Data, Water System Management, Water/Energy Nexus, Water Quality



Source: California Council on Science and Technology April 2014¹⁶ and modified for this note.

¹⁶ Achieving a Sustainable California Water Future Through Innovations in Science and Technology California Council on Science and Technology April 2014.

PPPs in utilities can be one tool, among others, available to governments for improving the performance and financial sustainability of the water sector and to support improvements in efficiency and quality of service delivery. PPPs in the water utility have mostly worked using management and performance-based contracts. The advantage of this type of partnership is that the ownership of the assets remains in the hands of the public utility. The private operator becomes involved over short to medium time scales (5-7 years) in the operation and maintenance of municipal water and wastewater systems where the public utility seeks improvements in service delivery and quality. Utility PPPs can also focus on reducing leakage in distribution networks and ensuring that these efficiency gains are maintained over time. In this case, the benefit of the partnership is that the public utility gains by reduced levels of non-revenue water and the contractor by performance-based fees linked to volume of water saved. The engagement of the private sector has not been easy because of weak governance and weak engagement by the stakeholders and water users in designing the conditions under which each component of the water system would be managed and delivered. Because according to the UN resolution, drinking clean water is a human right¹⁷, the engagement of the private sector in this service requires careful assessment of the risk of using this issue for private profit.

Chart 1 above is adapted here to suggest that the complex water system requires elaborate policy framework to define the role of the role government, the private sector and the users as integrated stakeholders of this system. The public sector is crucial in developing and managing and protecting water resources as public good, building water infrastructure such as managing river basis and building dams and national water distribution networks and water storage and water quality and treatment facilities. The public sector is also responsible for monitoring and establishing public data for hydrology and water resources and public water information services. Private sector and water users and other stakeholders can play crucial roles in managing and delivering other components of the water system such as joint

17. On 28 July 2010, through **Resolution 64/292**, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights. The Resolution calls upon States and international organizations to provide financial resources, help capacity-building and technology transfer to help countries, especially developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all. The effects of energy subsidies on water withdrawals and depletion illustrate the consequences of unmanaged trade-offs in the water-energy-food nexus. A study on energy subsidies in MENA (in External the Size of External Effects of Energy Subsidies" Commander, S., Nikoloski, Z. and Vagliasindi, M. (2015) suggests that countries with lower-than-average diesel prices are characterized by much higher (and statistically significant) water withdrawal to availability ratios. In other Middle Eastern and North African countries where desalination is not a major supply source, subsidized fuel causes high water withdrawal to availability ratios (and thus unsustainable water use) by driving uncontrolled groundwater pumping.

management and operation and cost recovery of water delivery services and water collection and treatment and reuse. Engaging the private sector and the stakeholders require transparent governance, responsive water laws and regulations and competent legal and regulatory capacity in public water organizations.

Issue 5

Water/Energy/ Food Nexus needs careful adjustment.

Water, energy and food security are closely interlinked in a region. Water is needed to grow food. And energy depends on water to generate power, yet energy is needed to extract and deliver water to users. Deep groundwater extraction has increased exponentially with the spread of energized pumping for irrigation and to provide drinking water for the millions of rural communities which are not connected to national water carriers.

Great improvements have been made in the methods of drilling in recent years, thanks largely to technology developed by the petroleum industry. Powerful pumps enable the users to draw large volumes of water via deep boreholes, thus affecting the water table beyond the confines of their property and depleting distant wells formerly considered to lie safely beyond the drilled zone. The steady decline in costs, pumps are now, to a large degree, privately owned and have spread rapidly. Facilitated and encouraged by cheap energy prices and subsidies to the energy sector, the dissemination of relatively cheap pumping technology has revolutionized access to both underground water (deep wells or shallow wells) and surface water (tapping rivers and drains and flows in irrigation canals¹⁸). Pumps and tube wells have played a prominent role in irrigation in the semiarid regions for many decades. The expansion of pumping technology has often resulted in dramatic declines in the water table in areas of low or zero recharge. The complex relationship between groundwater extraction and energy subsidy is difficult to address efficiently because of the political economy of both water and energy in most countries in the region. This has superimposed a logic of individual, flexible, and on-demand access to water, which has far-reaching and, as yet overlooked, implications for the regulation and management of our water resources. Subsidies on energy allowed this expansion. If subsidy on energy is removed, water extraction will be better managed to optimize use¹⁹.

¹⁸. Molle, F. Shah, T. and Baker, R. *The Groundswell of Pumps: Multilevel Impacts of a Silent Revolution*, 2003.

¹⁹. Rana El Hajj, et al. 2017 "Enhancing regional cooperation in the Middle East and North Africa through the Water-Energy-Food Security Nexus" Issam Fares Institute for Public Policy and International Affairs, American University of Beirut.



Agriculture consumes between 70% to 80% of water in most countries of the region, while its contribution to GDP has been in decline. On average, agriculture contributes less than 10 % to the GDP. Generation of energy at various stages demands water. For example, in Egypt 25% of the electrical generation capacity is based on hydropower. Energy is needed throughout the water system starting from extraction at the source to delivery to consumers. Several governments in the region attempt to manage water scarcity by increasing investment in water desalination and water recycling of water for reuse. In Saudi Arabia, approximately 65% of domestic oil use is for desalination. It is estimated that close to 15% of the electrical consumption in the Arab world goes into the water cycle. Desalination is the main source of drinking water in the six GCC countries. Energy is also needed in food production at different stages starting from pumping needs for irrigation to transportation of produce and finally refrigeration. In other, less rich parts of the region, however, water and energy needed for food production are still lacking²⁰.

Water is inextricably linked to energy and food production. Energy depends on water for power generation, the extraction, transport and processing of fossil fuels, and the irrigation of biofuel. At the same time, water provision depends on energy for its abstraction, purification and distribution. Food production needs water, productive land and energy to grow crops, maintain livestock, and process food. Food waste can also be used to generate energy via anaerobic digestion. Such bi-directional links are further complicated by the sector-specific externalities that modify the physical or chemical characteristics of water and alter water flows. The structural modification of water courses resulting from their use for energy can impair their integrity, alter water flows and negatively affect the health of rivers.

Issue 6

Food Security in the region.

Ample food supplies exist globally despite COVID-19's impacts. COVID-19 has caused disruptions to the food supply chains around the world and raised concerns about food security. Global cereal markets are expected to remain well supplied and balanced but localized disruptions, largely due to logistical issues, pose challenges to the functioning of food supply chains in the several countries in the region. FAO reports indicate that food supplies and reserves are currently

²⁰. (FAO) 2020, COVID-19 and its impact on food security in the Near East and North Africa: How to respond?

satisfactory in most countries in the MENA region, but worries remain for countries affected by conflict and instability²¹.

For decades, MENA countries have been allocating the bulk of their scarce water resources to the agricultural sector to enhance food security, despite the fact that all countries in the region are increasing their dependence on international markets for main staple food commodities. While domestic food production has increased due to substantial investment in modern agricultural and irrigation technology,²² the increase is not enough to secure food for the growing population which has more than tripled between 1970 and 2020, rising from 173 million people to 578 million people and reducing the average amount of fresh water available per capita and arable land by more than 60 percent FAO (2001) and PRB (2002)²³.

Natural constraints on production for most of the MENA region, geography and climate combine to impose severe constraints on agriculture production. Vast deserts stretch across North Africa to the Arabian Peninsula, leaving little arable land for most of the region's population. Growing populations, in fact, have reduced per capita arable land availability to 0.19 hectares, one of the world's lowest rates (USDA 2015 and FAO, 2014). Exceptions exist, of course, with the area covering the historic Fertile Crescent²⁴—which includes Turkey, Lebanon, parts of Syria and Jordan, and the Nile River Delta—offering sufficient moisture to sustain productive agriculture²⁵. Rain-fed agriculture in MENA is supplemented with irrigation systems on about 30 percent of arable land, though the vast majority of this is concentrated in Iran, Egypt, and Iraq.

Moreover, highly variable rainfall in areas that rely on rain-fed agriculture contribute to large swings in year-to-year yields. In

21. (FAO) 2009, (AQUASTAT Survey – 2009) "Irrigation in the Middle East region in figures".

22. Roudi-Fahimi, F. Creeli, L., De Souza, R.D. (2002) Finding the balance: Population and water scarcity in the Middle East and North Africa, The Population Reference Bureau, Washington DC USA.

23. Dixon, J., et.al (2001) "Farming systems and Poverty: Improving Livelihood in a Changing World, FAO World Bank publication.

24. Nigatu G., and Motamed, M., (2015) "The Middle East and North Africa Region: An Important Driver of World Agricultural Trade". The Economic Research Service, USDA (2015), and (FAO). 2014. FAO Statistical Yearbook 2014: Near East and North Africa Food and Agriculture. Rome.

25. Historically and scientifically the region is recognized as the center of origin of wheat, barley, lentils and chickpeas which have formed the main diet of the region for centuries. Larger global producers of these crops still rely on the wild relatives of these crops which still grow in the region to enhance breeding varieties resistant to disease and climate.

Morocco, for example, wheat yields have averaged about 1.5 metric tons per hectare (MT/ha) since 2000, though depending on the rainfall in any given year, this value could jump or fall by nearly 50 percent. Land and water are scarce, and both rain-fed and irrigated land in use suffer from ongoing degradation caused by wind and water erosion and unsustainable farming practices. Of the total land area of the MENA region, only one-third is agricultural land (cropland and pastures), while only 5% is arable (cropland). The rest of the land is either urban or dry desert.

Unfortunately, poor land use planning has combined with political expediency. Most urban communities built and expanded in the last four decades have done so at the expense of arable lands surrounding existing cities rather than building cities in the marginal zones of most countries. The growing urban populations in Egypt and Jordan and Israel and Palestine have expanded around urban centers traditionally built around water resources. Egypt has expanded settlement in the western desert through substantial investment in groundwater (See Annexes A and B). More recently, Egypt and Jordan have initiated strict land use planning to prevent further encroachment on diminishing agricultural lands. Egypt is investing in infrastructure to expand settlements in the western and eastern deserts of the country. The increasing pressure on and limited productive lands and water resources has diminished the regional capacity to feed its growing and urbanizing population.²⁶

Due to the dry climate, about 40% of cropped area in the region requires irrigation and only 4% of land in the region has soils judged of high or good suitability for rain-fed cereal cultivation. With urbanization growth at the expense of currently cultivated land, and with little prospect to expand cultivation into new lands, farmers are transforming their farming system to produce high value crops as the next generation for food and water and sustainable environment.²⁷

While production has grown over the past decade, cereal yields across the MENA region average around 1.9 tons per hectare, well below the 3.7 tons per hectare world average (FAO, 2014). Gaps between world and regional average yields for all crops combined are estimated at 60% in North Africa and 49% in the Middle East (FAO, 2011), suggesting considerable room for growth through improved inputs.

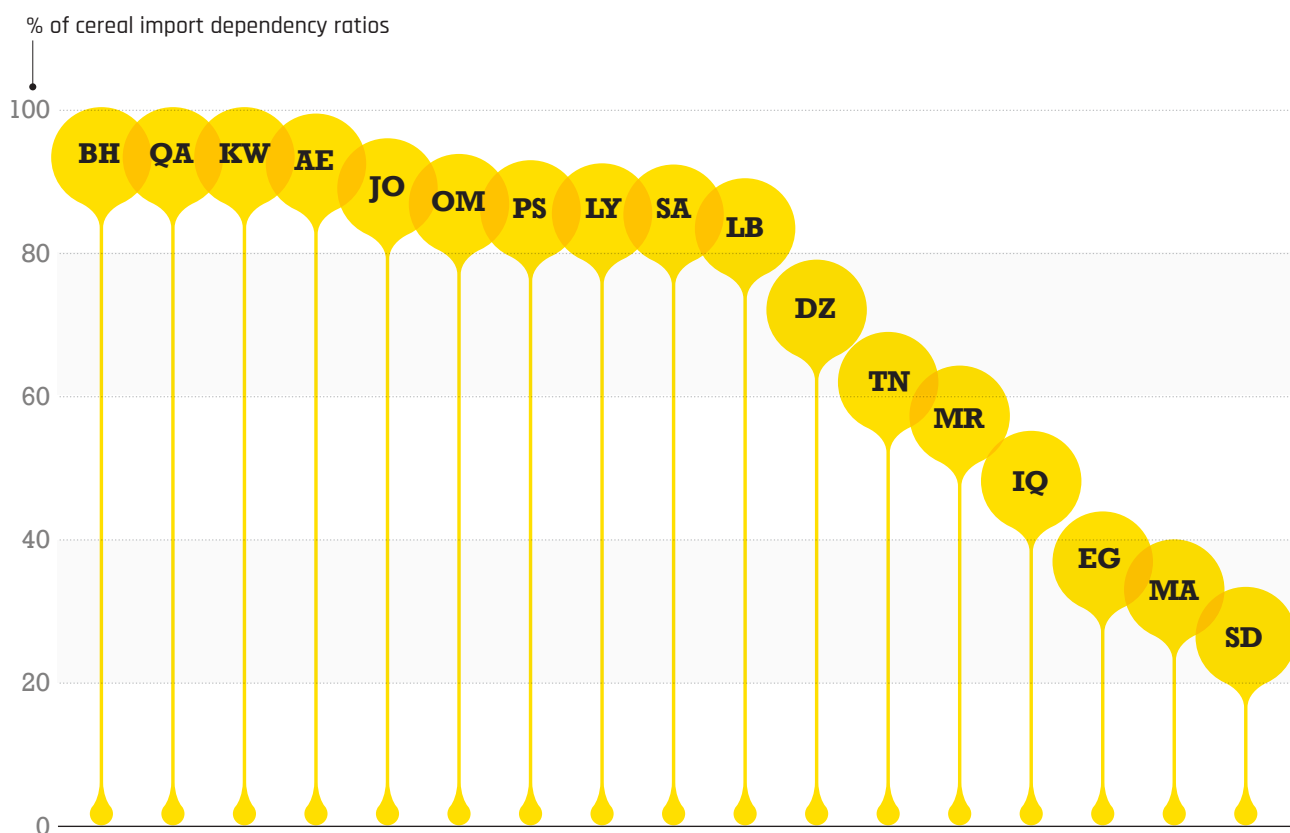
26. OECD-FAO Agricultural Outlook, 2018-2027. Special Focus: Middle East and North Africa, Chapter 2. The Middle East and North Africa: Prospects and challenges.

27. FAO (2018) Water management in fragile systems: Building resilience to shocks and protracted crises in the Middle East and North Africa, (2018).

When all inputs are calculated including the opportunity cost of water resources, the cost of producing one ton of cereal crops in the MENA region is much higher than the cost of imported ton from main producing countries in Europe or the Americas. Because of the above constraints, the region is the largest grain-importing region in the world (Chart 2). Severe constraints on arable land and water, coupled with a growing population and rising incomes, make the region inherently dependent on imports to meet rising demand for food, particularly cereals.

Chart 2

Cereal import dependency ratios (in percent) of selected Arab countries²⁸



Source: FAOSTAT (reference year: 2017), cereal import dependency ratio is defined as the share of imported cereals in domestic consumption. It is calculated using the following formula: Imports / (imports + domestic production - exports)

28. Food and Agriculture Organization of the United Nations, COVID-19 and its impact on food security in the Near East and North Africa.

These imports became exorbitantly expensive in recent years, as world market prices for cereals were high and erratic. As a result, MENA countries, as well as food importing countries throughout the world, have placed a new premium on designing strategies for improving food security by reducing the risks that accompany being a food importing nation. The three main risks of food security facing the region are: (i) availability risk, i.e., the risk that grains may not be available for import, potentially because of crop failures in producing countries or due to there being barriers to import (physical or political); (ii) counterparty performance risk, i.e., despite grains being available at an acceptable price, the party who contracted to deliver the grain defaults on the contract; and, (iii) price risk, i.e., the risk that the price of imported grains will increase above levels that the importing country considers to be acceptable and/or may be able to afford²⁹.

Issue 7

Agriculture, trade and water productivity.

Since it is easier to import food than to import water, all countries of the region are net importers of food, a practice that is the equivalent of augmenting water supplies. All MENA countries but Syria are net importers of water embedded in food, since they do not have sufficient rain or irrigation water to grow crops domestically. More than half of total water needs of MENA countries are imported in the form of food, a concept known as virtual water. Given these circumstances, trade is an increasingly important issue for water policy. Trade will become increasingly important as farmers begin using irrigation water more efficiently -- higher value-added per drop -- since they will grow more of the crops in which the region has a comparative advantage, which they will export, while increasing imports of staples. In effect, the countries would be exporting high-value virtual water and importing larger quantities of low-value virtual water from countries with more abundant supplies.³⁰ There is growing interest in using water productivity as measured in terms of unit of crops production per one unit of water to inform and guide management and allocation of water resources.

29. Grain import dependency in the MENA region: risk management options Marc Sadler & Nicholas Magnan, Springer Science Business Media B.V. & International Society for Plant Pathology 2011.

30. (i) Hoekstra, A.Y. and Hung, P.Q. (2002) *A quantification of virtual water flows between nations in relation to international crop trade*. Value of Water Research Report Series No. 11, UNESCO-IHE Institute for Water Education, Delft, the Netherlands. (ii) Chapagain, A.K. and A.Y. Hoekstra, (2003) *Virtual water flows between nations in relation to trade in livestock and livestock products*. Value of Water Research Report Series No. 13, UNESCO-IHE Institute for Water Education, Delft, the Netherlands.

Studies at the International Center for Agricultural Research in the Dry Areas (ICARDA) have addressed optimal use of water for optimal farm economic and crops yield. These studies concluded that productivity of water used to irrigate cereals is among the lowest as presented below (Table 2).

Table 2 Average water productivity for selected agricultural products in the MENA region

| | Physical water productivity, midrange value (kilograms per M3) | Average producer price in MENA, 2010-16 (USD per kg)** | Average economic water productivity (USD per M3 of water in producing agricultural commodity) |
|-------------|--|--|---|
| Crop | 1 | 2 | 1x2=3 |
| Tomato | 12.5 | 0.4 | 4.98 |
| Onion | 6.5 | 0.42 | 2.76 |
| Apples | 3.0 | 0.88 | 2.64 |
| Potato | 5.0 | 0.45 | 2.23 |
| Olives | 2.0 | 0.90 | 1.80 |
| Lentils | 0.7 | 1.17 | 0.82 |
| Dates | 0.6 | 1.33 | 0.80 |
| Fava Beans | 0.6 | 0.98 | 0.54 |
| Maize | 1.2 | 0.45 | 0.51 |
| Rice | 0.9 | 0.59 | 0.51 |
| Bovine meat | 0.1 | 7.48 | 0.49 |
| Wheat | 0.7 | 0.52 | 0.33 |
| Ground nuts | 0.3 | 1.33 | 0.33 |

Source: David Molden Molden, D., et al. (2010), "Improving Agricultural Water Productivity: Between Optimism and Caution" Agricultural Water Management, Vol. 97, <http://www.icarda.org/wli/pdfs/articles/4-ImprovingAgriculturalWaterProductivity.pdf>. Water is not the only input in agricultural production, and other factors influence the decision of which crops or livestock to produce. Decisions on product selection also depend on the type of land available (e.g. pasture vs. cropland), the location of the farm (e.g. in rain-fed or irrigated areas), and farmers' attitudes towards risk. However, if other costs are similar, a farmer in the MENA region would obtain the highest payoff per drop of water by producing fruits and vegetables.

Additional theoretical studies on virtual water estimate water consumption per unit of crop production based on common water application methods. For example, one hectare of wheat crop requires about 6000 M³ under efficient irrigation throughout the growing season. As mentioned earlier, a hectare of wheat is expected to produce an average 2.5-3 tons under well-managed system in most countries in the region. The opportunity cost of water in most MENA countries is about one US\$ per m³ (the cost of m³ from new sources including fossil aquifer or desalination.) or close to \$2000 per ton for the cost of water alone. Farmers also grow vegetables during off-season when Europe is unable to produce these commodities especially in winter. The expanding of modern packaging and freight and international supermarkets has facilitated the growth of cultivation of high value perishable crops for export from MENA countries to Europe.

There is a growing trend in the region to invest in innovative policies and practices and water governance. More is needed to invest in research, technology development and transfer to further enhance water efficiency and water and crop productivity in the region. These innovations include highly successful technology development, policy reform to better manage subsidies to the energy and to balance the use of energy for water food production. Also needed are responsive policies to expand high quality and safe treated reused water for recycling, and policies that have successfully reallocated water from low- to high-value uses. More is needed to test and adapt and scale up new technologies and policies for water resources management and water service delivery such as smart metering to improve accuracy in billing, evaluate consumption, and increase users' awareness of their own consumption. Smart metering also helps water service providers identify leaks, reduce operating costs, and communicate the value of water to users.

The private sector and small farmers in several countries in the region such as Jordan, Tunisia and Palestine are promoting hydroponics **farming to produce fresh vegetables for domestic and export markets**. The term hydroponics is a subset of "hydroculture" which refers to growing plants without the use of soil. It uses nutrient-rich solutions in a water solvent and is typically done indoors, in a controlled environment. The latter is a growing area of commercial food production and is also used for home food. It is recognized as one of the fastest developing soil-fewer cultivating practices globally. Hydroponics produces higher yield than conventional farming, an increase of 3 to 10 times in the same amount of space. Furthermore, it is up to 90 per cent more water efficient than traditional methods, allowing a longer growing season.

In addition to increasing revenues, hydroponic techniques also provide a platform to increase economic opportunity and new, competitive skillsets to members of underserved communities. Introducing hydroponic systems to farmers also helps vulnerable groups, such as women and youth, garner workforce skills and vocational training.

- Improving water efficiency in agriculture through hydroponic systems that use significantly less water than traditional farming practice.
- Strengthening agricultural productivity by increasing the quantity and value of produce.
- Using cost-effective and environmentally friendly green energy sources for farming instead of fossil fuels.

The high “crop per drop” ratio inherent to hydroponic systems is achieved by reusing water runoff and limiting water loss associated with evaporation and percolation. Root mass is much smaller in hydroponic systems, where plants are given nutrients directly and in precise proportions.

The main objectives of the Government initiative are:

- Promote hydroponic technology in established farmer networks and targeted communities throughout the Jordan Valley and highlands.
- Demonstrate the feasibility of hydroponics through field days at HGFI program sites.
- Bridge the gap between traditional agricultural knowledge and hydroponic systems through educational material and training exercises.

Issue 8

Climate Change and impact on water security and food security in the region.

Previous sections highlighted the effects of population and economic growth on increasing water demands. But recent studies warn that climate change will be the primary driver for the most pronounced changes in surface water stress across the region.³¹ The effects of climate change on water resources will be spatially variable across MENA region and may be felt most severely in the medium-to-longer-term. While spatially variable, generally forecasted accelerated warming in coming decades is likely to increase desertification, reduce

31. Kelley, C. P., S. Mohtadi, M. A. Cane, R. Seager, and Y. Kushnir 2014. “Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought.” *PNAS (Proceedings of the National Academy of Sciences)* 112 (11): 3241–46.

river flow due to increased evaporation, increase risk of flash flooding, and reduce long-cycle crop production. This will amplify existing stress on water availability in the region and ultimately become a key constraint on the region's continued economic development. Climate change and socio-economic change will influence surface water stress in 2030. The World Resources Institute's recent studies warn that some of the biggest climate change-induced changes in surface water stress will occur in countries already facing politically and environmentally fragile situations. Iraq, Lebanon, Jordan, Israel, Syria and Morocco will all experience increased water stress driven by climate change.³² Climate change will also drive increases in the exposure to floods, and will increase water stress in the Middle East and North Africa. Water is the primary medium through which the impacts of climate change will be felt. Climate projections point toward a drier and hotter Middle East and North Africa region, where increasing water stress will reduce GDP growth rates between 6 and 14 percent by 2050 (World Bank 2016).³³

Not only will climate change lead to less water in many areas, but it will increase variability in terms of when rains occur, thus presenting added challenges for the region's agriculture. Climate change will also intensify flood and drought risks. Climate change increases water stress through multiple mechanisms, including reductions in rainfall and increasing temperatures (IPCC 2014). Climate models project an increase in temperature (Verner 2012)³⁴ and heat extremes in the Middle East and North Africa.

In addition to water scarcity, the main challenge facing expanding cultivation in the Middle East's desert environment is climate change. The projections indicate that climate change will reduce the rate of increase in agricultural productivity. The yields of our most important food, feed, and fiber crops decline precipitously at temperatures much above 30°C. Among other reasons, this is because photosynthesis has a temperature optimum in the range of 20° to 25°C for the major temperate crops, and plants develop faster as temperature increases, leaving less time to accumulate the carbohydrates, fats, and proteins that constitute the bulk of fruits and grains. Widespread adoption of more effective and sustainable agronomic practices can help buffer crops against warmer and drier environments, but it will



32. State of Climate Action: Assessing Progress toward 2030 and 2050, Water Resources Institute (2020).

33. 2016. High and Dry: Climate Change, Water, and the Economy. Washington, DC: World Bank.

34. Verner, D. 2012. Adaptation to a Changing Climate in the Arab Countries: A Case for Adaptation Governance and Leadership in Building Climate Resilience. MENA Development Report. Washington, DC: World Bank.

be increasingly difficult to maintain, much less increase, yields of our current major crops as temperatures rise and dry lands expand. Climate change will further affect agriculture as the case in the Nile Delta, where sea level rises would increase saline intrusions from the sea and also increase the risk of flooding and salinization in coastal areas in the Middle East and North Africa. Low-lying deltas such as the Nile delta and the Shatt-al Arab have been identified as at risk from the impacts of climate change low-lying coastal areas such as Morocco's Mediterranean coastal zone³⁵.

35. N. V. Fedoroff, "Radically Rethinking Agriculture for the 21st Century" * Science 12 February 2010: Vol. 327 no. 5967 pp. 833-834.

Summary



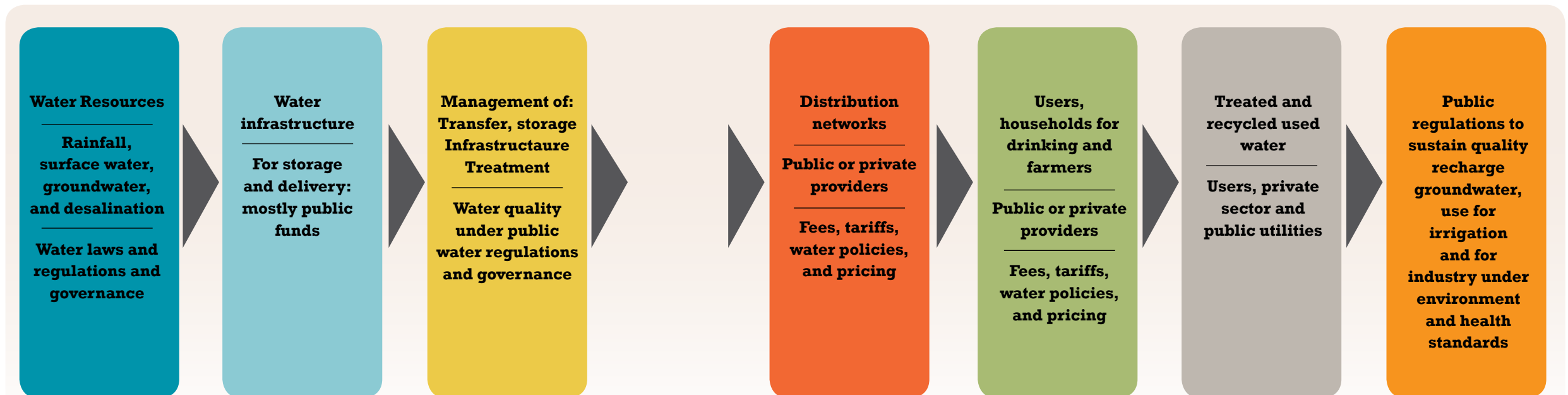
Water security requires efficient management supported by a solid policy and legal framework. And the scope of management should address all components of a water system that includes several important components (Chart 3). Key messages are:

1. Water resources determine the scope of water scarcity and the role of the public sector in secure adequate supplies from rainfall, surface water, groundwater and desalination
2. The role of public sector covers protecting, managing developing and monitoring and updating data and information and knowledge about these resources. The main issue here is water laws and regulations and governance. Most countries in the region have advanced responsive water laws to manage these scarce resources issued related to managing the three sources: surface water, groundwater, and non-conventional water resources.
3. Water infrastructure such as building dams and groundwater wells and desalination plants attract public and private investment in extracting each of the above water resources. The issue is the strength of the legal and regulatory framework that guides such investment.

4. An adequate water stock for national needs, especially during political and natural crisis, must be built the issues here are managing storage facilities, applied approved standards of water treatment to ensure healthy and acceptable water quality responsive to national and international water regulations and governance.
5. Water distribution and services are through networks managed by public or private providers charging fees and tariffs. The issues here are reliability and stability of these services which interact with adequate water pricing and water fees and tariff to cover proper national accounting of operating and maintaining these services
6. Operating an efficient water system requires substantial engagement of water users including households for drinking and farmers for irrigation and other industries to agree on allocations of water across sectors based on economic and social indicators especially to address salient human needs and strategic economic objectives.
7. The valuation of water under scarce conditions while addressing environmental and ecological factors and considering the importance of treated and recycled used water, is crucial to the efficient management of the water cycle and adds a valuable source which can be used to recharge groundwater, for irrigation for landscape and environmental purposes, and for select industries.

Chart 3

Components of National Water Systems: Public Private Partnership desirable in select components under transparent governance and regulations



Source: Authors

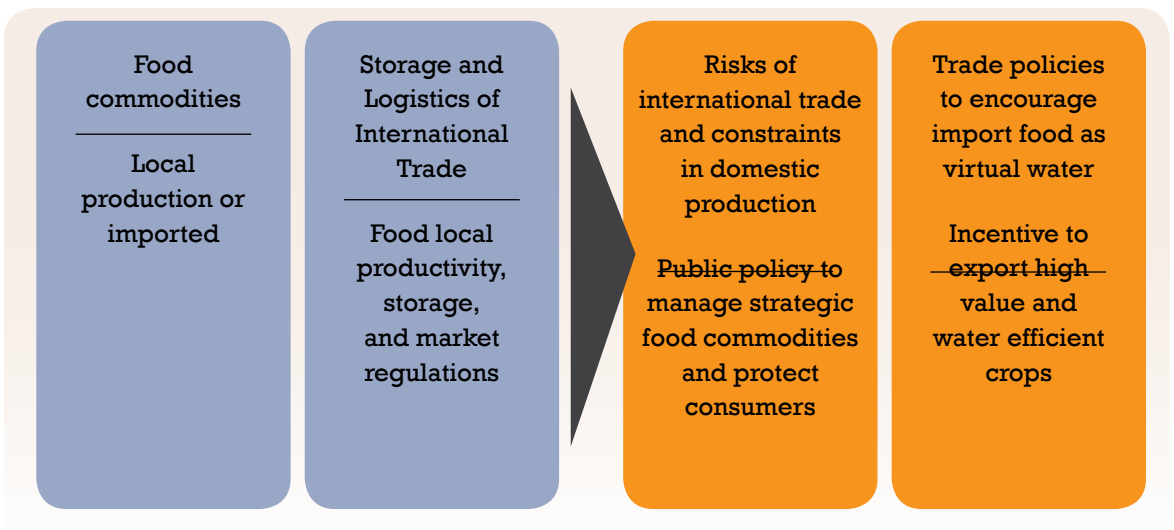
Main components of Food Security (See Chart 4) are:

1. Water productivity for food production should guide the process of producing domestic food crops and imported food commodities. It is desirable to allocate water to high water efficient crops (see Table 2 above). Well-defined policies should be in place to guide increasing imports of staples. In effect, the countries would be exporting high-value virtual water and importing larger quantities of low-value virtual water from countries with more abundant supplies. There is growing interest in using **water productivity as measured in terms of unit of crops production per one unit of water to inform and guide management and allocation of water resources**. A primary challenge is to increase the productivity of water used in irrigated agriculture by introducing modern irrigation technologies to reduce losses and unproductive water use; the second is to develop agricultural production practices to shift cropping patterns to include increased production of higher-value crops.
2. Trade policies are increasingly important as farmers begin using irrigation water more efficiently -- higher value-added per drop -- since they will grow more of the crops in which the region has a comparative advantage, which they will export. The challenge is to ensure the safety and exportability of produce grown with water quality accepted in international markets. Water productivity should be supported by government policies to ensure that water quality destined for agricultural use is well managed to ensure food safety on domestic and export markets.
3. The private sector plays an important role in the logistics of international trade for both import of strategic food commodities especially cereals, and domestic food production, storage and market. Government regulations should be guided by well-defined governance and public procedures responsive to high environmental standards and consumer protection. The Government, in participation with other stakeholders, e.g., the private sector and local communities, has to make difficult decisions on water allocation and selection of crops for domestic production and commodities for import from foreign markets. Policies should be based on holistic multi-sectoral approach to balance the needs nationally, i.e., to apportion diminishing supplies between ever-increasing demands, taking into account national priorities and the impact on the social and economic and the natural environment of the country. Such an approach would entail close collaboration among all concerned sectors (planning, water and irrigation, agriculture, environment, tourism, industry and trade, health) on water-related policy, economic and social concerns, especially for the inter-sectoral use of water.
4. Transparent trade policies are needed to import food. Enhanced government role is key in managing risks of international trade and constraints in domestic production. The three main risks of food security facing the region are: (i) availability risk, i.e., the risk that grains may not be available for import, potentially because of crop failures in

producing countries or due to there being barriers to import (physical or political); (ii) counterparty performance risk, i.e., despite grains being available at an acceptable price, the party who contracted to deliver the grain defaults on the contract; and, (iii) price risk, i.e., the risk that the price of imported grains will increase above levels that the importing country considers to be acceptable and/or may be able to afford. Such policies should be based on reliable market intelligence and be guided by transparent and qualified analytical tools

Chart 4

Components of Food Security




Source: Authors


Annex A

Constraints to Water Security and Food Self-Sufficiency in Egypt

Water resources in Egypt are facing serious challenges. More than 95% of Egypt's water comes from the Nile, this means that it depends on rainfall outside of its territory. The Nile River is shared by ten countries (Egypt, Sudan, Ethiopia, Eritrea, Tanzania, Uganda, Burundi, Rwanda, D.R. Congo, and Kenya) The basin is the home to more than 260 million people (Mason).³⁶ Ethiopia, home to the main watershed of the Blue Nile, is building the Grand Ethiopian Renaissance Dam that is likely to impact the allocation of water to Egypt and Sudan.



Farming in Egypt is confined to less than three percent of the total land area because the country falls within arid and hyper arid zones. Nearly all farming operations depend on irrigation. Consequently, 90 % of land currently used for agriculture (Old Land) is located in the Nile Delta, and virtually all of the rest falls within a narrow ribbon along the Nile River and a strip along the Mediterranean. Irrigation and drainage infrastructure remain insufficient. Most farms depend on surface irrigation that suffers from aging and inefficient water distribution networks and declining water quality and quantity for most cultivators. Egypt's water irrigation and supply system in these areas operates with only 50% efficiency and 40% cost recovery.



Lands irrigated with Nile waters continue to be lost to agriculture. Annual loss of land due to urban encroachment is estimated to be between 15-20 thousand hectares or one percent of the irrigated land of Egypt per year over the past two decades . In addition, major causes of land degradation are irrigation drainage, soil salinization, inadequate crop rotation and soil erosion.³⁷

³⁶. Hamza, W, Mason. S, (2004) Water availability and food security challenges in Egypt Paper presented at the "International Forum on Food Security Under Water Scarcity in the Middle East: Problems and Solutions", Como, Italy, 24-27 Nov. 2004.

³⁷. Presentation by A. Sheta,(2014) Head of the Soils and GPS study Group, MALR.



The government has embarked on a long-term strategy to address main challenges caused by the growing population density in the Nile Delta, limited cultivable lands in the Nile Basin, and growing demand for jobs among youth and landless population. This strategy is based on expanding economic opportunities through investment in partnership with the private sector to build new communities adjacent to the Nile Basin and to provide incentives to the private sector to expand investment in diversified economic enterprises including in the initial phase agriculture and related sectors. The program would provide housing needed for workers who join the newly created enterprise opportunities in several sectors especially farming and related industries. The strategy is designed to expand cultivation into “New Lands” and diversify and expand agricultural production into new ecological zones, while expanding exports of agricultural products and reducing the flow of rural people into Cairo. The Government’s overall US\$6 billion program will support a broad range of investments including those related to the establishment of new communities and the infrastructure needed by those communities as well as investments related to the establishment of irrigated agriculture.



Annex B

Jordan's Water and Food Security

Jordan is a landlocked country with minimal coastline on the Gulf of Aqaba. Water security is already being affected by a multitude of factors. Through a series of negotiations with Israel which started in the early 1960s and concluded with the peace agreement in 1994, Jordan and Israel agreed to share the small amount of water in the Jordan Basin Jordan which is equivalent to only two percent of the flow of the Nile River. The populations of the three riparian countries in the basin (Israel, Jordan and Palestine) have increased from less than 10 million people in the 1960s to more than 25 million in 2019. Its dry climate, population increases through a succession of shocks of refugees, and disadvantaged downstream location on the Yarmouk-Jordan River system increase the vulnerability of Jordan's freshwater resources. Recent climate change studies indicate that Jordan is facing a deepening multipronged freshwater crisis, exacerbated by a long-term decline in rainfall, declining groundwater levels, and regional conflict and immigration. Jordan's per capita water availability has decreased from 3600 m³/year in 1946 to 135 m³/year in the present, putting the nation far below the 500 m³/year level of "absolute scarcity."³⁸

The country has allocated substantial investment to extract and transfer water from the transboundary groundwater aquifer in the south with Saudi Arabia to urban centers in the north. Slow negotiations with Israel are under way to increase cooperation in water desalination and joint management of the Jordan Valley's water resources.

Despite the fact that Jordan is considered one of the most water scarce countries in the world, the country has shown a remarkable progress in improving access to water services reaching most rural and semi urban populations. Unfortunately, these achievements have been offset

³⁸ Rajsekhar, D. and Gorelick, S. (2017), "Increasing drought in Jordan: Climate change and cascading Syrian land-use impacts on reducing transboundary flow" *Science Advances* 30 Aug 2017: Vol. 3, no. 8, e1700581.

by low water availability, competing water demands from other water consuming sectors and more importantly through a regular influx of refugees from neighboring countries. The challenge remains in terms of providing universal access to those services. The percentage of the population with access to safely managed water was 93% and only 77% had access to safely managed sanitation services. Since 2011, Jordan alone has provided refuge to more than 1.3 million Syrians. Most of these refugees live in camps, while the remaining have settled in urban and rural areas, primarily in northern governorates and in Amman.

Jordan has modernized its water laws. In Jordan, for example, the public water agency recognized the important fact that aquifers systems and sub systems are intimately connected with portions of the overall hydrological system in the country, and that the patterns of groundwater uses are usually interconnected and often sequential. The government introduced a new policy framework to regulate and manage the groundwater subsector. The average annual abstraction from groundwater in all sub basins in the country is about 160% of the annual renewable average of recharge. The recently enacted national water policy is being supported with tough regulations. It prevents the issuing of new licenses for new or to renewal of existing wells; imposes full control on water drilling throughout the country; and permit only hospitals and educational institutions to renew their license to abstract groundwater. About 90% of all wells are equipped with meters to enforce new volumetric water pricing on abstracted groundwater. Also included in the new framework is a new mechanism designed to regularly monitor the status of groundwater resource through observation wells and identify and enforce actions required for water resource protection and quality control.

The new procedures clearly define the development priorities for each sub basin, set guidelines for water allocations, introduce specific policy tools to install and measure abstraction; and enforce targeted rules to prevent illegal drilling. The policy also provides support for long term research on water quality, on managing shared water aquifers, and on communication and education to the public. The government also encouraged farmers to transfer farming systems and crop choices and irrigation systems to reduce allocation of fresh water to agriculture. It has enhanced the increasing recycling of treated used water to irrigate select crops in the Jordan Valley, home of the majority of irrigated agriculture. Jordanian farmers are diversifying farming toward less water consuming and high value crops for export. But recent travel restrictions and regional conflict has reduced interregional trade and reduced farm income. The government of Jordan has managed the impact of COVID-19 relatively well and is responding proactively to mitigate potential immediate impacts on the availability of food to the population.

In Jordan, even though only 5% of land receives enough rainfall to support cultivation, agriculture is currently the largest user of water. While farmers irrigate less than 10% of the total agricultural land, agricultural

water requirements represented around 60% of total national water needs which is estimated to be 700MCM and the agricultural sector contributed about 3-4% to GDP in 2013. Jordan's system of subsidies affects the use of irrigation water, which necessitates strict rationing to allocate the remaining water resources. Appropriate water pricing can be used for optimizing cropping patterns and water distribution, which can also substantially increase agricultural production. Advanced irrigation technologies including greenhouse cultivation will expand which would result in yield gains and water savings. According to the national water reallocation policy, fresh water allocated to irrigated agriculture in the highlands will be capped and eventually reduced, and would be replaced by treated wastewater. Irrigated agriculture would be expanded mainly where treated wastewater is available. Irrigation water in the Jordan Valley will be increased with improvements in reclaiming non-revenue water or when new water supply sources are developed and treated wastewater increases.³⁹

The Government of Jordan in cooperation with USAID initiated projects to promote hydroponics in among Jordan small farmers. In addition to increasing revenues, hydroponic techniques also provide a platform to increase economic opportunity and new, competitive skillsets to members of underserved communities. Introducing hydroponic systems to farmers also helps vulnerable groups, such as women and youth, garner workforce skills and vocational training.

- Improving water efficiency in agriculture through hydroponic systems that use significantly less water than traditional farming practice.
- Strengthening agricultural productivity by increasing the quantity and value of produce.
- Using cost-effective and environmentally friendly green energy sources for farming instead of fossil fuels.

The high "crop per drop" ratio inherent to hydroponic systems is achieved by reusing water runoff and limiting water loss associated with evaporation and percolation. Root mass is much smaller in hydroponic systems, where plants are given nutrients directly and in precise proportions.

The main objectives of the Government initiative are:

- Promote hydroponic technology in established farmer networks and targeted communities throughout the Jordan Valley and highlands.
- Demonstrating the feasibility of hydroponics through field days at HGFI program sites.
- Bridging the gap between traditional agricultural knowledge and hydroponic systems through educational material and training exercises.

³⁹. National Water Strategy of Jordan, 2016 – 2025 Ministry of Water and Irrigation | Hashemite Kingdom of Jordan.

While the government has been active to ensure on a short-term basis adequate food availability and access through support of well-functioning food supply chains, key risks remain. Globally, markets for food staples are well supplied and aggregate international prices have been generally stable to date, with increases in global wheat and rice prices. Jordan needs to continue to monitor its food prices for consumers and pay particular attention to food availability and financial accessibility for the most vulnerable, including poor Jordanian households (who lost their income sources) and a large population of refugees. At the regional level, conflict, combined now with the vulnerability to COVID-19, is restricting cross-border. The macro economic impact of COVID19 has been somewhat alleviated through the recent cooperation with the IMF, ensuring that the emergency health and economic needs of Jordan do not affect Jordan's balance of payments. It may be important to assess to what degree this assistance includes support to key links in the food supply chain, the food system, of Jordan. It is important to ensure a close link between health interventions and food security interventions, including with respect to the health of laborers and rural populations.⁴⁰

40. The World Food Program, Jordan Food Security Update May 2020 Implications of COVID-19.

Annex C

Water and Food Security in Palestine, West Bank and Gaza

The outbreak of the Coronavirus (COVID-19) crisis in Palestine has exacerbated the deteriorating health and socio-economic conditions of Palestinians, particularly the most vulnerable groups, including elderly people, persons with disabilities, woman-headed households and children. Restrictive measures forced thousands of Palestinians out of their work, significantly impacting their livelihoods. The World Bank projects a year GDP decline of at least 7.6% and up to 11% due to restrictions related to COVID-19. Coupled with the rise in unemployment, poverty will increase in the West Bank from 14% to 30% and in Gaza from 53 % to 64%. A UN Women report shows that a staggering 95% of women-owned businesses are negatively impacted by COVID-19, and 27 women-owned businesses have already shut down.⁴¹

The Palestinian population has grown rapidly over the last forty years with an estimated growth of 3.75%/year. Demand for water is increasing especially among the urban population that makes up about 70% of the country's total population. The population across the Gaza Strip is very dense, and discharges huge amounts of pollutants (organic matter, nitrogen, etc.). While around 70% of the urban area is served by wastewater collection systems, many people are still using cesspits or septic tanks for discharging their raw wastewater. This will negatively impact on the groundwater pollution as a result of the wastewater leakage through the highly permeable unsaturated sandy zone. As recorded, groundwater pollution by nitrates is already widespread in the Gaza Strip and the majority of the wells, utilized for domestic water purposes, contain more nitrates than the WHO-recommended limit (50 mg/l). This percentage is still growing with higher concentrations under urban areas.⁴²

⁴¹. WFP Palestine Country Brief October 2020.

⁴². National Water and Wastewater Policy and Strategy for Palestine Toward Building a Palestinian State from Water Perspective, Palestinian Water Authority 2013.



Following three consecutive years of economic growth below two percent, 2020 is proving to be an exceptionally difficult year as the Palestinian economy faces triple reinforcing crises: i) resurgent Covid19 outbreak, ii) a severe economic slowdown; and iii) another political standoff between the Palestinian Authority (PA) and Government of Israel (Gol), disrupting clearance revenues. Scarce water resources have seriously affected most communities especially those in rural areas where water services depend on small private providers at relatively high cost.



Surface water resources in Palestine are very scarce. There are currently very few surface water resources in the West Bank, and none anymore in the Gaza Strip, where the main seasonal water streams (wadis) have been dried up by upstream water abstraction in Israel. The main permanent surface water resource on the West Bank is the Jordan River, which is used heavily for irrigation and domestic water supply by Israel. Since 1967 the Palestinians do not have access to this resource. It is a trans-boundary resource, shared between Jordan, Syria, Lebanon, Israel and Palestine. The integrated management of this resource and Palestine is mostly reliant on groundwater where the majority of Palestinian water supply comes from this source either by wells or springs.



The total renewable groundwater resources are contained in deep aquifers. Most large production Wells are 200-800 meters deep and the water table lies between 100 and 450m below the surface. These aquifers are commonly divided into three main aquifers-Basins (Western, Eastern and North-Eastern). The Western and North Eastern basins flow to Israel where it constitutes one of the main groundwater resources. In Gaza, groundwater resources are contained in a shallow sandy aquifer, extending eastward to Israel and southward to Egypt. There are more than 5000 water wells, most of them are for agriculture purposes with an average depth of 40-70 meters and the water table lies between 20-50m below the ground surface. Gaza is a dry area and the local aquifer recharge is very limited (55-60 Mm³ /year on average). Abstraction by all users (Israelis, Egyptians and Palestinians) already far exceeds natural recharge. Consequently, the aquifer has been depleted and suffers from seawater intrusion. the conclusion of a basin wide agreement is a key component of any long-term strategy.

Water abstraction by Israelis already exceeds the thresholds agreed in Oslo and many sub-aquifers are mined and suffer from depletion. This depletion is particularly marked in the southern part of the Eastern aquifer, which is subject to unlimited abstraction by Israeli wells that are significantly affecting the nearby Palestinian wells. In addition, the continuation of severe drought also has a negative impact on the aquifers recharge. The coastal aquifer is also depleted as a result of un-equilibrium between the total water abstraction and its renewable amount, where the water level has been declining during the last few years to about 10-15 meters below sea level.

Israeli occupation and the restrictions imposed on the circulation of goods and persons, as well as on investment, are major constraints that hinder the economic development of Palestine. As such, they must be taken into account when considering the feasibility of any investment, including investment in the water and wastewater sector.

Although environmental conditions are difficult in Palestine (as a result of the very high population density: by 2011, the population density was 456 persons/km² in the West Bank and 4,353 persons/km² in the Gaza Strip. As a result of Increasing investment in water infrastructure and improvement in water supply and sanitation life expectancy has risen, infant mortality has decreased, and most health indicators are among the best in the region.

National Water Policy and Strategy roles and responsibilities of the main water institutions in the water sector are detailed in the 2002 Water Law No 3. In general, the Water Law lacks clarity as it neglects to define the exact nature of and relationships between the sector institutions. The Water Law defines the roles and responsibilities of the PWA and the National Water Council (NWC), but fails to offer any guidance on other institutions (e.g. Ministry of Agriculture) and to define the overall sector architecture under which the NWC and the PWA have to operate. The Water Law does, however, provide PWA with jurisdiction over the utilities responsible for water provision and sewage water services. At present, the relative roles, responsibilities and relationships of water sector institutions are in need of clarification. The institutions and institutional framework created since 1995 to manage water resources and water uses, including the provision of water and wastewater services need assistance to upgrade their performance in meeting the needs of the people in Palestine. The lack of clear institutional mandates has contributed to a situation of ineffective governance and weak capacity, which, when combined with the occupation-related restricting factors, hinders the development of integrated water resources management, infrastructure development and service provision policies, strategies and regulations. For all those reasons, PWA started the water sector reform process with a clear mandate and responsibilities for all the water actors, based on the newly developed water law that differentiates the responsibilities of PWA for policy and strategy and for regulating the water resources.

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