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Sao Tomé and Principe

Diagnostic Trade Integration Study (DTIS) Update:

Strengthening Competitiveness and Resilience through Trade

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SAO TOME AND PRINCIPE

Government Fiscal Year: January 1 – December 31

Currency Equivalent
(Exchange Rate Effective October 7, 2013)

Currency Unit	=	Sao Tome Dobra (STD)
US$1	=	STD 18,294

Abbreviations and Acronyms

ACE	African Coast to Europe
ACP	African, Caribbean and Pacific countries
ADSL	Asynchronous Digital Subscriber Line
AFT	Aid for Trade
AOC	Air Operation Certificates
APCI	Agency for the promotion of trade and investments
BISTP	International Bank of Sao Tomé and Principe
BPO	Business Process Outsourcing
CEEAC	Economic Community of Central African State
CEMAC	Central African Economic and Monetary Community
CET	Common External Tariff
CIAD	Center for International Development
CIF	Cost Insurance Freight
CNC	Commission for Commercial Negotiations
CRS	Credit Reporting System
CS	Customer Service
CST	*Companhia Santomense de Telecommunicacoes (*Sao Tome and Principe's Telecommunications Company)
CY	Container Yard
DTI	Direct Trade Input
DTIS	Diagnostic Trade Integration Study
EBA	Everything But Arms
EDF	European Development Fund
EEZ	Exclusive Economic Zone
EIF	Enhanced Integrated Framework
EPA	Economic Partnership Agreement
EU	European Union
FAO	Finance and Accounting
FCFA	*Franc Communauté Financière Africaine* (Central African Franc)
FDI	Foreign Direct Investment
FIDA	*Fonds International de Développement Agricole* (International Agricultural Development Fund)
FRN	*Fundo Rodoviario Nacional* (National Road Fund)
GDP	Gross Domestic Product
GoSTP	Government of Sao Tomé and Principe

HIPC	Highly Indebted Poor Countries
HRO	Human Resources
ICAO	International Civil Aviation Organization
ICT	Information Communication Technology
IFC	International Finance Corporation
INAE	*Instituto Nacional das Estradas* (National Institute of Roads)
IT	Information Technology
ITES	IT enabled services
JDZ	Joint Development Zone
JSAN	Joint Staff Advisory Notes
LCSI	Liner Shipping Connectivity Index
LDC	Least Developped Countries
LPI	Logistics Performance Index
MCC	Millenium Challenge Corporation
MCIT	Ministry of Commerce, Industry and Tourism
MDRI	Multilateral Debt Relief Initiative
MRA	Mutual Recognition Agreements
NPRS	National Poverty Reduction Strategy
NRF	National Road Fund
NTB	Non-Tariff Barriers
OECD	Organisation for Economic Cooperation and Development
OGE	General State Budget
OHADA	*Organisation pour l'Harmonisation en Afrique du Droit des Affaires* (Organisation for the Harmonization of Business Law in Africa)
PAP	Priority Action Program
PAPAFPA	*Programme d'Appui Participatif à l'Agriculture Familiale et à la Pêche Artisanale* (Program for Participating Support of Family Agriculture and Artisanal Fishing)
PNCQ	National Program of Quality Control for Civil Aviation Security
PNFT	National Program of Capacity building and Training of Civil Aviation
PRSP	Poverty Reduction Support Project
ROO	Rules of Origin
SAD	Single Administrative Document
SADC	Southern African Development Community
SME	Small and Medium Enterprises
SAC	*Sociedades Agro-Comerciais* (Agro Business Societies)
SPS	Sanitary and Phytosanitary
SPV	Special Purpose Vehicle
SSA	Sub-Saharan Africa
STP	Sao Tome and Principe
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VAT	Value Added Tax

WFP	World Food Program
WTO	Word Trade Organization

Vice President	=	Makhtar Diop
Country Director	=	Laurence Clarke
Sector Director	=	Marcelo Giugale
Sector Manager	=	John Panzer
Task Team Leaders	=	Marco Antonio Hernandez and Elisa Gamberoni

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The DTIS Update was led by Marco Antonio Hernandez (Senior Economist, LCSPE) and Elisa Gamberoni (Economist, AFTP1). The core members of the team included Olivier Cadot (Consultant and Technical Leader), Nora Dihel (Senior Trade Economist, AFTPM), Charles Kunaka (Senior Trade Specialist, PRMPR), Eneida Fernandes (Private Sector Development Specialist, AFTFE), and Catia Batista (Consultant, Agriculture Expert).

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Executive Summary

The Government of the Republic of Sao Tomé & Principe has requested an update of the 2006 DTIS[1] and has asked the World Bank to take the leading role in this exercise. The update's objectives are to (a) take stock of progress in the mainstreaming of trade in the National Development Plan and of the implementation of Action Matrix recommendations; (b) complement and deepen the analysis in selected areas; and (c) revise and update the Action Matrix to take account of the evolving context since 2006. The aim of the analysis is to assist the Government of Sao Tomé & Principe in defining an overall competitiveness strategy for inclusive, job-creating export-led growth, and to further mainstream trade into the general policy orientation defined by Sao Tomé & Principe's key policy documents, including the 2012 PRSP II.

Four key messages emerge from the DTIS update:

i. **For a small island nation like STP, accessing foreign markets is vital.** STP needs to create 30,000 jobs in the next decade just to absorb new entrants in the labor market. Export-led growth can make this happen, provided that pro-competitive reforms go ahead irrespective of the prospects for oil**.** Oil is not a job creator; in fact, international experience suggests that it actually makes job creation *more* difficult. To spur exports in the non-oil sector, the government of STP needs to move forward with an agenda of pro-competitive reforms to (i) reduce trade costs, (ii) put the cocoa sector back on its feet, and (iii) broaden the productive base to services and tourism.

ii. **Service exports, in particular tourism, have the potential to diversify STP's economy and reduce its vulnerability to internal and external shocks**, provided that the government matches its long-term vision with step-by-step progress on key bottlenecks. Cable access to the internet's "backbone" and the issuance of a second telecom license are important steps to reduce communication costs. They should be complemented by urgent action to build market-relevant skills. The tourism sector's bottlenecks should also be addressed through better air and maritime connectivity, a clear legal environment, and improved governance.

iii. **The government's vision to make STP a sub-regional trans-shipment hub, and later on a service-export center, requires an accelerated pace of reform**. Other countries in the region are forging ahead, some with similar visions, and the outcome may well be a "winner-takes-all". Much progress is still needed in STP to meet the government vision's basic prerequisites, in particular in terms of infrastructure and skills.

iv. **Cocoa-dominated agriculture employs a quarter of STP's labor force and accounts for over half of household income.** In order to make a dent in poverty, reinforcing the cocoa sector's international competitiveness is a first-order priority. A number of small cooperatives have successfully developed in upscale niche (organic) markets, demonstrating the private sector's drive to organize itself and invest. The government

[1] Sao Tomé & Principe's Diagnostic Trade Integration Study (DTIS) was carried out in 2005 and its draft report validated in a national workshop in 2006.

should build on these achievements by working with donors on effective export promotion, infrastructure (irrigation), and a better legal environment (land rights).

Building on the Government of Sao Tomé & Principe's strategic documents, the results of missions on the ground, and analytical work carried out by the World Bank and other development partners, the DTIS update provides practical, detailed guidance to achieve these objectives through in-depth analysis and an overall action matrix.

Making the DTIS update the catalyst of a national competitiveness strategy

Since 2006, STP has made tremendous headway in terms of macroeconomic performance. The country has experienced unprecedented growth over the last decade, with GDP per capita rising 50% between 2001 and 2011. Growth accelerated from 1.4% per year on average during the 1990s to 5.2 percent in the 2000s, fueled by rising cocoa prices, oil bonuses, and a rise in consumption and investment, partly in anticipation of a coming oil boom. Inflation receded to single-digit levels in 2012 (down from 23.5% over 2005-8), and the primary domestic fiscal deficit was reduced to just over 3% of GDP in 2011-12, against 9% on average over 2005-8. Finally, donor assistance under the Enhanced HIPC initiative enabled STP to benefit from a $314 million 3-relief package, reducing the debt-to-GDP ratio from 340% over 2001-4 to 83.5% in 2012.

Improved performance rewarded progress on several fronts. Monetary and fiscal management have improved substantially, providing a better environment for external competitiveness. Structural reforms, including the investment climate, have made progress, for instance by the setting up of a one-stop shop for enterprise creation. Public financial management is improving, notably through the reduction of cross-arrears between the Treasury and parastatals and the reduction of non-essential expenditure items, although fuel subsidies still weigh heavily on the budget. Customs management has improved substantially through automation (with assistance from bilateral donors) and the adoption of latest-generation software, leading to better transparency and more reliable statistics—although much remains to be done in all these areas.

The 2006 DTIS helped mainstream efforts to raise the economy's competitiveness. In a small country like STP where aid accounts for over 20% of GDP (21.7% in 2011) and bridges over half the current-account deficit, donor coordination around a consistent strategy is key. Yet, in STP, donor coordination has proved difficult, with no permanent representatives in the country; paradoxically for a small island economy, trade competitiveness was not always given center stage in donor strategies. Against this background, the 2006 DTIS highlighted the need for export diversification and helped mainstream competitiveness in donor strategies; it also contributed to more focused efforts aimed at reducing trade costs through improved connectivity and better-functioning Customs.

In spite of a decade of progress, STP's economy is still vulnerable. The economy's vulnerability was highlighted by a rapid succession of exogenous shocks including a sharp rise in world food prices in 2008, the global financial crisis, a drought in 2009, and the E.U.'s ongoing banking crisis. Each of these shocks has taken its toll on employment, poverty, and revenue. As STP relies heavily on food imports and is entirely dependent on imported fuel products, the 2008 food and fuel price spike contributed to raise the poverty headcount from 23% of the population

in 2008 to an estimated 33-38% in 2009 (together, imported fuel and food account for two thirds of consumer-price inflation). The 2009 global financial crisis further stressed the economy, reducing foreign direct investment (FDI), tourism, and aid flows. After a decade of progress, these shocks highlight the need for STP's economy to diversify and strengthen its productive sector to improve its resilience.

It also lacks competitiveness. Structural indicators of competitiveness have remained persistently weak even during STP's "golden decade". Exports of goods and services grew by only 5.7% per year on average before the onset of the global financial crisis, against 26% for imports. Even the feeble growth of exports was overstated by the data, being partly fueled by rising cocoa prices while export volumes actually shrank. Throughout the economy, value added per person grew at only 2.8% per year. Employment rose over the whole decade by about a third, but at the cost of negative labor-productivity growth. STP's export structure failed to diversify, with concentration measured by the Herfindahl index staying over 90%, an unusually high value even for a small island economy (for Cape Verde, for instance, the corresponding figure is 10%). STP's persistent lack of competitiveness was due to weaknesses at all levels of the value chain, including labor-force skills, transport and connectivity infrastructure and services, and the investment climate.

The lack of structural transformation of STP's economy has translated into an inability to make a durable dent in poverty. Whereas some social indicators—school enrollment, illiteracy rates, infant mortality, and the incidence of malaria—have improved, by and large growth failed to translate into substantial poverty reduction, with the poverty headcount standing at 61.7% in 2010 and unemployment at 14.2 % in 2012.

Oil alone won't reduce STP's vulnerability and lack of competitiveness. Total's pullout from the exploitation of STP's oil field implies that oil would not start flowing in 2015 as expected, thus failing to relieve budget pressures. Should a new solution be found, oil would nevertheless be portent of numerous dangers to stability and the economy's ability to diversify, in particular if the real exchange rate was allowed to appreciate. In a nutshell, the risk would be that the oil sector fuels the price of non-tradable such as housing, services and skilled labor, while also putting upward pressure on the Dobra's value. The double squeeze of rising non-traded good prices and an appreciated currency could erode the non-oil economy's competitiveness to the point where few activities remain profitable—a syndrome known as the "Dutch disease". The country has adopted a best-practice framework for oil management, but earnest implementation would be key to success. Most important of all, oil management should be embedded in a clearly articulated national competitiveness strategy geared toward economic diversification and job creation in the non-oil sector.

Trade integration will effectively strengthen competitiveness and improve resilience. Given its small market, STP has no choice but to reach out to foreign markets—both regional and overseas. Although the ability of STP's cocoa sector to provide a stable and growing source of income has been disappointing so far, international experience suggests that, with forward-looking branding and quality strategies, export markets can raise farm incomes and reduce their volatility. STP's cooperatives are already moving in that direction, albeit on a limited scale, with help from foreign buyers. Untapped opportunities are also there to put STP on the map of tour operators, diversifying source markets away from crisis-stricken Southern Europe. In the long run, offshored service activities (e.g. call centers or back-office functions) could be developed for the broader lusophone world (including Angola and Brazil), providing added sources of

income and raising the return to education, once supply-side bottlenecks are overcome and the investment climate improves.

Mainstreaming trade in STP's development strategy calls for enhanced coordination with donors. The DTIS update is an opportunity to place outside market opportunities at the center of STP's development strategy. It provides a detailed road map for STP's authorities and donors to lift key supply-side constraints through a pragmatic action matrix designed to address binding ones in priority. In particular, the action matrix is designed to feed into the government's broader development strategy as subsumed in the PRSP-II, by providing leads for reforms and actions to be implemented under the PRSP's Priority Action Plan.

In this context, a coherent long-term vision is emerging to develop tourism, professional and trans-shipment services as the economy's "second leg", while strengthening the cocoa sector's competitiveness and resilience. In order for this vision to become reality, a realistic sequence of steps must be devised, some with immediate payoffs, some likely to bear fruit only after a while:

i. The reduction of trade costs through **investments in sea and air transit infrastructure** will have a very rapid payoff and has a high degree of urgency. The government should get moving very rapidly on these fronts.
ii. Shaping up the school system to **improve labor-force vocational and technical skills** will pay off only over the medium run, but progress will build up gradually and the payoff is potentially very large. The government needs to get going right away with donors on that front.
iii. **Improving the cocoa sector's business environment** (through better defined land rights) is a medium-term challenge; tackling it in earnest, together with improvements in infrastructure (rural roads and irrigation), will help putting the cocoa sector back on its feet.
iv. **Improving the MTIC's policy-formulation capabilities** (in particular through better data collection and analysis) to put key trade-policy choices behind. These include WTO-related reforms (getting regulations in conformity, etc.), taking a clear stand on the EPA or even going ahead with an interim agreement, and tabling a free-trade deal with CEMAC involving service liberalization. All three are necessary steps, although unlikely to be game-changers by themselves.

These four areas of action are the common thread of the DTIS update's action matrix detailed at the end of the executive summary.

Doing away with excessive concentration

STP suffers from a chronic trade deficit financed largely by aid inflows. With exports (4.6 percent of GDP) covering only a tiny share of imports (47 percent of GDP), the trade deficit averaged about 42 percent of GDP during 2008-12; thanks to large transfers, the current-account deficit stood at 21.8% of GDP (down from 27.6% in 2010). It is projected to average 23% in 2013-2014.

The diversification of exports and production is a first-order priority for STP because concentration is portent of economic vulnerability and instability on both the import and export sides. On the import side, the country's dependence on imported foodstuffs makes it vulnerable to food price hikes such as the recent one, with severe consequences on poverty and food

security. For instance, it is estimated that the headcount of individuals below the international food poverty line rose from 23% of STP's population in 2008 to 33-38% in 2009, largely on account of the rise in worldwide food prices.

Concentration means vulnerability to domestic and outside shocks. On the export side, the country's persistent and quasi-exclusive dependence on cocoa, which is striking in the face of declining volumes, makes it vulnerable both to weather shocks and to the price gyrations of commodities. In recent years, export values have been buoyed by the increase in global cocoa prices; however, historical experience suggests that commodity-price booms are frequently followed by busts. As for volumes, STP has managed to more or less halt their decline (minus 70% in twenty years), but a drought in 2009-10 again negatively impacted production. Only diversification can smooth out the impact of such shocks on GDP.

Concentration is not just product-wise; it is also geographical. In terms of destinations, STP's exports are heavily skewed towards the E.U.'s slow-growing markets; while its imports are overwhelmingly originating from Portugal and a few other E.U. countries. While not necessarily an issue in itself, the large share of E.U.-originating imports constrains the government's ability to go forward with preferential tariff elimination as part of an EPA, as it would imply tariff-revenue losses.

Fostering diversification does not mean that the government should "pick winners". Contrary to many low-income countries, STP shows limited "export entrepreneurship", and this speaks to the formidable barriers that stand in the way of generating economic activities in STP—in terms of skills, support services, trade costs, and so on. Specific supply constraints in tourism, services and agriculture will be detailed later on in this report; but the sector analyses will also show that most of the binding constraints are cross-cutting. The attention of STP's government should therefore focus, at least in a first stage, on these cross-cutting issues rather than on targeted sectoral-promotion interventions. That is, the government of STP should facilitate entrepreneurship and help raise productivity in all sectors, while letting the market choose where the opportunities are.

Moving ahead with key trade-policy challenges

STP's trade policy today faces three key challenges:

i. WTO accession,
ii. Relations with/entry into CEMAC,
iii. EPA negotiations with the EU.

In all three cases, it would be beneficial to take a long view and see the three challenges together as an overall opportunity to make progress on needed and interlinked modernization reforms. Narrow cost-benefit analyses of each challenge separately would risk missing the point and leading to short-term and incoherent strategies. Essentially, WTO accession and the EPA are opportunities to enlist technical assistance to modernize STP's trade institutions and build capacities. WTO accession will help modernize STP's regulatory apparatus. An EPA will provide a spur to implement a fiscal transition (toward domestic taxation) that is anyway needed in the medium term; tariff reductions would be phased in over several decades, leaving ample time to build capabilities for the deployment of alternative domestic taxes, including a VAT. A free-trade deal with CEMAC would have very few implications in the short run given how little

trade there is; but it could open future, unforeseen business opportunities as the investment climate gradually improves on both sides.

STP's border taxes do not constitute a major distortion to economic efficiency, having a simple structure with two instruments: A tariff and surtax on petroleum products, alcohol, wine and spirits, tobacco, and used cars. The tariff has a simple 4-band structure at 0% (0.1% of HS6 subheadings), 5% (19.7% of HS6 subheadings), 10% (69% of them), and 20% (11.1% of them). It has only very mild escalation, with a simple-average tariff of 9.4% on capital equipment, 9.7% on intermediates and 10.9% on final goods (10.2% overall).

Although WTO accession is unlikely to involve significant tariff concessions given the relatively simple current structure, several directions of improvement and reform should be considered. First, in accordance with widespread practice, STP could consider reducing the tariff rate on capital goods to 5% in order to reduce the disincentive to productive investment. More importantly, the current system's main function is fiscal, as it contributes to about half of the State's tax revenue; by contrast, its role in protecting domestic value added is only marginal. A fiscal rebalancing in favor of domestic taxes through the creation of a VAT would be a step forward and consistent with the general spirit of WTO accession.

WTO accession is also an opportunity to modernize the regulatory framework for trade. Non-tariff barriers (NTBs) are not an issue for STP, which has no quantitative restrictions, economically-motivated prohibitions, or tariff-quotas. However, STP needs to pursue recent efforts to modernize its legislative framework and administrative capabilities, in order to bring them to full conformity with not just the letter but also the spirit of key WTO agreements, in particular the SPS and TBT agreements. In terms of SPS regulations, STP needs to put in place a regulatory framework responding, in terms of public health and environmental protection, to the needs of a small island economy with fragile ecosystems that is also a low-income country. Drawing on the experience of more advanced island economies like Mauritius will be key to avoiding some of the mistakes—like over-ambitious regulatory systems—commonly seen on the continent and to avoid inadvertently creating NTBs and rent-seeking regulatory agencies.

STP needs to develop a vision in terms of regional integration. STP currently belongs to the CEEAC which aspires to become a Customs Union, but not to CEMAC. CEMAC is a Monetary Union (sharing the FCFA as a common currency) and a Customs Union. Joining it would entail a tariff increase, as CEMAC's Common External Tariff (CET) is higher than STP's tariff, unless the tariff and surtax were consolidated and aligned on the CET. Apart from tariff alignment, in the short run, the implications of joining CEMAC would be minimal given that there is virtually no trade between STP and CEMAC. In the long run, unforeseen opportunities and benefits could potentially arise from regional cooperation and free trade.

International experience suggests that the benefits from regionalism are not limited to commercial preferences. They also stem from (i) the credibility effect of an external anchor for countries embarking in reform programs, and (ii) cooperation on—typically non-trade—"regional public goods" such as the management of environmental commons, energy and water management pools, or regional security. In the case of CEMAC, non-trade benefits of this type may be marginal, but regionalism can help a dynamics of good governance and reform to emerge gradually through the adoption of good practices in various areas, including e.g. the OHADA treaty on commercial legislation.

EPAs are also a modernization opportunity. STP should participate proactively in EPA negotiations alongside its CEMAC partners. EPA negotiations with the E.U. are dictated by the necessary replacement of the non-reciprocal Cotonou convention by a WTO-consistent reciprocal agreement. As Cotonou and the EBA initiative for LDCs already granted preferential access for 97% of ACP exports to the E.U.'s market, the main changed involved in an EPA would be for countries like STP to reduce tariffs on E.U.-originating products. STP's authorities fear that, given the E.U.'s large share in STP's imports, this would entail a significant reduction in tariff revenue. These concerns, while genuine, should not be the tree hiding the forest: the long-term gains from an EPA stem essentially from keeping the E.U. as a development partner in the many dimensions in which cooperation is crucial, many of which are non-trade related. The possibly adverse implications of tariff elimination are mitigated by several factors. First, the tariff phase-out period is very long: according to the initial schedule, the first tranche (necessities) was to be liberalized by 2015; the second tranche (capital goods and raw materials) between 2016 and 2021. Both of these tranches would essentially involve pro-poor efficiency gains: the first by reducing the price of necessities, and the second by reducing investment costs. The really binding tariff eliminations, on consumer products in the highest tariff band, would take place between 2022 and 2033. Moreover, 28.3% of CEMAC imports from the E.U. would be excluded. Such a gradual phase-out of tariffs would leave ample time for a switch to alternative sources of taxation, as part of a fiscal transition that is anyway needed.

Reducing trade costs, improving connectivity

While STP has made substantial progress on customs reform, its transit infrastructure today remains a significant constraint on the country's trade integration. Plans to build a deep-water port hold the opportunity to develop the island as a trans-shipment hub for the region. To be successful, this ambitious plan will require overcoming many hurdles including (inter alia) competition from other regional ports and the absence of a hinterland. Most importantly, it will require a commitment to make progress on several fronts including skill-building, related infrastructure, and governance.

Improvements in the efficiency of STP's customs since 2006 show that reform is possible. The adoption of ASYCUDA World in March 2011 with assistance from UNCTAD and the U.S. Department of Defense made STP the first adopter in Central Africa. It contributed enormously to Customs efficiency and transparency, with direct link to the International Bank of STP for duty collection. In parallel, Customs have worked to simplify administrative procedures. As a result of automation and procedural simplification, over 80% of transactions are now cleared within one to three days, and revenue collection is up 25% in spite of lower transaction volumes. The proposed Single Window should further reduce costs.

By contrast, facilitation infrastructure needs to be further improved given a small island economy's natural dependence on maritime and air transport. STP's slippage in Logistics Performance Index (LPI) ratings shows that recent Government attempts to improve the situation, although going in the right direction, are still not sufficient, in particular by comparison with competitor countries.

Air transport services are very limited which diminishes international connectivity. The government has attempted to improve the air-transport regulatory framework by entering bilateral agreements with a number of countries in order to accelerate the entry of new carriers.

However, in spite of regulatory improvements, air services have not yet developed substantially as a result of infrastructure constraints and limited demand (essentially cut flowers and fruit on the export side and perishable food products on the import side; tourists fill in barely a quarter of the available seats).

Small-scale reforms on air service development can have a large impact. For instance, the main airlines consulted reported that the runway at the airport was bumpy leading to high tire wear. Improving the surface can reduce operating costs for airlines. The airport also has no cold storage facility for perishable products. These are all simple things to fix, and delays in fixing them send a poor signal that bilateral agreements are unlikely to offset. However, progress is expected in the near future as the recent contract to Angola's Sonangol to upgrade the airport is already producing results, such as the much-overdue lighting of the runway.

Maritime connectivity is also limited. STP's trans-shipment hubs are either in Europe or in Leixoes or Las Palmas, while main continental ports are distant (Lagos is 774 km away). Compounding the effect of distance, container freight costs from Europe are high on account of thin traffic and lack of competition (40% above those to Libreville, although the distances are similar). Small and declining container traffic (down 12% between 2009 and 2011) takes place mostly in 20' container against a worldwide trend to use larger 40' ones, and the frequency of international vessel call is very low (74 in 2011, or one every ten days each way, all origins/destinations combined).

The main bottleneck in maritime transport is STP's port at Ana Chaves Bay. The port's depth (2.5m at low tide) is insufficient for large vessels, which have to anchor 1.5 miles offshore. Barges are used to trans-ship cargo between vessel and port, which is slow, costly, and hazardous. The port's management by Enaport, a State corporation, has led to underinvestment in capacity and equipment, although the recent acquisition of a 45-ton crane has made it possible to handle limited numbers of 40' containers.

The 2006 DTIS recommended the creation of a deep-water port, and the Government's approach was to award a concession agreement to Terminal link, a subsidiary of France's CGM-CMA, to develop it at Fernão Dias, 11 km North of Sao Tome, at a cost of $570 million. The investor considers that STP's location has the potential to develop into a profitable trans-shipment hub for the sub-region (whose trade has grown four-fold over the last twenty years), as no port in West Africa is equipped to handle the latest generation of ocean freighters in terms of depth (13m) and turnaround speed. With 1'000 jobs and 1.9 million TEU to be handled per year, the port is expected to generate substantial spillovers for STP's economy.

However, the challenges to make this plan work are equally formidable. Success will require renewed commitment, as international experience shows that the successful development of trans-shipment ports results from the convergence of many factors. The region already has too many medium-sized ports, and some have the ambition to grow into hubs. Fernão Dias, which does not have a captive domestic market, would have to demonstrate clear competitive advantages in terms of equipment, handling charges, fuel prices and turnaround time to have a chance of imposing itself. Trans-shipment is a very competitive business in which differentiation/quality of service play a key role; with fast-growing but still limited traffic, West Africa's trans-shipment market may well turn out to be a winner-takes-all.

If Fernão Dias could secure sufficiently high volumes, it could trigger a virtuous circle of economies of scale, lower costs, and attractive services; but given the likely consolidation of port

activities in West Africa and the competing ambitions of several existing ports, STP will need to go fast and make no mistakes. In clear, the pace of decision-making and implementation must accelerate dramatically and the government needs to put renewed energy in building the workforce skills needed for employability in a modern port and offer an attractive overall package in terms of energy availability and pricing, inland infrastructure, and investment climate.

Services hold the promise of diversification

Services offer a large potential for export diversification in Sao Tome and Principe. They account for most of the 13,000 new jobs that were created during the last decade in STP, and currently account for about 60 percent of total employment, compared to 47 percent in 1987 (STP CEM, 2011). However, in spite of a recent recovery, the potential of services to lead growth, exports and job creation has so far failed to materialize.

The vision of STP's government is to transform the country into a services platform for the Central Africa sub-region. This medium to long term plan aims at leveraging the country's strategic location in the Gulf of Guinea, including by harnessing non-traditional services sectors such as business process outsourcing (BPO) and IT enabled services (ITES) for export growth.

International experience suggests that countries develop business services sectors incrementally, beginning with basic "staff augmentation" services such as back office functions and moving gradually to "transformational sourcing" where the service provider competes in higher-value activities. Each step prepares for the next, as service providers gain experience and exposure to international competition. Most developing countries' service sectors fall towards the bottom of the progression; given the infancy of IT services in STP, in a first step the strategy should focus on standardized IT and BPO services in bottom segments (staff augmentation and low-value offshoring) that can be performed by middle-level professionals.

The quality of STP's ICT infrastructure is improving substantially. Up till now, a weak communication infrastructure and high connectivity tariffs were key constraints for STP's service development. However, backbone access via the ACE submarine cable linking STP to the west coast of Africa to Europe and to the rest of the world (a project supported by the World Bank) has the potential to reduce prices dramatically and increase the quality for communications services, allowing the country to capitalize on the transformative power of information and communications technology. The government has also launched a public tender for the award of a second telecoms license, including permission to launch 2G and 3G services. The entry of a second operator would end CST's monopoly and benefit the economy.

However, key bottlenecks remain in labor-force skills. Skills mismatches and skills shortages pose a significant challenge to Sao Tome and Principe's development. A recent study (RESEN, 2013), shows that there is a strong imbalance between job openings and the skills produced by the education sector. For instance, over the past ten years, 39% of graduates remained unemployed. Furthermore, an important part of those who manage to get a job do not poses market-relevant skills. This is particularly worrisome given that STP is among the region's highest-ranked countries in terms of both higher-education spending and vocational school graduates.

Funding for higher education could be better allocated. STP spends more than comparators on higher education with more than 80% of scholarships targeted at studies abroad, but scholarship allocation criteria must be revisited to prioritize market-relevant skills and while resources are simultaneously mobilized at home to provide useful vocational education on the basis of dialogue between education institutions and the private sector.

Finally, the government of STP could improve market access for STP's future service providers through deeper regional integration in the services area as well as the provision of market research information.

Tourism can be made a growth engine

Tourism is a powerful growth engine and job creator around the world, generating directly and indirectly 258 million jobs (8.8% of global employment), US$6 trillion of value added (9.1% of global GDP), US$1.1 trillion of export earnings (5.8% of the total), and US$652 billion of investment (4.5% of the total). World international tourist arrivals have grown by an average of four to five percent a year since the 1950s. In particular, international tourist arrivals to SSA increased by 8% between 2009 and 2010 despite the global financial crisis, making SSA the world's second fastest growing region after Asia Pacific.

Tourism has considerable potential in STP. In spite of a severe slump in international arrivals to STP from 15,000 in 2009 to 8,000 in 2010, spending by tourists has grown steadily from US$6.5 million in 2006 to US$9.4 million in 2010. Tourism accounted for 5.4% of GDP, 3,500 direct jobs (4.6% of total employment), and 40% of exports of goods & services in 2010.

Although the international tourism sector is highly competitive, STP has strong natural and cultural assets to leverage. STP does not have the expansive beaches to compete in the "sun and sea" segment that generally brings large-scale resort development. Yet STP contains numerous picturesque natural areas including small nested beaches, lakes, waterfalls, and rainforest. Obo National Park is its only protected area but covers 30% of the country's territory. Obo hosts great biodiversity, including a number of endemic plant and bird species. STP also has rich cultural heritage, including the remnants of the colonial Portuguese architecture in the capital city of São Tome (in need of restoration) and the network of colonial-era coffee and cocoa plantations known as Roças. STP's natural and cultural assets can be combined to form a compelling tourism offer. STP's attractiveness is further aided by its safe environment, political stability, and the absence of malaria.

Recent investments have improved STP's tourism capacity and quality of service. These investments were originally attracted to the country based on expectations of large increases of business tourism linked to offshore oil exploration. Investors, which clearly intended to cater to the business traveler, include international chains such as the Pestana hotel group. The Portuguese company has built three properties in STP, including the island's only five star hotel. Some recent investors, however, are also targeting the leisure market. This is the case of the South Africa-based HDB Group, which intends to develop several small-scale, high-end resorts on Principe Island to add to its recent acquisitions of the Omali Lodge in São Tome and the Bom Bom Island Resort on Principe Island.

Yet, in spite of its potential, the sector's performance has fallen short of the government's expectations. STP's 2001 Strategic Plan for Tourism Development targeted arrivals of over

25,000 per year by 2010. Yet the average figure over the past decade has been around 10,000 and never exceeded the 2009 figure of 15,000. In the early 2000s, there was an expectation that the oil sector would bring significant amounts of business tourists. Yet this segment currently only accounts for only 4% of tourists, a figure dwarfed by those who come to visit friends and relatives, (41%).

There are a number of binding constraints to growth but most are domestic and within the reach of government action. Air connectivity is very limited, with only two weekly flights from Europe: once a week on TAP and once on STP airways. Of serious concern is the lack of international standards in safety oversight, which excludes STP-registered airlines from EU airspace. While the air link between São Tome and the island of Principe has improved to four weekly fights, this frequency is still insufficient to meet the needs of tourists. Also, basic health services and emergency evacuation capabilities are inadequate. Additionally, lodging operators indicate that high utility prices are driving up hotel operating costs and therefore making the sector less competitive. Finally, much of STP's workforce, which is the principal point of contact for tourists, is not adequately qualified.

Government action should fall within six priority areas. These include (i) institutional development; (ii) transport infrastructure investments; (iii) labor force training; (iv) conservation of environmental and cultural resources; (v) product development and packaging, and (vi) tourism promotion activities. In some cases, these overlap with priorities in other sectors.

The government's tourism strategy needs to be energized. The strategy, prepared for the period of 2009-2014, has not had much impact to date. Its lack of implementation can in part be attributed to the fact that it lacked an action plan to guide its implementation. Perhaps more importantly though are the substantial human and financial resource limitations of the Directorate of Tourism and Hospitality (DTH). A new action-oriented plan should be created in conjunction with significant capacity building activities to bolster DTH's ability to implement the plan. As for the financial element, funding was supposed to be generated for DTH through a tourism tax established by decree in 2007. To date, however, the tax has neither been properly collected nor transferred to the sector's institutions. As a result, promotion, training, tourism information provision, and other tourism development activities have largely been left to the private sector.

The government of STP should continue its visa procedure simplification efforts. Progress has been recorded in the simplification of visa procedures with support from the International Finance Corporation (IFC). Once implemented, an online system will allow tourists to obtain visas without having to mail passports to STP's few existing consulates and embassies worldwide. The government can further accelerate the deployment of the system by implementing a more user-friendly online version.

The government needs to improve and diversify air links with its main tourism source markets through reliable and competitive air access. The two priority issues must be air safety and airport upgrading. Once these issues are resolved, the government should conduct a cost-benefit analysis to assess what incentives would be needed to encourage the development of scheduled low-cost air services to the country.

The government could work with donors and the private sector to set up effective vocational training geared toward the needs of the tourism sector. The labor market is an important linkage between the tourism sector and the wider economy, ensuring that benefits from

the sector are widespread. The government could work out a practical plan to make the education system more market-relevant by delivering the skills that will make graduates more employable.

The government should also ensure that sector development reflects the need for effective environmental and cultural protection. It should prohibit haphazard real-estate development in coastal zones, ensure that agri-business development does not clash with the need to protect the environment (for instance in the case of plantations located next to protected zones), and raise the visibility and value of heritage goods through careful restoration. These are complex and technical issues on which donors can contribute by sharing experience and knowledge. Addressing them also requires government vision and commitment with relation to the tourism sector's sustainability.

The government needs to work with the private sector to develop new tourism products and packages. While the country possesses many tourism assets, few have been converted into quality tourism products. Among those with the strongest tourism potential are the Roças. Despite their natural beauty and exceptional cultural value, most have been largely abandoned. A partnership model between surrounding communities and private investors could help revive some and provide a truly unique tourism attraction. In addition to tourism product development, backward linkages between the tourism sector and potential suppliers of inputs (such as horticulture, fruits, and decorative flowers) should be developed through SME development schemes and producer training. Once products are developed, they can then be packaged by tour operator in collaboration with airlines and other tourism service providers. At present, there are approximately eight tour operators or travel agents in STP. Yet most of these only issue tickets and have not focused on creating integrated packages.

There is also a need to better promote the country and its tourism offer. In the absence of a substantial government budget to market the country, private sector accommodations owners and tour operators have help promote STP abroad. However, the scope of their efforts has been limited. Additionally, they have primarily targeted Portugal and other southern European countries that have been hit particularly hard in recent years by the global financial crisis. This has highlighted the need for promotional efforts that can help STP diversify its source markets.

Finally, successful development of the tourism sector depends upon a coherent set of actions pursued across numerous bodies. Tourism is a complex sector requiring coordination between multiple government agencies and the private sector, as represented by trade associations. Civil society organizations and communities also have an important role to play. Furthermore, it is essential to have strong cooperation with related sectors that include transportation, communications, finance, education, sanitation, and environmental management.

STP's agriculture can be put back on its feet

While declining, primary activities still employ about a quarter of the workforce in the country and generate the largest share of household income. As a consequence of the 1992 land reform, most farmers are smallholders, many of whom had little technical or managerial expertise in the agricultural sector at that time. Without a land market, they were unable to sell their land plot or get credit for investment—as land cannot be used as collateral for loans—and many of them simply abandoned their land and migrated to urban areas, contributing to the primary sector's decline.

Against this background, an agricultural export strategy will have to target the export of quality crops with high value that can be sold in international niche markets. This is critical to offset the fixed costs associated with small-scale production and STP's large transportation costs (see *supra*). The main objective for an integrated agricultural trade policy should be to harness the country's traditional comparative advantage in cocoa production while pursuing complementary strategies for agricultural export diversification. The idea would be to promote economic diversification to mitigate volatility and risk while promoting job creation as an engine for growth and poverty reduction. In order to implement this strategy, several priority actions should be implemented, several of them following on past donor initiatives that may need updating or more forceful implementation in view of recent developments in the sector.

The most important in STP's agricultural sector since the 2006 DTIS is the successful emergence of export-driven farmer cooperatives exporting cocoa, coffee and pepper. The emergence of these cooperatives has benefited from the combined support of the national government, international donors, and foreign buyers who provided initial technical and financial support. The cocoa cooperatives have been particularly successful, with one organic cocoa cooperative becoming financial sustainable without government or donor support.

The government could support the successful cooperative organization model and promote its adoption by other market players. Most of the positive developments in the agricultural sector in the last few years can be attributed to the successful implementation of the export-driven farmer cooperative model. The expertise and organizational structure passed by international donors and foreign buyers of organic and fair trade cocoa, together with local know-how brought to this partnership by the government of Sao Tome and Principe, has created a combination that has the potential to revive the agricultural sector.

Continuing success of existing and new export-driven farmer cooperatives will require further technical and financial support. STP's cooperatives are still small and need international quality recognition, additional human resources and financial support in the interim period before financial sustainability. The government of STP should ensure that the newly created National Agency for the Promotion of Exports and Foreign Investment has the resources to effectively support the farmer cooperative model. The search for new outlets should be pursued with a view to securing some degree of bargaining power for STP's small cooperatives in dealing with buyers not just in terms of price-setting, but also technical assistance, equipment and organic certification costs. This additional marketing effort and bargaining power is particularly needed in the organic coffee and organic pepper sectors where current prices do not guarantee the viability of the cooperatives.

The National Agency for the Promotion of Exports and Foreign Investment should attract foreign direct investment, in particular in the cocoa sector. New investments in the sector would enhance competition, contributing to better farmer information on prices and STP cocoa's "quality premium". It should also strive to attract additional capacity investment to transform cocoa into chocolate in order to retain in STP the value added in the chocolate-making production chain. Currently most cocoa produced in Sao Tome and Principe is processed only at a basic level and exported as dry beans. The only chocolate exporter in the country is an Italian investor running a family business that sells to high-end international markets, branding Sao Tomean chocolate as a gourmet exclusive treat. More of this type of foreign investment should be attracted. The agency should also promote diversification into the tropical-fruit sector, a niche market that has not been developed until now.

However, the agency should not confine its mandate narrowly to attracting FDI: It should also put in place safeguards and convey them clearly. The first type of safeguards concerns the organizational model followed by new investors and should mandate a commitment to working with small farmers on a regular basis, for instance by providing technical assistance and inputs, as well as working to build processing facilities as much as possible at the village level. The second type of safeguards should ensure that environmental protection and damage mitigation plans are attached to foreign investment plans. This type of planning should be requested of all new investors – especially in the case of the exploration of palm oil, and also especially if this is in areas bordering natural reserves like the Obo Park, or rivers which have been prone to flooding in the recent past. When safeguards are clearly communicated and enforced in a predictable and transparent way, they do not act as deterrents to foreign investment—at least not to the type of investors that STP wants to attract.

Beyond export and investment promotion, the Government of STP needs to improve the legal and institutional environment of agriculture. Finalizing a full agricultural census is crucial to draw a land policy that promotes agricultural investment. Given the current uncertainty about land rights and the actual use of existing land plots, efforts to draw up a cadastre should be complemented with a full-fledged agricultural census. In fact, recent uncoordinated attempts by the government to undo its original land redistribution, lack of clarity in land redistribution decisions and resistance from entitled individuals have combined to create a high level of uncertainty about land rights. This acts as a strong deterrent for both foreign and domestic investment. Clear rules and property rights could contribute to attracting foreign direct investors to the agricultural sector.

Creating a land right-of-use market is also a much needed step to increase agricultural investment, and ultimately to improve land productivity. The small size and dispersion of land plots in Sao Tome and Principe increases the costs of agricultural activities, thereby creating an impediment to agricultural investment in the country. Fully privatizing land is a politically sensitive topic, but introducing land rights-of-use that are sufficiently long (ideally between 30 and 50 years would be a desirable length) could be a measure powerful enough to create a land use market with many potential economic benefits. First of all, these contracts would allow the purchase of the rights to use agricultural land to create larger farming land plots that could increase profitability to a scale that justifies investment on equipment and knowledgeable extension support staff. A second benefit of an active right-to-use-land market would be that meaningful collateral could be provided to banks in exchange for credit for investment in agricultural modernization, which is currently not available. The existence of an active right-to-use-land market could also prevent the type of social tensions related to expropriations recently observed in Sao Tome, since the need for the government to expropriate smallholders in order to facilitate foreign direct investment could be reduced in this way.

STP also needs to invest in rural infrastructure. The vulnerability of Sao Tomean cocoa production to the recent drought highlights the need to invest in irrigation to reap the rewards of recent investments in terms of productivity. Most irrigation systems date from colonial times and are outdated and ineffective. There has been little investment on irrigation infrastructure by the government or donors, although it is a priority action.

The creation of new export-driven agricultural investment will also require complementary investment in transport infrastructures, which would also benefit other agricultural activities and the economy as a whole. The EU has recently financed an important program of road

reconstruction. Additional investment on good roads to inland areas of the country would help fishermen get their products to villages that are currently not served. Further investment is also needed in international transit infrastructure, including maritime and air, to facilitate exports of cocoa, coffee, pepper and fresh flowers and fruits (see Chapter 3).

Additional support should be provided to capacity building on information for the agricultural sector. Agricultural research and development services provided by CIAT are of crucial importance for the modernization of Sao Tome and Principe's agricultural sector and its ability to disseminate and adapt new varieties or species to local agro-ecological conditions. FENAPA, the national small farmer association, also plays an important potential role in decentralizing agricultural extension, even though its current organization may need to be adapted to the changing conditions in the cocoa market. In summary, technical and financial support to these two institutions should be considered by donors as an important and relatively low cost way to support the country's modernization and renewal of the cocoa sector.

A light preservation and transformation food industry that links the primary sector to the services sector, particularly tourism, should be promoted. Both agricultural production and fishing often exceed local demand and are simply wasted. In the case of agricultural production, this is due to seasonal fluctuations and weather shocks that cannot be accommodated in the absence of a food preservation industry. In the case of fishing, excess production has also to do with poor infrastructure for fish preservation, including a near complete lack of refrigeration facilities. In addition to preservation capacity, the creation of food transformation capabilities could generate value added and productive employment. Target markets for this industry could include hotels, the domestic school network, animal feed from maize and fish, and domestic consumption. In this setting, the creation of a light preservation and transformation industry would also serve as an instrument for food security and for the reduction of the food import dependence, while simultaneously allowing for job creation.

Complementary measures to support the fishing sector include the prioritization of investment in the improvement of traditional boats and the adoption of a fisherman cooperation model. Adding stabilizers (made of environmentally-friendly materials) to traditional boats is a simple way of making them safer and allowing traditional fisherman to venture further away from shore, where fishing resources may be under less pressure. The creation of fishing associations with the financial capacity to buy fiberglass boats taking 3- to 5-fishermen crew would allow safe fishing further away from shore, thereby increasing the potential fishing supply and potentially generating additional employment.

Finally, additional attention and financial resources are required for the control of STP's maritime zone. Evidence points to a large fraction of Sao Tome and Principe's fishing resources being extracted by unlicensed foreign boats in deep waters. The national coast guard has no boat to control this, and strengthening its capacity would preserve future sustainable fishing in STP's waters.

Revised and Updated DTIS Action Matrix

Trade Policy

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Weak trade-policy formulation capabilities	**Improve MCIT's leadership role in pro-competitiveness reforms**	**N**	**PASC capacity-building program**	**Trade Directorate's analytical capacities still very limited**	**Hiring of technical staff, limitation of time spent in missions outside**	**MCIT**	**Produce and discuss synthetic notes on all consultant reports, document follow-up**	**H**	**L**	**M**	**2.4**
Excessive reliance on border taxes for fiscal revenue	Improve effect of tariff structure on incentives	N	Fiscal consolidation program	Weak domestic-taxation capabilities	Reduce tariff rate on capital goods (e.g. tourism equipment) to 5%, then 0%	Ministry of Finance	Creation of a joint MTIC/MoF task force	M	L	M	2.3.1
Lack of visibility of STP's trade-policy orientations	Provide long-term visibility for investors	N	Lengthy negotiations	Weak capabilities, lack of prioritization, lack of commitment	Propose free-trade deal to CEMAC partners with service liberalization Adopt a clear position on EPA negotiations on basis of Laporte report	MCIT, Ministry of Foreign Affairs MCIT, Ministry of Foreign Affairs	Organize a validation workshop on Laporte report, produce a synthesis note	M M	L L	M M	2.3.3
Lack of effectiveness of STP's investment policy	Attract FDI in key sectors including agriculture and tourism	N	Creation of API, negotiated fiscal incentives	Ineffectiveness of tax deals to affect investors' decisions	Improve transparency of deals with foreign investors Continued efforts to improve investment climate	MCIT, MoF All ministries	Publish terms of contracts with large foreign investors Improved CPIA, DB ratings	H H	L M	M H	2.3.2

Notes
a/ L: low; M: medium; H: high.

Trade Facilitation

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Lack of essential port infrastructure and facility	**Better use existing po**	**Yes**	**Reachstacker crane, port tractors, generators installed (as of Feb 2013)**	**Suitable approach, but implementation is slow**	**Install basic equipment in the existing Port**	**ENAPORT, SONANGOL**	**No. of moves per hour**	**H**	**M**	**H**	**2.2.1**
Insufficient use of the customs automation system	Modernization of border Management	No	ASYCUDA World rolled out in 2011	Appropriate approach, hampered by lack of resources	Introduce Single Window System	Customs, MoF	No. of linkage to other agencies	M	L	M	4.1
		No	Only some modules are in operational		Enhancing Risk management system with ASYCUDA modules	Customs, MoF	remaining ASYCUDA Modules are fully in use	H	L	M	4.1
		No	Customs agents charge up to 2 % of goods value to lodge declarations		Allow DTI such that firms can lodge declarations form their premises	Customs	Reduction of costs of lodging customs declarations	H	M	H	3.1
Lack of transparency in concession process	Regulatory environment for PPPs in trade related infrastructure	No	Contracts are not publicly accessible	Lack of Transparency	Increase transparency of contracts for the development of trade related infrastructure	Ministry of Finance	Operational provisions of contacts are publicly available	H	H	H	2.2
Lack of essential port infrastructure and facility	Leveraging the Proposed Deep Water Port	Yes	Concession contract signed with TerminalLink in 2009	Lack of Transparency, lack of monitoring of implementation (slow)	Construction of deep sea port (transshipment port)	ENAPORT, TerminalLink	Financing and completion of new port development and construction	M	M	H	4.2
				Need to consider the roles and its effective use of two ports	Prepare Port strategy to manage 2 ports (Ana Chaves and Transshipment port)	ENAPORT, TerminalLink, Port Management Commission	Completion of the strategy	M	L	M	4.2

Trade Facilitation (cont'd)

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref in text
Poor air connectivity and safety oversight	Enhancing air connectivity	No	Only terminal building improved, not other infrastructure at the port	Insufficient investment, problems largely left unaddressed	Expand apron space at Sao Tome airport	ENASA	Apron space expanded to accommodate at least two large aircraft	Mediu m	M	H	3.3
					Construct refrigerated facilities equipment and infrastructure at the airport of Sao Tome	ENASA,	Lighting installed, refrigerated facility built	H	L	H	3.3
					Implement safety oversight program (PNCQ), (PNFT)	INAC, STP Airways	STP registered airlines removed from EU blacklist	M	M	M	4.3
					Increase the connection with regional hub airports	INAC	No of regional flights per week	M	H	M	4.3
Poor connectivity to local and global markets	Improving local to global links	Yes	n/a	Slow progress	Improve domestic connectivity in each island and inter -island transport	Min. of Public Works and Transport	Frequency of seaborn transport between two islands	H	H	M	4.4
					Review revenue management of INE and FRN	INE and FRN	Regular revenue to FRN	H	H	H	2.3
					Identify priority feeder roads to connect producers and local markets /transport	INE, FRN, Ministry of Agriculture	No. of identified roads	M	L	H	4.4
					Build storage facilities with linkage to transport for small farmers to consolidate their products	Ministry of Agriculture	No. of storage built	M	M	H	4.4
Lack of involvement of private sector in reform process	Involvement of private sector in trade facilitation reforms	Yes	None existing	Suitable approach, need to be clear who can be a focal point for both the governement and	Involve private sector representatives in formulation of policies and reforms relating to trade facilitation and logistics	All agencies	Creation of logistics committee	H	L	H	4.5

Services

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Skills mismatches and skills shortages	**Raise employability of STP labor force**	**No**	**Increase number of students and high spending on tertiary education**	**Absence of market-relevant skills**	**Education reform:** **Better vocational education** **New criteria for scholarship allocation based on market needs** **Incentives for firms to conduct business and IT training**	**Ministry of Education**	**Reduce number of unemployed graduates by 50% and number of "inadequate" skills by 50% in 2015 in 2015**	**H**	**M**	**H**	**4.3.2**
Inadequate regulatory framework	Improvement in the services business environment	No No	On-going reform in telecoms No approach	Bureaucratic bottlenecks risk delaying the successful completion of the process Absence of associations and regulatory frameworks in key professional and IT services	Award second telecom license Develop regulatory plans for professional and IT services		Price reductions and increased connectivity as projected by AGER in 2014 Regulatory frameworks in place in 2015	H H	L L	M M	4.3.1
Absence of country branding	Improved market access	No	Creation of API	Absence of coherent strategy to create professional associations	Develop services-specific country branding strategy		Country branding strategy developed	M	L	M	4.3.3
Lack of knowledge about export opportunities	Improved market access	No	None		Collect and disseminate to local service firms market research information, opportunities for services exports Create services trade directories	Chamber of Commerce, business and professional associations	Number of exporting firms increased by 50% in 2015.	M	L	M	4.4

Tourism

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Lack of workforce training	**Improve workforce productivity, quality of service delivery**	**No**	**No specific vocational training; on the job training by employers**	**Worker turnover reduces return to training investment by employers**	**Set up vocational training center in collaboration with private sector and donors, delivering specific tourism-related skills**	**Ministry of Education, MCIT**	**Budgeting for the construction of a vocational training center, hiring of faculty**	**H**	**L**	**H**	**5.4**
Lack of promotion, product development and packaging	**Improve access to source markets**	**Yes**	**Left to private-sector initiative**	**No government support; public-good problem**	**Set up a round-table with all private sector stakeholders including travel agents to work on developing packaged products**	**MCIT**	**One "eco-tourism" product created and marketed, e.g. in Germany**	**H**	**L**	**M**	**5.4**
Lack of institutional development	Ensure consistency and effectiveness of tourism development policy	Yes	Tourism tax and creation of Tourism directorate at MCIT	Tourism tax ineffective, capacities at Tourism Directorate weak; no environmental policy	Effectively deploy tourism tax; ensure that it is channeled to capacity building; put in place effective environmental zoning regulations with donors	MCIT, Ministry of the Environment	Adoption and implementation of coastal zones protection law	H	L	H	5.4
Lack of air connectivity	Improve access to source markets	Yes	See Chapter 3								

Agriculture

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Cocoa											
Lack of foreign investment, insufficient spillovers to village producers	**Additional output and employment, spillovers to other producers**	**Yes**	**Tax incentives to foreign investors**	**Lack of a consistent framework for FDI in agriculture**	**Improved investment climate** **Transparency in incentives** **Clear environmental guidelines** **Guidelines for cooperation with village producers and communities**	**Ministry of Agriculture**	**Growth in cocoa-sector FDI** **Publication of tax incentives to foreign investors** **Publication of guidelines** **Agreements between cooperatives and investors**	H	M	M	5.2.7
Uncertainty about land rights	**Creation of a well-functioning land market; improved access to credit; investment growth**	**Yes**	**Uncoordinated attempts to modify land distribution**	**Lack of predictability and fairness, uncertainty, resistance**	**Draw up agricultural census; finish cadastre; implement clear land-rights policy**	**Ministry of Agriculture**	**Complete cadastre and agricultural census; settle disputes to everyone's satisfaction; grant**	**H**	**H**	**H**	**5.2.7**
Lack of marketing and branding	Improved market access	No	Left to private sector	Cooperatives do not have the resources for effective branding/export promotion	Reinforce API and make it work for cocoa cooperatives	Ministry of Agriculture	Presence of cooperatives in foreign fairs	H	L	M	5.2.7
Insufficient local value addition	Employment, skill-building, export revenue, diversification	No	None	Attract investors	Improved investment climate, promotion via API	Ministry of Agriculture, MCIT	At least one substantial investment in next five years	H	M	M	5.2.7
Other crops											
Lack of marketing and branding	Improved market access	No	Left to private sector	Limited success in promoting organic coffee and pepper	Targeted promotion efforts by API	Ministry of Agriculture	Presence in at least one foreign fair each year	M	L	M	5.3.6

Agriculture (cont'd)

Identified constraint	Objectives	In 2005 AM?	Current approach to deal with constraint	Limitations of current approach	Improvement/new action proposed	Responsible agency	Monitoring indicators	Priority level/ time frame	Diff. a/	Payoff a/	Ref. in text
Cross-cutting											
Vulnerability to wheather chocks	Improved resilience	No	None		Draw up plan for irrigation infrastructure investment	Ministry of Agriculture	Feasibility study completed	M	M	M	5.1, 5.2
Lack of inland access to port	Reduced transportation costs	Yes	Rehabilitation of rural road	Not yet completed	Follow-up on donor efforts with government own efforts	Ministry of Agriculture/ Transportation	5 more rural roads rehabilitated within 5 years	M	M	M	5.1

Chapter 1: Five years on - Limited progress and new challenges

1.1 Introduction

1. **STP is a small island nation with an open economy**. An archipelago of about 1,000 square kilometers, with less than 200,000 inhabitants and a GDP per capita of US$1,275 (2011), STP faces vulnerabilities related to its small size, insularity, and aid dependency that translate into high unit costs of government and utility services, limited degree of flexibility to adapt to shocks, and few opportunities for risk diversification within the domestic market. Production is limited due to a small and insular domestic market, while high transaction costs raise export costs. The country is very vulnerable to terms of trade shocks and is dependent on imports, even for food products, in spite of favorable natural conditions.

1.2 A macroeconomic context in transition

2. **At 5.4 percent per year, GDP growth was high between 2001 and 2010 compared to an average of 1.4 percent over 1990-2000, driven by rising cocoa prices, petroleum bonus payments, and rising consumption and investment, including in the tourism sector where hotel construction picked up in anticipation of oil windfalls**.

3. **The start of oil production is not known given current uncertainty about whether STP's oil field offers commercially viable quantities**. Given this uncertainty and the need to provide jobs that capital-intensive oil production cannot provide, the government of STP wants to promote economic diversification.

1.2.1 A progressive but largely successful stabilization

4. **During the past decade STP has built a solid reputation for prudent macroeconomic policy and has managed to sustain the momentum of the structural reform process over multiple administrations, paving the way for HIPC/MDRI debt relief and facilitating the strong economic growth rates observed during the past decade**. The government has pursued responsible fiscal and monetary policies, enhanced the quality of governance in general and the efficiency of public spending in particular, promoted greater trade openness by reducing import tariffs, and progressively developed the capacity of its natural-resource management agencies.

5. **As a result of prudent macroeconomic policies and a benign external environment, economic performance improved over the past decade**. Growth averaged over 5 percent per year between 2001 and 2011, compared to an average of 1.4 percent over the 1990-2000 periods. Growth was driven by rising world cocoa prices, bonus payments for petroleum exploration, and increased private consumption and investment in private activities (construction of hotels and resorts and financial services) led by FDI in anticipation of potential oil production. Annual inflation decreased substantially from an average of 23.5 percent during 2005-08 to a projected 8.3 percent by end-2012. In 2007 STP reached the Completion Point of the Enhanced HIPC Initiative and received a debt relief package equivalent to US$314 million, significantly improving its structural fiscal stance and reinforcing the long-term sustainability of its debt burden. Furthermore,

fiscal consolidation efforts have resulted in an important reduction of the domestic primary deficit, from an average of 9.3 percent of GDP during 2005-2008 to a projected 3.2 percent in 2012. Table 1 provides a summary of selected economic indicators during the past decade.

Table 1: Selected Economic Indicators in STP, 2001-2012

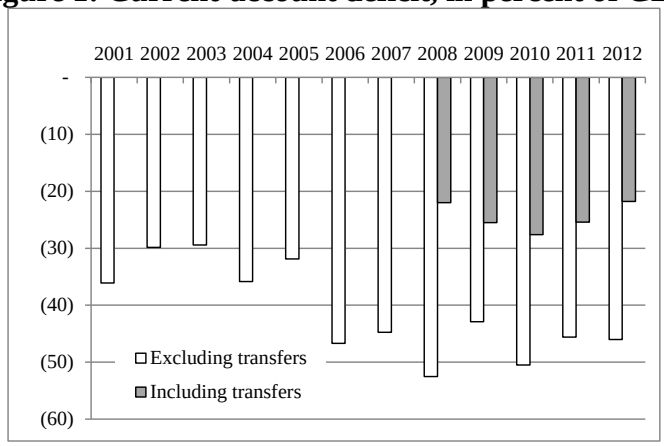
	2001-04 Average	***2005-08 Average***	**2009**	**2010**	**2011**	**2012(p)**
Real GDP (Annual change, %)	4.1	6.3	4.0	4.5	4.9	4.5
Inflation Rate (End of Period, %)	10.9	23.5	16.1	12.9	11.9	8.3
Current Account Balance (% of GDP)	-17.7	-22.2	-25.5	-27.6	-25.4	-22.8
Domestic Primary Balance (% of GDP)	-8.3	-9.3	-8.0	-4.1	-3.0	-3.2
Aid (% of GDP)	37.2	27.0	15.5	24.5	21.7	-
Public Debt (% of GDP)	340.7	182.7	69.2	78.2	80.1	83.5
Foreign Direct Investment (% of GDP)	3.9	30.6	12.3	25.2	15.4	8.5
Unemployment Rate (% of labor force)	16.6	16.5	15.5	15.1	14.7	14.2

Sources: IMF, World Economic Outlook (October 2012) and World Bank's World Development Indicators

6. **In January 2010, the country pegged the São Toméan Dobra to the Euro, the objective of which is to maintain a steady and predictable nominal exchange rate favorable for business development**. It is worth noting, however, that the new exchange rate regime entails new fiscal and monetary policy challenges (including enhanced liquidity management). International evidence on the use of a nominal anchor to stabilize inflation suggests that it may entail substantial costs in terms of competitiveness (in STP, price competitiveness could matter particularly for the tourism sector), especially when stabilization is gradual and price increase-differentials pile up on one another year after year. Progress in fiscal and monetary areas and in capital-market flexibility has been mixed, with the most significant observed gains in fiscal consolidation and responsible liquidity management, while serious structural rigidities persist in capital markets. The authorities are working with the IMF to strengthen these areas.

7. **Overall, STP's external-sector performance remains weak due to the country's narrow export base, heavy import dependence, and the maintenance of a fixed exchange regime**. The trade deficit averaged about 42 percent of GDP during 2008-12, with exports (4.6 percent of GDP) very modestly offsetting imports (47 percent of GDP); import prices largely determine trends in the trade deficit. The current-account deficit is structurally high, closely mirroring trends in the savings-investment balance (see further below), and it has been financed mainly by FDI and donor aid.

Figure 1: Current-account deficit, in percent of GDP



Source: STP Central Bank and IMF (2008-2012), WDI (2001-2007)

8. **STP's economy, like many others, has been hit by a double shock in the last five years: the food- and fuel-price rise of 2008-9, and the global financial crisis that followed**. Because of its ties with Portugal, it is also directly affected by the prolonged slump in Southern Europe. So far, the government has managed to navigate the rough seas without jeopardizing its key long-term stabilization objectives. Continued adherence to this agenda will be needed to ensure that hard-won gains are not dissipated.

9. **As STP relies heavily on food imports and is entirely dependent on imported fuel products—together, these account for 67 percent of consumer price inflation—the rise in food and fuel prices had a major effect on domestic inflation and impeded progress on poverty reduction and food security**. For instance, the World Food Program (WFP) estimated that the number of vulnerable people (with daily caloric intake below the international food-poverty standard) rose from 23 percent of the population in 2008 to between 33 and 38 percent in 2009. The effect of external shocks was compounded by adverse climate shocks on domestic agriculture, which led to renewed price pressures in 2011 and 2012.

10. As for the second shock—the global financial crisis of 2009 and the subsequent drawn-out slump in Europe, in particular in Portugal—it has severely affected STP, leading to a sharp drop in foreign direct investment (FDI) and tourism receipts and drying up key sources of foreign exchange and revenue.

11. **The government tried to counteract the effect of the global financial crisis with a counter-cyclical fiscal policy, financing a spending program with proceeds from the sale of a 35% stake in ENCO, the national oil importer, to Angola's Sonangol**.[2] In spite of these efforts, GDP growth slumped to 4 percent in 2009. Moreover, the need for countercyclical policies to offset external shocks worked at cross-purposes with the government's long-term objective of fiscal consolidation, with the domestic primary deficit rising to 7 percent of GDP in 2008 and 8 percent in 2009. With stronger fiscal controls, the domestic primary deficit fell to an estimated 3.2 percent in 2012, in line with IMF targets.

[2] The program involved infrastructure investments and improved farmer access to seeds and agricultural inputs.

Table 2: Basic macroeconomic indicators, 2008-12

	2008	2009	2010	2011	2012
				Actual	Est.
National Income and Prices	*Annual Percent Change*				
GDP at constant prices	9.1	4.0	4.5	4.9	4.5
Non-oil GDP at constant prices	9.1	4.0	4.5	4.9	4.5
Consumer prices					
End of period	24.8	16.1	12.9	11.9	8.3
Period average	32.0	17.0	13.3	14.3	9.6
External Sector	*Percent of GDP unless otherwise stated*				
Exports of goods and nonfactor services	29.6	12.0	24.0	19.5	12.3
Imports of goods and nonfactor services	36.0	-9.5	25.8	12.5	8.8
Exchange rate (dobras per US$; end of period)	15,228	16,814	18,651	19,008	...
Real effective exchange rate (depreciation = -)	13.2	12.0	-2.8	11.7	...
Government Finances					
Total revenue, grants, and oil signature bonuses	45.4	31.2	38.1	37.1	44.8
Of which : tax revenue	15.2	14.5	16.6	16.6	16.4
Nontax revenue	1.2	2.1	1.6	1.4	1.1
Grants	28.9	14.6	19.9	18.3	23.5
Oil signature bonuses	0.0	0.0	0.0	0.8	4.0
Oil revenues	...	...	...	...	...
Total expenditure and net lending	31.2	49.6	49.1	49.0	53.6
Of which: personnel costs	8.1	7.9	8.3	8.4	8.3
Nonwage noninterest current expenditure	12.1	11.7	11.1	10.5	9.8
Treasury funded capital expenditures	1.3	4.0	2.3	1.5	1.9
Donor funded capital expenditures	6.9	24.4	26.3	27.5	32.4
Domestic primary balance	-7.0	-8.0	-4.1	-3.0	-3.2
Overall balance (commitment basis)	14.2	-18.4	-11.0	-12.0	-8.8
External sector					
Current account balance					
Including official transfers	-22.0	-25.5	-27.6	-25.4	-21.8
Excluding official transfers	-52.5	-42.9	-50.5	-45.6	-46.0
PV of external debt	10.5	18.1	33.7	33.6	35.5
External debt service (percent of exports)	56.3	19.9	10.6	18.4	10.6
Export of goods and non-factor services (US$ millions)	17.5	19.6	24.3	29.0	32.6
Gross international reserves					
Millions of U.S. dollars	47.0	49.0	39.3	39.7	28.8
Months of imports of goods and nonfactor services	7.9	6.6	4.5	4.6	3.3
National Oil Account (US$ millions)	12.0	9.7	7.8	8.3	17.6
Memorandum Item					
GDP					
Billions of dobras	2,696	3,185	3,719	4,376	5,063
Millions of U.S. dollars	183.5	196.5	201.0	248.3	264.8

Sources: São Tomé and Príncipe authorities and IMF staff estimates and projections (October 2012).

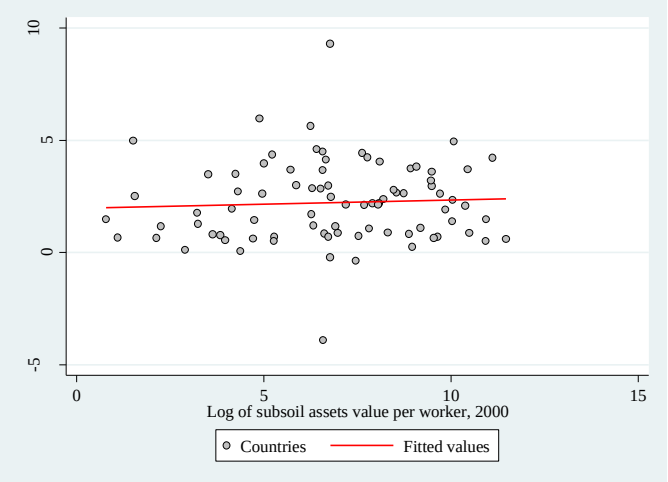
12. **Since then, the government's fiscal consolidation agenda has made significant progress. In 2010, the government reduced cross-arrears between the Treasury, the national electricity and water utility (EMAE), and the partially-privatized national oil importer (ENCO).** The growth of current expenditures—in particular the wage bill—has also been contained and tax revenues recovered.

1.2.2 The challenges of the upcoming oil economy

13. **STP's economy is expecting oil windfalls, although there is uncertainty about whether they will materialize, and if yes when and how much**. Oil revenue could play a critical role in relaxing cash constraints in the public and private sector and generating much-needed resources for poverty reduction and public-capital investments, although some of the increase is likely to be offset by reductions in aid commitments .

14. **However, STP's transformation into a resource-rich economy is unlikely, by itself, to bring a solution to the development challenges highlighted in this report**. The term "natural-resources curse" was coined in the 1990s by reference to the poor growth performance of many resource-rich countries (Sachs and Warner 2001). The concept has since been challenged on various grounds. Figure 2 shows that there is actually no correlation, positive or negative, between national resource endowments and subsequent growth performance. That is, resource richness is not an excuse for poor growth performance, but it is also not a growth accelerator, and expectations that oil, if it materialized, would be a game-changer for STP might be disappointed.

Figure 2: There is no "natural-resource curse"



Note: The horizontal axis is the log of the dollar value of known mineral and oil reserves per worker in 2000, evaluated at their 2000 market prices; the vertical axis measures average percent per-capita GDP growth between 2000 and 2010.
Source: Mission calculations using WDI data and World Bank (2006)

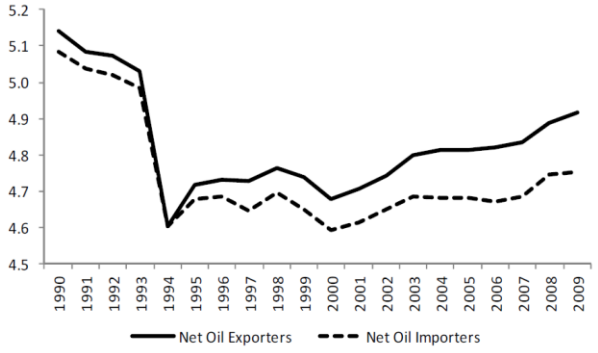
15. **Recent experience on the African continent suggests that oil production can stress macroeconomic and governance structures and severely undermine the competitiveness of the non-oil economy**. One syndrome seems to be robustly associated with large natural-resource sectors—the so-called "Dutch disease", a syndrome whereby the exploitation of natural resources

puts upward pressure on the real value of the currency through an increase in the price of labor and non-tradable and an inflow of foreign exchange.

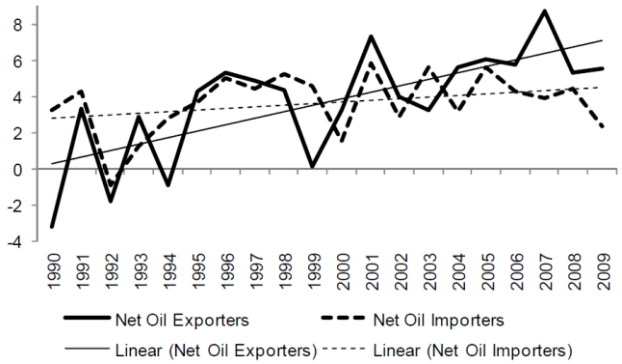
16. **The Dutch disease can result in a dual economic structure with an internationally-open enclave producing primary products for exports and a non-resource economy largely closed and living on the typically limited fraction of natural-resource rents that stays in the country and gets redistributed**. Figure 3 illustrates the effect of the Dutch disease on resource-rich CEMAC countries compared to resource-poor ones. Panel (a) shows a real appreciation in CEMAC's resource-rich countries compared to the resource-poor due to higher inflation (since the currency is common). However, Panel (b) shows that growth was slower in resource-rich ones until roughly 2000, before the commodity boom of recent years. Above-average GDP growth for resource-rich economies in recent years reflects essentially a terms-of-trade effect.

Figure 3: Dutch-disease syndromes in CEMAC

(a) Real exchange rate



(b) Real GDP growth

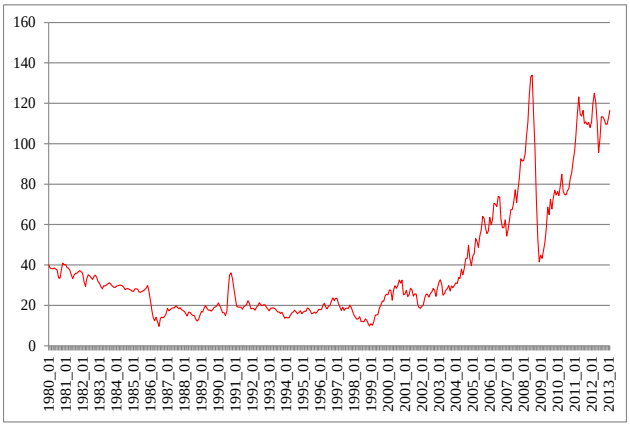


Source: Trevino (2011)

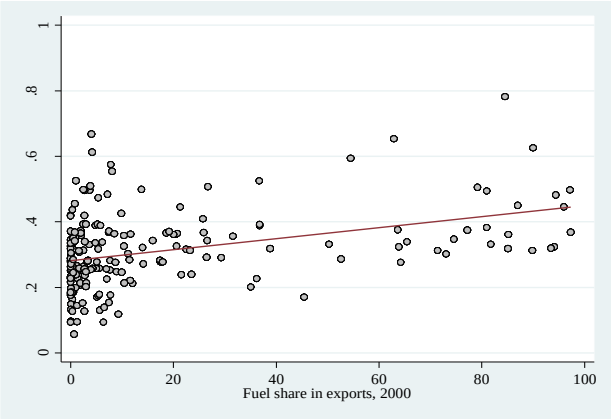
17. **Moreover, the dominance of natural resources in exports and GDP is portent of economic instability (Bacchetta et al. 2010)**. Figure 4a shows that oil prices have been extremely unstable over the last thirty years, with a dramatic rise over the last decade. The world oil market's fundamentals seem to suggest that the bubble could come to an end in the next decade under the effect of new technologies and large new reserve discoveries, in particular in the U.S.. As a result of oil-price volatility, across countries, GDP volatility correlates with the share of oil in exports (Figure 4b).

Figure 4: Oil prices, oil exports and income volatility

(a) Monthly brent crude prices, January 1980 to January 2013



(b) Oil exports and income volatility



Source: Mission calculations using IMF commodity prices and WDI GDP data.

18. **In STP, oil has already a decade-long history and has already generated complex co-management issues with neighboring Nigeria**. In 2001, the country established a Joint Development Zone (JDZ) with Nigeria to manage the extraction of petroleum resources in the waters between the two countries. Under this agreement, STP was entitled to 40 percent of the JDZ benefits (and costs). At the same time, STP established an institutional and legislative framework to manage potential oil resources in its own Exclusive Economic Zone (EEZ) in its territorial waters. Oil production in STP's EEZ was until recently expected to begin in 2015, but there is new uncertainty about whether the EEZ contains commercially viable quantities given the cost of extraction from deep-water wells. So far, STP received US$81.8 million in signature bonuses for oil exploration, of which US$77.8 million for the JDZ (mostly before 2008) and US$4 million for the EEZ (in the past 15 months).

19. **If it materialized, the flow of oil revenues would confront the government with macroeconomic challenges and has already done so**. Sign-on bonuses induced a rise in government spending from 14.7% of GDP in 2000 to 27.3% on average over 2006-7, with a surge in the public-sector wage bill from 5% of GDP in 2002 to almost 9% in 2006-7. Overshooting of spending as a result of oil windfalls has not been uncommon in the continent's recent history; it will therefore be important to use the oil revenue optimally to generate productivity gains and growth in the nonoil economy. The government has indicated its intention to earmark oil revenue for strategic public investments, which could help to increase productivity in other sectors and thereby offset the effects of Dutch Disease. Continued stabilization efforts until oil production materialized would be a key precondition for oil revenue to start flowing in an otherwise sound economy.

20. **Oil management challenges go beyond macroeconomic policies**. Resource-rich countries that have put in place successful diversification strategies such as Chile have emphasized the necessary modernization of public-investment management processes. For instance, Chile has introduced a public-investment management system to improve the efficiency of public investments, resulting in a more strategic selection of projects, a higher degree of completion, greater transparency in the project cycle, and enhanced integration of the capital and recurrent budgets. This is a process that the Government of STP should consider before oil money becomes

available, and perhaps even before all uncertainty about the reserves is lifted, as putting in place the right institutional safeguards to ensure value for money will take time and sustained capacity-building efforts.

21. **It is also worth noting that Chile effectively targeted the real exchange rate between 1982 and 1992 to offset the Dutch-disease syndrome and power an export surge**. The government used the copper stabilization fund to help make the sterilization policy more acceptable in the face of political demands for more expansionary policies.

1.3 DTIS implementation : Much remains to be done

22. **Against the challenging macroeconomic background, STP has been pursuing efforts to diversify its economy and integrate it in world markets by reducing trade costs and improving the business environment**. The 2006 DTIS provided a road map to take this agenda forward.

23. **However, implementation of the 2006 DTIS has been incomplete, hampered by a combination of factors, some of which inherent to the political/institution system in STP, and others due to the EIF process itself**. On one hand, political and institutional turnover constrained ownership and consistency at the country level; on the other hand, the DTIS suffered, like many other similar exercises, from a lack of incentives, weak appropriation by the donors themselves, and the absence of a serious costing exercise.

24. **On the positive side, implementation has been highest in areas that are core trade areas such as trade capacity building, cross-border trade facilitation (as part of a customs modernization program), and improvements in the environment of business**. However, attribution of the relevant policy initiatives to the DTIS (DTIS "additionality") is difficult to assess, as a number of the initiatives in questions seem to have followed a single donor-driven logic that had little to do with the IF/EIF process.

1.3.1 Improving ownership and monitoring

25. **Overall, the 2006 DTIS has had relatively low visibility beyond the validation workshop, largely due to a combination of political turnover and lack of ownership and drive in the administration**. A commission including representatives of several line ministries was formed to review the document and produce a response. Key objections to the document were communicated to the World Bank and discussed at the validation workshop, including a broad range of technical issues; however the commission's role does not seem to have extended to any "positive thinking" beyond producing this response, and in particular did not lead to strong ownership of the strategic vision or plans to go forward.

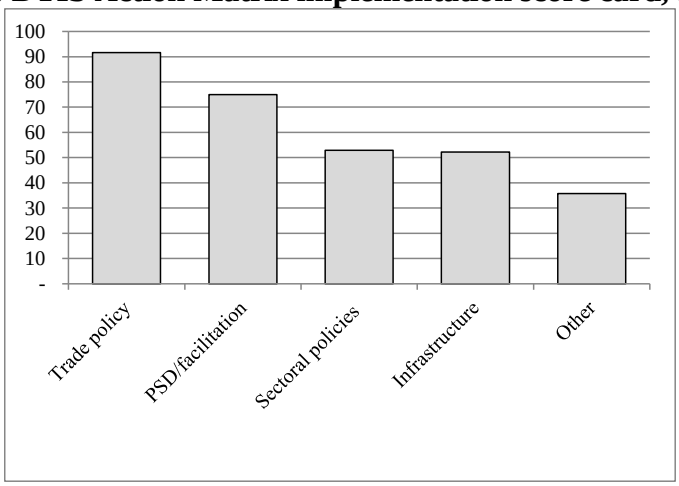
26. **After the validation workshop, frequent government changes[3] have contributed to shifting priorities, making the emergence of a long-term competitiveness strategy more difficult and relegating the DTIS process to the background**. In the senior ranks of the

[3] Sao Tomé & Principe has a proportional representation system which results in frequent minority governments and shifting coalitions.

administration, where the effects of political turnover could have been mitigated by more institutional memory and consistency, low average tenure and structural instability have also been somewhat problematic. For instance, there were three successive directors of commerce in less than a decade, and the structure of the Ministry of Trade was reshuffled back and forth through mergers and de-mergers with other ministries.

27. **In spite of the DTIS's limited visibility, action-matrix implementation has been substantial, and at the time of writing it seemed to be picking up**. Annex 1 shows a systematic assessment of the DTIS action matrix's implementation carried out by CIAD, a Sao-Tomé based think tank.[4] A crude count of implementation scores (full implementation = 100, no implementation = 0) suggests that actions categorized under the "trade policy" and "PSD/facilitation" headings (essentially capacity-building programs, improvements in the legal and administrative environment of business, and customs modernization) have the highest implementation scores, while sectoral policies and infrastructure investments lag in implementation (Figure 5).

Figure 5: DTIS Action Matrix implementation score card, by sector



Note: PSD stands for private-sector development and includes improvements in the business climate.
Source: Mission calculations based on data from CIAD.

28. **The prima-facie evidence in Figure 5 is largely confirmed by anecdotal evidence on the ground**. Most of the action so far consists of capacity-building programs and a small number of key initiatives in private-sector development and trade facilitation.

29. **Window 2 of the IF was used to finance capacity-building projects at the Trade Directorate with the UNDP as executing agency and a program of improvement in the business environment including the creation of the Agency for the promotion of trade and investments (APCI in its Portuguese acronym) in collaboration with the Geneva-based ITC, although only the director had been appointed at the time of writing and the agency is expected to get off the ground only with the 2013 budget.** Importantly, a single window for the

[4] We are grateful to Adelino Castelo and Dillson Tiny for carrying out this assessment as part of the DTIS's preparation.

registration of new companies was also launched which has significantly cut the complexity and length of the enterprise-creation process.[5]

30. **In addition, two "Tier-1" Enhanced Integrated Framework (EIF) projects[6] were recently initiated**. A first Tier-1 project to build institutional capacities at the Ministry of Trade is to start in April 2013 for three years. Endowed with $300K/year from an UNOPS Trust Fund under the UNDP's execution, the project aims at financing a new building for the Ministry of Commerce (jointly with the E.U.'s PASC—see below), investment in equipment, and training programs for existing personnel.

31. **In parallel, the E.U. has been running the PASC, a €1.3 million capacity-building program aimed at fostering the emergence of a mid- to long-term competitiveness strategy, an objective that is highly similar to that of the DTIS.** The PASC works by improving institutional capabilities at the Trade Directory and SME management capabilities. On the institutional-capabilities side, the program includes WTO awareness-raising seminars[7] and short-term training programs on topics like SPS regulations, trade facilitation etc. On the private-sector side, it includes training in enterprise creation and SME management for the private sector. The program also includes a half-million euro envelope to carry out supply-chain analyses in selected sectors including cocoa, coffee, vanilla, flowers and peppers.

32. Efforts have also included the upgrading of national legislation in a variety of areas including, *inter alia*, a commercial code, a law on prices, a law on plant protection, and a number of other initiatives to improve the legal environment of business.[8]

33. Finally, as will be detailed later on in this report, customs automation, including the migration to ASYCUDA World, has apparently cut clearance times and improved the business-friendliness of import procedures, while the border-protection administration is currently deploying a system of electronic visas with the potential to simplify entry procedures, which are already somewhat less cumbersome than in other countries in the region.

34. **In order to improve the DTIS's ability to generate results, the government of STP should explore ways to improve ownership**. A number of possibilities can be considered in this regard. First, DTIS implementation should be firmly anchored at the technical level where there is less turnover than at the political level. Recent EIF initiatives seem to be going in that direction. For instance, beyond the designation of a focal point (typically the Director of foreign trade), since 2009 the EIF requires the creation of an implementation unit within the Ministry of Trade. Such a unit was created in STP and indeed seems to have improved the institutional memory on the myriad of consultant reports produced as part of the IF/EIF and related processes. However there is still a disconnect between the level at which the DTIS has visibility (technician level) and the level at which decisions are effectively made.

[5] The system is in a continued process of improvement to become more business-friendly, e.g. by the elimination of capital requirements for business start-up.
[6] In the Enhanced Integrated Framework's jargon, "Tier-1" projects are essentially capacity-building ones.
[7] It also includes an update of the trade-regime memorandum prepared in 2008 as part of the WTO accession process.
[8] However, STP was not at the time of writing a signatory of the OHADA Treaty which has helped streamline and improve the legal environment of business throughout West Africa.

35. **Second, as in many countries, DTIS implementation in STP is still largely the traditional model that consists of hiring a consultant to do the substantive work, getting a report, and then either applying it if it is directly "operationalizable" (like a draft bill) or shelving it/hiring a new consultant if it involves further work**. This modus operandi is not very conducive to ownership.

36. **The model recently emerging at the Ministry of Plan's PRSP unit provides an alternative route**. In terms of identification of issues—an exercise largely left to outside consultants in the DTIS process—the PRSP team in the Ministry of Plan has recently used a situation-analysis tool in group work that could be applied to DTIS issues. Essentially, the tool is a grid that seeks to (i) analyze problems and sort out contributing factors into immediate, underlying and fundamental, (ii) identify opportunities for improvement, measures, horizon, stakeholders and responsible agency. Its format is thus close to that of a DTIS action matrix. It would be useful for the Trade directorate and staff from line ministries to go over key areas of the DTIS and carry out this group exercise to check if they reach the same action mapping as DTIS consultants, and if not, to reconcile conclusions before the validation workshop.

37. **Moreover, in order to become a truly operational document, the DTIS action matrix must undergo a serious costing exercise that makes it possible to integrate it in the PRSP's Priority Action Program (PAP).** With limited access to external finance, the government of STP has no choice but to make trade-offs in terms of budget priorities, and so do donors. The implementation scorecard summarized in Figure 5 shows that implementation tends to be lower in areas where projects are costly, such as infrastructure or sectoral interventions, confirming the presumption that costs have something to do with lack of implementation. In its initial form, the DTIS action matrix involves no costing, and there is a missing link from this "money-free" action matrix to a real-world action plan like the PAP. The government of STP, and in particular the Trade directorate, should work on filling this missing link shortly after the validation workshop.[9]

38. **Finally, DTIS implementation requires a permanent and effective monitoring mechanism**. The PRSP II notes that lack of ownership and drive has plagued the PRSP I, with reasons that seem very similar to those hampering implementation of the 2006 DTIS:

> "[…] a number of constraints led to the poor performance of the PAP (2006-2008) and, consequently, of the NPRS-I, in particular:
>
> - Insufficient ownership by the government of the technical sectors;
> - The absence of a dynamic communications strategy for consistent dissemination of the NPRS-I;

[9] The adoption of a PAP in itself does not guarantee satisfactory implementation, though. Reflecting on the 2002 NPRS, the PRSP-II notes that "[i]n December 2005 a Priority Action Program (PAP 2006-2008) was submitted to the partners at the Brussels Round Table with a view to forming a partnership for good governance and poverty reduction […]. This exercise in negotiating with technical and financial partners was continued at the sectoral round tables held in São Tomé in December 2006 and a Coordination Meeting held in Santo Antonio in […] October 2007. Despite these initiatives, implementation of the National Poverty Reduction Strategy (NPRS-I) fell short of expectations, as evidenced by the progress reports and impact assessments for the policies and programs implemented." (p. 14)

- A dysfunctional coordination apparatus and insufficient technical and financial support for the PRO;
- Poor coordination between the instruments of government planning and implementation, in particular the NPRS-I, the Government Program, the Major Planning Options, and the General State Budget (OGE).

Another obstacle to the NPRS-I implementation was the fact that some sectors had not properly defined and coordinated sectoral strategies to ensure consistency between activities in these sectors and the objectives of the national strategy." (p. 19).

39. **Clearly, the same analysis applies to the insufficient implementation of the 2006 DTIS**. The PRSP II is not entirely clear about what will be done this time to make it more effective, and clearly the same question applies to the DTIS update. While the answer lies in the hands of the government, one obvious suggestion is to set up an effective monitoring unit. In Uganda, for instance, the Prime Minister's office has set up an overall government-effectiveness monitoring unit (see World Bank 2012) that provides evidence on what seems to be working or not within the government. The government of STP has set up a monitoring unit for the PRSP, with a poverty reduction observatory. This monitoring unit should be strengthened with specific, skilled personnel and resources and a mandate to collect and analyze data so as to carry out internal evaluations and break with, or at least complement the traditional model of the ready-made outside-consultant evaluation report, which has proved its inability to trigger take-up.

1.3.2 Improving alignment and AFT coordination in STP

40. **If action-matrix implementation has been far from nonexistent, establishing a causal link from the DTIS to actions that were taken (« attribution ») is difficult**. Although Annex 2 to this chapter suggests that, by the mid-2000s, STP seemed to have been successful in attracting aid for trade, there is to this day little evidence of donor coordination and initiative around the DTIS. Donors do not seem to have formed a round-table centered on trade issues after the 2006 DTIS's validation workshop, and the visibility of the DTIS was, five years on, as low with many donors as it was with their counterparts in the government. The UNDP and E.U. seem to have been the most directly engaged with the Ministry of Trade; other donors have apparently followed their own priorities, which might or might not happen to coincide with those of the DTIS.

41. **The issue of budgeting is as key to the donors as it is to the government**. Without budgeting and a commitment to earmark specific and additional resources for action-matrix implementation, the DTIS can have no additionality. That is, if action-matrix measures happen to coincide with PAP measures or with donor plans, they will, or at least may be implemented. If they do not, they will be ignored. Here again, there seems to be a disconnect between the EIF's procedural requirements on one hand, in which DTIS circulation among donors is, de facto, largely limited to ensuring broad agreement on key messages and weeding out controversial statements, and the need, on the other hand, to generate a real commitment to take the action matrix to the ground.

42. **The government of STP should take the lead in raising the DTIS's visibility with local donors and mobilizing them around a vision for competitiveness and export-led growth**. The

country is the prime stakeholder in the exercise, and proactively approaching donors on the basis of the DTIS would show the ownership and commitment that has been lacking so far. Specifically, the government could engage a dialogue with donors on ways to align their action with the DTIS's priorities, i.e. with the government's own vision for competitiveness. For instance, a dialogue could be initiated with those donors who are active in the area of vocational training to ensure that such training is in tune with sectoral priorities, including e.g. the development of the tourism sector or the demand of the agricultural sector for training in relevant areas of agronomy. Other areas of synergy between poverty-reduction, health and other actions that do not appear prima-facie to be trade relevant could be easily found; for instance, investments into water treatment would have obvious positive spillovers for the tourism sector—in fact, they might well be a prerequisite for serious tourism development. Each donor has its own priorities; it is for the government to integrate them into a coherent vision around its key development documents, including the PRSP and the DTIS.

Annex 1: 2006 action-matrix implementation scorecard

Recomended action	Relevant gov. Agency	Status	Output
Short-term measures (12 months)			
Determine and start to implement a internal solution of realization and modernization of the Port of São Tomé *or construct an alternative pier, at low cost.*	MOPRN/ENAPORT	On-going	Evaluation of feasibility study and Perspective of privatization of ENAPORT
Rigorously apply the existing law regarding public procurement and contracts with strategic partners in the infrastructure sectors			
Approve the new Customs code and abolish unnecessary requirements	Customs		Organic rule of the Customs – Decree No. 55/2006;
Approve the new tax code	Taxes	On-going	Approval and implementation of a set of laws of reforms of the sector:
Establish a system of common labor unions with groups of truly representatives of private sector and the civil society	CCIAS	A formal system doesn't exist yet	
Sell the processing & marketing assets pertaining to at leat 3 previous cocoa plantations ("roças") to agri-businesses willing to rely increasingly on out-grower smallholders	Agriculture	Concession contracts exist but sales have not taken place	Contract a concession to the companies, i.e. Agripalma, SATOCAU e Vida Boa, existing in the sector
Rehabilitate access roads at least 10 rural communities, using rain-resistant materials.	INAE/GIME/PAPAFPA	On-going	Documents which explain rehabilitation and maintenance 9 more than 100 Km of roads of desolate land, with access for more than 50 existing communities in INAE
Publish a register of existing holders of provisional land titles	Agriculture	Registration process concluded	File existing in the sector
Initiate a cadastre	Agriculture	Process of recording concluded	File existing in the sector
Rigorously apply the existing law and regulations conducive to the transparent allocation of provisional land titles	Agriculture	Process of realization of on-going respective laws concluded	File existings in the sector
[1] STP is looking for a strategic partner and it looks as if Sonangol were positioned to be that partner.			

Recomended action	Relevant gov. Agency	Status	Output
Medium term (2 years)			
International transport			
Create a legal and regulatory framework to encourage private sector participation in the ownership and management of port facilities.	Min. Public Works and Rec. Nat. (MOPRN)	Not yet implemented	
Remove the port operations monopoly enjoyed by ENAPORT	MOPRN	Not yet implemented	Development of feasibility study and of perceptive of privatization of ENAPORT
Expedite the award of a contract, through international competitive bidding, for the construction of a new deep water port capable of providing international container trans-shipment service			
Expedite the award of a contract, through international competitive bidding, for the extension and improvement of international airport	MOPRN	On-going, but in regime of direct tender (award)	Development of feasibility study and of perceptive of privatization of ENAPORT
Improve the Port in Príncipe	ENAPORT	Implemented	It was installed in this year, a new crane with enough capacity. Meanwhile, predicted construction of hangar was not achieved due to the lack of funding.
Domestic transport			
Elaborate a strategy for the future development of road transport infrastructure in STP.	MOPRN	Strategy and respective master plan developed	Documento de política de transportes e respetivo plano diretor existentes no respetivo Ministério
Create a legal and regulatory framework which provides for the properly funded maintenance, rehabilitation and construction of rural access roads by local communities.	INAE	On-going	National Road Fund (FRN) – Decree-Law No. 25/2005
Rehabilitate access roads to at least 10 rural communities, using rain-resistant materials	GIME/	On -going	Rehabilitated and being rehabilitated and / or constructed in bituminous concrete
Other infrastructure services			
Prepare a strategy for the electricity sector.	Rec.Nat. and Energy/ AGER	Not yet implemented, but there is a pending Energy Law	-Project-Law of Energy Base – in Council of Ministers for approval
Develop a strategy for the water and sanitation sectors.	Rec. Nat.and Energy	On-going	- Participative Strategy for the Water and Sanitation of STP 2030 – developed in 2010;
Define clearly the obligations and responsibilities of CST under its license.	AGER	On-going	
Strengthen the telecommunications regulatory agency	AGER	On-going	- Project CAB 2 (regional), supported by the World Bank – predicted for the beginning of 2013
Permit door-to door delivery of stuffed containers	Customs	On-going	Order of existing service in the sector permits this service, but when containers are handled with only type of goods / frozen;
Trade policy			
Eliminate the trade license (“alvara”)	Commerce	On-going	Eliminate some classes of permissions – D/L No. 11/2011; import is now only subject to declaration (to the directory of trade).
Establish effective duty drawback scheme for exporters	Customes/	On-going	Work thourgh the regime of suspension of rights – Code of the Customs
Eliminate all taxes and special regulations that rules the Trade between islands and Príncipe.	ENAPORT	Implemented	Taxes and special regulationa no loger exist
Lower or remove tariff duties on all capital goods imports and treat public and private importers equally	Customes	On-going	Decree-LawNo. 31/2005
Reduce the surtax on used cars and diesel fuel.	Customs	On-going	Decree-LawNo. 31/2005
Reinforcement of capacities of negotiation of commercial agreements			
Abolish the suspended agreement with a private enterprise for a creation of free commerce zone in Príncipe.	MPD	Implemented	Suspended and under examination for final decision

Recomended action	Relevant gov. Agency	Status	Output
Private-sector development & facilitation			
Reduce formalities for the creation of companies and set up a Single Window.	Dir. Single Counter (GU)	Implemented	Change of commercial Code – Law No.14/2009; Single Window set up and working (D/Law 37/2009); reform of framework for enteprise creation
Create the customs in Príncipe, which permits direct International Trade	Customs	Implemented	Customs service of Independent Region of Príncipe
Abolish the free zone regime	MPD	Implemented	Suspended and under examination for final decision
Develop and start a implementation of the National Strategy of Good Governance, which identifies specific means to improve administration of public expenses and to be more transparent; strengthen the laws about governmental procurement and its application; strengthen judiciary and create a strong framework of laws and institutions to fight against corruption.		On-going	Approval of Law 3/2007 (SAFE) regulating public financial administration; Creation of Department of Public Accounting inside the MFCI
Develop and start to implement a strategy to resolve the principal deficits of technical and specialized labor force	Min. Education	Not yet implemented	
Sectoral policies			
Develop a strategy for a fishery industry which includes consideration at least the following options of taxes for the fishery:	Dir. Fishery	Master Plan developed and on-going	- Proposal of elaborated tax and ready to renegociation
Renegotiation of taxes for the international fishery industry in the sea of STP.		On-going	-Procurement of fisheries materials with revenue of fishery, resulted in public bidding for the effect, on-going;
Promote an employment of citizen of STP as crew member of ships of industrial fishery.		On-going	- It's on analysis phase and discussion between Fisheries sector and Coast guard, evaluating a feasibility of installment of service of rescue and find of national fisheries boats, through marine fleet.
Allocate part of revenue of fishery to create a hand fishery sector		On-going	- Appointed sanitary inspectors and in exercise– Decree No. 67/2011
Establishment of a marine fleet and of Coastal guard for patrol of areas for the fishery of STP and for a service of rescue and find boats of national fishery sector		On-going	
Promote investment by experienced enterprises in agriculture and agricultural companies which compromise to contract much smaller holders.	Agriculture	On-going	- Some national incestiemnt, such as medium smalce agricultural enterprises: : Nelson Silva, Salgueiro, Eugénio, etc.
Strengthen the CIAT in order to be able to (i) take exams and acceptable analysis internationally before the emission of certificates, and (ii) provide services of research and useful extension for the small holders	CIAT (ag research agency)	On-going	In construction of laboratory of reference, whose conclusion is predicted by the end of 2012.
Finance more processing of cacao at the village level, to local value added	Agriculture/PAPAFPA	On-going	Drying & fermentation done on site by cooperatives: CECAB (Cooperatives of biological Cacao); CECAQ (Cooperative of Quality Cacao);
Implement a strategy of tourism with special focus on: (i) Control of malaria and waterborne diseases; (ii) Environmental protection ; (iii) Training; (iv) reduction in air transport costs	Turism	On-going	Approved documents in VCM, awaiting publication: Tourism base law, legal regime for travel agents, decree on hotel and related activities

Recomended action	Relevant gov. Agency	Status	Output
Long term (3 to 5 years)			
International Transport			
Adapt a legal and regulatory framework as necessary to permit and encourage private sector participation in the construction and operation of major infrastructure facilities (BOT, BOO etc.).	MOPRN	Not yet implemented	
Facilitate the construction and operation, by the private sector, of storage facilities for perishable and non perishable cargo at or near the international airport.	MOPRN	Not yet implemented	
Enter negotiations with maritime transport companies to include STP in more shipping routes.	MOPRN	Not yet implemented	
Internal transport			
Strengthen the management of the road sector through consolidation of clearly defined responsibilities among governmental agencies.	INAE	Implemented	National Institute of Roads (INAE) – Decree-Law No. 25/2005
Customs			
Eliminate the obligation to channel all Customs declarations through licensed brokers	Customs	Implemented	-New Customs Dispatch – Despacho No. 12/2010;
Involve the private sector in Customs' reform through a Customs sub-commission of the Customs Multisectoral Commission of International Trade Negotiations	Customs	On-going	-Fórum about Public Private Partnership in the customs – Decree No. 49/2009;
Acquire weighing scales to enable more adequate control of volumes	Customs	Not yet implemented	
Adopt new techniques for detection of infractions	Customs	On-going	- Antifraud service was created and implemented
Join the World Customs Organization.	Customs	Implemented	-Joining in the OMD accomplished (STP has associate membership).
Strengthen the career structure, compensation and technical skills of customs officials.	Customs	On-going	
Computerize collection and analysis of statistical information in Customs; provide systematic automated link between port and customs statistics.	Customs	On-going	
Training			
Broaden range of destination countriesof foreign scholarship program to include more market-oriented economies.	Dir. Of Higher Education	On-going	-Scholarship program is still maintained only with traditionally destination countries
Establish merit-based, transparent selection process.		On-going	-There is a Dispatch of Office of minister, looking to the transparent selection, of candidates for scholarship to the other country.
Negotiate with destination countries application of laws and regulations obliging students to return to work for at least a minimum period in STP.		On-going	-There is in the sector an application form, in filling out, candidates to the scholarship are required to come back to the Country, immediately at the end of the course
Broaden contacts with foreign education institutions that could provide courses in STP or transfer knowledge		On-going	- there is a protocol with foreign education institutions to provide Master's course in STP. There are also perspectives for the Doctor course since this year.
Sectoral policies			
Create incentives for traders to buy selected forest products	Forest	On-going	- Forest Law - LawNo. 5/2001
Implement fishing industry strategy	Dir. Pescas	On-going	Proposal of general regulation about the exercise of fishery activities and helieutic resources – approved in VCM and wait for publication; several pieces of legislation on SPS regulation
Elaborate a strategy to enable and extend the sustainable extraction of natural resources such as honey.	Dir. Forest	Not yet implemented	
Private sector development			
Census of commercial operators by sector.		On-going	Law Quadro das Receitas Petrolíferas – LawNo.8/2004; project stopped for lack of funding
Complete the cadastre for the entire country, identifying areas for tourism development, for export-oriented food production, and for oil activities.	Dir. Forest	On-going	
For the island of São Tomé and Príncipe: Pass legislation dividing land into different zones , each with predetermined use, e.g. agriculture land, national parks, urban zones, and public lands etc..	Dir. Forest	On-going	
Convert provisional land titles into clear and unambiguous property titles. Allow transparent sale or lease of land property titles.	Direção geral da Agriculture	On-going	
Carry out and publish independent audits of all companies in which the government has a stake.	MFCI/Public Tresuary	Implemented	Audited accounts of public enterprises and participants by the Status are sent to Commission of Economic Issues of National Assembly
Strengthen the judiciary system and the office of the Attorney General and Auditor General, both financially and through training.		On-going	Substantial number of new laws and regulations passed
Development of support services for informal sector		On-going	-Gabinete de Registo e Informação Pública – LawNo.11/2007;

Annex 2: STP's performance in attracting aid-for-trade

According to a recent study (Gamberoni and Newfarmer 2010), based on 2006 data STP seems to have been relatively successful in convincing donors to assist its integration to the world economy through aid for trade. Based on five measures of trade performance (e.g., export growth, export diversification, etc.) and five measures of trade capacity (e.g., quality of infrastructure, trade related institutions, etc.), they constructed an indicator of "potential demand" for aid for trade based upon country rankings for each variable. Scoring each variable on the basis of country quintile ranking, and then summing each variable with each weight produced a rank for all countries. Those countries in the bottom average quintile scores were deemed to have the greatest potential demand for aid for trade. STP, while not in the lowest quintile, evidenced a strong need for aid for trade by this measure (Figure 6).

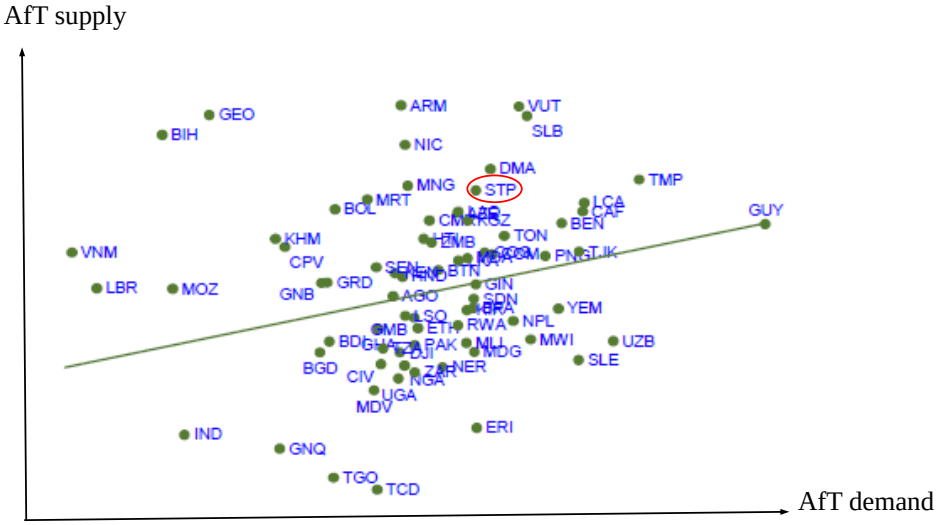
Figure 6: Country-level demand for aid for trade

Note: Aid for trade demand is assessed on the basis of five trade-performance indicators including, inter alia, export growth and diversification, and five trade-capacity indicators including, inter alia, infrastructure quality, trade-related institutions, etc.
Source: Adapted from Gamberoni and Newfarmer (2010)

Using the study's econometric methodology to determine whether this demand was requited with a proportional response in supply of aid for trade, it seemed that AFT supply did in fact correspond to demand in STP. A regression of the supply of AFT per capita on this demand (together with

controls intended to proxy for development effectiveness) suggested that STP was, overall, successful in attracting aid for trade (Figure 7).[10]

Figure 7: The allocation of aid for trade by country



Source: Gamberoni and Newfarmer (2010) based on the OECD's CRS database.

While indicative, these results should be interpreted cautiously given the broad definition of aid for trade adopted in the OECD's CRS database, which includes, inter alia, support to productive sectors and to infrastructure (e.g. roads), whether directly trade-related or not.

[10] Hoekman and Wilson (2010) redid this calculation using a principal components methodology to weight the various indicators of trade capacity, and arrived at similar conclusions. Gamberoni and Newfarmer (2011) later used a three stage regression procedure, and once again concluded the same.

Chapter 2: Trade performance and policy: key choices for export-led growth

2.1 Introduction

43. **STP's external sector faces two challenges**. First, it must become sufficiently dynamic to reduce the country's financing gap, currently bridged by aid. Second, it must provide jobs to STP's unemployed in order to make a dent in the country's persistent poverty. In order to meet these twin challenges, STP's government cannot just wait for oil. Oil will help reduce the current-account deficit, but it won't create enough jobs. In fact, if international experience is any guide, it will make it *more difficult* to create jobs. Therefore, the government of STP needs to put in place a strategy to get key sectors such as cocoa production back in shape and to diversify the economy's structure toward employment-generating activities *before* oil starts flowing.

44. **For Sao Tome and Principe (STP), openness is not a choice: It is a parameter**. With 163'763 inhabitants[11] and a GDP per capita of US$1'275 in 2011, STP is a small island economy characterized by high unit costs of production and delivery for goods and services, including even food products, in spite of favorable natural conditions. Thus, a large part of the country's consumption can only be imported. Against this, STP exports only small and declining quantities of cocoa. Even if the decline was halted, cocoa by itself would be unlikely to bring enough revenue to bridge the financing gap; so under current conditions oil is the only bright prospect on the export side.

45. **However, even if oil solves the current-account deficit, it will not be enough to lift the country out of poverty and mass unemployment**. Oil is a capital-intensive activity that generates few jobs; moreover, those jobs tend to be skilled and few of STP's unemployed have the skills that would make them employable on oil installations. Oil production also generates perverse effects on the real exchange rate, a syndrome known as the "Dutch disease". Once these effects set in, it becomes distinctly more difficult to diversify the economy; STP's continental partners—Gabon and Nigeria—are striking illustrations of this syndrome.[12] Thus, the clock is ticking, and the government needs to put in place a diversification strategy before Dutch-disease syndromes start to appear.

46. **This chapter takes stock of the structure and performance of STP's foreign trade and details the challenges that the authorities face in devising a pro-growth trade policy**. STP needs to put together a coherent vision in terms of its three main trade-policy challenges: WTO accession, relations with CEMAC, and EPA negotiations with the EU. The government should take all three challenges together as a spur to modernize its trade regime, anchor reforms, and progress toward better regulations and governance.

47. **In terms of tariff policy, STP is currently heavily dependent on import taxes as a source of revenue**. The government needs to pursue current efforts toward a progressive fiscal transition to more diversified sources of revenue, including domestic income taxation and a VAT, and to build capacities for this transition to become feasible. Once this transition is realized, the

[11] The last population census was conducted in 2001. A new census is expected to be completed in 2013-14.
[12] For Gabon, see World Bank (2013).

tariff implications of an EPA, which are anyway far down the road given the long phase-out period involved, will become much easier to manage. What is at stake in EPA negotiations is not just tariff revenue, but, perhaps more importantly, deepening cooperation with the E.U. as a key development partner.

48. **In terms of industrial policy, the STP needs to improve all aspects of the investment climate, including energy and transit infrastructure, labor-force skills, and the legal and regulatory environment**. Making progress on all these fronts will require a long-term commitment going beyond the horizon of a single government, as well as continued and close coordination with donors; but the payoff is potentially very high. An industrial policy aiming at the elimination of supply-side constraints is likely to be much more effective than resorting to costly tax incentives to attract foreign investors, as international experience suggests that their effectiveness to attract FDI is weak at best.

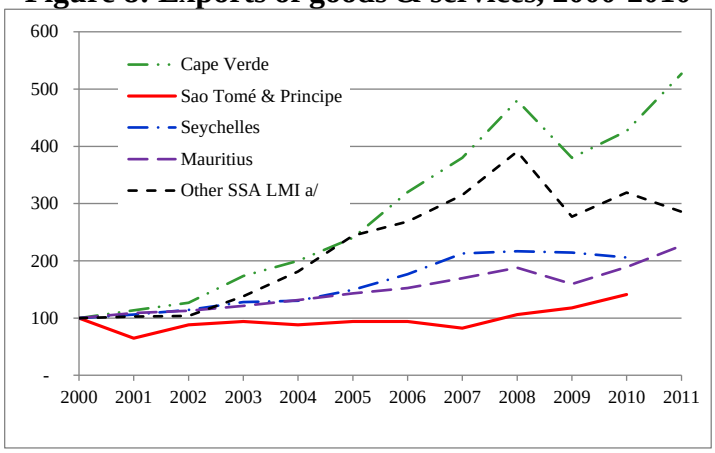
2.2 STP's trade performance is improving slowly

49. **External-sector performance remains weak due to the country's dependence on cocoa exports, and its dependence on food and fuel imports**. The trade deficit averaged about 42 percent of GDP during 2008-12, with exports (4.6 percent of GDP) financing a very small share of imports (47 percent of GDP). The country's dependence on imported foodstuffs makes it vulnerable to food price hikes such as the recent one, with severe consequences on poverty. On the export side, values have been buoyed by the increase in global cocoa prices; but volumes, which have been declining continuously for over two decades, were further depressed by a drought in 2009-10. In 2012 the current-account deficit is estimated to have fallen to 21.8 percent of GDP; it is currently projected to average 23 percent of GDP from 2013-2014.

2.2.1 Untapped potential, excessive concentration

50. **The external sector is central to the development of a small island economy like STP**. However, openness has progressed only slowly if at all since the 2006 DTIS, both on the goods front and, as will be discussed in Chapter 4, on the services front (Figure 8). STP's lackluster performance stands in sharp contrast with that of Cape Verde.

Figure 8: Exports of goods & services, 2000-2010



Note: Index of the dollar value of exports of goods and services, 2000 = 100.
a/ Average value for SSA lower- and middle-income countries excluding Cape Verde and Sao Tomé & Principe.
Source: World Bank, World Development Indicators.

51. **Slow progress in leveraging opportunities offered by the external environment is reflected in a below-average openness ratio (Figure 9), a striking observation for a small island economy for whom geography dictates openness**. It results from the persistence of structural bottlenecks at the sectoral level, cross-cutting constraints in the business environment that persist in spite of recent improvements, and, more broadly, limited headway in mainstreaming trade in the country's development strategy.

Figure 9: Openness ratio, STP and comparators

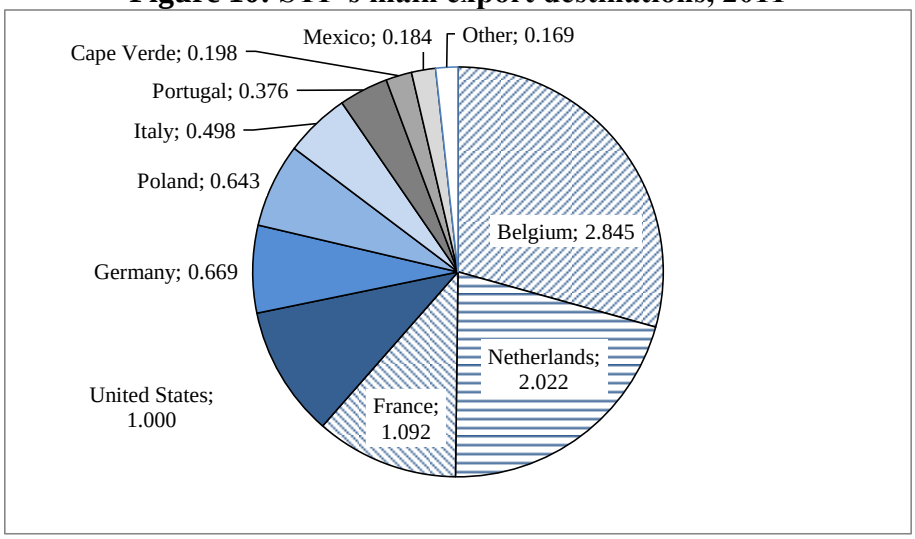
(a) Goods, 2005 (b) Goods, 2011

Source: Team calculations using COMTRADE.

52. **STP's exports are heavily skewed toward the E.U., which absorbs two thirds (67%) of its exports (Figure 10)**. Given that these markets have had slow growth over the last five years and are unlikely to recover soon, STP's exports will not be benefitting from overseas markets dynamism, unless STP's clients in the E.U. are themselves exporting to dynamic markets, which is

often the case in the case of cocoa where many traders are located in Europe but chocolate products are re-exported to many destinations.

Figure 10: STP's main export destinations, 2011



Note: Aruba (a small Caribbean island) is the largest recorded destination for STP's exports in mirrored trade statistics. This is likely to be an error in Aruba's customs records. In the graph above, Aruba was dropped from the calculation.
Source: Mission calculations using Comtrade mirrored data.

53. **In terms of products, cocoa has absolute dominance in STP's export portfolio**. Few countries in the world, even small island economies, have such a high degree of dependence on a single product. Moreover, the degree of dependence has not gone down over the last five years, even though cocoa output failed to recover from its continuous decline over the last decades. The failure of other export sectors to emerge reveal the formidable supply-side constraints facing STP in broadening its portfolio of export products.

Table 3: STP's main export products

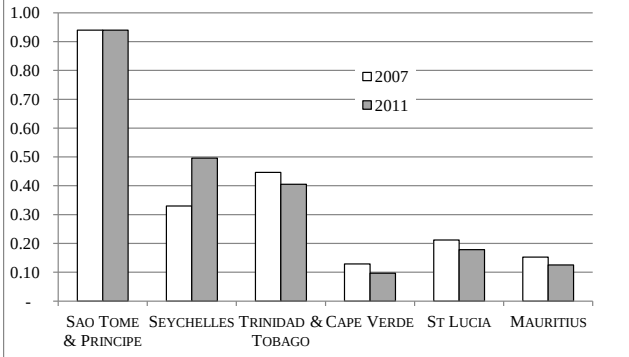
	2007			2011		
	Value a/	Percent		Value a/	Percent	
		Including re-exports	Excluding re-exports		Including re-exports	Excluding re-exports
Cocoa	4.824	67.0	0.97	6.685	70.2	0.97
Chocolate	0.134	1.9	0.03	0.196	2.1	0.03
Re-exports & reporting errors	2.240	31.1		2.645	27.8	

Notes:
a/ Value is in million USD (Comtrade data divided by 1'000).
Only top ten destinations considered to minimize misreporting errors. Products classified as "re-exports and reporting errors" include watches, electric equipment, machinery, integrated circuits etc.
Source: Mission calculations using Comtrade mirrored data.

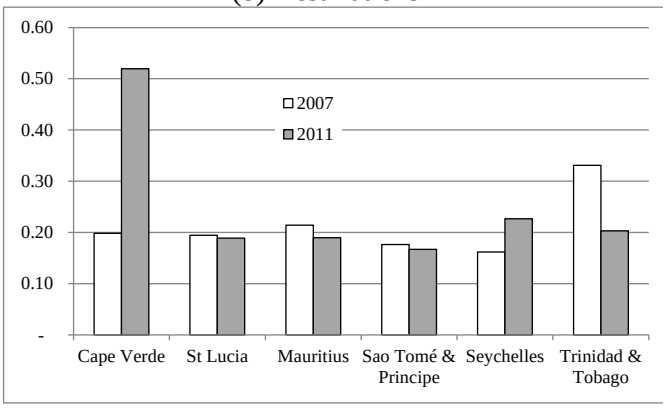
54. **The dominance of cocoa in STP's export structure apparent in Table 3 translates into a highly concentrated structure in terms of products, even by comparison with other small island economies (Figure 11a).** STP's export structure is also concentrated geographically, reflecting the small number of buyers for its main export product (Figure 11b).

Figure 11: Herfindahl Index (HHI) of Product Concentration, Average 2009-11

(a) Products (HS6)



(b) Destinations

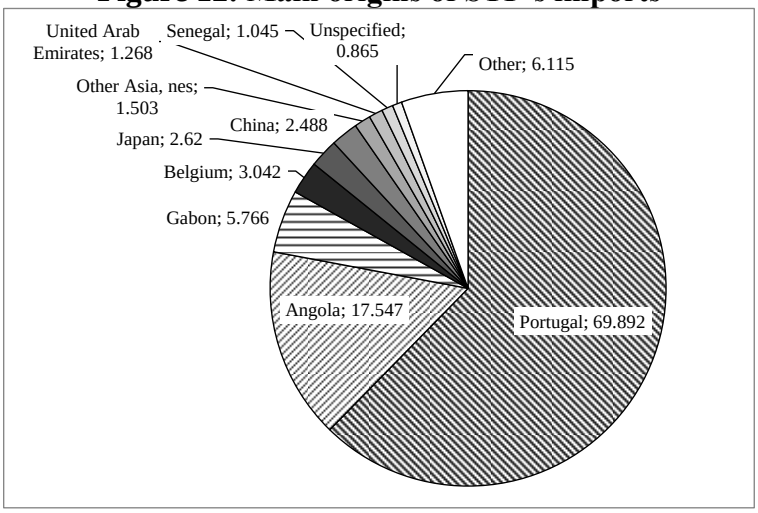


Note: Raw (un-normalized) Herfindahl index calculated at the HS6 level of disaggregation
Source: Team calculations based on COMTRADE (mirrored) data.

55. **In sum, STP's export structure is one of the most concentrated in the world even if one accounts for size**. This over-concentration has persisted in spite of a continuous decline in cocoa output. The absence of "export entrepreneurship", which sets STP aside among low-income countries—where export experimentation is typically active—reveals that formidable barriers lay in the way of export diversification. At the same time, the case for diversification is particularly strong starting from such a narrow base, which exposes the country to large price fluctuations.

56. **STP's import structure is very heavily skewed toward the E.U., in particular Portugal (Figure 12)**. This dependence reflects the combination of past colonial links and air and sea links that are also centered on Portugal. Whereas the former are a given, the latter can be affected by transit policy choices and regulations fostering competition and entry (see Chapter 3 of this report).

Figure 12: Main origins of STP's imports



Note: Amounts indicated are in million USD.
Source: Comtrade

57. **The large share of the E.U. in STP's imports has nontrivial policy implications**. The authorities' reluctance to go ahead with an Economic Partnership Agreement (EPA) stems in large part from the fear of large tariff revenue losses, as reciprocal market access would make E.U.-originating imports tariff-free. Given the present structure of STP's imports, duty-free access for Portuguese products would undoubtedly have substantial budgetary implications. However, there are several mitigation factors, discussed in the next section.

2.3 Upcoming strategic choices

STP's trade policy today faces three key challenges:

i. WTO accession
ii. Relations with/entry into CEMAC
iii. EPA negotiations

58. **In all three cases, STP authorities need to take a long view and see them together as an overall commitment to make progress on needed and interlinked modernization reforms**. Narrow cost-benefit analyses of each challenge separately would risk missing the point and leading to short-term and incoherent decisions. Essentially, WTO accession and the EPA are opportunities to enlist technical assistance to modernize STP's trade institutions. WTO accession will help modernize STP's regulatory apparatus. An EPA will provide a spur to implement a fiscal transition (toward domestic taxation) that is anyway needed in the medium term; tariff reductions would be phased in over several decades, leaving ample time to build capabilities for the deployment of a VAT. A free-trade deal with CEMAC would have very few implications in the short run given how little trade there is; but it could open future, unforeseen business opportunities as the business environment gradually improves on both sides.

59. **In order to see through those issues, the Government of STP will need to start thinking strategically**. This will require a serious commitment and capacity-building effort. In 2012, a

national commission for commercial negotiations (CNC) was created, with three sub-commissions (respectively for WTO accession, EPAs, and regional integration). This is a start, but the commission's capabilities are weak.[13]

2.3.1 Trade policy: In need of a fiscal transition

60. **The Government of STP has been pursuing fiscal consolidation efforts since 2009 through the introduction of corporate and personal income tax laws intended to simplify the rate structure and encourage compliance**. The authorities are also receiving technical assistance from the IMF in the modernization of the country's tax system, including, in the medium term, the introduction of a VAT to replace the existing sales tax. These efforts are key to allow STP to reduce its excessive reliance on border taxes as a source of revenue and allow trade policy to pursue economic-efficiency objectives, free of fiscal constraints.

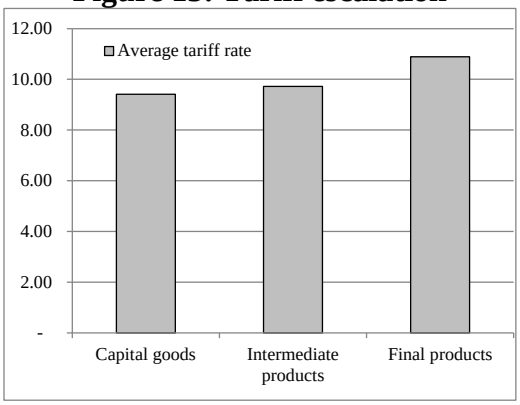
Border taxation

61. **STP has a fairly simple structure of border taxes, with two instruments:** A tariff and a surtax on petroleum products, alcohol, wine and spirits, tobacco, and used cars. The system's main function is fiscal, as it contributes to about half of the State's tax revenue.[14] By contrast, its role in protecting domestic value added is only marginal. A "fiscal transition" toward domestic taxation would free border taxes of their fiscal function and make it possible to use them competitiveness instruments through lower taxes on capital goods and intermediates.

62. **The tariff has a simple 4-band structure at 0% (0.1% of HS6 subheadings), 5% (19.7% of HS6 subheadings), 10% (69% of them), and 20% (11.1% of them)**. It has only very mild escalation, as shown in Figure 13, with a simple-average tariff of 9.4% on capital equipment, 9.7% on intermediates and 10.9% on final goods. Following widespread practice, STP authorities might consider reducing the tariff rate on capital goods to 5% in order to reduce the disincentive to productive investment.

[13] Technical assistance is provided to the CNC from the PASC program.
[14] See Laporte and Helder (2008).

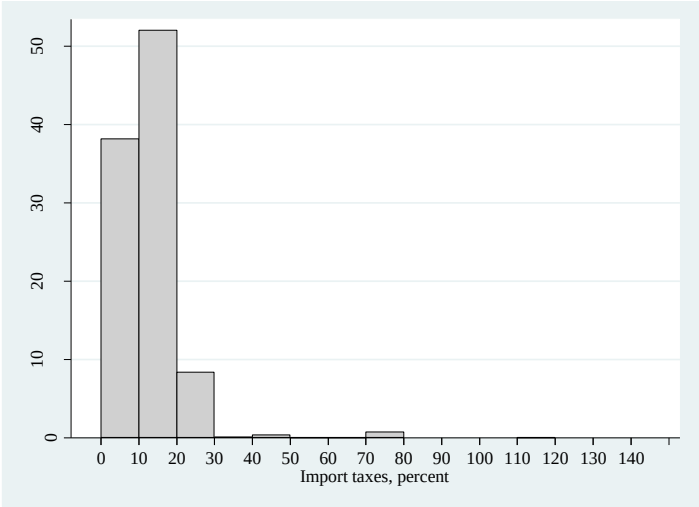
Figure 13: Tariff escalation



Source: Mission calculations using tariff data from STP authorities and Broad Economic Categories classification

63. Combined import taxes actually applied on the ground and calculated as the ratio of taxes paid to CIF value (using STP customs data) have substantially more variation, as shown in Figure 14, with a tail of combined import taxes above 20%, some as high as 70-80%.

Figure 14: Distribution of combined import taxes, by HS6 product, 2011

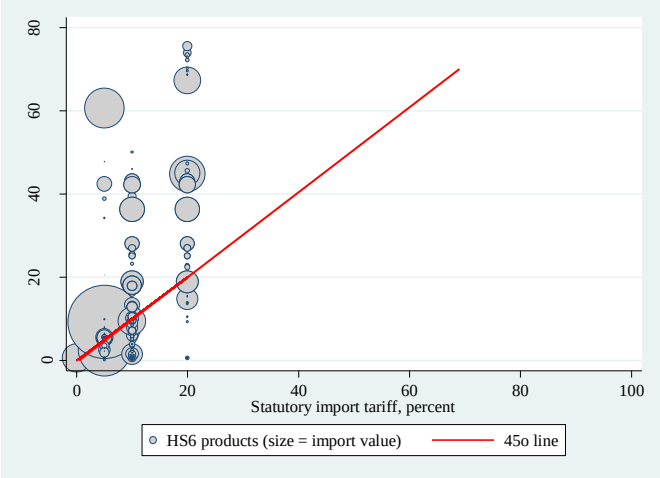


Source: Mission calculations using STP customs data; total of tariffs and surtax.

64. As a result, combined border taxes are higher than tariffs on the book for products concerned by the surtax, in particular for spirits (25-55%), tobacco (55%), petroleum products (42.2-322%), and vehicles (5-15%).[15] This can be seen from Figure 15, where products on the 45º line are those for which combined border taxes are just equal to the statutory tariff rate, whereas products above it have higher combined border taxes.

[15] STP customs records use an idiosyncratic product nomenclature with 11 digits, of which the first and last two are added to the more standard HS8 nomenclature used in the tariff document (a pdf file). Adding a digit in front of HS8 codes is bad practice. The first 6 digits should be the Harmonized system's subheadings, and local customs administrations can stick as many additional digits as they want, but at the end. It is doubtful that 11 digits are necessary for STP, but even sticking to an 11-digit system, the "local" ones should be the *last ones*. In addition, several hundred product codes starting with a double zero do not seem to match any version of the HS nomenclature.

Figure 15: Total import taxes vs. tariffs on the book, by rate



Source: Mission calculations using STP customs data. Products with combined taxes above 80% eliminated for readability (engine fuels including jet fuel).

65. **A simple check reveals no discretionary variation of import-tax burdens across individual importers**. The check consists of regressing import taxes at the transaction level on product (HS6) and origin-country dummy variables (as controls) as well as firm dummies. Statistically significant coefficients on some of the firm dummies would mean that different tax rates were applied to the same product imported from the same origin depending on which firm was importing. In the case of STP, all 1'239 importer dummies were exactly zero (not just insignificant), suggesting a remarkably uniform imposition of import taxes.

66. **All of the variation in import taxes paid by importers comes from different product-level rates of taxation**. The variation across HS sections is shown in Table 4, with the highest rates on vehicles (21.2%), hides and skins (20.5%), prepared foodstuffs (16.1%), and wood products (13.4%), with average rates between 10.06% (simple) and 12.2% (import-weighted).

67. **Given the simple structure of STP's tariff, WTO accession is unlikely to involve significant reductions in bound tariffs compared to the current structure (Laporte and Helder 2008)**. However, a fiscal rebalancing in favor of domestic taxes through the creation of a VAT would be a step forward and consistent with the general spirit of WTO accession. It might however require a substantial capacity-building effort in terms of fiscal administration.[16]

[16] The Government of STP received technical assistance from the E.U. for the creation of a VAT, but capabilities remain weak and some observers even doubt the feasibility of a VAT in the short run.

Table 4: Combined import taxes: Summary statistics, by HS section, 2011

Section	Description	Average collected import taxes, precent			
		Average	Standard deviation	Lowest	Highest
1	Animal products	11.2	10.9	0.5	75.5
2	Vegetable products	8.7	4.7	0.0	42.3
3	Fats & oils	8.0	2.9	5.5	10.5
4	Prepared foodstuffs	16.1	19.4	5.5	75.5
5	Mineral products	4.8	3.3	0.0	10.5
6	Chemicals	12.1	6.2	5.5	20.5
7	Pastics	12.4	4.7	5.5	20.5
8	Hides and skins	20.5	0.0	20.5	20.5
9	Wood products	13.4	4.9	10.5	20.5
10	Wood pulp	9.8	5.0	5.5	20.5
11	Textile and clothing	8.9	2.4	5.5	10.5
12	Footwear	9.0	2.4	5.5	10.5
13	Cement and stone products	8.4	2.5	5.5	10.5
14	Precious metals	n.a.	n.a.	n.a.	n.a.
15	Base metals	8.5	2.9	5.5	20.5
16	Machinery	11.0	2.8	5.5	32.2
17	Vehicles & transport equipment	21.2	27.1	0.5	117.4
18	Optical instruments	7.0	4.2	0.5	10.5
19	Arms and ammunitions				
20	Miscellaneous manufactured articles	9.9	1.6	5.5	10.5
21	Works of art, collectors' pieces and antiques	10.5	0.0	10.5	10.5
	Average				
	Simple	10.06			
	Import-weighted	12.20			

Source: Mission calculations using STP customs data

Trade legislation and regulatory framework

68. **Non-tariff barriers (NTBs) are not an issue for STP, which has no quantitative restrictions, economically-motivated prohibitions, or tariff-quotas**. However, STP needs to pursue recent efforts to modernize its legislative framework and administrative capabilities, in order to bring them to full conformity with not just the letter but also the spirit of key WTO agreements, in particular the SPS and TBT agreements.[17]

69. **In terms of technical regulations, STP needs to adopt a set of technical regulations by importing best practices corresponding to its level of development and administrative capabilities**. This may build on its current approach of "unilateral recognition" of foreign certification, especially given the predominance of Portugal as a source of imports (see STP 2008). However, as sources of imports of various products may in the future diversify—say, to China and

[17] An update of the 2008 WTO accession memorandum was in preparation at the time of writing. The updating was initially planned for February 2013 but seemed to have been delayed.

other countries where standards are highly variable—it may want to equip itself with a more formal regulatory apparatus.

70. **Perhaps more importantly, STP needs to think about a serious sanitary and phytosanitary (SPS) framework to protect its ecosystems from invasive species**. Although STP is a member of the OIE and of the FAO's epidemiological monitoring network, its SPS protection system is inadequate, with no testing laboratory and a legislation that only partially responds to the islands' needs.[18] Technical assistance from other small island economics, including e.g. Mauritius, could help build an appropriate framework in this regard. Essentially, STP needs to put in place a system that is effective in keeping epizooties outside while not creating a rent-seeking standards bureau as is common in many African countries. A key step in this regard will be to separate rule-making from verification functions, as is currently envisaged in Zambia, in order to avoid having a body making rules to ensure revenues to itself.

71. **In sum, STP needs to put in place a regulatory framework responding to the needs of a small island economy that is also a low-income country in terms of public health and environmental protection, without inadvertently creating NTBs and rent-seeking regulatory agencies**. Drawing on the experience of more advanced countries like Mauritius will be key to avoiding some of the mistakes—like over-ambitious regulatory systems—commonly seen on the continent.

2.3.2 Investment policy

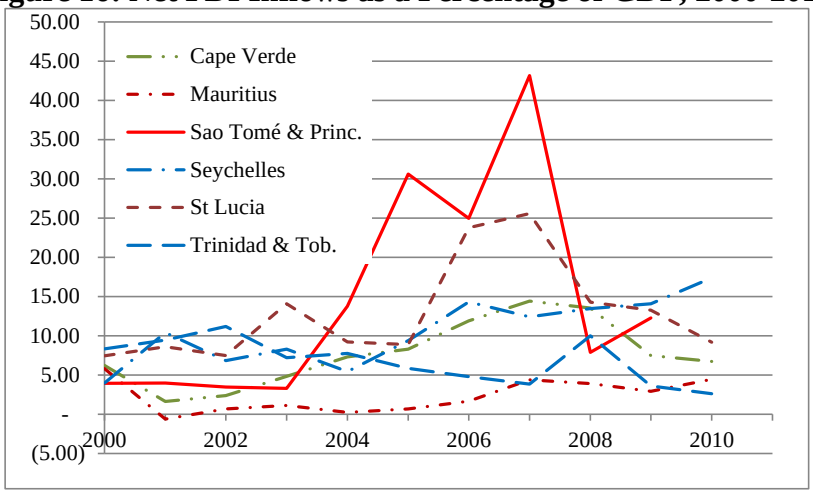
72. **The Government of STP adopted in 2008 a new investment code in replacement of Law 13/92**. The latter allowed for tax incentives for FDI through a "contractual regime", whereas the new investment code has no explicit provision, Article 11 being very general. However, as discussed below, the Government of STP counts on tax incentives to attract FDI. Over-reliance on tax incentives is a classical mistake of investment policies in many countries. The Government of STP needs to focus on improving the investment climate's fundamentals—labor-force skills, logistics, public utilities, and good governance—and adopt a simple and transparent tax regime.[19]

73. **At about US$25 million in 2010, net inward FDI into STP is small in comparison to other small island economies (about a quarter of the flow in Cape Verde or St Lucia, for instance).** However, as illustrated in Figure 16, as a percentage of GDP, FDI flows have reached substantial proportions between 2003 and 2008, peaking at 43 percent of GDP in 2007. This increase was mainly due to large investments in construction in the residential and tourism sector (fueled by the expectation of the start of oil production).

[18] Technical Regulation DP/UVE/SIV/2002/006 of the Veterinary Inspection Service mandates the presentation of sanitary certificates from origin countries for meat, animal products and products of animal origin. In cases of doubt, laboratory analysis may be required, but the low frequency of flights to Portugal makes this option impractical. The Government is hoping that the CIAT will develop into a full-fledged laboratory and verification center, but the challenges are substantial.

[19] Currently, STP is one of the very few countries not covered in Ernst & Young's Worldwide Corporate Tax Guide, an omission which does not project an image of transparency.

Figure 16: Net FDI Inflows as a Percentage of GDP, 2000-2010



Source: World Bank, World Development Indicators and STP authorities.

74. **However, it is important to mention that the growth effect of FDI (and aid) inflows—into, inter alia, residences, hotels and road infrastructure—is weakened by their high import content**. The high-import content of FDI limits the demand pull on the local economy and weighs mechanically on the trade balance. Realizing their potential to lift demand for local products will require a concerted strategy to upgrade the potential supply response in sectors (e.g., light construction materials) that could subcontract for FDI and donor-financed projects.

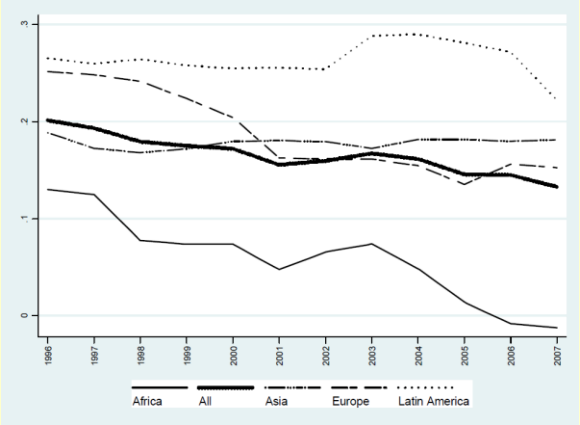
75. **The government of STP counts on tax incentives to attract foreign investment, in particular in the agricultural sector (see Chapter 4 of this report).** However, international experience suggests that tax incentives are an inefficient instrument to attract FDI. First, they are costly in terms of scarce budget resources. Second, they often lack transparency—as is currently the case in STP—as they are often granted as part of ad-hoc deals signed between the government and private investors. Third, even when they are part of published special regimes, they result in complicated tax structures making it difficult to calculate effective average and marginal tax rates. Fourth and most importantly, their impact in terms of inducing investors to choose a particular location is, empirically, very uncertain (see Box 1). In particular, cross-country evidence shows that tax incentives do not substitute for a good investment climate and solid fundamentals in terms of infrastructure, logistics, and prudent macroeconomic policies.

Box 1: Do Tax Incentives Attract FDI ?

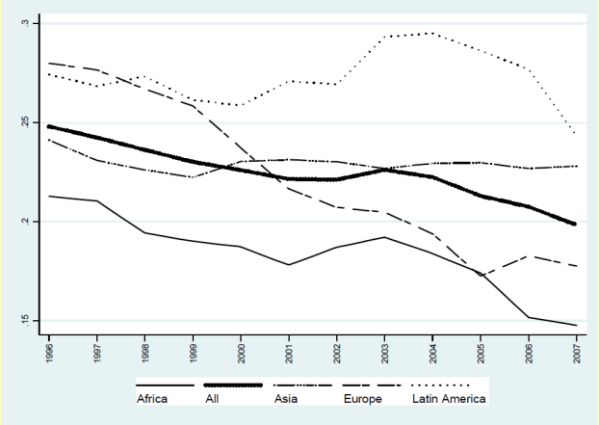
Most governments, in both developed and developing countries, try to attract Foreign Direct Investment (FDI) by way of tax incentives, either through low statutory tax rates or through special regimes. As one country's tax cuts reduce the probability of another country being chosen by investors, the result is a worldwide race to the bottom benefitting the shareholders of multinational companies at the expense of public goods in host countries. This race to the bottom is clearly visible in Figure 17, which shows that, except in Asia (where the trend is flat) and Latin America (where rates rose in 2003-4), corporate income tax rates have been clearly trending down. It is worth noting that the downward trend, which in the case of Africa has taken effective average rates to 15% and effective marginal tax rates to zero in the sample's last year (2007), applies not only to marginal rates (those applied on marginal investments), but also to average rates (those applied to infra-marginal investments, some of which, particularly in resource sectors, have very high rates of return).

Figure 17: Worldwide trend in corporate taxation, 1996-2007

(a) Effective marginal tax rates



(b) Effective average tax rates



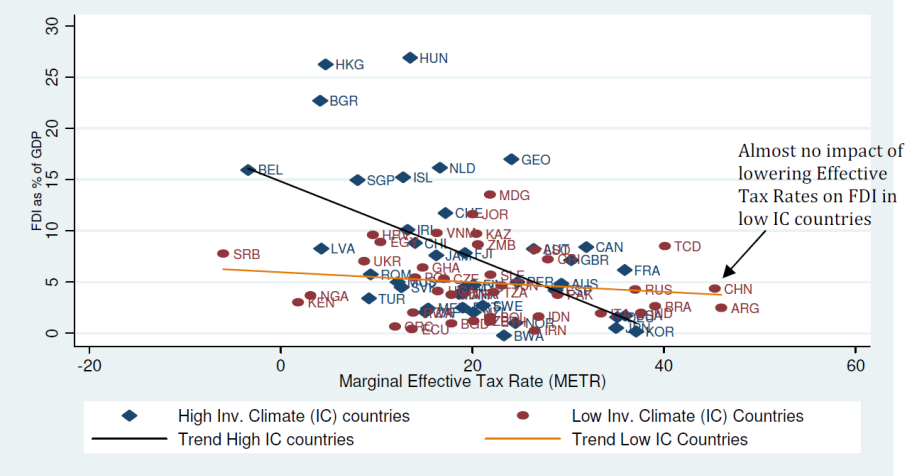
Source: Abbas, Klemm, Bedi and Park (2012)

The effects of lower corporate tax rates were, until the onset of the Global Financial Crisis, hidden by higher profits which generated higher corporate tax revenues in spite of the lower rates. Although data since 2008 is not yet available, it is possible that the race to the bottom in terms of rates is now translating into lower tax revenues.

The race to the bottom is also apparent in the fact that in the majority of cases, decreases in statutory rates have been accompanied by more generous special regimes. The reform of tax systems characterized by large numbers of over-generous special regimes should combine the elimination or tightening of special regimes with lower statutory rates, so as to make the tax system more neutral and transparent while preserving tax-neutrality. Instead, out of 26 cases of large effective tax-rate reductions studies by Abbas et al. (2012), 21 were accompanied by *more* generous special regimes.

Yet, this race to the bottom does not seem to be based on economic rationality. Mody (2007) showed ample evidence suggesting that U.S. multinationals' outward investment decisions were only weakly affected by tax deals. Abbas et al. (2012) confirm these findings on the basis of a panel of 47 countries around the world: FDI is not significantly responding to variations in either marginal or average tax rates irrespective of the estimation method. By contrast, host-country fundamentals such as macroeconomic stability have a significant effect in attracting FDI. This is also what James (2009) found, particularly for low-income countries (Figure 18).

Figure 18: Correlation between FDI inflows and marginal effective tax rates



Source: James (2009)

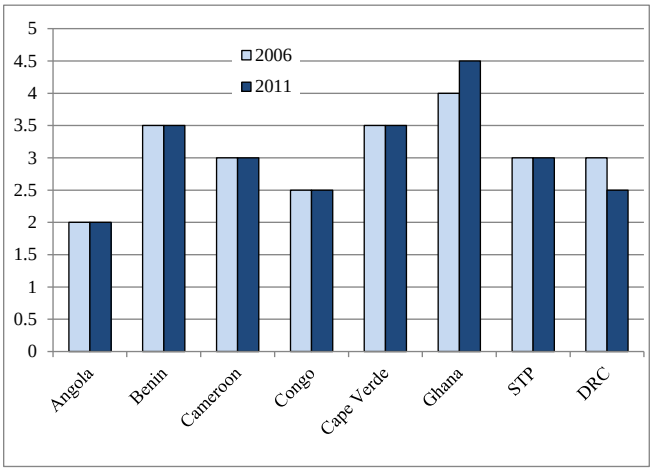
In sum, the race to the bottom in terms of tax incentives seems to hurt developing countries by pitching them against one another while having little effect on investors' decisions. Worse, if corporate income tax profits edge down as a result of slower growth worldwide, reduced tax revenue risks impairing the ability of host countries to improve the fundamentals (infrastructure and education) that do seem to make a difference in investors' decisions.

76. Tax incentives, which are sequentially the last criterion considered in long lists by multinational investors, do not substitute for deep-rooted efforts to improve the business environment. In this regard, much remains to be done in STP.

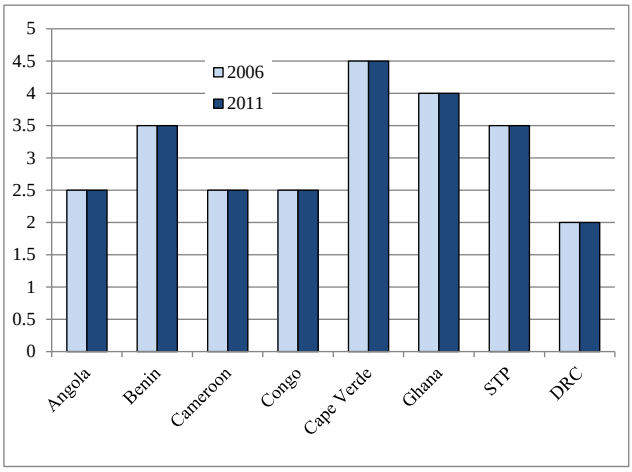
77. **In terms of infrastructure, the country's electricity supply is gravely deficient, with only 60% of household having access to electricity and power outages responsible for economic losses estimated at 4% of GDP (World Bank 2013b)**. In terms of telecommunications, by contrast, the situation is improving rapidly with the construction of a submarine cable connecting STP to the backbone (supported by the World Bank's Central Africa Backbone project) and the issuance of a second private telecom license (see Chapter 4). The reduction of telecommunication costs, if combined with an effort to build market-relevant skills, could promote the gradual emergence of an offshore service sector for Portuguese-speaking countries (see Chapter 4) which could then be a key contributor to the diversification of the country's export basket. In terms of CPIA ratings for three key criteria for foreign investors, the country ranks roughly on par with regional comparators: (a) The quality of the business regulatory environment; (b) transparency and accountability; and (c) building human resources.

Figure 19: STP CPIA ratings against regional comparators, 2006-2011

(a) Business regulatory environment



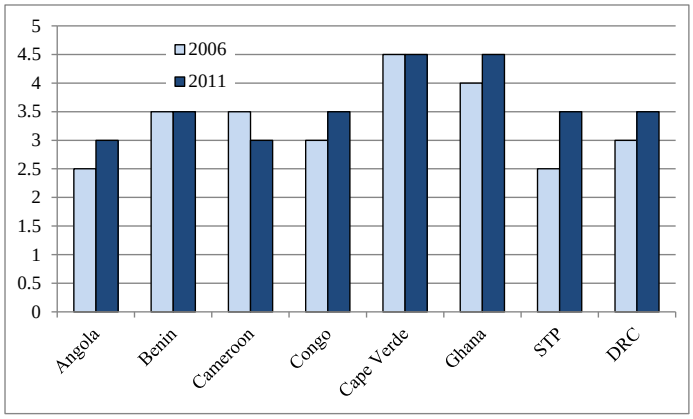
(b) Transparency and accountability



Source: World Development Indicators

Figure 19 (cont'd)
STP CPIA ratings against regional comparators, 2006-2011

(c) Building human resources



Source: World Development Indicators

78. **In all three dimensions, the region's performance is weak, and STP is no better than average**. In terms of regulation, the previous section already discussed the deficiencies of the SPS/TBT regulatory framework, which needs to be upgraded to become fully consistent with WTO obligations. However, progress has recently been recorded in other dimensions. For instance, the government issued a new licensing law reducing the complications involved in the old business licensing system. A new law has also simplified the issuance of building permits, which used to involve over a dozen separate procedures.

79. **In terms of transparency, relations with foreign investors often take the form of special deals—whether it be agricultural concessions or privatizations—whose terms are not publicly disclosed**. Such lack of transparency acts as a negative signal not only to civil society, but also to

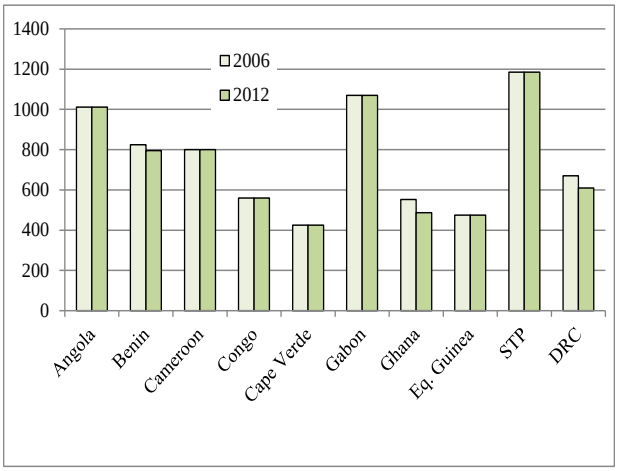
future investors who expect that whatever deals they manage to obtain may be affected by other deals made possibly with competitors.

80. **In terms of building human resources, STP has managed to raise the net primary-school enrolment rate from 69% in 2006 to 98% in 2009 (World Bank 2013b).** This has been achieved through a substantial increase in education spending from 2.7% of GDP in 2002 to 8.8% in 2010. The World Bank has been assisting the effort through the Education for All-Fast Track Initiative (EAFTI) launched in 2007. However, the quality of the educational services delivered remains weak, in particular at higher levels. One-third of household heads with high-school degrees and one fourth of those with higher degrees are currently under the poverty line, suggesting a very low rate of return on educational investment (World Bank 2013b).

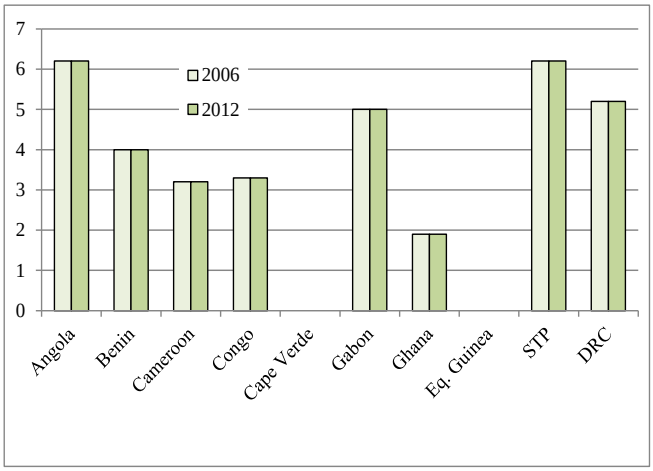
81. **Doing business indicators confirm the mixed picture (Figure 20)**. Only in business startup procedures has STP made substantial headway, partly as a result of the single window (*Guichet Unico para Empresas*) put in place with donor assistance. In other dimensions that may be more relevant for foreign investors, such as enforcing contracts or resolving insolvency, STP's performance is no better than the regional average, which is generally weak. Doing Business ratings may even understate the difficulties faced by investors in registering property given the uncertainties around land rights.

Figure 20: STP Doing Business performance against regional comparators, 2006-2012

(a) Time to enforce contracts



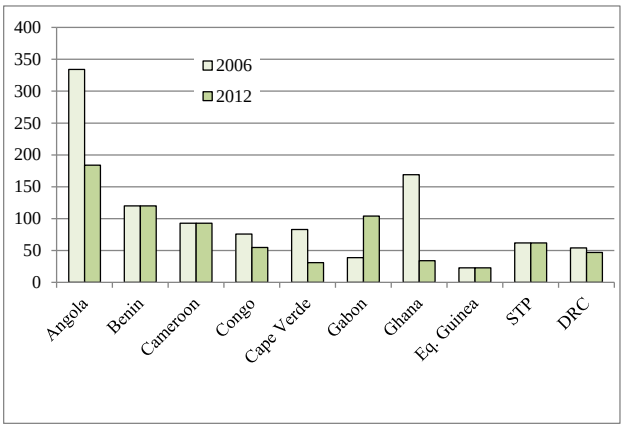
(b) Time to resolve insolvency



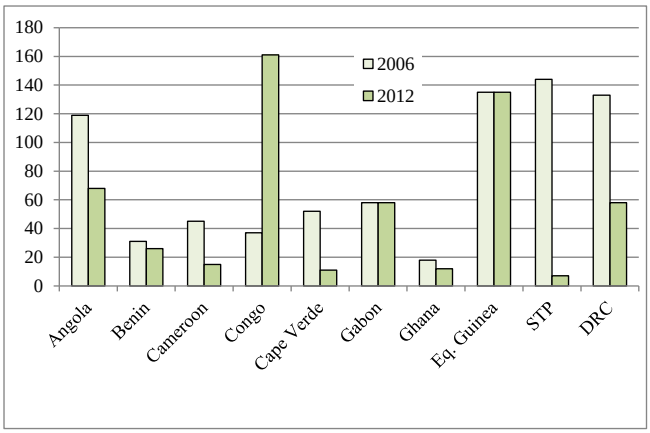
Source: World Development Indicators

Figure 20 (cont'd)
STP Doing Business performance against regional comparators, 2006-2012

(c) Time to register property



(d) Time to start a business



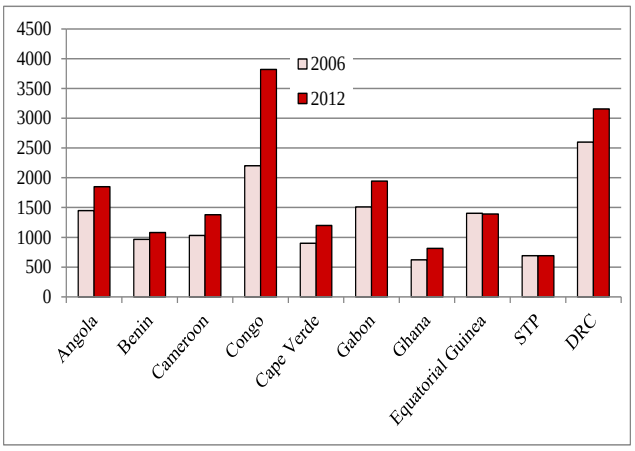
Source: World Development Indicators

82. **In the DB's "trading across border" set of indicators, STP tends to perform better than the region's average, at least in terms of costs, thanks in part to improvements in Customs automation and processes (Figure 21)**. The adoption of ASYCUDA World by STP Customs will represent a marked improvement in customs efficiency. The construction of a $570 million deep-sea port, discussed in detail in Chapter 3, will also significantly reduce export and import costs.

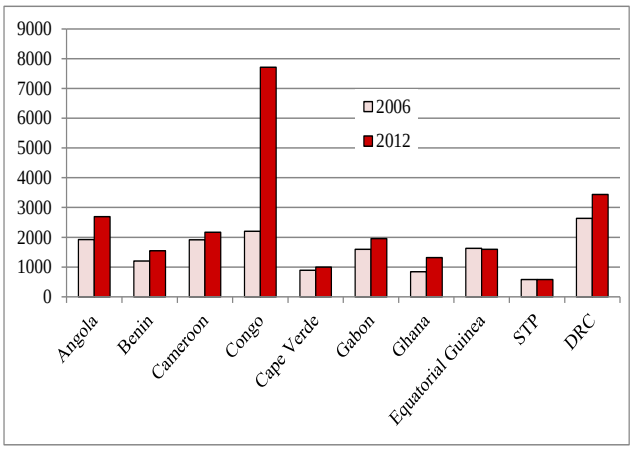
83. **However, Chapter 3 will also document the high cost of connectivity in STP, including shipping costs (40% more to ship a container from Portugal to STP than to Libreville, although distances are comparable)**. Moreover, the DB's estimate of the cost of shipping a container should be interpreted cautiously in the case of STP; for instance, the DB's requirements for international comparability imply that the container should be loaded with dry cargo with no SPS requirements; cocoa beans do have strict SPS requirements under E.U. regulations in the form of maximum residual levels of aflatoxin B1, a carcinogenic. On the import side, the need for trans-shipment at Ana Chaves Bay limits the use and benefits of containerization (see Chapter 3). Finally, as is well known, the DB relies on a small number of informants in each country (essentially law firms), limiting the data's representativeness (see World Bank 2008).

Figure 21: Cost to import and export a container from STP

(a) Cost to import



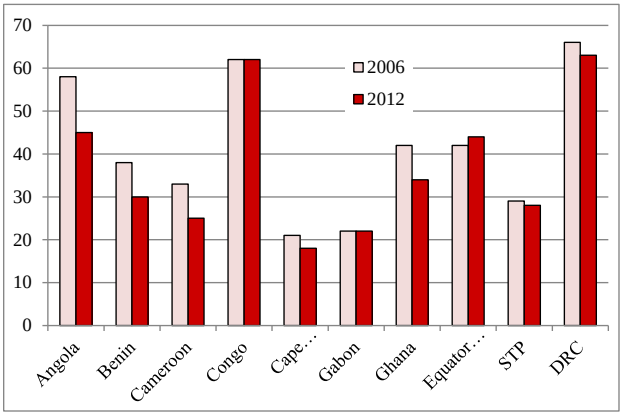
(b) Cost to export



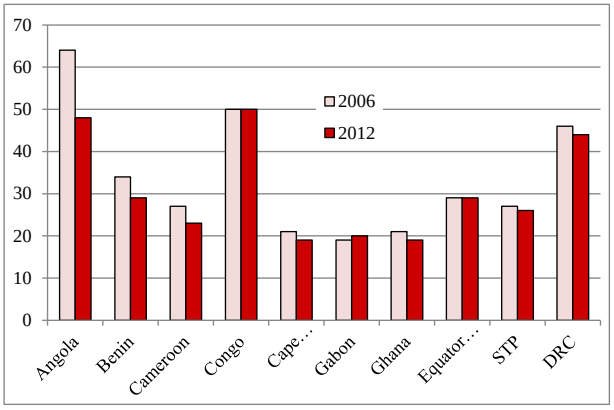
Note: Cost is in USD for a 20' container of dry cargo with no special SPS requirements. Does not include maritime freight.
Source: World Development Indicators

Figure 21 (cont'd)
Time to import and export a container from STP

(c) Time to import



(d) Time to export



Source: World Development Indicators

In terms of time to export and import, STP's performance is around the region's average.

84. **In sum, STP's performance in terms of investment climate is no better than the region's average in most dimensions, worse in some others (like connectivity), and shows little sign of improvement, except for business startup procedures.** All of these factors can be mitigated with adequate policy reforms and infrastructure investments. Improvements in this area would send better and stronger signals to foreign investors than negotiated tax sweeteners, and international evidence suggests that they would also be more effective.

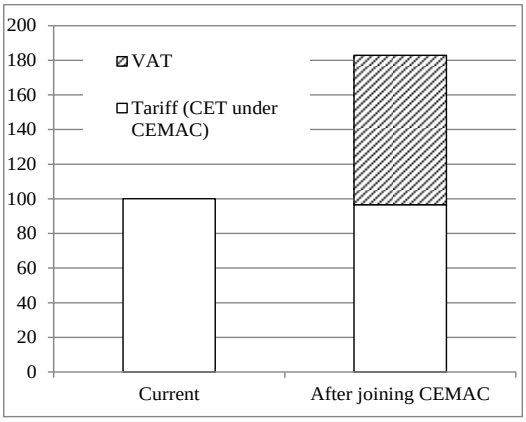
2.3.3 Regional integration and preferential agreements

Joining CEMAC

85. **STP currently belongs to the CEEAC which aspires to become a Customs Union,[20] but not to CEMAC**. CEMAC is a Monetary Union (sharing the FCFA as a common currency) and a Customs Union. Joining it would entail a tariff increase, as CEMAC's Common External Tariff (CET) is higher than STP's tariff, unless the tariff and surtax were consolidated and aligned on the CET. Apart from tariff alignment, in the short run, the implications of joining CEMAC would be minimal given that there is virtually no trade between STP and CEMAC. In the long run, unforeseen opportunities and benefits could potentially arise from regional cooperation and free trade.

86. **CEMAC's CET currently has four bands: 5% on necessities, 10% on capital equipment, 10% on intermediates and miscellaneous, and 30% on final products (Laporte and Helder 2008)**. These rates are, by and large, higher than STP's, especially on final products (30% against 20%). However, products affected by the surtax in STP have a higher combined rate than under the CEMAC's CET. CEMAC's VAT Directive mandates the adoption of a VAT at a rate between 15% and 18% together with excise taxes at rates not exceeding 25% on a limited number of products (including beverages and tobacco currently subjected to the surtax in STP). Notwithstanding the capacity issues involved in setting up a VAT in STP, convergence to the CEMA system would raise both tax revenue and consumer prices in STP (see Figure 22). If it wanted to avoid these outcomes, STP could explore flexibilities with CEMAC partners—for instance, Gabon has a zero-percent tariff—or simply form a free-trade agreement with CEMAC without joining the Customs Union.

Figure 22: Impact on tax revenue of fiscal transition to VAT + CEMAC CET



Note: Baseline revenue normalized at 100.
Source: Adapted from Laporte and Helder (2008)

87. **International experience suggests that the benefits from regionalism stem not so much from commercial preferences but rather from (i) the credibility effect of an external anchor**

[20] CEEAC members include Burundi, Cameroon, Gabon, Equatorial Guinea, Chad, Congo, the CAR, the DRC, STP, Rwanda, and Angola. STP also has bilateral agreements with Angola, Equatorial Guinea, and Cape Verde (Laporte and Helder 2008).

for countries embarking in reform programs, and (ii) cooperation on—typically non-trade—"regional public goods" such as the management of environmental commons, energy and water management pools, or regional security. In the case of CEMAC, non-trade benefits of this type may be marginal, but regionalism can help a dynamics of good governance and reform to emerge gradually through the adoption of good practices in various areas, including e.g. the OHADA treaty on commercial legislation. Moreover, if STP wants to position itself as a trans-shipment hub for the region (see Chapter 3 of this report), being a full member of regional forums may help secure cooperation from other countries in the region.

The EPA

88. **EPA negotiations with the E.U. are dictated by the necessary replacement of the non-reciprocal Cotonou convention by a WTO-consistent reciprocal agreement**. As Cotonou and the EBA initiative for LDCs already granted preferential access for 97% of ACP exports to the E.U.'s market, the main changed involved in an EPA would be for countries like STP to reduce tariffs on E.U.-originating products. STP's authorities fear that, given the E.U.'s large share in STP's imports, this would entail a significant reduction in tariff revenue. These concerns, while genuine, should not be the tree hiding the forest: the long-term gains from an EPA stem essentially from keeping the E.U. as a development partners in the many dimensions in which cooperation is crucial, many of which are non-trade related.

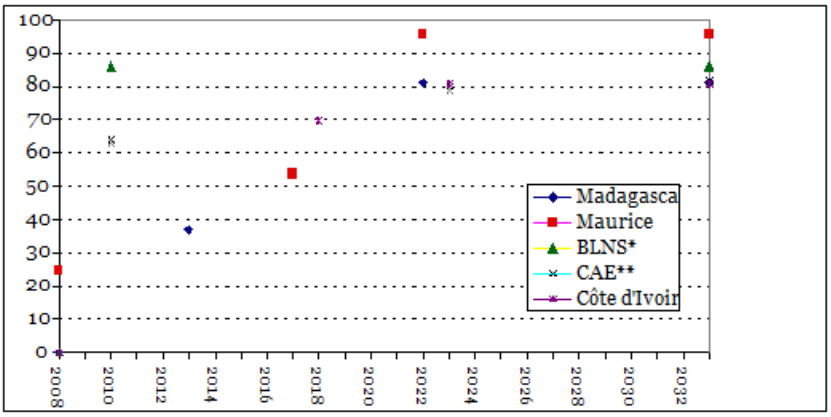
89. **STP has negotiated EPAs with CEMAC and the DRC, a heterogeneous group with relatively few convergent interests**. For instance, as Cameroon is not an LDC, its fallback is not the EBA regime but rather the GSP, which does not provide deep preferences; it is accordingly more favorable to signature than, say, Chad, the CAR, or Equatorial Guinea. As a result of this heterogeneity—and of a lack of capabilities and commitment—progress in the "Central Africa" EPA negotiations has been very slow.

90. **Two substance issues have contributed to slow progress in EPA negotiations in other regions: Rules of origin (ROO) and SPS requirements.** Neither of these issues should be considered as crucial for STP. Special and differential treatment in ROO (instead of a standard application of the PANEURO system) matters for some of East Africa's garment exporters; indeed, flexible rules of origin is a precondition for the effective utilization of preferences (see e.g. Cadot et al. 2006). However, the reform of E.U. ROOs has relaxed the double-transformation requirement in the textile sector, making it more flexible. Moreover, ROOs are of little importance in the CEMAC region and STP in particular given their current trade structure. For instance, cumulating rules are of no importance for CEMAC where trade in intermediates is nonexistent; in the case of STP, there is no sizeable export-oriented manufacturing sector, and the country's size makes it an unlikely assembly platform for manufactured products. As for SPS requirements, it is unlikely that the E.U. would relax them for development purposes given the salience of food safety and environmental issues in the E.U. Instead, what LDCs can seek is technical assistance to help them cope with E.U. SPS requirements. But that would be better achieved with an EPA than without.

91. **As for the budget consequences of tariff elimination, there are several mitigating factors**. First, the tariff phase-out period is very long: according to the initial schedule, the first tranche (necessities) was to be liberalized by 2015; the second tranche (capital goods and raw materials) between 2016 and 2021. Both of these tranches would essentially involve pro-poor

efficiency gains: the first by reducing the price of necessities, and the second by reducing investment costs. The really binding tariff eliminations, on consumer products in the highest tariff band, would take place between 2022 and 2033. Moreover, 28.3% of CEMAC imports from the E.U. would be excluded. Such a gradual phase-out of tariffs would leave ample time for a fiscal transition to alternative sources of taxation (see supra).[21] Figure 23 illustrates the very progressive increase in the share of imports covered by EPA tariff liberalization for a sample of countries having signed EPAs. It is apparent that the phase-in is very gradual.

Figure 23: Tariff-elimination schedule for some EPAs



Notes: The vertical axis indicates the percentage of trade that must be liberalized according to the negotiated liberalization schedule for each country/grouping.
* Botswana, Lesotho, Namibia, Swaziland;
** Burundi, Kenya, Rwanda, Tanzania, Uganda.
Source: World Bank (2010).

2.4 Improving STP's trade policy-formulation capabilities

2.4.1 Capacities at the Trade Directory

92. **The government of STP has only weak capabilities in terms of trade-policy formulation**. Continued donor support is needed to train existing staff and hire new staff with trade-analysis skills, as the existing weakness makes it difficult to ensure ownership of consultant reports and even key policy documents. An examination of the pattern of action-matrix implementation (see Chapter 1 of this report) shows that when progress happened, it tended to take one of two forms. Either a donor financed and implemented a technical assistance project, like e.g. customs automation or the Single Window for Trade; or consultants were hired, again financed by donors, to draft bills and other pieces of legislation, which, in the best case, were forwarded to Parliament with little input from the administration. Seldom did any initiative originate from the administration, or did the administration discuss and amend the substance of documents prepared by consultants to carry them forward toward implementation. In many cases, projects led nowhere because of political instability.

[21] STP's commitment to the negotiations could also be improved, for instance by submitting a list of sensitive products. Consultations with the private sector to elaborate such a list should not be a difficult matter and should not be among the challenges that require technical assistance.

Part of the problem is the administration's small scale and lack of technical personnel and resources. The Ministry of Commerce, Industry and Tourism (MCIT) has four directorates: Trade, coordination of economic activities, industry, and tourism, transferred from the Ministry of Plan to the MCIT when the latter was created in 2012. The Trade directorate has 11 staff in all, of which only five professionals.

93. **The UNDP, which is the IF donor/facilitator in STP, has implemented a capacity-building project for the MCIT's Trade Directorate**. The project has organized a seminar on the planned Competition Law; provided equipment for the Single Window; prepared a diagnostic study of the MCIT; organized a national business forum; hired a consultant to draft a consumer protection law; supported work on the improvement of the permits and licenses system; commissioned a study on the transformation of small agro-industrial units; set up training events in several business-related areas for public institutions and the private sector; provided support to the Young Entrepreneurs Association and the Commercial Information Center.

94. **Whereas the project has achieved some success in mobilizing resources, the response from the Trade Directorate has been weak and hampered by numerous structural reforms and reshufflings, in particular in 2007-8, with little follow-up in projects**. In parallel to donor efforts to build capacities, the Government of STP needs provide stability and visibility to its own administration to enable it to carry forward reform projects.

2.4.2 Trade statistics

95. **There is no meaningful trade-policy formulation possible if there is no quantitative analysis or even familiarity with numbers in the Trade Ministry's technical services**. But STP's trade statistics are not reliable enough to be used for policy analysis. STP being a small island economy, it is crucial to distinguish between exports and re-exports. Asycuda allows for that distinction in two ways: either with a special regime code, or by specifying the country of origin as different from STP for re-exports. Some of STP Custom's records do make the second distinction, but even excluding those, export statistics include also a whole lot of products that simply cannot be genuine exports. This is illustrates in Table 5, which shows STP's top ten export products in 2011. It is unlikely that electrical equipment (generators and transformers) be the #2 and #3 items respectively. This highlights the need for renewed technical assistance to Customs and forwarding agents in terms of meaningful record-keeping. In particular, there should be cooperation between the Trade Directorate and Customs on what type of statistics should be collected for what type of analysis, which could happen if the Trade Directorate had the personnel with the training and the resources to do quantitative analysis.

Table 5: The unreliability of STP's export statistics

hs4	Annual export value (Dobras)	Description
1801	267000000000	Cocoa beans, whole or broken, raw or roasted.
8502	23500000000	Electric generating sets and rotary converters.
8504	7840000000	Electrical transformers, static converters (for example, rectifiers) and in ...
1806	5040000000	Chocolate and other food preparations containing cocoa.
8010	4760000000	
801	4460000000	Coconuts, brazil nuts and cashew nuts, fresh or dried
1905	2910000000	Bread, pastry, cakes, biscuits and other bakers' wares
2202	2790000000	Waters with added sugar
4202	2060000000	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases

Note: Table constructed by limiting entries to "typ_sad = EX" and "cty_or_code = STP". The first restriction limits the data to exports and the second to exports that originate from STP, i.e. not re-exports.
Source: Mission calculations using STP customs data. The team is grateful to STP Customs for sharing the data.

96. **The unreliability of STP's trade statistics reflects a wider syndrome of deficiency in data collection, which have been raised in World Bank/IMF Joint Staff Advisory Notes (JSANs) on the Government's Poverty Reduction Strategy (World Bank 2013b)**. This serious weakness in data collection prevents the emergence of effective monitoring and evaluation mechanisms for government programs and initiatives, in trade as in other areas.

Chapter 3: Trade Facilitation and Logistics

3.1 Background

97. **São Tomé and Príncipe's performance in trade facilitation and logistics is influenced by three mutually reinforcing factors**: a) small size of the domestic market; b) insularity and remoteness from both regional and major traditional international markets, and c) poor infrastructure which exacerbates poor connectivity. The thin logistics market is compounded by remoteness from traditional international markets especially in Europe. São Tomé and Príncipe (STP) trade relatively small volumes over long distances to each market. These factors determine the extent to which the country can reduce its trade costs. Presently STP faces much higher trade costs than other countries in its immediate neighborhood. In fact a study in 2006 suggested that the costs of shipping a container to São Tomé from Europe were about 40% higher than those for Libreville even though the distances were almost the same. However, as described below there have been several recent developments that demonstrate it is possible to make progress as well as pointers to further actions that could be taken.

98. **Due to geographical factors STP is dependent on two main modes of transportation to reach regional and global markets.** These are maritime and air transport. In fact the same applies also to connectivity between the two main islands of São Tomé and Príncipe, where sea transport in particular is the main mode of transport. As such, understanding trade costs for STP is dependent largely on understanding the operational practices and performance of maritime and air transport systems, as well as that of border management systems and processes.

99. **As a small island state, trade facilitation and logistics in STP is largely about how to connect to regional and global markets at minimum cost**. The present chapter of the DTIS Update therefore sought to answer three questions: a) how well is STP connected to regional and global markets for trade in goods? b) what measures can be taken to improve STP's degree of connectivity while minimizing cost and improving reliability? c) what impact will the improvements have on STPs trade competitiveness in specific commodities?

100. **Before analyzing current levels of connectivity, it is important to acknowledge that STP has made some progress in improving its trade facilitation environment**. The progress is more pronounced in some areas such as customs where some practical steps are beginning to show results, than in others where progress has been slower. The main developments since the 2006 DTIS are summarized below.

3.2 Progress in Implementing 2006 DTIS Action Matrix

101. **The 2006 DTIS made several specific proposals to improve the trade facilitation and logistics system performance of STP**. These fell under three main categories:

i) Customs

ii) International transport and

iii) Internal transport

3.2.1 Customs

102. **Though the 2006 DTIS noted that customs were not a major barrier to trade in STP, it identified several actions that could be taken to improve efficiency and reduce costs**. In general the customs administration had low capacity to adequately manage cargo clearance and to efficiently collect tax revenue. The principal actions that were proposed were the following:

i. Adopting a new customs law in part to allow door-to-door shipment of containers
ii. Eliminating the requirement to channel all goods through brokers
iii. Adopting more modern techniques to detect violations
iv. Investing in weighing scales in the port to help with controls and
v. Improved data collection and management.

103. **Significant progress was made in all these areas, most of it over the past 3-4 years**. Some of the significant achievements are the following:

A new Customs Code (Decree 39/2009) was issued in 2009 and forms the basis for all customs reforms. Up until then customs administration in STP was based on an outdated code from the colonial era. The new code defines principal aspects of the customs system and organization. As one of the crucial reforms, the new code permits computerization of the customs activities. Furthermore, customs has established a presence in Príncipe, and unlike in the past, it is now possible to lodge customs declarations on that island. However, due to the small volumes of cargo, most of declarations are still handled at the port of São Tomé.

104. **In 2006 STP customs used Version 2.7 of the ASYCUDA software system.** This system, which was DOS based, was slow and no longer appropriate for customs administration in a modern era. Declarations had to be prepared manually by the customs agents on behalf of traders and then the data were entered by the customs administration into the system. Since then customs have implemented the latest version of a customs system called ASYCUDA World. It was officially introduced in March 2011 with support from UNCTAD and the United States Department of Defense, which financed improvements of the building where the system is housed. This made STP the first country in the Central Africa Region to have this system. It has already contributed immensely to improve the efficiency of the customs' work. Currently, the customs in the port of

São Tomé receives about 300 declarations on average per month[22]. ASYCUDA World enables customs to collect import tax efficiently in a transparent manner. The system can be linked to customs agents and the International Bank of STP23 (BISTP), which is responsible for collection of import tax and duties.

105. **Along with the ASYCUDA World, customs simultaneously conducted a reform to simplify the declaration process and officially published the new administrative procedure**. For instance, the customs has introduced a single administrative document (SAD) for declarations, which is aligned with the UN international standard. With regard to the import tax payment, the designated bank for tax collection (BISTP) is already on site of the customs offices at the port and airport.

106. **The various reforms were accompanied by capacity building of staff, rehabilitation of infrastructure, and installation of modern equipment**. In order to use the new system and equipment, training was offered to the officers of the customs, declarants, and BISTP to familiarize with the new system. On coordination side, a memorandum of understanding was signed among the port authority, fiscal police, and shipping agencies on each role, tasks, and responsibility to facilitate cooperation and coordination of management activities.

107. **While progress has been significant in implementing the Action Matrix in this area, other actions are needed to maximize the benefits of the new system**. One of the critical outstanding activities is implementing the ASYCUDA World module that allows payment of duties and taxes to be made electronically. Presently payments have to be made by cash or check[24], which is inefficient and increases costs. There is also need for a law to allow the electronic signatures, unlike at present when all declarations are signed manually. Acceptance of electronic signatures would also lay the ground for the introduction of a single window system, as anticipated by customs and other stakeholders.

3.2.2 International Transport

108. **As an island state, STP depends on maritime and air transport to maintain its international trade relations in goods.** The 2006 DTIS proposed several actions to improve these two modes of transport. The main proposals and achievements are described below.

Maritime transport

109. **Maritime transport is the dominant mode of transport for STP's trade, both inter-island and international**. The main findings and actions coming out of the 2006 DTIS can be classified into two related categories of infrastructure and shipping line connectivity.

110. **STP has one major port, which is located in Ana Chaves Bay on the island of São Tomé**. This is the main gateway for international commerce. However, the port is shallow both

[22] From the STP customs during the mission on Oct 2012

[23] BISTP (International Bank of São Tomé and Príncipe) is responsible for receipt of all payments at the port and airport, and transfer the revenue to the single account of the treasury. This is a private bank, but the government has a 40% of share in capital of it.

[24] As of October 2012.

along the entrance channel and alongside the quays. The depth is only 3.5m to 4m at high tide and approximately 2.5m at low tide. It is therefore not possible for large vessels to come alongside quay and most ocean vessels are forced to anchor off the port, about one to 1.5 miles off shore and barges are used to transship cargo between vessel and port. On the land side the port suffers also from limited space for the storage of containers and poor equipment for container handling. The port is managed by the state corporation, ENAPORT, which however is hampered by lack of resources to invest and improve capacity and efficiency.

111. **Seaborne trade between continents is typically carried by large vessels, which enjoy economies of scale and reduce unit costs of transport**. When regions or countries generate small volumes these are often ferried by feeder vessels to regional hub ports at which large vessels are deployed. However, the immediate neighborhood of STP especially the countries in the Gulf of Guinea do not themselves offer any more superior logistics performance to STP. As a result, STP has to rely on transshipment hubs located in Europe and to a smaller extent for air transport connections through Cape Verde and Luanda. In maritime transport the transshipment hubs are typically Leixões or Las Palmas. Therefore STP relies on small vessels to carry its cargo to long distance hubs contrary to conventional practice where small craft are used for coastal shipping or feeder services to regional hubs.

112. **Not surprisingly, the DTIS identified the practice of vessels anchoring off-dock as one of the major bottlenecks to efficient logistics in STP**. The practice prevents the country from benefitting fully from containerization, limits vessels only to those of small carrying capacity and also access to some markets, and generally increases costs and time to load and unload vessels, and therefore trade costs. Several remedial actions were proposed:

- Improving infrastructure in the port, including adding a new pier
- Changing laws on public tenders and contracts to allow for private sector participation in infrastructure investments and facility operation
- Ending the port monopoly of the state enterprise ENAPORT
- Improving the harbor in Príncipe and
- Eliminating taxes and special regulations that control trade between the two islands.

113. Unlike the actions relating to customs, progress in implementing the maritime as well as air transport actions has been patchy, focused mainly on the first two bullets above, which in any event are closely linked.

114. **One of the significant developments over the past couple of years has been the opening up of investment in port infrastructure and equipment to the private sector**. However, this took the form on an executive decision by GoSTP, which approached the government of Angolan for urgent support to rehabilitate [25] the port. The request led in 2009 to a concession contract being signed with SONANGOL, an Angolan state-owned petroleum company. While the concession agreement is not readily available, the main SONANGOL intervention so far has been the purchase of new equipment at the port including a 160-ton capacity crane and tractors. Improvements and expansion of the port infrastructure has not yet started. The GoSTP has since extended the concession contract with SONANGOL to include also improvement to the airport. The concession

[25] ENAPORT Website http://www.enaport.st/noticia5.htm

agreement is for a period of 30 years and worth US$12 million[26]. The contract includes rehabilitation and expansion of the port and airport, followed by the management and further investment over the contract period.

115. **Related to the above the GoSTP has been promoting the development of a deep water port for STP.** Such a port is intended to enhance international connectivity by sea and to reduce maritime transport costs through transshipment of cargo. An effort is being made to leverage the country's location by building a deep sea water port in the north to serve as a transshipment hub for West – Central Africa. The site of the proposed port is Fernão Dias, 11 km away from the city of São Tomé. The DTIS had assessed the expected impact of the deep water port in some detail and concluded that it would reduce the costs of transportation to STP, which in turn would result in lower prices for imported goods and greater income for exporters. The port would therefore have significant positive welfare effects. Post the DTIS, a feasibility study was carried out which confirmed the economic viability of the proposed port, if the new port is developed as a transshipment hub[27].

116. **A concession agreement to develop the port has since been signed with a subsidiary of the CGM-CMA group of France under the name TerminalLink**. Terminal Link considers the location of STP an ideal hub terminal for the traffic in West Africa. Costs of developing the port are estimated at $570 million. It is expected that once the new deep port is completed, it will create 1,000 jobs and handle 1.9 million TEUs of traffic per year. Cargo handling capacity in STP will therefore increase dramatically. However, construction of the port has been delayed due to difficulties in raising financing for the project, not helped by the financial crisis in Europe.

117. **The plan to develop a deep water container transshipment port is based on a number of considerations.** Firstly, the latest generation vessels, containers high capacity (exceeding 4000 TEU), require depths of at least 13 meters when full, which is beyond the capacity of all ports on the African continent, with a very few exceptions. Secondly, large ships require very rapid charge and discharge, which is considered unlikely at ports in continental Africa. Furthermore, ship owners are increasingly reluctant to send fast ships to some ports in sub-Saharan Africa because of security concerns and the high cost of insurance, both for equipment and for the crew.

118. **However, in addition to the above, experience from elsewhere in the world suggests that success in developing trans-shipment ports is the result of the convergence of several factors including location relative major shipping lanes, operational efficiency, regulatory regimes, and policy clarity among other factors**. STP would therefore need to take several other actions to prepare for the proposed port. One such action is to sensitize local stakeholders on the proposed plans. Presently it would appear the proposed port project is not widely known even in circles that should know about it. The authorities should put in place a comprehensive strategy around the project, including incentives for investments in activities that complement a major transshipment hub.

[26] US$5 million for the Port of Ana Chaves (São Tomé) and more than US$ 7 million for the airport http://www.icafrica.org/en/news/infrastructure-news/article/angola-invests-in-sao-tome-port-and-airport-1893/, http://www.dw.de/angola-investe-na-infraestutura-de-s%C3%A3o-tom%C3%A9-e-pr%C3%ADncipe/a-6515164

[27] In the DTIS (2006), it states that it would be viable for STP to have a deep water facility if it secures 15 % of the 2000 traffic or about 225,000 TEUs per year.

Air Transport

119. **Air transport is the only other mode of transport available to STP to access regional and international markets**. STP has one international airport in São Tomé that has a few direct flights to regional capitals in Angola and Cape Verde and a twice weekly service to Lisbon, Portugal. Connections to STP are generally difficult and invariably result in long flight times.

120. **The international airport has traditionally faced several interrelated infrastructure constraints chief among them a single runway, a small terminal and lack of apron space for aircraft.** The length of the runway limits the size and configuration of intercontinental jets aircraft that can use it. At the time of the DTIS the few airlines operating at the airport reported a bumpy runway that resulted in frequent tire changes to a high wear rate , increasing operating costs for the airlines. In addition, the airport also lacked storage facilities for perishable cargo, though there was a small general cargo terminal.

121. **The 2006 DTIS identified two main actions to improve air transport connectivity**: a) creating a legal framework for private sector investment in air-related infrastructure and b) granting contracts to private sector to expand and improve the airport and to build warehouses and storage facilities for perishable cargo.

122. **The authorities have over the past two years tried to address the various weaknesses faced in air transport.** They opened up investment in air infrastructure to the private sector. However, this was not pursued through a competitive process as originally envisaged, but as noted above under maritime transport, through direct award of a contract to SONANGOL of Angola. SONANGOL signed agreements with the government to improve the airport and also the runway facilities. Subsequently, in 2012 SONANGOL started work at the airport to improve and increase the capacity of the passenger terminal. Installation of runway lights is reported to be already completed, and storage for cargo and parking space for airplanes are expected. One of the stated reasons for the delays in these activities derives from the difficulties in bringing in special equipment because the poor condition of the port of São Tomé. In addition to investing in infrastructure SONANGOL, through its subsidiary Sonair, has also been considering taking up majority shares in STP airways.

123. **While the above are encouraging developments, at least in plugging weaknesses in air infrastructure, progress in implementing the DTIS actions has been slow such that the some of the practical problems identified previously are still very much being experienced**. This is the case with limited space for passengers in the terminal, and parking for aircraft. However, the authorities have recently in mid-2013 addressed one of the more severe constraints on operations, the restriction of flights to daytime hours only. Runway lights have been installed at the airport, opening the possibility of nighttime flights. Previously the lack of lights complicated scheduling of international airlines as any delay in on one sector such that the flight would not arrive in São Tomé during operating hours, had cascading effects of subsequent cancellations, schedule disruptions and increased costs for the airlines. One of the likely effects of provision of lights is that airlines have greater flexibility in scheduling flights which in turn may lead to better use of the available capacity at the terminal. It should be possible to minimize the congestion effects from limited space.

3.2.3 Internal transport

124. **The domestic transport system is comprised of road links and services on the individual islands, shipping services for inter-islands connections and air transport links**. Due to small volumes, costs are particularly high for the island of Príncipe. Within the individual islands road transport is the most important mode of transport. While the Ministry of public works, infrastructure, and information technology is responsible for policy on infrastructure and public works, the National Institute of Roads (*Instituto Nacional das Estradas* - INAE) and Road Fund (*Fundo Rodoviário Nacional* -FRN) are the key players to implement the policies on the ground. INAE serves the Ministry in administration, supervision of works, bidding, and project management of roads in the country. FRN was initially sustained with fuel tax and vehicle taxes.

125. **The GoSTP has continued to expand the road network**. About 300 km of new road network were built between 2004 and 2009. According to the Ministry of Public Works, a total of 1,101 km of asphalt and gravel roads exist in the country for both islands. This is an increase from about 800 km in total in 2004. Though STP seems to have a functional road maintenance system, a significant proportion of the road network is in bad condition or worse (Table 6).

Table 6: Condition of Road Network in STP

Condition of road network	Percent paved	Percent unpaved
Good	52.30	8.20
Medium	21.70	17.60
Bad	21.60	74.20
Very bad	4.40	

Source: Ministry of Public Works, Assitência Técnica para a Definição de em Política de Transporte em São Tomé e Príncipe, 2009.

126. **The EU (EC) has been very active in supporting the rehabilitation of rural roads in STP**. The EC presented a strategic framework for cooperation between the European Commission and STP under the 10th European Development Fund (EDF). This strategy has specified roads as a focus area of intervention. Their interventions enabled the authorities to rehabilitate roads and bridges across the country. A list of the rehabilitated road infrastructure is provided in Annex 3.

127. **Inter-island shipping: While St Thomas is the main port for STP, there is a smaller port on Príncipe Island, located some 162 km from São Tomé**. The port is small and has shallow water, with an ability to receive vessels with a maximum draft of only 1.7m.

3.3 Current Trade Facilitation and Logistics Performance

128. **Based on the above review it is apparent that implementation of the 2006 DTIS actions has been mixed.** Clearly there was significant progress on the regulatory aspects especially reforms and modernization of customs processes in particular. However, there remain significant constraints with respect to trade infrastructure and access to transport services.

129. **The weaknesses in STP's logistics performance are apparent in the Logistics Performance Index (LPI), produced by the World Bank**. While STP's logistics performance is equivalent to the average for Sub-Saharan Africa, and marginally lower than that of lower middle income countries it is lower for both peers in the infrastructure and international shipments dimensions (Figure 24). These are the components influenced by insularity and poor core logistics infrastructure. Worryingly, a comparison of STP's logistics performance in the 2012 LPI compared to 2007 points to marked deterioration over the five years period. The deterioration was across nearly all six dimensions of the LPI with the exception of Infrastructure whose score remained about the same. In the rest of the LPI dimensions the scores fell significantly for International Shipments followed by Logistics Competence and less so in Customs and Tracking and Tracing. The LPI data therefore point to weaknesses in international connectivity and logistics systems and services, the same issues that were identified in the 2006 DTIS. All these factors are critical to STP's trade competitiveness in general and particularly for the commodities that it produces, most of which are of low value yet time sensitive.

130. **One area where STP has made substantial progress is in customs reform and modernization.** As mentioned above customs have now introduced the ASYCUDA World system. However, the impact of the customs reform has not been reflected in improvement of the LPI.

Figure 24: STP Logistics Performance compared to Sub-Saharan Africa and Lower Middle Income Countries, 2012

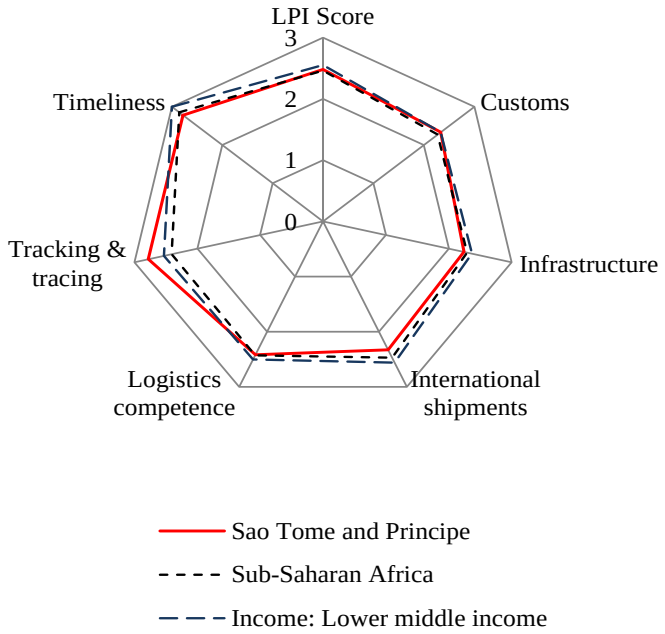
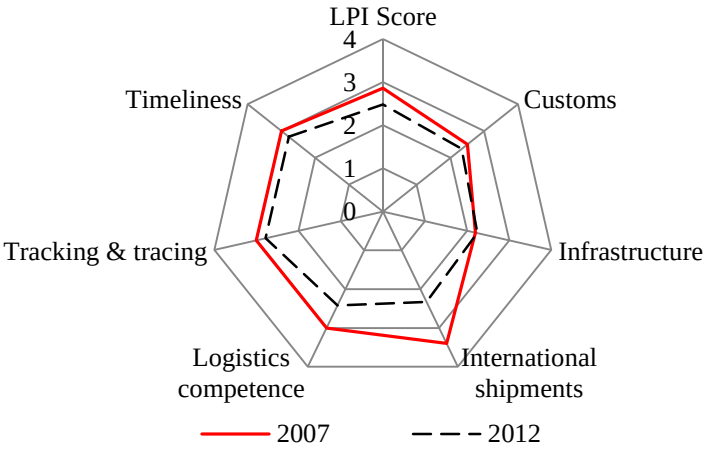
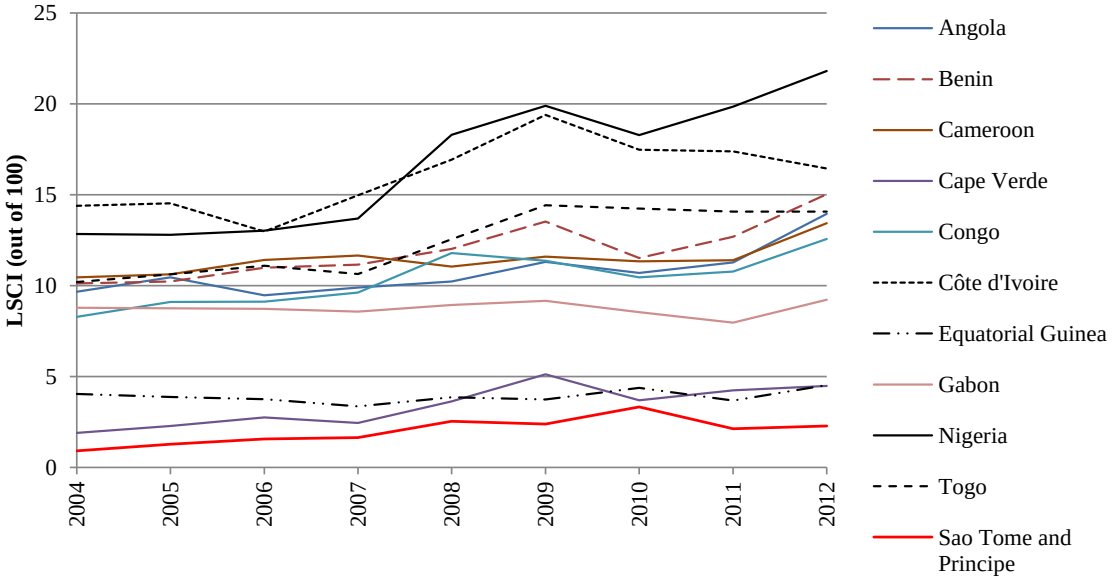


Figure 25: STP Logistics Performance in 2012 Compared to 2007



131. **While LPI is the perception based index for several dimensions of logistics services, the Liner Shipping Connectivity Index (LSCI) produced by UNCTAD provides an index of maritime connectivity based on the statistics on capacity and frequency of maritime transport**. The LSCI for STP compared to other countries in the region is shown in Figure 26. The trend shows a drop between 2010 and 2011 which corresponds with a decrease in the number of containers handled at the port of São Tomé.

Figure 26: São Tomé LSCI Relative to Other Countries in West and Central Africa



Source: Mission estimates using UNCTAD

132. **In addition to the poor infrastructure, STP is in a neighborhood with several other competing ports in close proximity**. Shipping liners want to call at ports with better facilities and services. In this sense, STP cannot compete with other ports especially for transshipment. Consequently, neither large global liners nor literally large vessels want to call at STP. This reality is reflected in the Liner Shipping Connectivity Index 2012 by UNCTAD. STP has a score of 2.28, which is far below of those of neighboring countries Figure 26.

133. **Looking at the discrepancy between LPI and LSCI, the progressive reforms, especially the customs modernization, seem not to have significantly benefited traders or private operators.** Rather, the reforms may have resulted in creating new hurdles to them and led to the drop in perception of freight forwarders in the LPI. Despite the undergoing reforms, the fruits of interventions have not come out. Therefore, further interventions are necessary to bring explicit improvement from the reforms in overall trade facilitation.

134. **Improvements in STP's logistics performance should encompass all areas covered by the LPI and LSCI including**: customs to enhance risk management system and integration with traders and transport operators; rehabilitation and construction of the port and the airport with priority for lighting and refrigerated facility at the later; and connectivity to the international hubs. Both the public and private sectors have roles to play in improving performance.

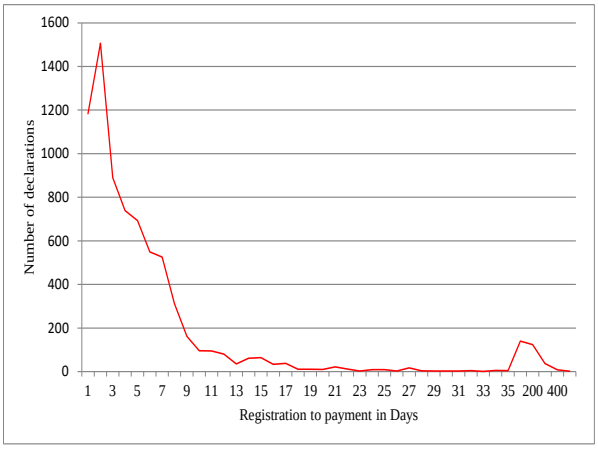
3.3.1 Customs and Border Management

135. **The various reforms and actions of the past few years have already resulted in some important improvement in STPs customs and border management environment**. In terms of simplification of the procedure, the customs reforms have resulted in a reduction in the number of steps for clearance of goods from 21 to 8 steps. Overall the various actions have seen 56% of exports and 63% of imports customs declarations were completed within 1 day, and 79% of exports and 81% of imports within 3 days in 2011, respectively (Figure 27). Once payment is completed, the ASYCUDA enables goods to be released promptly.

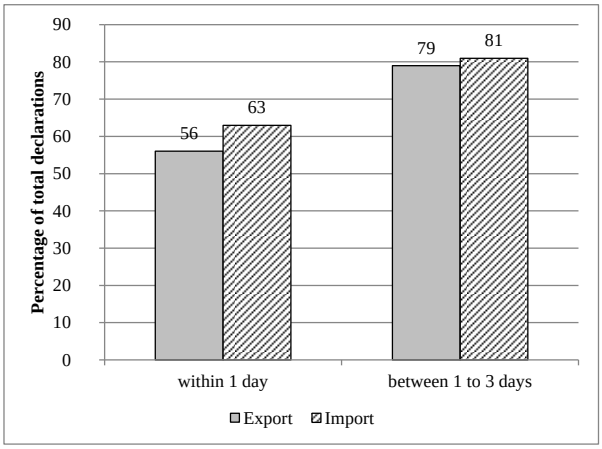
136. **One of the biproducts of the recent improvements in automation is that the STP customs now manages to collect standardized statistics accurately for the first time ever, such as HS classifications, weight, and processing time, and the data is made available for national authorities**. Also, the customs improved the efficiency to collect its revenues thanks to more transparent administration. According to UNCTAD STP managed to increase revenue collection by more than 25% despite the decrease in volume of exports and imports. Since import tax accounts for about 18 to 20% of total tax revenue in STP, the increase in import tax revenue is still important for small economy.

Figure 27: Clearance times in STP

(a) Average clearance times



(b) Proportion treated within one/one to three days



137. **One of the main bottlenecks to the customs clearance process is the requirement that clearance should be handled by a licensed broker**. There are two types of agents to handle customs process. One is the official customs agent who can handle goods from any individuals or groups, and the other is the customs agent assistant, who can only handle a single legal person and works for an importer. Customs controls the number of customs agents by limiting the issuance of authorizations. Only thirteen customs agents are currently registered. They can charge up to 2% of the goods value for their fee.[28] It is not unusual to limit the number of the customs agents, but 2% of goods value can be costly depending on the declared type of goods. The revision of the service and its price of the customs agents need to be reconsidered to alleviate the cost burden on traders. This can be done by allowing direct trader input (DTI) of customs declaration data, which will be feasible once the ASYCUDA World system is fully developed and rolled out. This should be a priority to give at least regular shippers and importers the option of submitting declarations from their own premises.

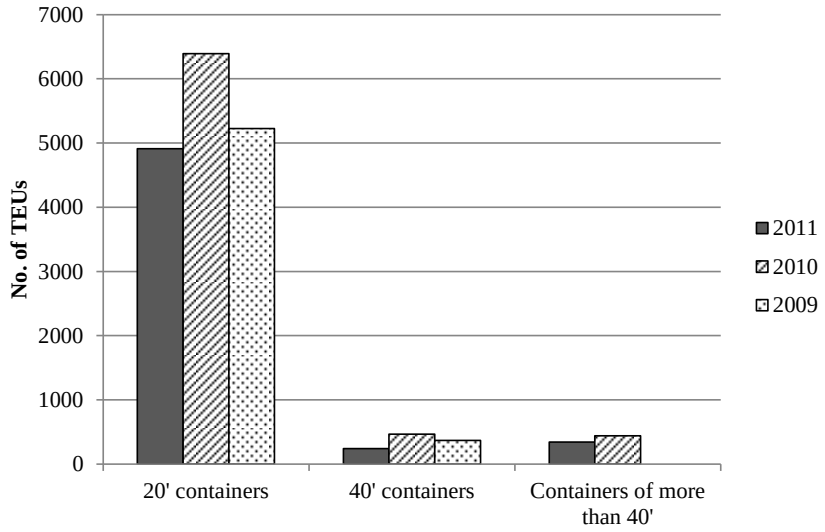
3.3.2 Port Performance

138. **As stated above, STP generates relatively small volumes of traffic: based on port data, in 2011 STP generated the equivalent of 5,500 TEUs of seaborne cargo**. The volume averaged less than 500 containers per month. In fact the seven major shipping line agents at Port of Ana Chaves handled an average of one and a half vessel calls per month, using a small sized fleet that carries 100 to 150 containers per vessel. In terms of tonnages, the volume of cargo by weight has been on a downward trend in recent years declining from 128,282t in 2009 to just over 110,921t in 2011 (Table 7). Most of the traffic is carried in 20 ft containers contrary to the general global trend towards 40ft boxes. However this is partly explained by the small volumes of traffic and also the use of ships gear to trans-ship containers to smaller vessels as described below (Figure 28). The decline in trade volumes conforms to a general decline in the country's volume of trade.

[28] From http://www.alfandegas.st/search/despachantes.php?target=despachante

139. **The barges are capable of transferring only 60 containers per day**. The shallow depth therefore increases both cost and time of handling international cargo.

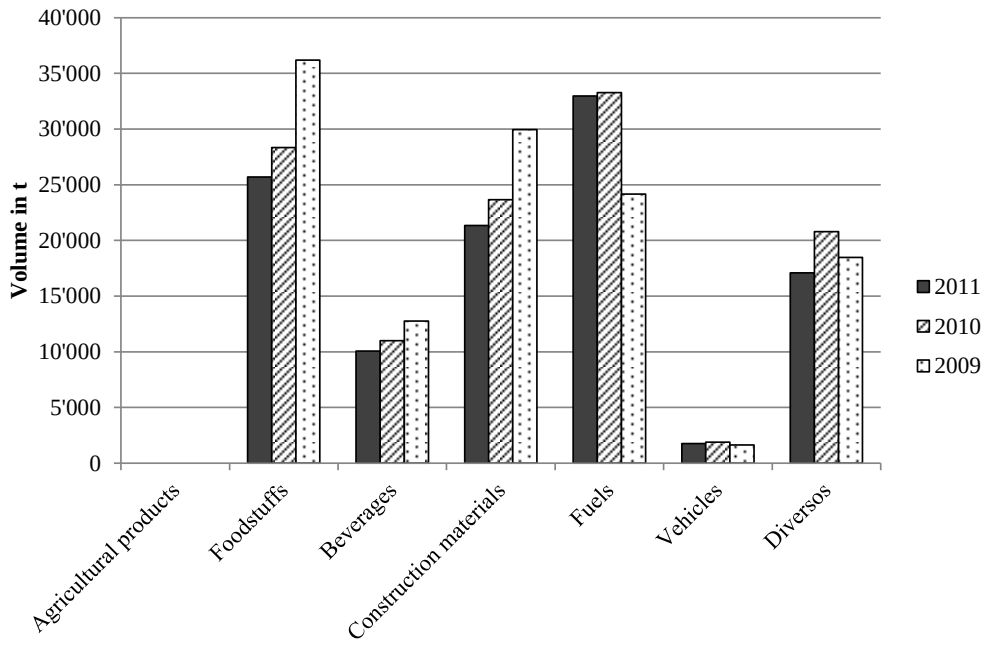
Figure 28: Number of Containers by Size



Source: ENAPORT, 2012

140. **The immediate impact of the then market is that the frequency of service is very low.** Consequently, when a shipper or an importer misses a sailing to a particular destination they may have to wait a whole month to catch another service. This has detrimental effects on the country's ability to trade in perishable products.

Figure 29: Type and Volume of Import Cargo



141. **There are problems with maritime transport both on the water side and on the land side**. As discussed above, the shallow water in the harbor results in vessels anchoring off-dock. Even then vessels with a carrying capacity of 100 TEUs are the only ones able to access the anchoring point. Barges are then used to move traffic between the vessel and the port. There are three barges in the port of São Tomé, each with a carrying capacity of 10 TEUs. The barges are capable of transferring an average of 60 containers per day.

142. **In addition, the land condition of the port is not ideal.** Not all areas are asphalted, and only 52.3% of it is in a good condition; for the unpaved land, 74.2% are in a poor condition. The poor condition of the apron may have negative impact on the operation of the port. In consequence of capacity lack and inefficient port operation, the handling charge is expensive for this size of port. According to Doing Business Report 2013, the port and handling charges in STP cost 200 US$ for exports and 262 US$ for imports, respectively. Current charges are not competitive, in particular for 40' containers. The price for 40'container is extremely high because of the lack of capacity to handle large containers in the port.

143. **Even though maritime traffic is limited, STP experienced a decrease in the number of containers over the past two years**. According to the ENAPORT statistics in 2011, the port had 153 vessels calling and handled 110,921 tons with 5,497 TEUs. Out of 153 vessels, 74 were international vessels. However, since 2010, a few 40 feet containers have started to appear at the port as a result of the new equipment introduced at the port. The introduction of new equipment such as a crane allowed the port to handle containers with up to 45 tons. Still, though the port is equipped with a container yard (CY) for full containers, it does not have warehousing facility for consolidation.

Table 7: Maritime traffic 2009-2011 in the port of São Tomé

	2009	2010	2011
No. of Vessel calls	159	166	153
No. of handled Containers (TEU)	5.599	7.301	5.497
No. of handled Containers	5.598	6.847	5.204
20' Containers	5.286	6.393	4.911
40' Containers	312	233	121
40'< Containers	0	221	172
Handled cargos (in tonnage)	128,282.6	124,349.7	110,921.1

(Source: Report and Account of 2011, ENAPORT)

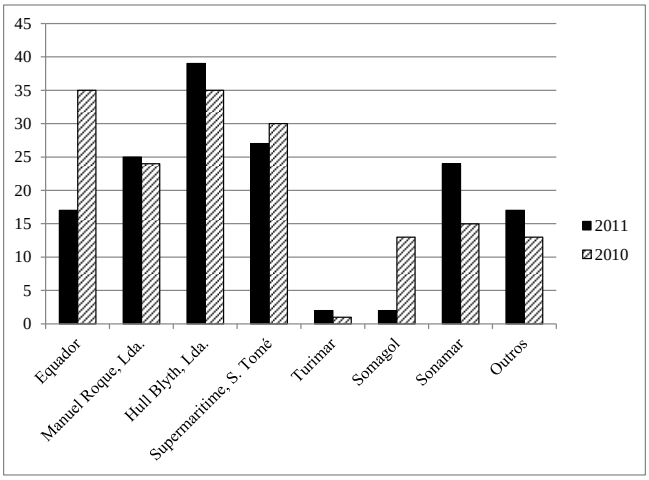
Table 8: Type of vessels that called at STP

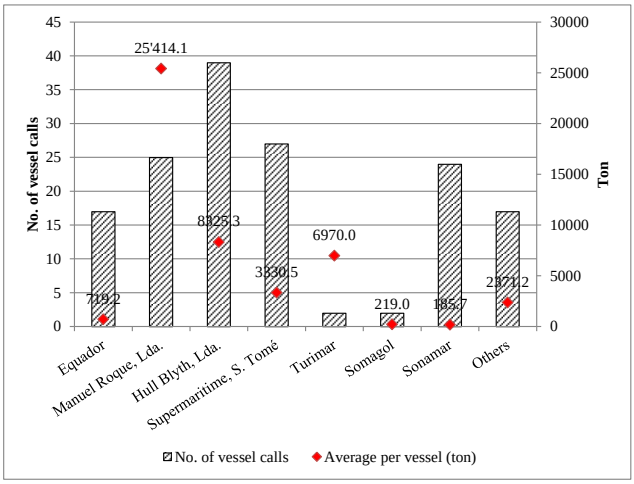
Vessels	2009	2010	2011
Long haul cargo freighters	56	72	74
Fishing	34	27	14
Cabotage	43	36	35
Tankers	10	9	9
Others	16	22	21
Total	159	166	153

(Source: Report and Account of 2011, ENAPORT)

144. **Cargo handling at the port of São Tomé is executed by several shipping agents, of which two are dominant.** The two major private shipping agents —Manuel Roque Lda. and Hull Blyth Lda.— handle about 85% of cargos in terms of the gross weight in 2011. They handled 635 tons and 324 tons out of the total 1,121 tons, respectively. Moreover, 6 small and medium sized shipping agents also operate for maritime shipments in STP. For most of the operators, average weight per vessel is very small (Figure 30). In any case, port operators suffer from the low port productivity, and it gives negative impact on operation such as cancelation of loading and unloading and risk to fall containers or goods.

Figure 30: No. of vessel calls and handled weight on average per vessel in 2011





Source: ENAPORT Statistics 2011

145. **In addition to containerized vessels, small boats operation is also important means of transport for both passengers and cargos[29] to and from Angola, Gabon, Cameroon, and Nigeria at ad hoc bases**. Due to the limited port infrastructure and capacity, the small boats play an important role to transport small consignments to adjacent countries. Given the small volume of cargo, it is usual that only a couple of handling companies occupied the market, but this structure makes freight expensive because of the lack of competition.

146. **All issues around the port considered, the transport cost to and from STP is very high[30].** For instance, when one container is shipped from STP to Northern Europe, it costs 40% more than that from Libreville in Gabon. Consequently, it is possible to estimate that about 15% of cost of imported goods is attributed to the weak productivity of port operation.

147. **Being an isolated island state connectivity to regional hub ports is crucial to minimize trade costs and to access to international markets.** Geographically, STP is located far away from other international maritime gateways in West Africa. The nearest international port is the port of Cap Lopez in Gabon, which is located 243.7 km away from the port of São Tomé, and the one of the biggest regional hub ports in the region —Lagos, Nigeria— is 774 km away. Besides, only two major shipping liners are operating between West Africa and Europe[31]. Transshipment hubs for STP are mainly European ports, reflected also in the main ports of the shipping lines serving the

[29] Columbia University, *The Investor's guide to São Tomé and Príncipe*, 2008. Also, the mission teams confirmed a small craft in operation loaded with palms to Cameroon.

[30] Ministry of Public Works, *Assitência Técnica para a Definição de em Política de Tranporte em São Tomé e Príncipe*, 2009

[31] From Containerization International http://www.ci-online.co.uk/. Lin Lines Inc. operates between Leixões – Lisbon – São Tomé – Cabinda – Soyo – Lobito – Namibe – Leixões; 3 sailings a month / Safmarine Container Lines operates between Bata – Malabo – Onne –Warri – Port Gentil – São Tomé – Douala – Aberdeen – Antwerp – Las Palmas de Gran Canaria – Bata; 2/3 sailings a month.

islands. As the LPI indicates, STP has very weak connectivity to the world and has poor connections to several potential export markets. The better connectivity to international hubs is as important as physical distance from the hubs for small islands states to ease business, especially to export.

3.3.3 Air connectivity

148. **Air transport is fundamental to the international connectivity of small island states to global markets**. It is used for time-sensitive or high value shipments. Due to small volumes, most air shipments are transported as belly cargo in passenger aircraft. There is therefore a close link between passenger air services and availability of capacity for air shipments. As such, often strategies to develop tourism have an important impact on space for air shipments. In any event, some of the cargo that moves by air is to support tourism. Based on these linkages, it is apparent that STP has rather limited access to air transport services and therefore capacity for shipments by air. Currently, there are only three airlines that fly into STP; namely, STP Airways, TAP, and TAAG[32]. As of late 2012, these airlines offered three international scheduled passenger flights per week to Lisbon and Luanda. There were no cargo freighter services into STP. Additionally, there were three flights per week between the two islands of the country.

149. **Meanwhile the GoSTP has since 2006 endeavored to enhance air transport services by improving the regulatory framework for civil aviation and pursuing new commercial relationships**. This has been mostly through bilateral air service agreements to accelerate the entry of international airlines. STP currently has agreements mainly with countries in West Africa. Bilateral agreements beyond the region can improve the connectivity to access to larger markets in the world. In addition to the existing designation agreements (Table 9), STP is starting to analyze the possibility to set up commercial agreements with more countries, including countries that possess regional and international hubs; namely, South Africa, Kenya, and Spain.

[32] In January 2012, Air Nigeria had been flying twice a week, but the Air Nigeria stopped their all international operations in September 2012 due to the safety concern.

Table 9: Countries with bilateral agreement

Uni-Designation Agreement (*Unidesignação*) (which allows only one designated company from each country to operate in STP)	Multi-Designation Agreement *(Multidesignação*)	Countries under consideration (STP starts to analyze the possibility to set up commercial agreement)
Angola, Republic of Congo, Russia	Cameron, Nigeria, Portugal, Equatorial Guinea (yet to be singed), and Gabon (yet to be singed)	Spain, South Africa, Kenya, , Gambia, Togo, Ghana, Cote d'Ivoire, Senegal, Central Africa, and DRC
	Negotiation for Multi Designation undergoing	
	Cape Verde, Brazil, Guinea-Bissau, Mozambique, Benin	

Source: INAC

150. **Further to the above, in 2012 the civil aviation authority INAC revised the Civil Aviation Regulations.** The revised regulations are intended to better facilitate both domestic and international operators to enter the industry. All air operations, regardless of passenger and cargo, are required to hold valid Air Operation Certificates (AOC) issued by the authority, which is effective for 24 months. Especially for foreign air operators, STP has also strategically loosened the regulation for them to enter STP market. STP air space is now open to those who hold AOCs regardless of the existence of bilateral agreements. When bilateral agreements exist, the authorization should be granted to operators with ease. In case there is not such an agreement in place, it is still possible to apply for AOC, and application will go through the review of the administration. Unless there are significant negative findings and deficiencies, authorization should be granted. Following the ICAO convention, foreign air operators are required to comply with the STP civil aviation law and regulation. All AOC holders will be subject to surveillance of INAC, and it conducts inspections accordingly. AOCs are effective for 24 months, and renewal of AOCs can give INAC chance to review the performance of the carriers as a part of quality and safety control. STP has reasonable regulation for air space and is ready to receive more air operators.

151. **Despite these developments, air services remain limited.** In part this can be explained by the limited demand for services and other constraints. Current demand for air transport in STP lies mostly in shipments of perishable products. It exports fresh perishable goods such as cut flowers and fruits and imports substantial perishables food products. However, such products are a small proportion of the total traded volumes by weight, accounting for only 0.3% of total gross weight traded in 2011. The prominent import commodities were foods, fashion apparels, nonessential groceries (i.e. Tabaco), electrical appliances, rare metals, antenna, printed materials, and medicine. All of the commodities are value added or high value commodities with small quantities. While, exports commodities were concentrated on a couple of products; most of the weight was for the cocoa related products. Cocoa itself is mainly exported by ship, but once cocoa is processed to

some extent, it is preferred to be shipped by air. After cocoa products, coffee and fresh coconuts are also observed. Only a few products consist of exports by air. According to the customs statistics in 2011, the total gross weight for import (about 476.7 tons) considerably exceeded the exported gross weight (about 11.6 tons). Therefore assuming that the aircraft belly space was full when a plane arrives in STP, when returning, it would be unoccupied more than 97% of them.

Figure 31: Exported Commodities by Air Freight in 2011

Exported Commodity	Net Weight (kg)
Cocoa & Cocoa products	4'110
Coffee & Coffee products	479
Coconuts	1'000
Sub-total of above three commodities	5,589 (53 %)
2011 Total air Export	10.509

(Source: STP Custom's statistics, from mission in Oct 2011)
*Exchange rate: 1 USD = 19,121.49 (Central Bank of STP, Oct 2012)

152. **There is however some potential and needs of air transport in STP**. For instance, palm oil recorded 50 percent growth in net weight since 2006, and soybean oil has emerged as an export commodity transported by ocean in 2010. These value added products can be transported by air. Likewise, the agriculture sector in STP wants to promote more high value-added products, such as organic coffee, organic papers, tropical fruits, and fresh cut flowers and intends to export by air. Fruits, nuts, and spices which have been already exported by air in 2006 and shown expansion of its exports. Among these commodities, cut flowers have potential to grow further. Cut flower and the related export was 83,744 net kg with the value of 96,154 USD in 2010. These flowers were exported only to Portugal, Angola, and Gabon —the destinations which have direct flights from STP or geographically close. If the freshness is well maintained before loading, they can be delivered to more markets in Europe and other part of the world.

153. **There are two fundamental challenges faced with air transport in STP, namely, air transport infrastructure constraints and safety oversight**. The first is a handicap to improving air transport operations while the second hampers the development of domestic capacity. The two are discussed in brief below.

154. **The current state of airport infrastructure is a deterrent to expansion of air services.** As stated above, the lack of runway lights has been addressed and nighttime operations are now feasible. However limited apron space and a lack of storage facilities especially for perishable cargo also serve as serious constraints.

155. **With regard to safety oversight, STP Airways registered aircraft are currently on the blacklist of the European Union**. As such, aircraft registered in the country may not fly into the airspace of EU countries. This is the reason why STP Airways uses a foreign provider form its services to Lisbon. However, in recent years the authorities have been taking steps to improve safety oversight capability. STP is participating in two programs that were approved in July 2012: National Program of Quality Control for Civil Aviation Security (PNCQ) and National Program of

Capacity building and Training of Civil Aviation (PNFT). Under the PNFT INAC staff has already been exposed to basic training on air safety oversight. Additionally, the regulation on Authorized Transport of Arms and Inflammables by Air has been legislated. Having established frameworks, the next steps and challenges are the implementation of these programs, and sharing of knowledge on regulation among the staff on the ground. Transferring experience through on the job training would be useful. It is indispensable to get over the safety issue at the earliest so that STP can start to seek more access to Europe.

3.3.4 Domestic Connectivity

156. **There are three main weaknesses with STP's domestic transport connectivity, namely**, the poor quality of a) road infrastructure; b) domestic road transport services; and c) maritime transport services between the two islands.

157. **Two thirds of the roads in STP are earth while the rest are tarred**. Of the earth roads close to three-quarters are in bad condition. This is a result of both the terrain and also climatic conditions. In many areas of the island of São Tomé, the terrain is very steep and rainfall can reach over 7000 mm per year. In these circumstances, compacted earth roads often deteriorate very rapidly if they are not properly maintained. Currently, the maintenance regime is clearly failing, and many roads are typically washed away each year at huge cost to the communities and the economy at large. Improving rural roads is therefore quite important in order to maintain year round access and to connect rural producers to domestic and international markets.

158. **Road transport costs in STP are much higher than in other countries in Sub-Saharan Africa**. This is partly due to the higher price of fuel as a result of taxes and high cost of import. Fuel prices are among the higher in the region. In addition to high input costs, operational practices in the road transport industry also increase costs. Vehicles tend to be old and expensive to run. The industry therefore seems to be in a downward spiral where low volumes lead to poor services which in turn lower demand. Measures would have to be taken to break this cycle. One way to reduce domestic transport costs is to encourage consolidation of volumes so as to reduce unit costs. This can be achieved by facilitating the formation of producer cooperatives and building facilities, especially storage, which enable farmers to store their produce until there are volumes that can be moved at minimal cost.

159. **STP is currently developing a transport sector policy to guide development of transport infrastructure and services**. The policy should form a firm foundation for improvements and reforms in the sector which is very critical to trade facilitation and logistics performance.

3.4 Priorities for Improving Trade Facilitation and Logistics Performance

The 2012 LPI also reflects that improvements to trade logistics performance are possible despite geographical and scale factors. Based on the foregoing diagnosis of the main weaknesses in the logistics system, the following sections identify the priorities for improvement to reduce trade costs.

3.4.1 Modernization of Border Management

160. **Modernization of customs in STP has been one of the areas where significant progress has been made**. While not all modules of the new ASYCUDA World system are yet in use, the vision for further reform seems clear. Priorities going forward are in interconnecting the port and customs systems to share manifest data, employing an effective risk management regime (presently physical inspections exceed two thirds of shipments), introducing a valuation database, building a single window system and capacity building (staff training, equipment). In particular, it would be important to interface the customs system with the port and other agencies involved in border management so there can be smooth and efficient sharing of data. Customs in STP has already embarked on building on the ASYCUDA World system as a basis for a comprehensive Single Window System, linking the port, the airport, the Central Bank, Customs Fiscal Police, sector Ministries to a central server.

161. **Operationalizing the risk management system is of paramount importance.** The system would enable customs and other agencies to streamline physical interventions during the clearance process of cargo. Presently customs still largely relies on physical inspection of most cargo. As containers have to be opened for inspection, this practice makes customs clearance slower, and increases cost to traders. The statistics on the processing time indicates that the time between registration and assessment of declarations tends to take longer than that between assessment and payment by traders. As is normally expected, the clearance process is longer for imports than for exports. This is mostly because taxes are payable on the former and not on the latter. The practice also of inspecting containers in the port is both a result of and contributes to the lack of a proper door-to-door system for the movement of containers in STP.

162. **One of the major weaknesses with the customs automation initiatives so far has been poor communication of reforms to the private sector**. There is a prevalent perception that there was a lack of transparency with the whole process, which needs to be corrected if all stakeholders are to contribute to realizing the intended objectives. It is less effective to have the latest system when the actual practitioners are not well involved in operationalizing policies. For instance, if the poor internet connection continues, it may hinder the traders from entering declaration online once a direct trader input is in effect. Any difficulties that the private sector faces should be shared with the government for improvement. As the proposed Single Window project takes shape, more dialogue with traders is necessary to make sure they are prepared for and appreciate the need for any changes in processes and procedures.

163. **Finally, the customs simplification reform should accompany with a licensing reform.** Although customs process got quicker now, traders may need to expect extra days to export goods due to the issuance of a license. The ASYCUDA World enabled the customs to control the

information about traders; therefore, annual renewal of licenses is no longer necessary. With the undergoing comprehensive licensing reform program, relaxation of licensing is possible especially for the sectors, which are expected to grow for exports. In addition, trade associated cost to obtain license costs USD$ 290 for exports and US$115 for imports, respectively which will be significantly lowered or eliminated under the ongoing reforms

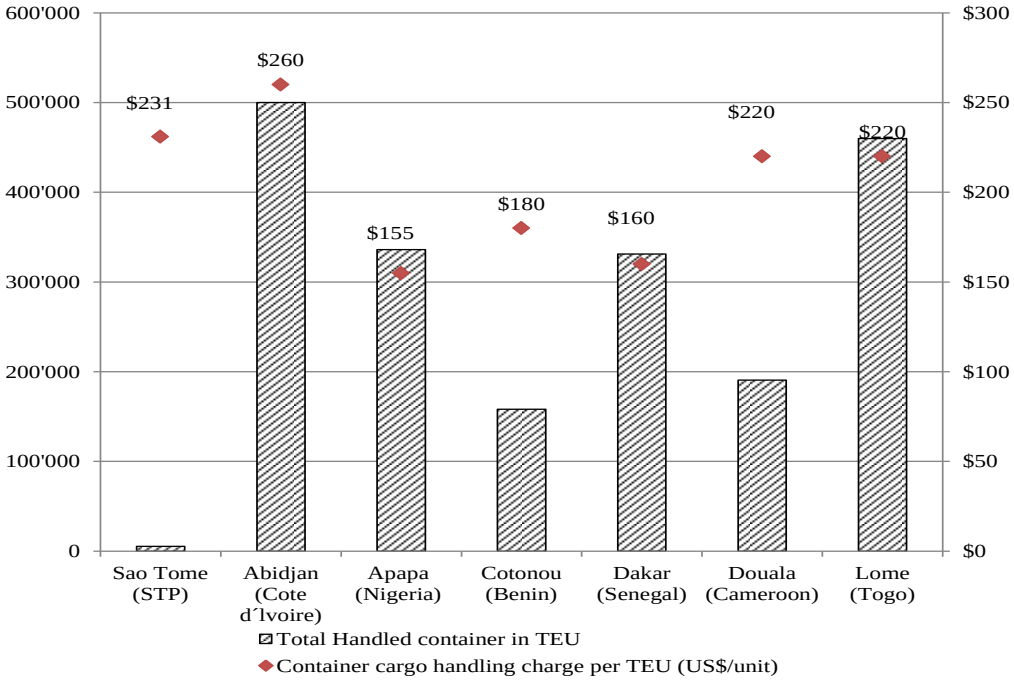
3.4.2 Leveraging the Proposed Deep Water Port

164. **There are other small island states across the world with similar domestic logistics markets to STP**. However, not all suffer the consequences of thin markets to the same extent. While it is difficult to influence the networks of shipping or air lines, it is possible to adopt a proactive approach in terms of infrastructure development, regulatory and foreign investment policies.

165. **The main strategy to improve STP's global sea transport connectivity is the proposed deep water port.** There is therefore need for STP to clarify the roles for both the existing and the proposed new deep ports to complement each other while maximizing global connectivity. While presently the port in São Tomé receives 12 to 13 vessels calls per month when a new deep port becomes operational some of the traffic may prefer to call at the deeper port. The existing port will no longer be the gateway for STP, but it can play a supporting role for the new deep port. Therefore, it should be clear which role each port will play. A deep port is indispensable to overcome capacity challenge of maritime transport, and the existing port may change its function to handle mostly domestic cargos.

166. **It is of course important to acknowledge that the deep water port in STP is proposed in a region with several other ports, some of which also have ambitions to serve as regional hub ports**. In order to attract traffic the new port should provide more efficient service than that of other ports in the region. At the regional level, the shipping traffic in the West Africa has been growing rapidly. During last decades, West Africa showed a strong growth in the container traffic. West Africa region had 4,082,000 TEUs maritime traffic in 2005, which was 394 % increase from 1995 in the number of TEUs. Given the strong growth in ocean traffic in West Africa, some ports have started to try to thrive as a regional hub for transshipment. Unlike other regions, there are many medium sized ports competing in West Africa; as a result, none of the West African ports were ranked within top 100 in the World Port Ranking 2010. Because of too many ports of similar size, there is a fragmentation of cargo volume, and this competition have neither contributed to reduce the port handling fees nor increase productivity of cargo handling performance. This is because that some ports serve to specific landlocked countries, and there is no better option for them. Given the relatively low performance in cargo handling in West Africa, the way for STP to stand out as a hub is to increase the port efficiency so that the handling fee eventually will be competitive to the rivals in both price and quality port handling.

Figure 32: No. of containers and handling charges in ports in West Africa



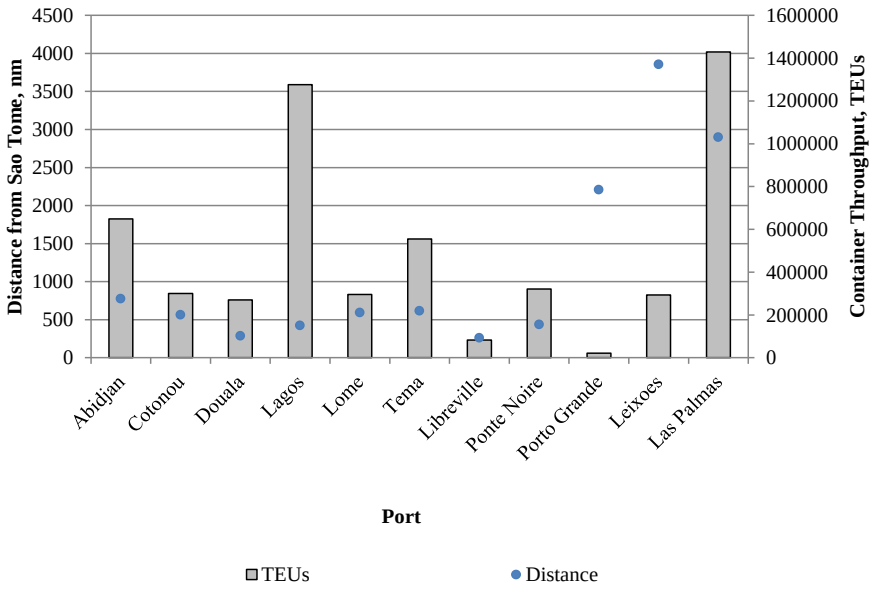
Source: Africa's Transport Infrastructure, Gwilliam 2011, based on AIDC database
*Total No. of TEU is from ENAPORT report in 2011.
* Handling charge for STP was calculated as an average of export and import handling charges in the DB report 2013.

167. **The new port will be an opportunity for STP to differentiate their transshipment service from other ports in West Africa; at the same time, STP needs to be aware of the risk of possible competition**. Transshipment ports usually have their own large local demand which forms the base of port operation[33]. In this sense, STP clearly does not have such a demand due to the small size of the domestic market.

168. **To serve as a successful transshipment port, STP will have to overcome some challenges**. Since STP is an island state, it does not have opportunities for transshipment of cargo by road to other countries in the region. Also, the fuel price in STP is more expensive than in neighboring countries[34], and shipping lines may want to avoid using the port which supplies costly fuel. However, if the port will be specialized in a specific type of cargos and commodity and well equipped for its handling, the STP hub can be distinguished in the regional transshipment industry and can secure certain volume of cargo[35]. Being unique port would be one way for STP to survive in transshipment business in the region.

[33] Kunaka Charles, *Transshipment Options for Nepal's Third Country Operation* (DRAFT), 2012; Isik, *Logistics Connectivity in the Caribbean: Current Challenges and Future Prospect*, World Bank, 2012
[34] In DTIS 2006, it was reported that the prices to the consumer of both diesel and gasoline were at 94 cents and 99 US cents (April 2005), respectively.
[35] The Port Reform Toolkit -2nd edition (WB) suggests the specialization to avoid intense rivalry.

Figure 33: Distance between São Tomé and Major Regional Ports



169. **For STP to develop a successful transshipment port, it is important to undertake several related actions some of which do not seem to have been taken as yet**. Firstly, it is critical to acknowledge that decisions on transshipment during deep sea shipping operations are typically made by shipping lines, and there are only a few incentives that ports can offer to influence such decisions. In fact, transshipment is a very competitive line of business for ports which have to offer various incentives to attract shipping lines. The benefit to ports and the territories where they are located are increased volumes, improved global connectivity and lower tariffs for the domestic shippers.

170. **Shipping lines generally apply two transshipment strategies: relay and hub and spoke operations.** Shipping services between hub ports can be organized in the form of pendulum services. These involve a set of port calls within a region of the world (typically East Asia, Europe, US East Coast and US West Coast), followed by a transoceanic transit, and followed by a set of port calls in another region, structured as a continuous loop. For instance, a pendulum service between Asia and Europe might have on average 8 to 10 ships and involve 8 to 12 port calls. Transshipment therefore takes place at the different hubs to move containers to their final destination port. In the West and Central Africa region there is no obvious regional transshipment port. The Caribbean is an example of a region that has had some success in developing regional transshipment hubs (see Box 2).

Box 2: Logistics connectivity - the Caribbean experience

Logistics service has played an important role for the economies in the Caribbean where almost all of the nations are the islands. Despite the necessity to depend on maritime and air transport, the Caribbean has suffered from the high logistics cost to move goods and poor connectivity to the rest of the world. The handling charges at the port are two or three times higher than those in similar ports in other regions of the world. As a result of the costly charges, overall transport cost ends up being 30 percent more expensive than that of the world average. Moreover, there is a huge negative container trade imbalance which attributes to high costs because of the lack of exports volume. One-way movement of empty containers is common, and this makes shipping cost more expensive to compensate the cost of empty space.

Although the Caribbean doesn't have much to export, the region has thrived as a transshipment hub. Transshipment of foreign cargo makes up a large portion of total maritime traffic in the region, mainly in larger ports i.e. Kingston (Jamaica), Freeport (Bahamas), and Caucedo (Dominica). Due to the small volume of export cargo, it is obvious that it is cheaper to transfer containers between global hubs, and regional hub ports are cheaper than transferring those between two service ports in the Caribbean. Therefore, the shipping route between Hong Kong and Miami costs much less than that from Miami to Port au Prince, Haiti. The trade imbalance is a serious bottleneck for the region. But the Caribbean has established the solid transshipment service as the interconnection. The islands states have overcome the disadvantage to be isolated by adopting hub and spoke system.

The shipping liners found the location of the Caribbean convenient to transfer containers bound for the North and South Americas. The regional hub ports play a leading intersection role in the Caribbean for the transshipment for east-west and north-south traffic. But the transshipment ports in the Caribbean are distinguished in a sense that 1) large feeder distance; 2) significant US feeder and cabotage bypass; 3) Trans-Panama Canal feedering; 4) very small domestic container trade; and 5) large variation in South American trade.

Looking at the regional level, connectivity to the international market by hub and spoke system, which has developed around transshipment, brought changes at intraregional level. In spite of the prospect in the international transshipment, intraregional connectivity has not been benefited. Because of the lack of sufficient demand to directly interconnect to countries in the region, the Caribbean experienced a drop of intraregional traffic. Also, general freight rates are basically managed by private shipping lines, and public intervention is usually cannot be reached. The freight rate can be seen as a barrier to trade because of the absence of public control.

With regard to the port management, the landlord model is more preferred for better efficiency and for minimum public interventions. Following international standards and compliance, such as ISO9000 and ISO 14000, will contribute to increase competitiveness and attract more shipping liners, but the many of the Caribbean ports still lack implementation of these compliance.

The Caribbean trade developed along with the development of transshipment business. However, more efforts with regionally integrated approach to logistics will be necessary to achieve economic development. The harmonized connectivity among the countries in the region will make the region more competitive and attractive for the rest of the world. The knowledge platform can give an opportunity to discuss logistics bottlenecks among various stakeholders. A logistics committee should be followed to create regulations and standards for the region to align as port security and safety compliance. In addition, data collection on performance of the ports will help both individual countries, and the region improves the competitiveness of logistics. In order to work at the policy level, to some extent, public interventions are indispensable to step forward in competitive logistics.

Source: World Bank, 2012

171. **It is therefore no coincidence that the most dominant transshipment ports in the world are those that lie along major global shipping lanes, and have efficient operations**. Certainly, geography on its own is no guarantee of the success of a transshipment facility. There are numerous factors that are considered by shipping lines in deciding where to transship cargo, including:

- Handling capacity and port fees. Typically, the fees for transshipped cargo are about a quarter those of destination cargo. Shipping lines put a lot of pressure on ports to get low fees. In any event, equipment used in transshipment can be of higher operational efficiency, which may however make it more costly than that used for destination cargo.
- Location of major shipping routes such that there is little deviation from the optimal path between an origin and destination. This would save the shipping lines money, as they would not have to deviate from normal routes. It is important to realize that transshipment is discretionary and can be moved anywhere along a shipping route. Relay type transshipment is used when two or more mainline services intersect and can be used to connect cargo between origin and destination. Shipping lines use this strategy to optimize and rationalize their vessel fleets and networks. They seek to minimize their system costs.
- Depth of harbor and entrance channel and ability to accommodate large vessels. Transshipment locations make sense when they are located in places with ideal geographical and natural conditions.
- Productivity in the transshipment port. The shipping lines seek to apply a supermarket approach where they handle high volumes at low prices and high levels of efficiency.
- While some ports specialize in cargo transshipment, usually transshipment ports will have their own large local demand which forms the foundation for the transshipment operations. This is the reason why transshipping typically takes place at a transport hub. Where such ports have excess capacity, then the transshipment cargo can be handled at marginal cost, leading to the low rates mentioned above.

172. **Overall, it is imperative that the authorities take all measures to encourage shipping lines to operate to the islands**. Currently, the liners operate to STP because there is a specific commodity of cocoa to specific destinations. It will therefore be important to sensitize local producers to take advantage of the improved connectivity that the new port may offer.

3.4.3 Enhancing Air Connectivity

173. **For several reasons, both geographical and economic, STP has poor air transport connectivity both within the region and internationally**. One way to increase air cargo capacity is to grow tourism. Travel and tourism is considered one of the main exports for STP, which accounts for about 43% of total export of goods and services[36]. In terms of the number of tourists, visas for 10,319 people were issued in 2011, and 8,004 out of this total were for the tourism purpose[37]. But the number of tourists only occupies about 23% of available passenger seats[38]. Also,

[36] STP Country Economic Memorandum 2011

[37] Ministry of Planning and Development, 2011. The number of people who don't need a visa is not counted in this number.

[38] A World Bank research (*Africa's Transport Infrastructure*, 2011) shows that STP has 45,725 seats as annual capacity in 2007.

all air cargos, including the tourism related goods, into STP are transported by passenger flights. Therefore, more available flights can be an opportunity to develop tourism and better air transport. In order to attract more airlines, touristic facilities should be enhanced so that STP can advertise itself possibly as a niche tourist destination. The more tourists come to STP, the more related goods will be imported by air. When STP is able to provide more favorable air transport conditions for traders, possible high-value products can secure its mean to export to the world. At the same time, given the fact that STP still lacks export commodities now, more export commodities should go out by air. Increased air freight volume will contribute to reduce transport costs, and benefit both tourism and trade.

174. **Lighting the runway at São Tomé airport is an immediate priority that will likely have a significant impact on connectivity**. With respect to the regulatory framework, INAC is proactively pursuing bilateral air service agreements with various countries in the immediate neighborhood and beyond. However, just as important is the need also to increase the capacity of the air transport regulatory authority (INAC) to provide air safety oversight in compliance with ICAI SARPS. Presently STP registered airlines are banned from EU airspace because of deficiencies in safety oversight. Currently air transport suffers from regulatory weaknesses and poor safety oversight which has resulted in the EU banning STP registered carriers from overflying its airspace. The chapter will explore both operational practices and regulatory constraints that limit supply of air transport services and impact on prices.

175. **Another way to increase STPs air connectivity is through improving connections to a regional hub airport**. In this sense, better connectivity with a regional hub airport will give STP more opportunity to promote both air cargo and tourism. Due to the lack of active movement of goods and people by air, currently there is no strong incentive for airlines to fly into STP profitably. Lisbon is the only destination in Europe that can be directly accessed from STP. But most of the air cargos are directed to European countries[39]. Moreover, about 57% of recorded entries in 2011 were European citizens[40]. Therefore, connection with other European airports, ideally regional or at least sub-regional hubs, can expect more tourists and facilitate trade with Europe. STP even does not have good connections to hub airports in Africa such as Johannesburg and Nairobi and resulted in limited move of goods and people. If more transport routes to access to hubs are proposed, exporters can enter a new market to which they never have exported. Therefore, the current effort by the government to improve infrastructure and to reach commercial agreements with several countries will be a prerequisite to extend connectivity.

3.4.4 Improving Local to Global Links

176. **STP has acknowledged that the transport means are indispensable to create activities in the sectors, and development of sectors should be accompanied by quality transport infrastructure**[41]. Based on the recommendation of the 2006 DTIS, STP planned to build access roads to connect to rural communities. However, the plan lacked clear guideline on how to connect roads to specific sector activities. Since the government of STP has identified sectors, which are

[39] STP Customs Statistics 2011
[40] Ministry of Planning and Development, Tourist entry record 2011, from Mission in October 2011
[41] Ministry of Public Works, *Assitência Técnica para a Definição de em Política de Tranporte em São Tomé e Príncipe*, 2009

agriculture, fisheries, and tourism, there is now need to establish linkages between these sectors and the transport means to support producers in rural areas.

177. **Specifically, STP needs to recognize the objective of feeder roads with sector lenses and select the most important roads for producers to connect to gateways.** For instance, agriculture and fishery sectors are to boost production for both domestic consumption and exports. Both sectors need roads to carry fresh products or fish to local markets or refrigerated storage for temporary preservation. Furthermore, Agriculture sector is further trying to integrate small cocoa producers into the export market. Rural roads are crucial to connect producers of cooperatives. INAE should consider the demands of producers and provide good connectivity for them to sell their products in domestic markets or to export via international gateways. Having said that, it is not enough to plan how long STP expands roads network, but selectivity of feeder roads is indispensable to meet the needs of local producers to access to the markets. Selectivity can also benefit STP by investing their limited funding effectively in rehabilitation and construction of new roads.

178. **Looking to stimulate exports products from small producers, they should have storage facility[42] for consolidation and be well connected to roads which lead to storage.** STP has identified cocoa and palm oil to recapture for exports in the diversification agenda and needs to secure road transport for small producers to reach to a focal storage. It is a challenge for small farmers to start agricultural business for the purpose of exports; however, the initiative to form a cooperative for cocoa has been successful, and nowadays, these cooperatives are trying to increase its productivity, production of adequate volume for exports will be feasible soon. Consolidated products also contribute to reduce the transport cost by truck or by vessel. Therefore, roads network needs to link producers not only with international gateways but also consolidation facility.

3.4.5 Developing a logistics strategy

179. **There is already port council at the Port of São Tomé, which serves as a consultative body for technical and other port issues**[43]. The council has representatives of public and private sectors. The council should form the core of a broader committee to deal with logistics issues in the country. Such a body, ideally formalized with extensive stakeholders in logistics industry (freight forwarders, truckers associations etc.), can coordinate interventions in trade facilitation and logistics in the country. It can offer advice on infrastructure development, regulatory reforms and promote private sector innovation to provide higher quality services. Therefore, engagement of this consultative council in developing a logistics strategy consequently will bring more transparency at the implementation stage of the strategy and solutions to challenges that investors and private operators have been facing in the logistics industry in STP.

[42] Kunaka Charles. *Logistics in Lagging Regions*, Washington DC: WB, 2011. The author emphasizes the importance of connectivity between small-scale farmers and domestic and global supply chains to increase the competitiveness at the local level.
[43] From the management of ENAPORT

Annex 3: List of Rehabilitated Roads

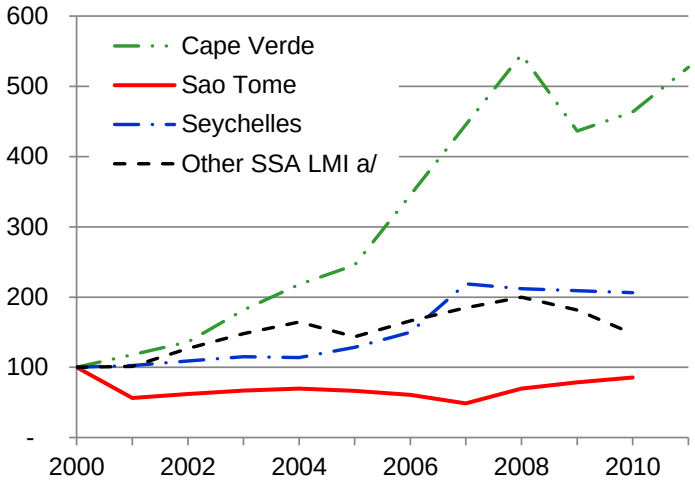
1. Bridge over the river Papagaio / Sto Cristo – Rehabilitation work of pavement with asphalt, located in Independent Region of the Príncipe and by extension of 3,2 Km;
2. Airport / Santo António – located in Independent Region of the Príncipe, with intervention in the stretch, consists of rehabilitation of pavement with asphalt in extension of 4,3 Km;
3. Cruzamento Changra / Desejada - Rehabilitation work of pavement with asphalt with extension of 2,1 Km;
4. EN3/Agua Amoreira / Diogo Simão –construction work with asphalt, by extension of intervention of 1,56 km;
5. Santana / Gomes – construction work of pavement with asphalt executed by the company Socobrise with extension 0,15 km;
6. Quilombo and street – by extension de 1,8 km;
7. School 12 de Julho/Vila Maria – construction of 0,4 km road;
8. Rehabilitation of National Roads 2 (EN2) – Empreitada em betão betuminoso numa extensão de 52.0 Km. *Foram realizadas actividades de limpeza, construção dos dispositivos de drenagem, muretes de protecção;*
9. Street Ribeira Afonso;
10. Improvement of drainage mechanism – Janquedê;
11. Uba Cabra Mesquita –Construction work of roads with extension of 0,8 km with bituminous concrete;
12. Uba Cabra Santarém – Construction work of roads with extension of 1,3km with bituminous concrete;
13. ES1 / Bairro Maria Emília – consistindo na construção de troço de estrada em semi-penetração e impregnação asfáltica numa extensão de 0,55 km, incluindo drenagens ao longo do troço.
14. Artes Gráficas / Embaixada de França – Obra de construção de estrada em asfalto, incluindo trabalhos de drenagem e requalificação do sistema de adução de agua existente no traçado da estrada.
15. Amparo I / Cruzeiro – Lemos / Caixão Grande – Construction work of roads with asphalt composed of two routes, ie. Amparo II / Cruzeiro e Lemos / Caixão Grande with extension of 4,1 km and 1,65 km, respectively.
16. Penha / Obô Izaquente – Construction work of roads with asphalt, with 4,3 km of extension and include works of arte e drainage.
17. Congress Palace / International Airport of STP – repair work of pavement in asphalt by burying holes along the Marginal to International airport.
18. Arruamentos / Cidade – Consists of burying holes in the streets of the capital city, for semi-penetration and bituminous implementation
19. About 100 km of rehabilitated roads and in maintenance, in desolated land, all over the country.

Chapter 4: Transforming Sao Tome and Principe into a service platform – a long term plan

4.1 Introduction

180. **Services offer a large potential for export diversification in Sao Tome and Principe.** They account for most of the 13,000 new jobs that were created during the last decade in STP, and currently account for about 60 percent of total employment, compared to 47 percent in 1987 (STP CEM, 2011). However, the potential of services to lead growth, exports and job creation has so far failed to materialize (Figure 34), although the period since the last DTIS has been characterized by a recovery, with the dollar value of services up from US$8.5 million in 2006 to US$14 million in 2011.

Figure 34: Service Exports Value Index, 2000-2011



Note: Index of dollar value, 2000 = 100.$

a/ Average index for all lower and middle-income countries in sub-Saharan Africa except Cape Verde and Sao Tome & Principe

Source: World Bank, World Development Indicators

181. **Bottlenecks that include red tape and the lack of an adequate infrastructure in terms of sanitation, roads, and health services have so far prevented the tourism sector from taking off, with barely over 10,000 tourists per year on average over the last decade.** For ICT-enabled services, constraints to export growth include a high-cost telecom infrastructure and lack of human capital. The good news in this area is the recent access to the backbone via the ACE submarine cable, constructed with World Bank support became operational at the end of 2012. This submarine fiber-optic cable will ease bandwidth access constraints and reduce significantly access costs per byte. However, leveraging this opportunity to develop an ICT-enabled service sector would require very substantial skill-building efforts as part of a strategic vision.

182. **Against this backdrop, this chapter will examine whether services sectors such as business process outsourcing (BPO) and IT enabled services (ITES) can be harnessed for export growth and jobs creation**. This chapter will identify the fundamental skill and competence requirements, the ICT connectivity and communication costs requirements, as well as the broader regulatory requirements that are necessary for the development of an IT-based sector. We propose policy recommendations to address those challenges that could help establish STP as a desirable offshoring destination for international clients.

4.2 Sao Tome's services performance and services trade policies

183. **Services constitute the largest part of Sao Tome's economy accounting for more than 70 percent of the country's GDP in 2010 (African Economic Outlook, 2012)**. Non-traditional services such as communication services, financial services and business services contributed to some extent to the increase in services outputs. Still, traditional sectors such as distribution services, hotels and restaurants, and transport continue to account for larger shares in terms of contribution to GDP (Table 10).

Table 10: Composition of Sao Tome's GDP, 2006 and 2010

	2006	2010
Agriculture, forestry, fishery and hunting	17.7	19.3
Mining and quarrying	0.6	0.7
Manufacturing	7.1	7.7
Electricity, gas and water	2.6	2.6
Construction	8.5	9.6
Wholesale and retail trade, hotels and restaurants	26.7	28.0
of which hotels and restaurants	*1.4*	*1.5*
Transport, storage and communication	16.4	14.7
Financial, real estate services, business and other service activities	7.1	8.4
Public administration, education, and health	7.8	3.7
Other services	5.6	5.3
Gross domestic product at basic prices / factor cost	100.0	100.0

Source: Sao Tome &Principe in African Economic Outlook, 2012

184. **STP services trade[44] performance has improved somewhat over the last years**. In the scatter diagram that plots each country's overall services openness measured as the percentage of

[44] Trade in services takes place through four modes of supply. The four modes of service supply are: Mode 1— Cross-border supply: services supplied from the territory of one country into the territory of another country; Mode 2 — Consumption abroad: services supplied in the territory of one country to the consumers of another country; Mode 3 — Commercial presence: services supplied through any type of business or professional establishment of one country in the territory of another (i.e., FDI); Mode 4 — Temporary presence of natural persons: services supplied by nationals of one country in the territory of another. This mode includes both independent service suppliers and employees of the services supplier of another country. IMF BOP statistics cover mainly trade in services through modes 1 and 2.

services exports in GDP against its per capita income STP lies below the trend line in 2005 (Figure 35a). By contrast, Figure 35b shows that in 2011 STP's services exports as a percentage of GDP were slightly above the trend line implying that the country's services exports are above the sample average conditional on the level of per capita income. However, STP's services performance is still lagging behind that of comparable small island economies.

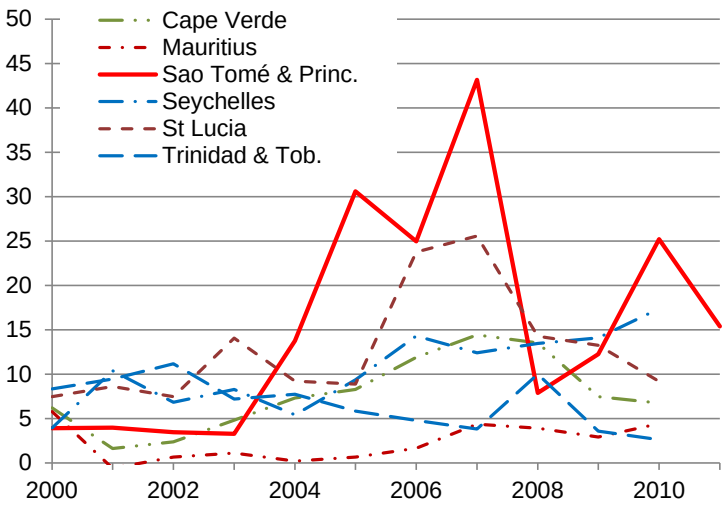
Figure 35: Openness to Goods and Services Trade, STP and Comparators

(a) Services, 2005 (b) Services, 2010

Source: Team calculations based on IMF BOP and WDI data, 2012

185. **A similar development is observable for FDI, which can be used as a proxy for trade in services through mode 3**. As illustrated in Figure 36, FDI increased significantly between 2003 and 2008, peaking at 43 percent of GDP in 2007. This increase was mainly due to large investments in construction in the residential and tourism sector (fueled by the expectation of the start of oil production). However, at about US$25 million in 2010, net inward FDI into STP is small in comparison to other small island economies (about a quarter of the flow in Cape Verde or St Lucia, for instance).

Figure 36: Net FDI Inflows as a Percentage of GDP, 2000-2010



Source: World Bank, World Development Indicators and STP authorities.

186. **A more in-depth look at STP's trade in services reveals that the country's cross-border services exports have fluctuated between 9 and USD 18 million annually over the last decade.** Commercial services represent around 98% of total services exports (the rest of services exports – i.e. government services include transactions in both goods and services by international organizations, embassies, or military units and their staff in the host country) (Table 11). At this stage STP's services exports consist mainly of travel and transportation services, whereas the country tends to be less competitive in exporting higher value added services such as computer or business services. Transport, business services and government services dominate the country's services imports. Table 11 presents the sectoral composition of services exports and imports, and the compound growth rate of several service subsectors from 2005 to 2011.

Table 11: STP's cross border trade in services, 2005 and 2011, USD (and % of total)

	Exports			Imports		
	2005	2011	Average growth rate 2005-2011	2005	2011	Average growth rate 2005-2011
Services Total (USD)	**9,311,196**	**18,398,167**	**12.02**	**11,279,708**	**31,401,041**	**18.61**
Transport (%)	**1.53**	**1.04**	**5.10**	**77.32**	**76.96**	**18.52**
Transport, Passenger (%)	0.00	0.00		3.56	3.29	17.05
Other Transport (%)	1.53	1.04	5.10	0.00	0.00	n.a.
Freight Transport of Merchandise (%)	0.00	0.00	n.a.	73.76	73.68	18.58
Travel (%)	**78.64**	**86.59**	**13.83**	**0.46**	**1.13**	**37.83**
Travel, Business (%)	31.46	20.12	3.98	0.00	0.00	n.a.
Travel, Personal (%)	47.19	66.47	18.60	0.46	1.13	37.83
Other services (%)	**19.83**	**12.37**	**3.54**	**22.22**	**21.91**	**18.32**
Communications Services, Telecommunication (%)	9.83	6.70	5.10	0.46	1.13	37.83
Computer and Information Services (%)	3.39	1.16	-6.37	3.83	1.70	3.64
Financial Services (%)	3.46	2.36	5.10	0.42	1.03	37.83
Insurance Services (%)	0.00	0.00	n.a.	5.53	5.53	18.58
Government Services (%)	3.15	2.15	5.10	11.99	12.52	19.47

Source: IMF BOP 2012. Note Government services includes transactions in both goods and services by international organizations, embassies, or military units and their staff in the host countries - see the IMF's Balance of Payment Manual, paragraph 266 (www.imf.org/external/np/sta/bop/bopman.pdf).

187. **In terms of FDI/commercial presence, it is important to mention that the growth effect of FDI and aid inflows —into, inter alia, residences, hotels and road infrastructure— is weakened by their high import content.** The high-import content of FDI limits the demand pull on the local economy and weighs mechanically on the trade balance. Realizing their potential to lift demand for local products will require a concerted strategy to upgrade the potential supply response in sectors (e.g., light construction materials) that could subcontract for FDI and donor-financed projects.

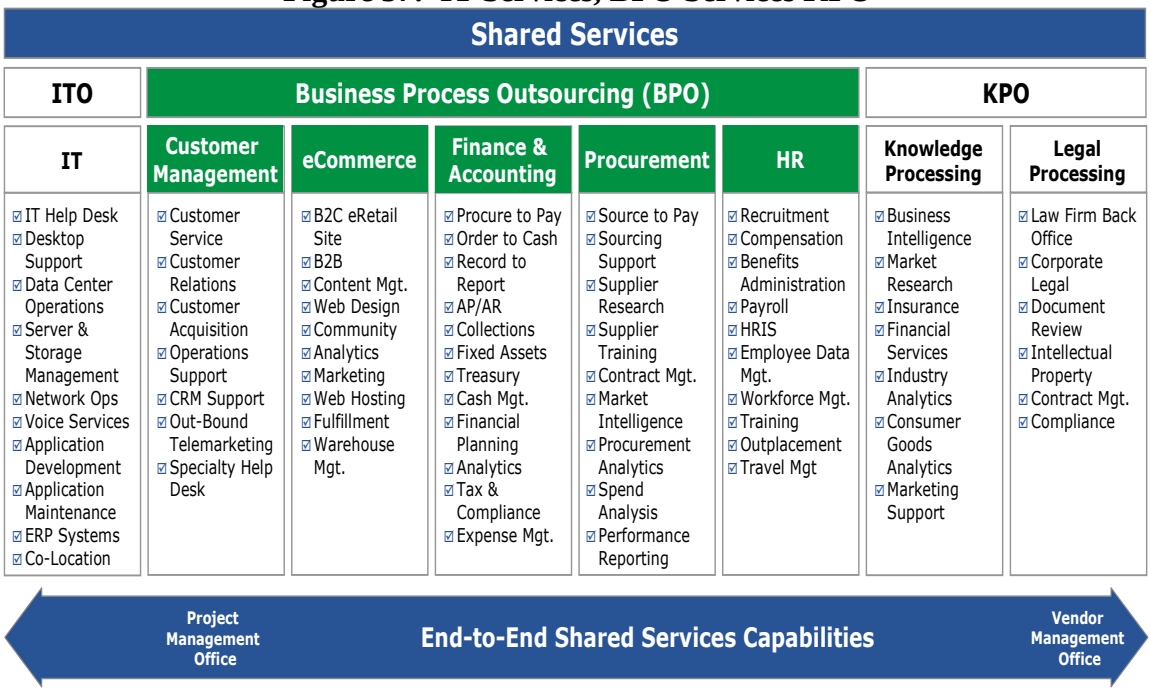
4.3 Opportunities and constraints to transforming Sao Tome and Principe into a services platform

188. **The government of STP plans to transform the country into a platform of services in the Central Africa sub-region.** This medium to long term plan aims at enhancing the country's

strategic location in the Gulf of Guinea, including by harnessing non-traditional services sectors such as business process outsourcing (BPO) and IT enabled services (ITES) for export growth[45].

189. **What BPO and ITES services could STP export?** To guide the analysis in this chapter, Figure 37 and Figure 38 illustrate the types of IT, BPO, and KPO services that are off-shorable. Figure 37 provides detailed lists of the types of services that can be outsourced, while Figure 38 details the types of activities that can be outsourced across an organization's value chain. Countries tend to develop their business services sectors incrementally, each step allowing the country to attain a higher value added as services sectors gain more experience and exposure to international competition.

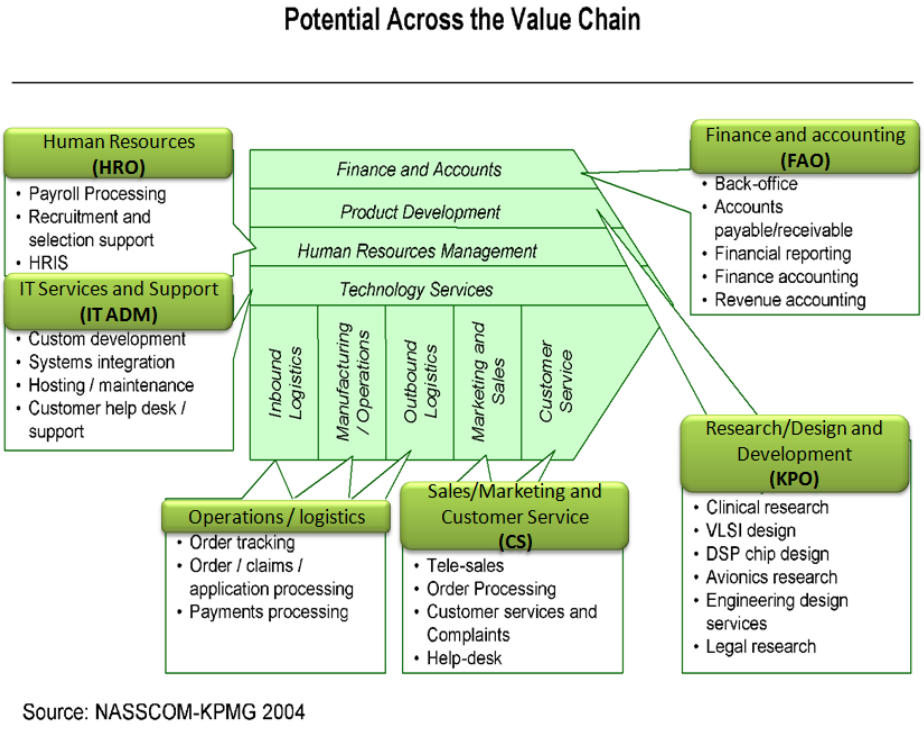
Figure 37: IT Services, BPO Services KPO



Source: Avasant (2010).

[45] Other services sectors included in considers by the government such as logistics services related oil exploration and transportation and tourism services are covered in chapters 3 and 5 of this DTIS update.

Figure 38: Types of activities that can be outsourced across an organization's value chain

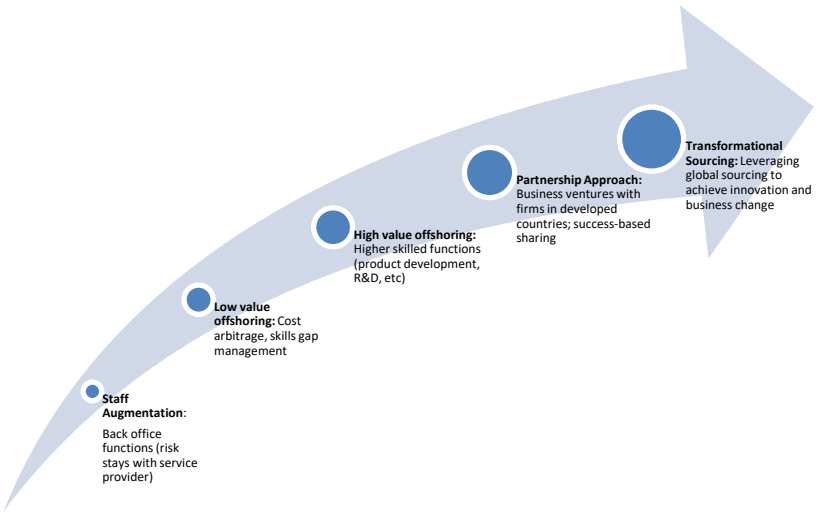


Source: Avasant (2010).

190. Figure 38 outlines the progression of service sector development, beginning with basic "staff augmentation" services, such as back office functions where a service provider from STP would take on most or all of the risk, to "transformational sourcing" where the service provider from STP would provide world class innovation, compete internationally, and possibly even expand to other countries.

191. **Most developing countries' service sectors fall towards the bottom of the progression.** Given the infancy of IT services in STP, a first step in implementing the country's services vision would be to focus on standardized IT and BPO services in the bottom two segments (staff augmentation and low value offshoring) that can be performed by middle-level professionals, aiming at entering the higher value offshoring and partnership segments at a later stage.

Figure 39: Evolution of business service sectors



Source: Adapted from Avasant (2010).

192. **Against this background, this chapter provides an assessment of the fundamental factors, which need to be in place for successful services exports (see** Box 3**)**. The chapter puts special emphasis on ICT connectivity and communication costs requirements, the fundamental skill and competence requirements, as well as the broader regulatory requirements that are necessary for the development of an IT-based sector in STP.

Box 3: Factors which determine the participation of developing countries in services exports

A recent World Bank review of services export performance for several developing countries identifies the key factors that determine the participation of developing countries in services exports:

The "fundamentals" include a country's factor endowments, especially of human capital, including skills and entrepreneurial ability; natural resources and cultural endowments, such as those that attract tourism; infrastructure, especially telecommunication networks that facilitate the delivery of services; and institutional quality, especially the regulatory environment for services. Empirical studies confirm that the performance of services sectors depends on human capital, the quality of the telecommunication network and the quality of institutions. Especially for higher end services exports, a country needs to be well endowed with human capital.

Policies affecting trade, investment, and labor mobility in services. A broad range of policies affect cross-border trade, such as transport and financial services; consumption abroad in health and education services; foreign investment and the participation of multinational companies in banking, telecommunications, and business process outsourcing (BPO); and the movement of individual service providers in construction and information technology (IT) services. Inward FDI may help initiate and sustain services exports.

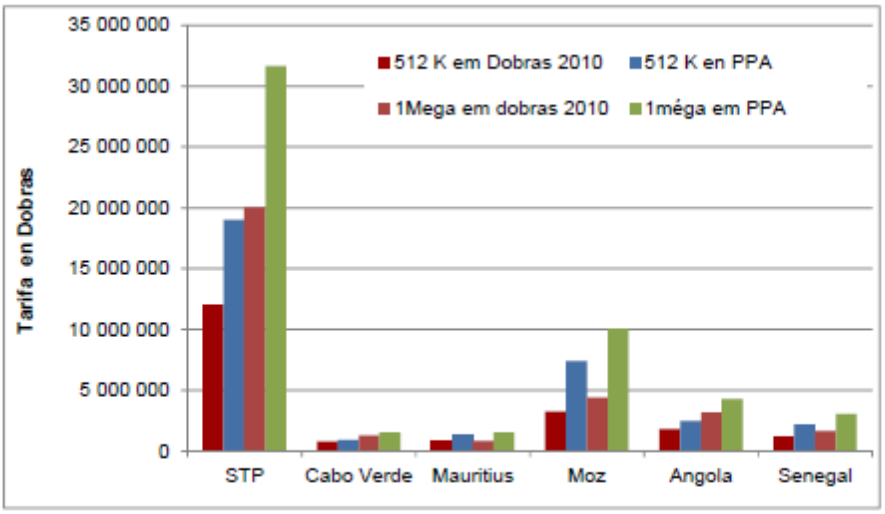
Proactive policies in services. Such policies include those designed to promote exports, investment, or both, for example, by creating special economic zones or allowing privileged access to land, infrastructure, or imported inputs; by providing fiscal incentives for exporters and investors in the form of subsidies or tax exemptions; and by establishing other trade promotion activities, such as trade fairs and information dissemination.

Source: World Bank (2012)

4.3.1 Overcoming ICT connectivity issues and high telecommunication costs

193. **Until the end of 2012 ICT penetration was low and expensive**. For example, Internet penetration was about 0.7 percent in 2010 and prices for Internet services were above average in the region (see Figure 40).

Figure 40: Tariffs for an ADSL (Asynchronous Digital Subscriber Line) Internet connection, 2010



Source: AGER (2013)

194. **A weak communication infrastructure and high connectivity tariffs were key constraints for STP's openness and development**. The lack of access to low price and high quality telecommunications services are factors that limited the country's potential to create jobs, expand production of goods and services, and trade competitively with the rest of the world. However, the access to the backbone via the ACE submarine cable, constructed with World Bank support became operational by end-2012. STP's connection to the ACE submarine cable project that links the west coast of Africa to Europe and to the rest of the world has the potential to reduce prices dramatically and increase the quality for communications services, allowing the country to capitalize on the transformative power of information and communications technology. To operationalize the access to the ACE submarine, the government and *Companhia Santomense de Telecomunicações* (CST) have created an SPV (special purpose vehicle), STP-Cabo, which owns part of the ACE project in Sao Tome. This submarine fiber-optic cable will ease bandwidth access constraints and reduce significantly access costs per byte.

195. **In addition, the government has launched a public tender for the award of a second telecoms license, including permission to launch 2G and 3G services**. The entry of a second operator would end the monopoly of the CST, which is currently the sole supplier of landline, mobile phone and Internet services in the country. The CST was established in 1990 and is a subsidiary of Portugal Telecom with the Saotoméan state holding a 49% stake. While the law on the liberalization of the sector was approved by parliament in 2004 and the legislation was partly implemented in 2006 when the government created the regulatory authority, *Autoridade Geral de Regulação*, it is only now that a licensing round has been launched.

Table 12: Projected monthly prices per STM1, USD

Year	1			2			3		
From	Santana,STP		Portugal	Santana,STP		Portugal	Santana,STP		Portugal
Capacity	Full	Half	Half	Full	Half	Half	Full	Half	Half
To									
Penmarch, France	215,189	115,523	31,786	137,199	72,643	18,405	79,995	42,424	10,857
Carcavelos, Portugal	190,743	103,300	-	121,365	64,726	-	70,779	37,816	-
Tenerife, Canary Islands	159,494	87,675	35,077	101,124	54,606	20,536	58,999	31,926	12,098
Nouakchott, Mauritania	132,226	74,042	50,342	83,462	45,775	30,424	48,720	26,786	17,852
Dakar, Senegal	121,662	68,760	55,928	76,620	42,354	34,042	44,738	24,795	19,958
Banjul, The Gambia	117,735	66,796	57,975	74,076	41,082	35,368	43,257	24,055	20,729
Conakry, Guinea	103,687	59,772	65,026	64,977	36,532	39,935	37,962	21,407	23,388
Freetown, Sierra Leone	100,535	58,196	66,547	62,935	35,511	40,921	36,773	20,813	23,961
Monrovia, Liberia	90,911	53,384	71,193	56,701	32,394	43,930	33,145	18,999	25,713
Abidjan, Côte d'Ivoire	70,613	43,235	80,568	43,554	25,821	50,002	25,494	15,173	29,247
Accra, Ghana	59,164	37,510	85,601	36,138	22,113	53,262	21,178	13,015	31,144
Lagos, Nigeria	47,604	31,731	90,524	28,651	18,369	56,451	16,820	10,836	32,999
Kribi, Cameroon	24,264	20,060	100,037	13,533	10,810	62,612	8,022	6,437	36,586
Bata, Equatorial Guinea	20,779	18,318	101,419	11,276	9,682	63,508	6,708	5,780	37,107
Libreville, Gabon	24,319	20,088	103,300	13,569	10,828	64,726	8,042	6,447	37,816
Santana, STP	-	-	103,300	-	-	64,726	-	-	37,816
Muanda, DRC	42,792	29,325	111,873	25,534	16,811	70,279	15,006	9,929	41,047
Luanda, Angola	52,195	34,026	115,495	31,624	19,856	72,625	18,551	11,702	42,413
Swakopmund, Namibia	95,114	55,486	131,812	59,424	33,756	83,194	34,730	19,791	48,564
Cape Town, South Africa	128,023	71,940	144,118	80,740	44,414	91,165	47,136	25,994	53,203

Source: AGER (2013).

196. **It is worth noting that a 25.5% stake in the Portugal Telecom-controlled STP-Cabo, the company that manages the island's connection to the African Coast to Europe (ACE) optical fiber submarine cable is also on offer in the bidding round**. A successful licensing round would increase competitiveness in the sector, lower charges for consumers and expand the population's access to Internet services. For example, the cost of international bandwidth (e.g. STM-1 price[46]) for STP's connections with countries in the region could register significant reductions (see Table 12). This would help the government's strategy to diversify the country's economy, boost information technology services and create a competitive advantage for exporting BPO services. However, in addition to uncertainties over investors' interests, bureaucratic bottlenecks risk delaying the successful completion of the process.

197. **While telecommunications is a critical input for exporting BPO services, leveraging the opportunity to develop an ICT-enabled service sector would require very substantial skill-building efforts as part of the government's strategic vision**.

[46] An STM-1 is a measure of data throughput (bandwidth) commonly used in the telecoms industry: it amounts to 155 Mbit/s. Many telecom equipments offer a bandwidth in multiples of an STM-1

4.3.2 Overcoming skills mismatches and skills shortages

198. **Skills mismatches and skills shortages pose a significant challenge to Sao Tome and Principe's development**. A recent study undertaken by the Ministry of Education in collaboration with the World Bank, UNESCO and Pole de Dakar (RESEN, 2013), shows that there is a strong qualitative and quantitative imbalance between educational opportunities and job openings. For instance, over the past ten years, 39% of graduates remained unemployed. Furthermore, an important part of those who manage to get a job do not poses market-relevant skills (see Table 13).

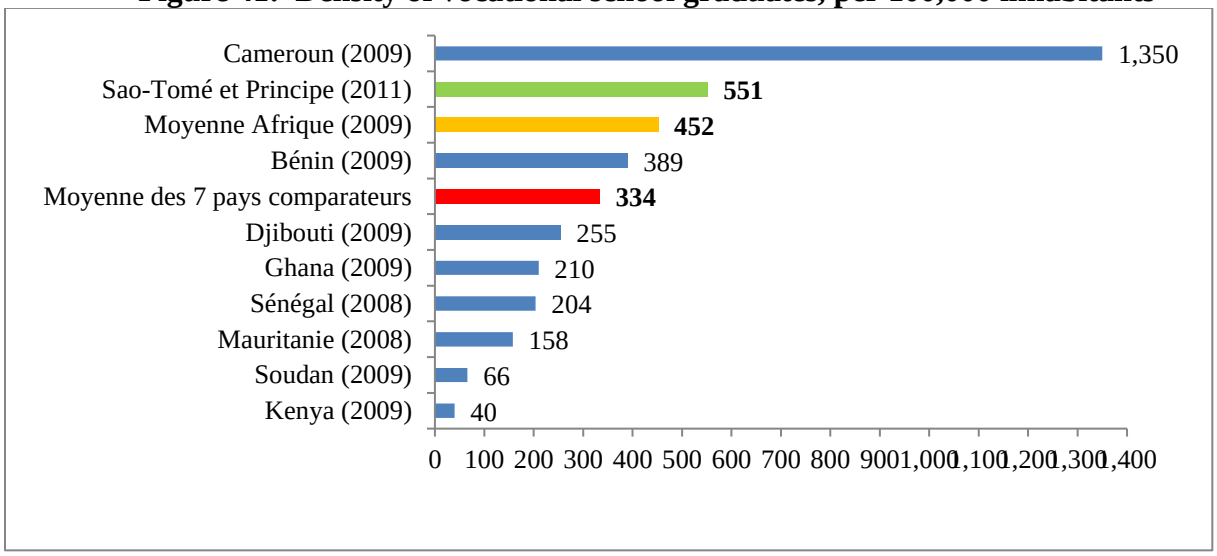
Table 13: Inadequate skills by employment category and sector of activity, 2010

	Inadequate skills
Managerial staff	21%
Employees	8%
Workers	11%
Agricultural activities	12%
Industrial activities	7%
Commerce	9%
Services activities	21%

Source: RESEN (2013)

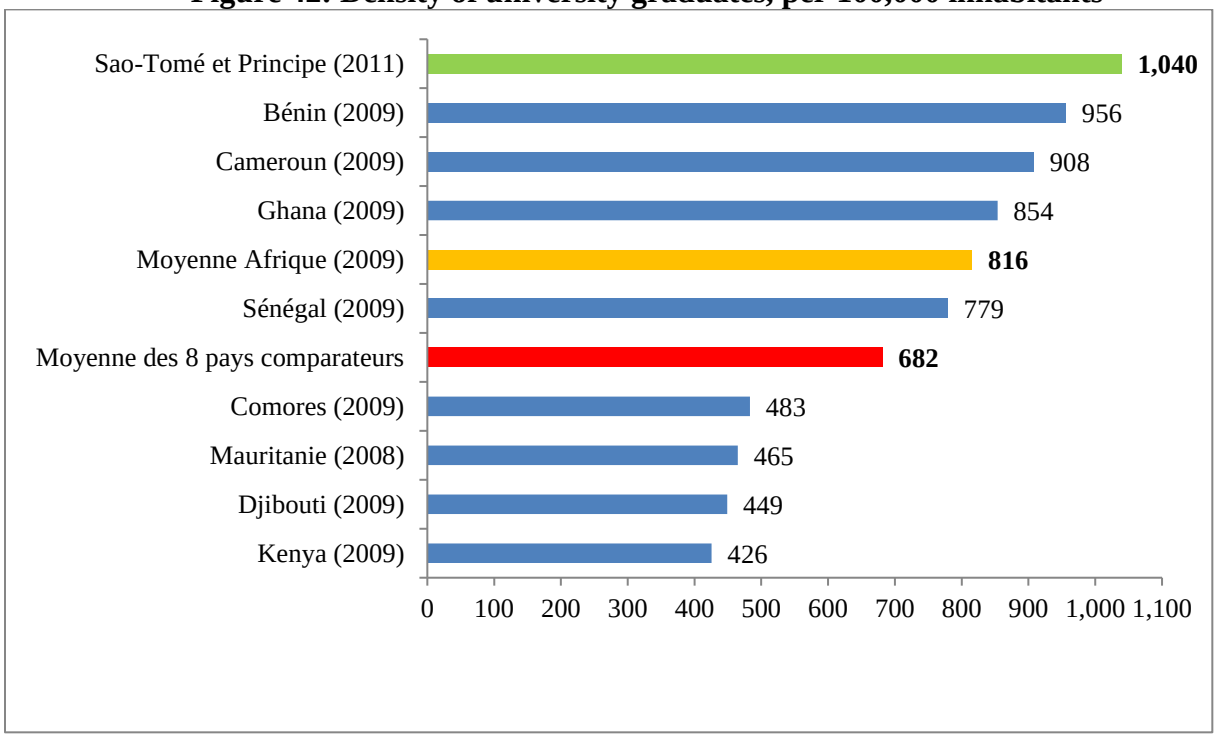
199. This is particularly worrisome given that STP is among the highest ranked countries in the region in terms of tertiary and vocational school graduates as well as spending on higher education (see Figure 41).

Figure 41: Density of vocational school graduates, per 100,000 inhabitants



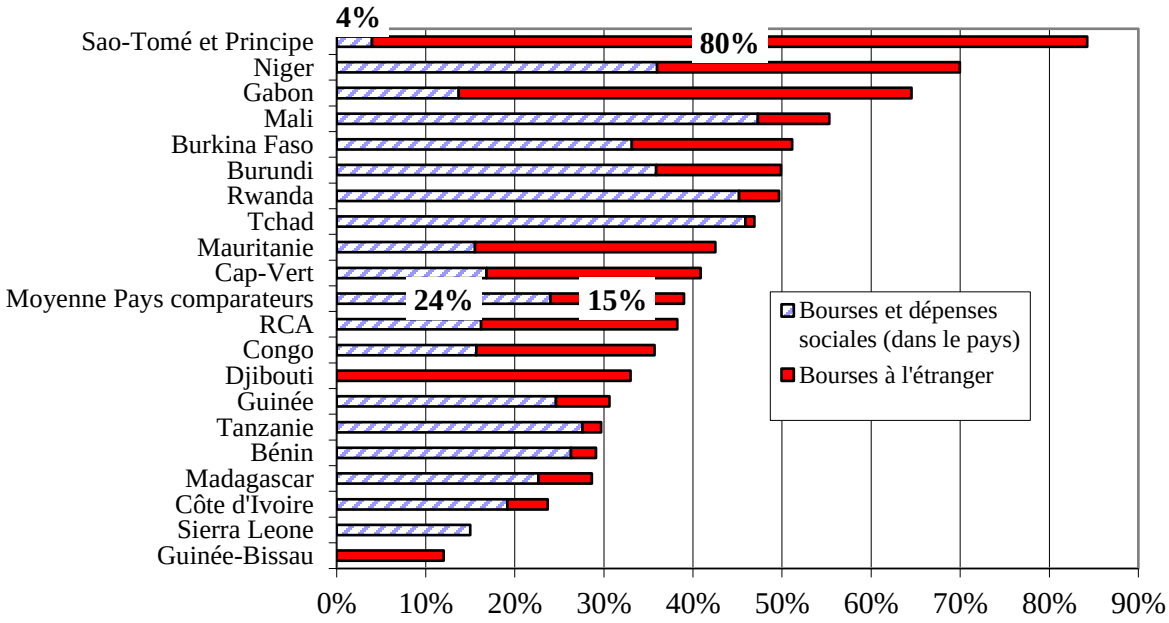
Source: RESEN (2013)

Figure 42: Density of university graduates, per 100,000 inhabitants



Source: RESEN (2013)

Figure 43: Share (%) of higher education grants in current expenditure, 20 African countries, 2007



Source: RESEN (2013)

200. **The data confirms that the quality of both vocation and tertiary education is poor and the allocation of public spending does not match the country's education priorities**. Vocational training, a key vehicle for enhancing skills, is underdeveloped. Students show limited interest in enrolling in vocational training because of the poor advocacy and low reputation that technical and manual work has. There is also an urgent need to develop basic business skills such as accounting and management. In order to adapt to an evolving labor market, the authorities will need to support training of marketable skills (technical and business skills), complemented with improved secondary education quality.

201. **Furthermore, it appears that funding for higher education is ineffective**. As shown in Figure 43 STP spends more than all other comparators on higher education with more than 80% of scholarships targeted at studies abroad. The identified skills mismatches suggests that it would be useful to revisit the allocation criteria for scholarships abroad - for example, the choice and quality of selected courses and seminars, including a priority for practical/market-relevant skills - and redirect some resources to promoting local supply of higher and/or vocational education and support a dialogue between private sector and education institutions.

4.3.3 Addressing private sector challenges

202. **Sao Tome and Principe's small size and its geographical isolation set natural limits to private sector development**; however, cumbersome investment regulations and procedures amplify the challenges faced by the private sector activity. The private sector is embryonic and mainly composed of microenterprises that focus primarily on trade, construction, and tourism.

203. **STP ranked 160rd out of 183 countries in the *Doing Business* 2013 report, representing a slight decline over 2012 (when it was in 157th position) and still lags behind most small islands**. STP was ranked well in trading across borders (89th out of 185 countries), but needs significant improvement in enforcing contracts (181th) and access to credit (180th). STP made trading across borders faster by adopting legislative, administrative and technological improvements, made registering property less costly by lowering property transfer taxes, and made starting a business easier by establishing a one-stop shop, eliminating the requirement for an operating license for general commercial companies and simplifying publication requirements. By contrast, companies complain about high interest rates and limited access to credit. Credit to private investors remains expensive (with interest rates of 26%).

204. **When it comes to services exports, the factor that constrains most service providers from exporting seems to be a widespread lack of knowledge about exporting opportunities, markets, and processes, and a lack of awareness as how to acquire such knowledge**[47]. The interviewed firms stressed that they lack international networks and find it very difficult to obtain market intelligence on foreign markets – for example knowing which are the largest firms in each sector, tax implications, key contacts - in order to access opportunities. Firms are also very unaware about available trade support services from the government, about which are the institutions that support trade and what services they offer.

[47] Mission findings January 2013.

205. **Another important constraint identified by the interviewed firms is a difficulty in penetrating foreign markets**. A series of regulatory barriers such as, taxation-related restrictions, excessive procedures and licensing requirements to operate abroad, or the absence sector-specific regulatory measures, were cited by the interviewed firms. Also, burdensome requirements on academic and professional qualifications and licensing requirements of individuals providing the service can restrict the entry into foreign markets. Finally, STP does not have international brand equity as a business service provider.

4.4. Getting STP's service growth on track

206. **The Government of STP is planning to diversify its export base by boosting business services exports**. The government can through its trade supporting institutions and in collaboration with business and professional associations and the private sector develop a long term Services Export Strategy and play an important role in helping reduce the barriers that service firms may face in their export development efforts. Possible policy actions for the Government of STP are summarized in Table 14.

Table 14: Policy recommendations

Address skills mismatches and skills shortages	Address regulatory and branding issues	Address skills mismatches and skills shortages
• Provide better vocational and tertiary education • Provide scholarships for further training to improve skills and marketability of BPO sector • Create incentives for firms to conduct specialized training	• Regulatory reform: address domestic regulatory barriers and encourage regional regulatory cooperation • Create and market Sao Tome and Principe's international brand	• Collect and disseminate market research information • Develop trade directories of service providers to be used for marketing to foreign firms • Encourage firms' participation in international expositions

4.4.1 Skill mismatches and shortages

207. **Several actions by educational institutions as well as the government at the training level would benefit potential skills for service exports**. The provision of more and better vocational education to individuals working in services sectors is necessary.

208. **The availability of scholarships or partial funding for students to be able to targeted, market-relevant training in courses not readily available in STP would improve the skills and thus the marketability of the country's BPO sector**. The same reasoning would apply to professionals employed in the ICT/ITES sector whose needs for training in specialized technology areas cannot be met by local learning institutions.

209. The provision of incentives for firms to conduct training – especially specialized training such as basic accounting or IT literacy skills – would help increase the quality and degree of specialization of the services offered by local firms.

4.4.2 Regulatory and branding issues

210. **Several domestic regulatory reforms could strengthen the IT sector in STP and facilitate service exports**:Telecommunication is a critical input for exporting IT and BPO services. The government needs to finalize the liberalization of the sector and implement the necessary regulatory reforms to ensure access to the submarine fiber-optic cable that will ease bandwidth constraints and reduce significantly access costs per byte. Furthermore, the lack of regulatory measures – for example in accounting or engineering services – needs to be addressed in close collaboration with professional associations and the private sector.

211. **To establish a regional presence, the government could pursue deeper regional integration in services sectors**. For example, the opening up of regional boundaries to allow free movement of Central African nationals without work permit requirements would be of great help to increase business opportunities within the region and boost service exports. Furthermore, the establishment of mutual recognition agreements (MRAs) of professional qualifications and of licensing requirements within the Central Africa in various professional services would likely benefit service firms in STP. Regulatory reforms and regional cooperation initiatives could be complemented at a later stage by efforts to position and market the country brand.

4.4.3 Lack of knowledge about export opportunities

212. **The Government of STP through the Chamber of Commerce in collaboration with business and professional associations can play a crucial role in reducing the information asymmetries about service exports affecting both local service firms as well as foreign clients**. Several ways in which the informational barriers to exports can be addressed are:

213. **The Chamber of Commerce could collect and disseminate to local service firms market research information (e.g., country profiles, sector rules and regulations, tax issues, general working conditions) and highlighting available opportunities for services exports**. The Chamber of Commerce can establish links with other international trade support institutions to create a greater pool of information on businesses opportunities available in other countries as well as profile companies that can deliver those services.

214. **The Chamber of Commerce with the collaboration of business and professional associations could develop trade directories of local service firms including detailed provider profiles, supply capacities, and key contacts**. Such directories should be readily available on their website and should be used by foreign missions in STP's embassies to market STP's services internationally. The Chamber of Commerce and business and professional associations could also establish physical or virtual business exchanges to increase the marketing of services.

215. **Business and professional associations should be more active to educate the industry and increase networking opportunities for local experts**. For this purpose, some capacity

building is necessary - possibly through a government supported program - for the associations so they can prepare marketing materials, organize conventions and forums, or participate in international forums and conventions to create awareness of the available skills in STP.

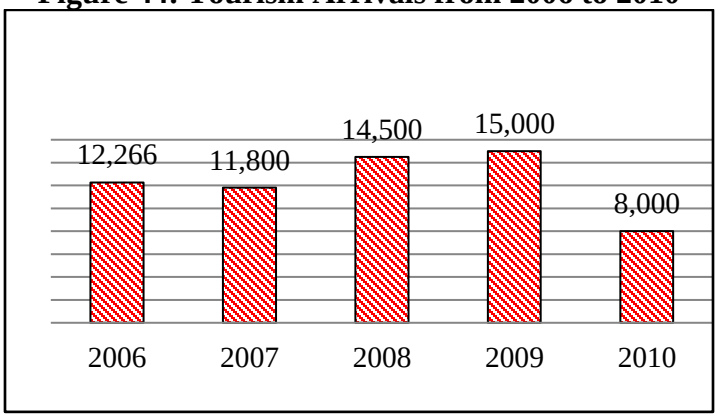
Chapter 5: Making tourism a growth engine

5.1 Tourism has strong potential in STP

216. Tourism is a powerful growth engine and job creator around the world, generating directly and indirectly 258 million jobs (8.8% of global employment), US$6 trillion of value added (9.1% of global GDP), US$1.1 trillion of export earnings (5.8% of the total), and US$652 billion of investment (4.5% of the total). World international tourist arrivals have grown by an average of four to five percent a year since the 1950s. In particular, international tourist arrivals to SSA increased by 8% between 2009 and 2010 despite the global financial crisis, making SSA the world's second fastest growing region after Asia Pacific.[48]

217. Tourism is currently an important economic activity in São Tome and Principe (STP). Despite the considerable decrease in international arrivals in recent years, from 15,000 visitors in 2009 to 8,000 in 2010 (Figure 44), tourism expenditures (Figure 44) have grown from US$6.5 million in 2006 to US$9.4 million in 2010. In 2010, tourism expenditures contributed 5.4% to GDP and the average tourism expenditure was estimated at US$1,175. The direct contribution of tourism to employment is estimated at 3,500 jobs (4.6% of total employment).

Figure 44: Tourism Arrivals from 2006 to 2010

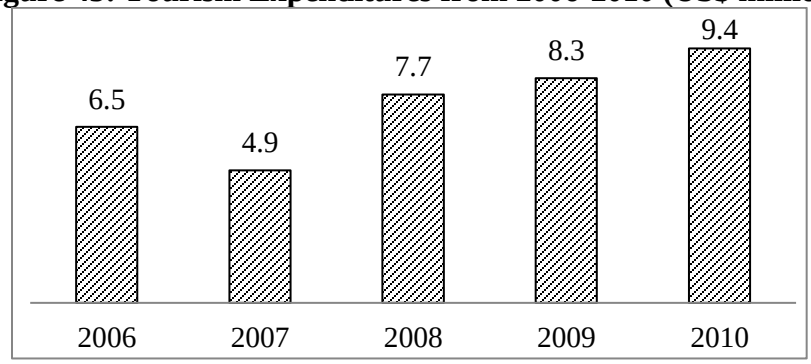


Source: UNWTO (2009)

218. Current arrival figures stand in stark contrast to the 25,000 per year projected for the year 2010 in the 2001 Strategic Plan for Tourism Development. The stagnation in arrival figures follows a period of growth in the early 2000s that accompanied the discovery of oil. Despite the minimal number of tourists visiting the island, the tourism sector accounts for nearly 40% of total exports of goods and services (Figure 46).

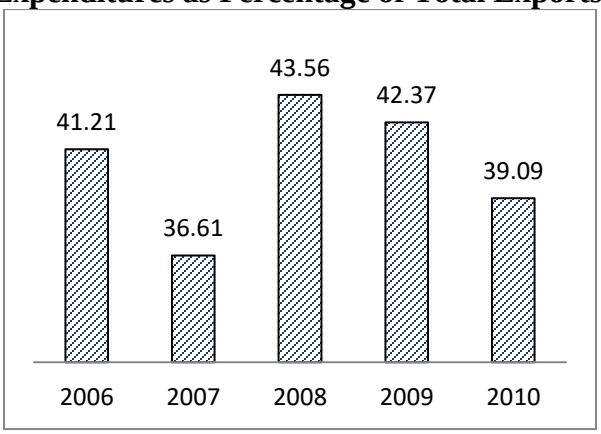
[48] Transformation through tourism (2012), The World Bank Group

Figure 45: Tourism Expenditures from 2006-2010 (US$ million)



Source: UNWTO (2009)

Figure 46: Tourism Expenditures as Percentage of Total Exports of Goods & Services

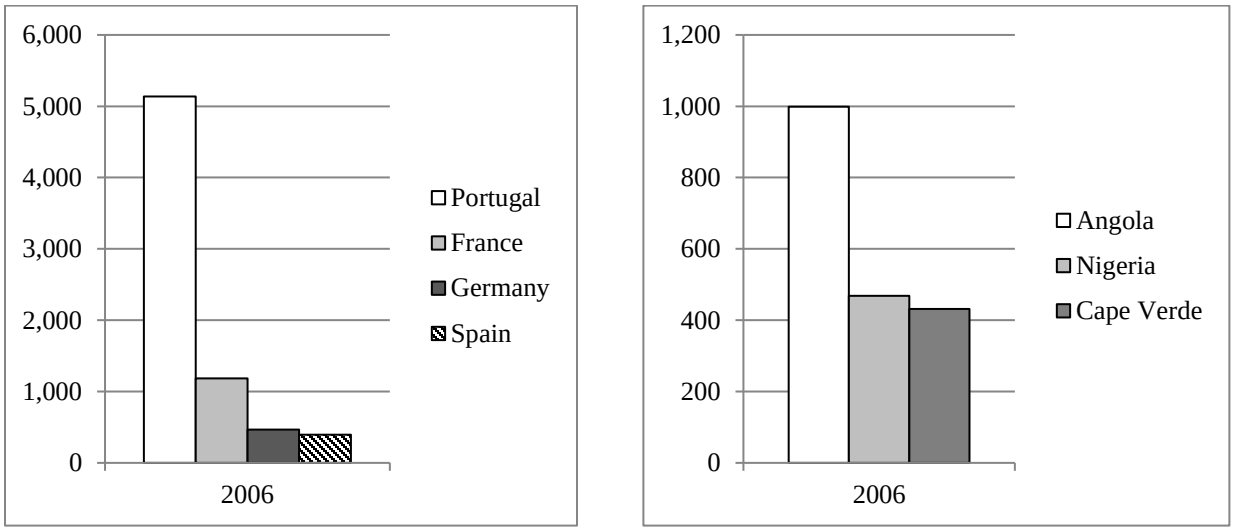


Source: UNWTO (2009)

5.2 Structure of STP's tourism market

219. **The top four long-haul source markets (Figure 47) for STP are Portugal, France, Germany and Spain.** Portugal, with over 5,000 tourism arrivals, is by far the most important long-haul source market and is primarily represented by visitors who have either family or historical ties with the country. France, with just over 1,000 tourism arrivals, is the second largest long-haul source market. It is followed by Germany and Spain. The average length of stay in STP by European visitors is seven days, which relates to the two weekly flight from Europe to STP. The most important regional markets are Angola and Nigeria, followed by Cape Verde. Although STP is still relatively unknown as a tourist destination in many markets, its tourism industry has made some efforts to promote the country abroad. These efforts have largely been led by the private sector, as the government's tourism promotion budget is minimal.

Figure 47: International Tourist Arrivals by Source Market (2006)



Source: UNWTO (2009)

220. Existing statistics indicate that leisure tourism is the largest segment, representing 55% of arrivals (Table 15). Business tourism to STP is estimated at only on 4% of total arrivals.[49] It is assumed that the majority of "Other tourists" are those visiting friends and relatives.

221. **Tourism has been closely linked to the economic growth of the country due to foreign investments in tourism-related projects**. Such investments represent one of the country's principal competitive advantages, as they have produced a diversity of international-standard accommodations offerings. These investments were originally attracted to the country due to speculation surrounding offshore oil exploration. Investors, which clearly intended to cater to the business traveler, include international chains such as the Pestana hotel group. The Portuguese company has built three properties in STP, including the island's first five-star hotel. Some more recent investors, however, intend to also target the leisure market. This is the case of the South Africa-based HDB Group, which intends to develop several small-scale, high-end resorts on Principe Island to add to its recent acquisitions of the Omali Lodge in São Tome and the Bom Bom Island Resort on Principe Island.

Table 15: Tourist Arrivals by Purpose of Visit (2008)

	Number			Percent		
	Leisure tourists	Business tourists	Other tourists	Leisure tourists	Business tourists	Other tourists
Sao Tome and Principe	7,975	580	5,945	55%	4%	41%

Source: UNWTO (2010)

[49] These statistics however are not considered very reliable given the deficiencies of the country's tourism data collection system. Figures broken down by purpose of visit are not available for years after 2008.

222. **STPs main comparative advantage in tourism rests with its untapped natural resource and cultural assets.** Cultural heritage assets of STP include remains of the colonial Portuguese architecture in the capital city of São Tome, the Roças on both of the islands of São Tome and Principe, the remains of the railway network connecting the Roças, and the history of various ethnic groups of slaves. The natural heritage of the island nation includes small nested beaches and several different eco-systems including rainforests. Obo National Park, which occupies around 30% of the country's territory, hosts important concentrations of orchids, birdlife, and butterflies. Additionally, throughout the islands one can find pristine lakes and waterfalls, various types of vegetation, and remarkable species of animals. The focus on the natural environment and ecosystems can be a powerful theme for creating the image of the country as an "ecotourism" destination—indeed, the little advertising it has engaged in already uses biodiversity as its theme. The geographic location of the island at the "center of the world" has also been used as part of the marketing of the destination.

223. **Competitive advantages of STP include safety and the non-existence of malaria, a main constraint among many Sub-Saharan African destinations**. Other competitive advantages of STP include political stability, the proximity to important international source markets, ample offer of international-standard lodging, receptiveness of the local population to tourism, and the relatively good condition of the country's natural environment. Nevertheless, these attributes should not be taken for granted. Tourism can lead to the spread of petty crime, and there should be no complacency in reinforcing law-enforcement capabilities. Tourism can also lead to other social disturbances such as increased income inequality and even prostitution. As such, public awareness activities are important alongside strong efforts to incorporate communities within the tourism value chain. Additionally, stringent regulations should be in place to ensure that future tourism development has minimal environmental impacts.

5.3 Tourism policy in STP

224. The Government of STP has expressed a commitment to boost tourism revenues. The government has designed a tourism strategy for the period of 2009-2014 to be implemented by DTH, which falls under the Ministry of Commerce, Industry and Tourism (MCIT). However, DTH is underfunded and has not been able to implement the strategy or substantively develop the sector. Government funding of the sector was anticipated to take place through funds from the tourism tax established by decree in 2007. To date, this tax has not been properly collected and transferred to the sector. As such, promotion, training, information provision, and other essential activities for tourism development currently have no reliable funding source.

Box 4: Countries that Have Expedited the Visa Process

The **USA** expanded its visa waiver program to include countries such as the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovakia, and the Republic of Korea.. Collectively, arrivals from these countries grew 46% over the following three year period while travel from these markets to other similar destinations only grew at a fraction of that rate. The change in visa policy is estimated to have contributed 41% growth over the same period, or over 12% annually. The growth attributable to the change in visa policy varied across countries ranging from 3% in Estonia to 101% in the Czech Republic. In 2010**, India** instituted a visa on arrival program for 11 countries (New Zealand, Finland, Luxembourg, Japan, Indonesia, the Philippines, Singapore, Cambodia, Laos, Myanmar, and Vietnam). For that year, the combined arrivals from these 11 countries increased 10.6%. This program is estimated to have accounted for 3.7% of the combined growth in arrivals from these markets in 2010.[50]

225. The Government is currently working with the IFC to streamline the tourism visa process by using electronic systems that will reduce not only the visa processing time but also the cost of the visa. The online system, once fully implemented, will allow tourists to obtain visas without mailing their passports to the few existing consulates and Embassies worldwide. This initiative will remove an existing barrier to tourism and make the destination more marketable abroad. However, it will be critical for the country to also consider revising its visa policy and relax entry requirements for some key markets (such as Schengen country passport holders). The current visa exemption for Angolan citizens provides a very relevant precedent for such a bold move and would surely bolster tourism. Furthermore, the Government should consider further simplification of the visa issuing process, perhaps by offering "visa on arrival" facilities.

226. **Successful tourism will not necessarily emerge on its own in the absence of government support**. Lacking a sound policy framework, tourism development to date has been mostly unplanned and led by the private sector. If the Government commits to supporting tourism development based upon responsible utilization of its natural and cultural assets, a strong sector can become a reality. Tourism is a complex sector that requires coordination between multiple government agencies, private sector bodies, civil society organizations, and community stakeholders. It is also vital to work across sectors, particularly in the areas of transportation, communications, finance, education, sanitation, and immigration. Support services for tourism such as planning, marketing, regulatory frameworks, and monitoring are frequently missing or inadequate; this can be a major hindrance for tourism development. Countries such as STP with a rich array of tourism assets are fully justified in deciding to prioritize tourism as a development tool as long as the challenges posed by the multi-sectorial nature of tourism development are not ignored.

227. **This said, there are other logistical obstacles limiting the tourism sector's ability to spur growth and alleviate poverty.** One of most pressing constraints is limited air access, both to and within the country. There are currently only two weekly flights from Europe: once a week on TAP and once on STP airways. A further impediment to greater air connectivity is the country's failure to comply with international air safety standards, which has resulted in STP-registered airlines being banned from EU airspace. Connectivity between São Tome and the island of Principe has improved to four weekly fights. Yet these flights are still insufficient to meet tourists' needs and are also at times unreliable. Additional core constraints include limitations in the supply

[50] The Impact of Visa Facilitation on Job Creation in the G20 Economies Report prepared for the 4th T20 Ministers' Meeting, Mexico, (2012) UNWTO.

of basic services that tourists demand such as health services and evacuation capabilities in case of emergencies. Other important challenges include poor and expensive infrastructure. The high cost of utilities results in higher prices and lower margins for accommodations operators, which adversely affects their competitiveness.

228. **The country has little experience with services—the workforce would have to be trained, as it is the point of contact for tourists**. STP's tourism sector also experiences relatively high seasonality, as visitors tend to avoid the country during the rainy season. Seasonality of tourism in STP is also affected by the lack of diversification of source markets. As such, suppliers of tourism services are unable to benefit from more stable demand that can occur from a changing mix of tourists at different points of the year.

229. **STP must start by prioritizing potential initiatives based upon an analysis of its assets as well as its product development constraints.** In terms of assets, the Government must explore how to convert comparative advantages into competitive advantages. For example, it should examine how to better commercialize high potential assets such as the culturally-rich Roças. Competitiveness can also be achieved by resolving some of the most urgent problems such as air connectivity. STP's government should also solidify its vision for tourism in the country, with clear prioritization of intervention areas for the next five years. In whichever areas that are chosen, the objective should be to integrate natural resources and cultural endowments to create competitive tourism attractions. Table 16 provides comparative data that illustrates results that STP could expect with a commitment to tourism and sustainable management practices. In Rwanda, strong government investment in tourism has led to the generation of direct and indirect employment for 74,000 workers. It has also provided an important foundation for the peace-building process following civil strife. Senegal has built a tourism industry based on large resorts as well as its traditional music market and now hosts over 300,000 tourists annually (and growing at a remarkable 10% per year).

Table 16: Tourism Indicators for STP and Countries in its Competitive Set

	Botswana	STP	Maldives	Rwanda	Senegal
International arrivals (thousand)	549	14.5	617	66	329
Growth rate for tourism (arrivals)	8.4	0	9.4	19	9.7
Contribution ITR/ GDP (%)	4.3	4.4	49.8	5.3	3.5
International tourism receipts (% of total exports)	9.2	43.5	61.5	30.4	21.6
Hotel rooms a/	4966	273	n/a	n/a	15842
Room Occupancy	50.3	n/a	83.9	n/a	34.59
Total economically active population (000s)	707		140	4,450	5,276
Total Tourism Employment (direct + indirect) (000s)	59	1.3	n/a	74	154
Landmass (sq. km)	600,370	960	300	26,338	196,190
Population (000s)	1,921.12	160	293	9,720.69	12,211.18

Notes: a/ 2009 for STP

230. **Several entities are primarily responsible for sector management**. While the private sector will retain the role of investing in accommodation, attractions, and tourism services, the government plays the crucial coordinating role. Government is responsible for formulating policy,

adopting a viable strategy and roadmap towards sustainable sector growth, and creating an enabling environment to stimulate private sector activity. The government will also have to supply basic infrastructure and assist in promoting the country to tourists and investors. While the government's role in developing and supporting the sector is essential, DTH has weak capacity, a limited technical team, and insufficient funding.

231. **At present, there is very little product development in STP**. In successful and sustainable tourism destinations, product development is at the heart of building a vibrant tourism sector. By packaging products creatively and keeping ahead of market trends, countries enhance their chances of succeeding. Tour operators and other intermediaries drive this activity in collaboration with other players in the tourism sector. At present, there are only around eight tour operators or travel agents in the country. Most of these only issue air tickets and have not focused on creating integrated packages. This needs to be encouraged so as to take advantage of STP's wide range of assets.

5.4 The way forward

232. STP fulfills the most fundamental preconditions for tourism development: safety, security, and health. Having these fundamental concerns covered, the government should focus on creating a stronger enabling environment by prioritizing improved connectivity, destination marketing, a planning framework, statistics collection, human resource development, and product development.

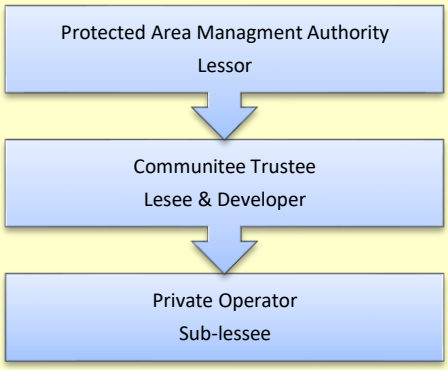
233. Improvement and diversification of air links to STP main tourism source markets: Tourists cannot visit STP without reliable and competitive air access from the main source markets to the destination. If scheduled services are not available, the destination will have no viable option to increase visitation. The lack of security standards as well as infrastructure gaps at the airport should be addressed urgently. Once these issues have been resolved, it will be important to conduct a cost-benefit analysis to assess the scale of incentives required to encourage the development of scheduled low-cost air services to the country.

234. Product development: Cultural heritage tourism is one of the fastest-growing segments of the international tourism industry. Forty percent of all international leisure trips have a cultural component. It has great potential for Africa due to the continent's rich traditions in music, art, dance, and literature. Cultural tourism generates economic activity and an enhanced sense of pride for residents. It also generates resources for the conservation of historic sites and traditional activities. Most studies have pointed to three to five areas of STP where tourism seems to be emerging. Criteria for site selection should include the intrinsic touristic value of the asset, potential itineraries for tourists in the area, the existence of facilities and infrastructure, potential for growth, ease of access, and potential social and environmental impacts. This type of tourism will present a product that incorporates the people of STP, therefore making it more unique and attractive to key tourist segments. While there are already facilities such as restaurants, music clubs and historical sites in STP, some need to be upgraded, better marketed, or made more accessible. Also, a concerted effort should be made to create a model for cultural tourism utilizing the Roças, as described in Box 5.

Box 5: Securing Community Rights in Roças - Borrowing from a Protected Areas Model

Although the Roças are nationalized and managed by the government, no major effort has been made to relocate and resettle the communities. This has resulted in the formation of small village-communes in and around the plantations, presenting a very interesting social phenomenon that would likely be of interest to culturally-oriented tourists. The residents can become an active part of the tourism industry by providing guided tours and services, as well as engaging in crafts and souvenir production.

Further benefits could accrue to communities by pursuing a model similar to that used in some protected areas. Under this model, the land would be leased to a community trust, which would then be able to enter into a partnership with a private sector entity. The partnership would allow communities to access the capital required to restore the Roças and convert them into attractive tourist attractions that could include accommodations and dining facilities. The partnership agreement would likely result in sub-leasing fees for the community trust, employment opportunities within the facilities, and ancillary business opportunities. Capacity building for community members would be important and could even lead to them managing the facilities when the sub-lease period has expired. In some protected areas, donors have provided training support and even some co-financing to make the deal more attractive to potential private sector partners.



Public conservation agency:
- *Focus on environmental expertise*
- *Managers protected area*
- *Supplies bulk infrastructure*
- *Optimizes income generation*

Community Trust:
- *Representative & stable legal structure*
- *45-year lease*
- *Offered via targeted "call for proposals"*
- *Funds &develops facility*
- *Manages sublease*
- *Distributes associated benefits*

Private operating partner:
- *10-15 year operating sublease*
- *Supplies FFE and operating capital*
- *Proven capacity and experience*
- *Appointed via tender*
- *Subject to empowerment obligations*
- *Hands back after 15 years*

235. **Marketing strategy development and implementation:** In consultation with the private sector a marketing strategy should be developed to promote STP to tour operators and the diaspora. Tour operators are highly skilled at promoting tourism services but they lack investment capital and generally restrict their promotion to the form of tourism that they currently offer – which in STP is primarily a middle-range "sun and sea" experience sold by the large hotels. This is somewhat incongruous with the country's comparative advantage: its cultural and natural assets.

236. **Institutional development and funding**: Tourism is a private sector activity that requires the public sector to play an active role in creating the institutional and policy framework. This is part of DTH's mandate, yet it requires capacity building in order to be successful. Limited donor support has been provided to the sector to develop the current strategy but will be needed to train the technicians in tourism policy and destination development. It is also important to build the capacity of the country's private-sector tourism associations. Furthermore, it is essential for DTH to secure funding to support promotional activities. DTH is currently in the process of creating the Tourism Tax Law to be collected by tour operators and lodging facilities. If this law is passed and enforced, it should be able to address some of the existing funding constraints.

237. **Tourism Statistics**: All tourism stakeholders need accurate statistics. Currently the statistics available for STP are not robust. In addition to collecting the existing tourist arrival figures, STP should also conduct a tourist expenditure and motivation survey. This would allow important data to be obtained regarding visitor's reason for visit, length of stay, expenditures, and level of satisfaction. The findings from the survey, to be conducted once every year or two, will help policy-makers better understand the sector's performance and also help them justify the need for increased sector funding.

Table 17: Tourism Sector Capacity Development

Types of course	Skills needed	Type of training
Vocational skills	Training for entry-level positions in the tourism industry. Skills needed include front desk management, reception, maintenance, housekeeping, food service, food preparation, and bartending.	Train-the-trainer courses that train people to become "vocational skills consultants;" Apprenticeship programs and day release
Public sector skills	Training for employees who work for public entities, parastatal entities, or nongovernmental organizations related to tourism, including wildlife reserves and national parks. Skills needed include destination planning and destination management.	Workshops and seminars that include monitoring and evaluation and are repeated on a regular basis
SME management skills	Training for owners and managers of private sector tourism enterprises that are small in scale. Skills needed include financial management, operations management, human resources management, sales and marketing management.	A series of courses that are short in nature and broad in scope, and are designed for owners and managers with a high school education
Management or executive skills	Training for upper- and middle-management employees in large corporations or medium-sized enterprises in hospitality and transport. Skills needed include hotel management, food and beverage management, hotel financial management, and human resources management.	In-house management training programs to develop a "culture of tourism"

Source: Adapted from Spenceley and Rozga (2007).

238. **Labor force capacity development**: The tourism labour market is an important mechanism for the transfer of tourism benefits to the local population. To make sure that this mechanism functions well, it is important to improve the service levels of tourism sector staff. According to a 2011 labor market study, there is a significant gap between the skills that the STP tourism labor force possesses and those that are required by the industry. This is partially attributable to tourism school curricula that do not fully take into account industry needs. As a result, levels of service are often inadequate. To address this issue, some hotels provide their own in-house training, which represents an additional cost burden for them. Therefore, STP must focus on providing some essential tourism capacity building initiatives in order to develop the sector. These should include vocational training, SME management skills, and management skills (as described in Table 17)

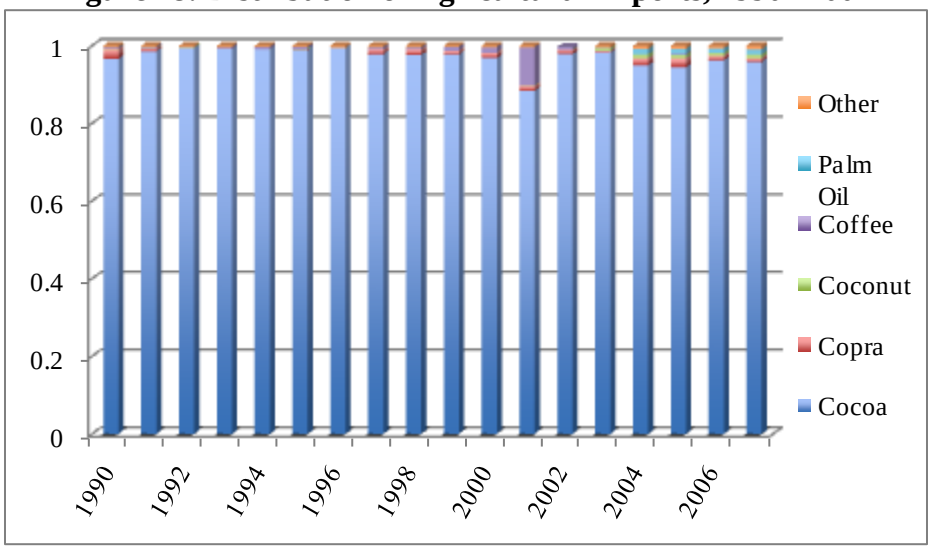
Chapter 6: Primary sector

6.1 The Primary Sector in Sao Tome and Principe

239. **The primary sector in Sao Tome and Principe has been losing relative importance over time, but still employs about a quarter of the workforce in the country and generates the greatest fraction of household income**. The contribution of the primary sector to GDP over the period 2002-2011 was of 17.2%, which represents a decline over time given the average primary real growth rate of 2.05% (below 5.2% for real GDP).[51] In terms of employment the primary sector employed 26.2% of the workforce in 2006, but still generated 63% of household income in 2001[52]. Unsurprisingly in this setting, poverty levels among households whose head works in agriculture or fishing are significantly larger than the average.

240. **The decline in the weight of agriculture in the overall economy is mainly explained by the significant decline in cocoa production, which has been more than halved relative to pre-independence levels**. Cocoa is however still the country's main commodity export: it has accounted for over 90 percent of commodity exports for many decades, averaging 6 percent of GDP during 2005–2009[53]. Given STP's narrow export base, its other export commodities - namely coconut (including copra), coffee, and palm oil - contribute only marginally to agricultural export earnings as is made clear by Figure 48.

Figure 48: Distribution of Agricultural Exports, 1990 –2007



Source: FAOStat.

241. **In the context of the 2008 food price crisis, the economy and food security of Sao Tome and Principe was seriously affected given the large fraction of imported food on household consumption**. This situation contributed to shifting agricultural policies in favor of increasing

[51] This is according to the NPRS II (2012).
[52] This is according to the CEM (2011).
[53] This is according to the CEM (2011).

domestic production, particularly of traditional staples such as taro, breadfruit or cassava, to reduce dependence on imports. In addition, several farmer cooperatives aimed at exporting agricultural commodities were created and existing cooperatives were further encouraged. This support led to a large increase in their role in the economy, particularly in the cocoa sector where they are currently responsible for about a quarter of total production.

242. **It is in this context that the current chapter proposes the design of an integrated agricultural trade policy that promotes economic diversification and job creation as engines of growth and poverty alleviation**. The main vector for such a policy should be the objective of harnessing the country's traditional comparative advantage on exporting cocoa production, while pursuing complementary strategies for agricultural export diversification.

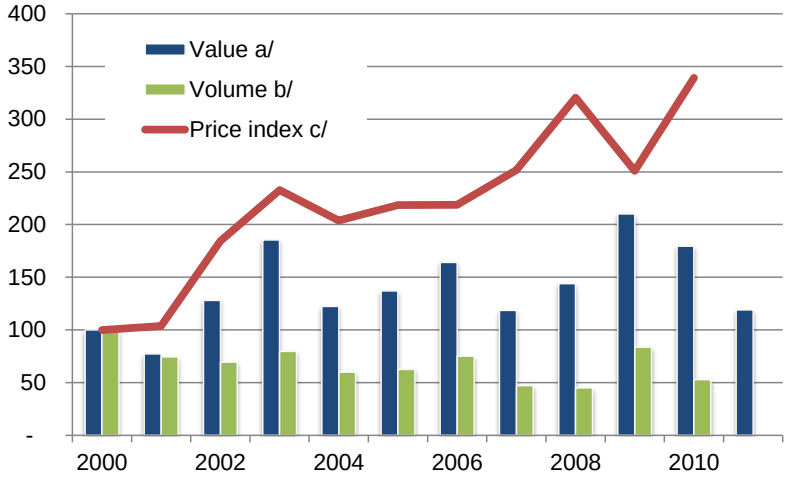
243. **The main directions pointed in the proposed strategy go towards the identification of niche international markets to which high-value quality agricultural output can be exported**. Producing to these high-end markets is the way to overcome the substantial trade costs brought about by STP's insularity and relative geographical isolation. Challenges to this strategy include the need for support in international marketing and branding of STP's agricultural products as ways to create international demand for these products; widespread moral hazard between farmers and output buyers who wish to provide farmers with technical assistance and quality inputs; and the absence of clear land titles that can create an active land market where larger farms can be purchased and credit can be provided supported by meaningful collateral. Overcoming these challenges is key to implementing an agricultural trade strategy that can promote job creation and economy growth, while reducing poverty.

6.2 Cocoa Sector: The Dominant Sector

6.2.1 Background

244. **Sao Tomean cocoa exports have fluctuated around a stagnating long-term trend, even in the recent context of rising international prices for cocoa, as can be seen in Figure 49**. It is indeed clear from the data that despite rising international cocoa prices since 2000, the volume of cocoa bean exports has not been able to follow price movements. The fact that cocoa exports did not increase since 2000 seems indeed a supply side phenomenon, as cocoa production has been mostly declining over these years.

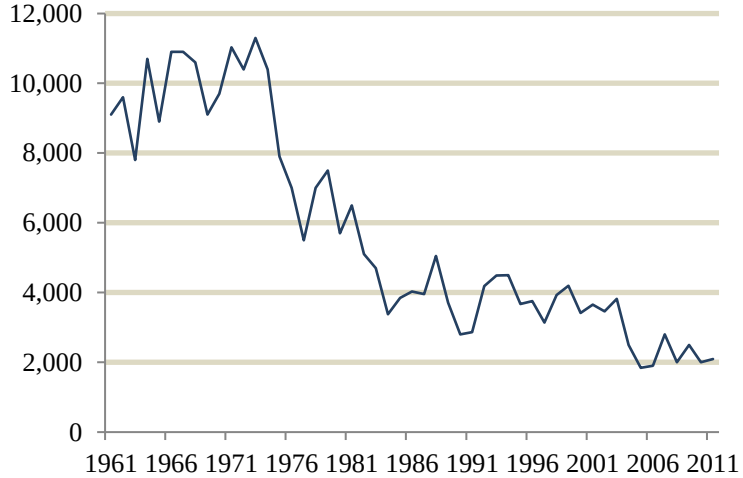
Figure 49: STP Cocoa Bean Exports: Value, Volume, and Unit Value, 2000-2011



Note:
a/ Index of export value in thousand U.S. dollars, 2000 = 100
b/ Index of value deflated by price, 2000 = 100
c/ Index of average cocoa bean producer price for Cameroon, Côte d'Ivoire and Ghana, U.S. dollar per ton, 2000 = 100
Source: Team calculations using COMTRADE (mirrored data) and FAOStat producer prices.

245. **The declining trend in cocoa production since 1961 is well illustrated in Figure 50**. The drastic fall in production after independence in 1975 (at which time production levels were basically halved) was never reversed. Especially from 2003, particularly low levels of production have been attained, with cocoa production reaching an annual production as low as 2,000 tons – which is approximately a third of the post-independence production levels.

Figure 50: Cocoa production in STP from 1961 to 2011 (in tons)



Source: FAOStat.

246. **This decline in production is mostly due to the fact that the cocoa sector has generally failed to restructure and modernize, and that the area devoted to cocoa production has been reduced as a consequence**. The land reform that took place in 1992 divided former large colonial cocoa farms (which had been nationalized and became state-owned after independence) in small plots and redistributed these small plots among the population with the objective of increasing agricultural productivity. This reform redistributed 43,775 ha of arable land to over 8,877 residents as workers in old cocoa plantations were entitled with the use (although not with the property, which remains public) of small land plots (2 to 3 hectares on average) regardless of their agricultural experience or skills. A large number of smallholders was created as a result, a significant fraction of whom had no previous experience or knowledge of cocoa cultivation or management practices. This lack of expertise could not be overcome with extension efforts, which led many owners of small and medium-sized plots of potentially productive agricultural land to keep very low levels of productivity or to eventually abandon production or convert to timber extraction. Even though existing land law stipulates that such vacant land plots should be redistributed to willing farmers, there is no record of its actual implementation.

247. **The fact that agricultural plots are mostly small areas and that many smallholders are untrained farmers who cannot sell these plots, makes it unprofitable and unfeasible to invest in modernization techniques that raise productivity and quality**. Even simple strategies to increase land productivity (such as planting new cocoa trees to replace old trees and increase the tree density per hectare) have therefore not been put in place. Indeed, most cocoa production is currently coming from sparsely planted cocoa trees with more than 50 years of age, which also helps explaining decreases in both yield per hectare and quality of most existing cocoa production.

248. **The lack of investment in modernization and the consequent decline in both the volume and quality of production has implied that not enough resources have been invested on international branding and positioning of Sao Tomean cocoa**. For this reason, despite its particular taste and internationally-recognized quality, STP cocoa no longer benefits from its past reputation, as when STP was the largest cocoa producer in the world —which happened as recently as the beginning of the 20th century.[54] Only in recent years a few new cocoa projects have developed targeting new high-end international chocolate markets.

249. **Since 2004, there has been additional investment on cocoa production by farmer cooperatives, but this investment has not yet managed to raise overall production**. The formation of cocoa farmer cooperatives has allowed the creation of a large enough scale of production to justify the use of extension workers and the rental of modern technology and equipment to produce quality cocoa. This strategy, mostly aimed at promoting organic cocoa production for exporting, has not yet produced big improvements in the volume of production. Indeed, the number of cocoa producers that are members of cooperatives has been increasing over time, but it is still relatively small, at around 2500 farmers. In addition, investment strategies have mostly focused on the plantation of new quality cocoa trees to replace old trees and to increase tree density within existing plantations. But these new cocoa trees require an average of 4 to 5 years to start production after being planted and they only reach maturity and a good level of production 7

[54] Cocoa was first planted in the country in 1822 from Brazil. The high-quality *Amelonado* variety (a type of *Forastero*) was brought in and this made Sao Tome and Principe the first place in Africa where cocoa plantations were started.

years after that time, which implies that an increase in production should only start to happen in the next couple of years.

250. **From 2005 to 2011 cocoa production has been depressed by a "rubrussintus" epidemic and severe droughts.** During the period 2005-2009, there was a "rubrussintus" plague that severely affected cocoa production. The "rubrussintus" epidemic arose because of deforestation by farmers who cut down large shade trees as a way to earn additional income. These trees and the shade they provide were however necessary to avoid the attack of "rubrussintus".55 Only after five years of education and reforestation efforts, it became possible to contain this plague. The period of this epidemic was followed by two years of bad droughts (2010 in particular), which highlights the lack of irrigation infrastructures and the vulnerability of cocoa production to dry weather —a phenomenon that has been increasingly frequent in STP.

6.2.2 Emergence of cooperatives

251. **From 2001, FIDA (the *Fonds International de Développement Agricole* or International Agricultural Development Fund funded by the French Ministry of Foreign Affairs) has been implementing a program to increase cocoa production by creating export-driven farmer cooperatives**. This program, called PAPAFPA (*Programme d'Appui Participatif à l'Agriculture Familiale et à la Pêche Artisanale*, Program for Participating Support of Family Agriculture and Artisanal Fishing) started in 2003, and is approved to last until 2015. This program is run jointly with the Sao Tomean government, which employs several agronomists to provide technical support to farmers and also provides financial assistance with equipment and other inputs to production. PAPAFPA also includes a set of guidelines for export production and cooperative organization and governance, as well as enables contracts to be made with international buyers that guarantees farmer output purchase at a contracted minimum price.

252. The importance of export-driven farmer cooperatives in cocoa production has been increasing significantly since 2005 as is made clear by Table 1. The first cocoa farmer cooperative was CECAB, which started in 2004 and aimed at producing organic premium cocoa to be purchased by KAOKA, a French cocoa company. In 2009, a second cocoa producer cooperative was created, also within the FIDA-supported PAPAFPA program. This second cooperative is called CEQAC 11 and produces high quality cocoa following organic production standards, despite the fact that it is not yet certified as organic. Output is sold to three international buyers that contract a minimum price for purchase. The three buyers are UK's Café Direct, Germany's GEPA and Italy's ICAM.

[55] The cocoa mirid *"rubrussintus"* (as it is locally known) can be controlled by planting large shadow trees to provide enough shade to keep a cooler environment in the cocoa plantations.

Table 18: Cocoa production in STP from 2005 to 2012 (in tons)

	CECAB	CEQAC 11	STP Total	(CECAB + CEQAC 11)/ STP
2005	67		1843	3.60%
2006	130		1900	6.80%
2007	216		2800	7.70%
2008	327		2000	16.40%
2009	469	8	2500	19.10%
2010	423	67	2000	24.50%
2011	418	75	2096	23.50%
2012	500*	120*	NA	NA

Source: Mission estimates

253. **CECAB was the first cocoa line of FIDA's support for farmer cooperatives, and has been financially sustainable since January 2012**. Planning and pilot activities for organic cocoa farming started as early as 2001 with 11 associations including 350 farmers, but the CECAB cooperative was only established in 2004 and certified organic cocoa production started in 2005. The cooperative currently works with 34 associations including 1800 families, which benefits 9000 individuals. The only output buyer, KAOKA, contracts a minimum and maximum price (based on the New York Stock Exchange Future Prices, to which a quality premium is added) for up to 800 tons of cocoa. KAOKA also provides inputs for organic farming, no interest financing of farmer advance payments, costs of organic certification and technical assistance. CECAB expansion plans for the coming years are mostly of vertical expansion (i.e. increase productivity of existing members), with a goal to reach 1000 tons of dry cocoa production and start selling to other international buyers in addition to KAOKA.

254. **CEQAC 11 is the second cocoa line of FIDA's support for farmer cooperatives, and has been producing since 2009**. CEQAC 11 initially gathered 11 associations (hence the name of the cooperative), but currently includes 17 associations or about 700 farmers. The cooperative started by the initiative of the ZATONA NGO who worked directly with cocoa farmers, and brought Café Direct, a UK Fair Trade chocolate maker, to purchase cocoa production. With the financial and technical support of PAPAFPA, CEQAC 11 started production and dry cocoa output is predicted to reach 120 tons in 2012 – not too distant away from the 300 tons that would make the cooperative financially sustainable. Note that this cooperative produces quality dry cocoa according to organic production standards, even though it is not yet certified. Adopting these standards was uncomplicated by the fact that traditional cocoa planting techniques in STP are very much aligned with organic practices. Organic certification will be sought as soon as the volume of cocoa output makes it profitable.[56]

[56] Organic certification entails fixed costs including periodic on site inspections of international certifiers. The organic premium received by farmers is 23% (43,000 dobras – or 2.76 EUR - per dry organic cocoa Kg as opposed to 35,000 dobras – or 1.43 EUR - per dry quality cocoa Kg). This number is much larger than the organic premium received by cocoa producers in 2012, which is 12% (55,000 dobras – or 2.25 EUR - per dry organic cocoa Kg as opposed to 49,000 dobras – or 2 EUR - per dry quality cocoa Kg). Note however that the organic cocoa buyer KAOKA pays for all costs

The cooperative organization model

255. **Each export-driven farmer cooperative under PAPAFA follows strict guidelines encompassing cooperative organization and governance, technical assistance and export model**. These are all fundamental aspects to the success of farmer cooperatives, which must adhere to the proposed standards in order to benefit from PAPAFPA financial and technical support provided (at a falling rate) in the first seven years after cooperative creation.

256. **One of the key aspects in farmer cooperative organization is the requirement that all available information on production, sales volume, prices received from buyers, prices paid to farmers, and cooperative expenses are publicly available.** This transparency is crucial to inspire farmers' trust and appropriation of the cooperative by each individual farmer. It also plays an important educational role in that farmers get to know about the "quality premium" that the cocoa produced in STP enjoys in international markets.

257. **An additional critical aspect of cooperative organization is having a clear governance structure**. Farmer cooperatives are run by an Executive Board and a Fiscal Council, which are elected every year by a General Assembly, which is itself composed of elected representatives of each association of small farmers (usually representing one or two small communities where farmers live). The clear organization and accountability are also crucial to inspire farmers' trust and appropriation of the cooperative by each individual farmer.

258. **The export-driven farmer cooperatives fulfill an essential role in providing technical assistance and equipment to small farmers**. Indeed, cooperatives provide (with PAPAFPA's support) initial financial and technical support (including one agronomist from the Ministry of Agriculture who works full time with the cooperative to which he is assigned) to improve the quality of farming practices and increase yields per hectare. Financial support has included the resources to improve facilities (office buildings and basic equipment as solar dryers or fermentation structures) and import trucks or other equipment for cocoa production and basic transformation (such as thermal dryers).

259. **Farmer cooperatives have also created schemes to promote community development and support.** For instance, "social premia" are provided to communities that work closely with the cooperative and may receive in return equipment for community level use, such as solar dryers and fermentation structures, which raise the value of its cocoa output. I addition, communities are allowed to use these facilities (especially dryers) for purposes other than drying cocoa – e.g. dryers can be used with other productions, such as banana. More recently, CECAB has started to offer additional benefits to participating farmers, such as medical assistance and funeral insurance. All of these forms of community support should create positive incentives for farmer appropriation and participation in the activities of the cooperative.

260. **Finally, farmer cooperatives supported by PAPAFPA have been working in close cooperation with the CIAT research center on tropical agronomy**. Indeed, large efforts on R&D

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of organic certification and the latter premium should therefore be regarded as the net premium, after certification costs. In 2011, due to USD/EUR exchange rate fluctuations, namely the USD sharp appreciation at the end of 2011, and the fact that quality cocoa prices are set in USD whereas organic cocoa prices are set in EUR, this organic premium was close to zero as CEQAC 11 received basically the same price in STP dobras for its quality cocoa as CECAB.

with the support of The cooperatives investment strategy to increase yield per hectare is to replant entire cocoa farms or planting new cocoa trees in existing cocoa farms, carefully selecting the most adequate cocoa tree varieties for the different microclimates in STP, aiming at maximizing productivity.

6.2.3 Foreign Direct Investment

261. **Since 2011, a Swiss-owned company named Satocao has become active in the cocoa market of Sao Tome and Principe with the objective of exporting cocoa of high quality**. For this purpose, Satocao has since then developed a cocoa transformation unit at old cocoa plantation of Santa Margarida, and established its nursery at Ponta Furada. Satocao aims at exploring an area of 2500 ha of own cocoa plantation, whose exact location the Government is currently still to indicate. In addition, it has started working directly with cocoa producing communities and aims at establishing close links with 2000 farmers in 30 communities, whom would benefit from technical and financial assistance in a model similar to that used by cooperatives under the support of PAPAFPA.

262. **Currently, Satocao is working with 13 communities and 300 cocoa producers on a regular basis**. Satocao is visiting each of these communities every fortnight and provides technical assistance to ensure that the cocoa produced is of high quality. These communities are where Satocao aims at purchasing cocoa I the next years, while it is investing in the plantation of new cocoa trees in the old plantations.

263. **At the moment, Satocao has just finished replanting cocoa trees in 5 different locations including a total surface of about 500 ha**. In the next year, an additional 500 ha should be replanted in several more locations. The fact that the total plantation area is dispersed over many different locations difficult logistics and increases costs, requiring high yields per hectare. In addition, there will still be at least three more years in which no cocoa production will be available from the current investment in planting new trees for Satocao to export.

6.2.4 STP cocoa market

Market players

264. **Currently the cocoa market in Sao Tome and Principe has three larger market players, who are the main output buyers**: export-driven farmer cooperatives, foreign buyers, and traditional buyers. The export-driven farmer cooperatives are CECAB and CEQAC 11. The foreign buyer is Satocao. The two main traditional buyers were the “SACs”: SODEAP and AGRICOM.

265. **The “SAC’s” are the Sociedades Agro-Comerciais (Agro Business Societies) created at the time of the 1992 land reform to keep exploring and processing cocoa production to be exported.** SODEAP is based at the old colonial plantation Diogo Vaz close to Neves, and AGRICOM is based at the Agua Ize plantation near Ribeira Afonso. Since 1992, these companies have been producing cocoa in their own plantations and buying cocoa production of smallholders for export.

266. **These traditional buyers were the incumbent in the cocoa market. Since 2005 CECAB started exporting cocoa, and since 2009 CEQAC 11 also joined the market.** However, these cooperatives only exported the production of cocoa producers from the communities with whom they worked, which did not strongly affect the traditional cocoa buyers' business. In some sense, these cooperatives were creating the cocoa supply they were exporting.

267. **The challenger in the market was Satocao, who entered in 2011. Satocao started operations in the island of Sao Tome with the aim of exporting high quality cocoa only**. For this purpose, it quickly rehabilitated a cocoa processing unit at Santa Margarida, which enabled it to purchase fresh cocoa beans from farmers and process them for exporting. Since at that time Satocao had no plantation or community with which it was working, this company adopted an aggressive cocoa purchase strategy where it visited all cocoa producers in Sao Tome and purchased their production as long as it had enough quality, regardless of whether they were receiving technical assistance and inputs from the farmer cooperatives or traditional buyers.

268. **An important related note regarding the cocoa market structure is that there is no input market in Sao Tome and Principe.** All inputs are purchased by the Government who sells it throughout the country at subsidized prices. The cost of purchasing these inputs in the free market would be too high for farmers to use them, given the transportation costs and the small absolute size of the country's agricultural sector.

Market failures

269. **The cocoa purchase strategy of Satocao when it started operations in Sao Tome created a market failure**. Indeed, since Satocao only buys the highest quality cocoa beans, it targeted mainly farmers who were receiving inputs, equipment and technical assistance from the farmer cooperatives and traditional buyers – likely the reason for the superior quality of these farmers' cocoa production. By creating incentives for farmers to break the implicit contract they had with the suppliers of the inputs they used, Satocao created a moral hazard problem. This moral hazard problem should in theory imply that farmer cooperatives and traditional buyers would no longer provide farmers with inputs, as the implicit payback of farmers delivering their cocoa production to the input supplier was not enforceable.

270. **The first best solution to this moral hazard problem would be enforceable exclusivity contracts between farmers and input providers**. If explicit exclusivity contracts (as opposed to the present implicit contracts) between farmers and input providers could be enforced, this would be a first best solution in order to provide incentives for input providers to continue providing the best possible assistance with the objective of maximizing the quantity and quality of cocoa production. Alternative arrangements (for example, where farmers are required to pay some fraction of inputs without being fully educated about the benefits of the use of this inputs) would have the disadvantage of leading to suboptimal input utilization.

271. **This type of first best explicit exclusivity contracts is however not likely to be perfectly enforceable, as the output buyer would need to be able to fully verify the farmers' actions and perfectly enforce any sanctions on farmers who broke the exclusivity contract**. However, it is likely that the mere existence of a written explicit exclusivity contract may create additional commitment from some of the farmers and could partly avoid the problem. In addition, a harsh

enough sanction (such as permanent exclusion from the contractual arrangement) would likely be sufficient to strongly mitigate the existing moral hazard problem. In fact this type of exclusion provisions, even if not a fully explicit exclusivity contract, is already being implemented by CECAB, together with more positive incentives for membership such as "social premia" like community level cocoa processing facilities (that can also be used for other purposes – e.g. using dryers for other purposes, such as drying bananas) or medical assistance and funeral insurance.

272. **Asking farmers to pay (even if only partially) for inputs and technical advice would be an alternative possible solution to the underinvestment caused by the moral hazard problem described above.** The main obstacle to implementing this strategy would be the fact that farmers need to be educated in order to fully understand the benefits (which are often long term) of buying inputs such as new cocoa trees or paying for technical assistance. This might be achievable for cooperative active members that have been members of this arrangement for a long period – as is clear from the fact that CECAB asks farmers to co-pay for the new cocoa trees they wish to replant on their land plots. But even if this farmer valuation were attainable, the unavailability of credit still leaves a difficult problem for farmers with modest financial resources – indeed often the reason why they chose to sold some of their production to Satocao. In this setting, credit availability would probably be necessary to allow farmers to invest in their cocoa exploration.

273. **A final alternative, which may be implemented in conjunction with the two previous possible solutions, addresses the fact that most times farmers decide to sell outside of their implicit exclusivity contract because of liquidity needs**. Providing liquidity to farmers over time is a strategy already being implemented by CECAB. The cooperative distributes payments to farmer (relative to the revenue from their cocoa production) over the year, similarly to a system of (non-interest bearing) committed savings. Indeed, it pays the farmer not only at the time of delivery of cocoa beans (60% of the total payment), but also when the export revenue is received (30%), as well as at Christmas time (10%). Given that most community-level associations working with CECAB have their own cocoa processing facilities, it is also possible for these farmers to keep delivering cocoa to the cooperative at a number of times during the year, instead of at one or two specific times of the year.

6.2.5 Research and development in the cocoa sector

274. **Both cocoa farmer cooperatives and foreign investors have been using the most recent R&D findings in their agricultural investment strategies with the support of the CIAT research center on tropical agronomy**. The CIAT exists since colonial times, and has endured spells of underfunding, but has been recently renewed to improve general facilities and labs, equipping the latter with modern machinery with the support of the Spanish cooperation. The center technical capabilities have also benefited and keep developing with the technical support of Portuguese universities. As a result of these recent developments, CIAT is currently asking for its recognition as an international reference laboratory.

275. **Agricultural modernizations strategies by cooperatives and foreign investors are based on research and development advice on how best to select the most adequate cocoa tree varieties for the different microclimates in Sao Tome and Principe, aiming at maximizing productivity**. Indeed an integrant part of the investment strategies of both cooperatives and foreign

investors is always to carefully develop nurseries that are suited to increase productivity and quality of agricultural production.

6.2.6 Taking stock: DTIS 2006

276. **The situation of the cocoa sector in 2005 described by the previous DTIS has been very much improved**. Most change is likely due to the large increase in the international price of cocoa. Probably stimulated by this upward movement, export-driven cocoa farmer cooperatives have strongly developed reaching international high-end organic and quality cocoa niche markets. This development has already reached a large fraction of the cocoa producing sector - indeed, out of the 154 cocoa producing villages in STP, 48 are in the organic cocoa cooperative (since its inception on 2005) and 17 are in the quality cocoa cooperative (since 2009). The combination of these two factors led to a 4-fold increase (at least) in the cocoa price paid to its farmers relative to 2005, which made cocoa plantation a good option even (or especially) for many smallholders.

277. **Large efforts of investment and renovation on cocoa plantations have started since 2005 and are currently ongoing**. In particular, farmer cooperatives, foreign investors and even traditional buyers have been replacing old cocoa trees with new ones, increasing tree density and using research directions from CIAT in order to increase hectare yields and resistance to pests. There are still many cocoa plantations in need for this type of investment, but there is a clear movement in the right direction.

278. **The cocoa farmer cooperatives are currently implementing many of the previous DTIS recommendations and are leading other market players (such as foreign investors and traditional buyers) to follow suit**. Technical assistance and inputs for cocoa plantation renovation are being provided to farmers directly by the cooperatives, and increasingly by the other market players who recognize that this is valued by the farmers. Fermentation and drying operations have been moved to the village level at several locations, especially those working with the oldest cooperative, CECAB. This decentralization of processing facilities is however not being followed but should be encouraged by other cocoa market players, namely foreign investors and traditional buyers.

279. **Cocoa farmer cooperatives have performed well in education farmers about the international "quality premium" enjoyed by STP, but additional investment on international marketing is still missing**. The transparency of sale operations by the cooperatives, together with their objective to educate farmers with respect to the STP "quality premium", has partly fulfilled the DTIS recommendation to publicly divulge information on cocoa production, exports and international prices. Additional investment on branding and marketing in international cocoa markets still needs to be pursued.

280. **One aspect where there has not been much change relative to the situation described in the previous DTIS is the land situation**. Most land plots are still owned by smallholders, many of whom abandoned them. Even in that situation, it has not been possible for the government to redistribute them in a systematic and effective way as owners often start some type of farming when they are notified that they are about to lose their land. In this context, credible land planning and

strategies to increase the size of cocoa plantations (in order to justify significant agricultural investment and modernization) are still very necessary.

6.2.7 Actions to be implemented: DTIS 2013

281. **The cooperative organization model should be supported and its adoption by other market players encouraged**. Most of the positive developments in the cocoa sector that happened in the last years can be attributed to the successful implementation of the export-driven farmer cooperative model, which led to the establishment of one large and financially sustainable cocoa exporting cooperative. The expertise and organizational structure passed by international donors and foreign buyers of organic and fair trade cocoa, together with the local know-how successfully brought to this partnership by the government of STP, created a combination that has the potential to succeed in reviving the cocoa sector. This cooperative model should be supported and its adoption encouraged by new cooperatives and other investors in the cocoa market. The following set of recommendations may help successfully implementing export-driven farmer cooperatives.

282. **Promote the effective activation of a National Agency for the Promotion of Exports and Foreign Investment to support the farmer cooperative model**. Export-driven farmer cooperatives have developed and grown tremendously since the last DTIS in the production of organic and quality fair trade cocoa. Despite this recent success, STP cocoa is still in need of marketing and branding that supports existing cooperatives and contributes to the creation of new ones. This effort is needed to secure additional foreign buyers to the cooperatives' cocoa production in a way that grants producer cooperatives an additional degree of bargaining power in the setting of cocoa prices and other benefits (such as technical assistance, equipment or organic certification costs).

283. **A second objective of promoting a working National Agency for the Promotion of Exports and Foreign Investment is to increase foreign direct investment in the cocoa sector of Sao Tome and Principe**. An active National Agency for the Promotion of Exports and Foreign Investment should also promote additional private sector foreign investment in the cocoa exporting sector. New investments in the sector will increase competition, which may contribute to improving farmer education – namely regarding the international valuation of the STP cocoa, including its "quality premium". Safeguards should, however, be in place regarding the organization model that new investors should follow: it is important that they commit to working with cocoa farmers on a regular basis, for instance by providing technical assistance and inputs, as well as working to build cocoa processing (namely fermentation and drying) facilities at the village level – this strategy would simultaneously save transportation costs for the investor and allow villagers to keep additional value-added from basic transformation of fresh cocoa.

284. **Finally, an effective National Agency for the Promotion of Exports and Foreign Investment could create additional capacity to transform cocoa into chocolate would improve the capture of value in the chocolate making production chain**. Currently most cocoa produced in STP is processed at a basic level and exported as dry beans. The only chocolate exporter in STP is Claudio Corallo, a family business that exports to high-end markets marketing Sao Tomean chocolate as a gourmet exclusive treat. Attracting this type of foreign investment would seem a desirable objective.

285. **Finalizing a full agricultural census is crucial to draw a land policy that promotes agricultural investment.** Given the current uncertainty about land rights and what the actual use of the existing land plots is, efforts to draw up a cadastre should be complemented with a full-fledged agricultural census. In fact, recent uncoordinated attempts by the government to undo its original land redistribution, lack of clarity in land redistribution decision making and resistance from entitled individuals have combined to create a high level of uncertainty about land rights. This acts as a strong deterrent for both foreign and domestic investment. Clear rules and property rights could contribute to attracting foreign direct investors to the agricultural sector. More specifically, only with an updated agricultural census it will be possible to develop an accurate plan for agricultural development in general and foreign direct investment in particular.

286. **Creating a land right-of-use market would be a crucial measure in order to increase agricultural investment in general and in cocoa farming in particular, and an instrument to ultimately improve land productivity**. The small size and dispersion of current cocoa plantations in STP increases the costs of exploring cocoa, thereby creating an impediment to agricultural investment in the country. Fully privatizing land is a politically sensitive topic, but introducing land rights-of-use that are sufficiently long (ideally between 30 and 50 years would be a desirable length)57 could be a measure powerful enough to create a land use market with many potential economic benefits. First of all, these contracts would allow the purchase of the rights to use agricultural land to create larger cocoa plantations that could increase profitability to a scale that justifies investment on equipment and knowledgeable extension support staff. A second benefit of an active right-to-use-land market would be that meaningful collateral could be provided to banks in exchange for credit for investment in agricultural modernization, which is currently not available. The existence of an active right-to-use-land market could also prevent the type of social tensions related to expropriations recently observed in Sao Tome, since the need for the government to expropriate smallholders in order to facilitate foreign direct investment could be reduced in this way.

287. **The vulnerability of Sao Tomean cocoa production to recent droughts highlights the need to invest on irrigation infrastructures. Indeed, the severe effects of the 2010 drought in particular were magnified by the inexistence of modern irrigation infrastructures**. Most irrigation schemes still date from colonial times and are clearly outdated and ineffective. Investment in irrigation infrastructures should be a priority action for donors, as this is a necessary condition for export cooperatives, foreign investors and all cocoa producers in general to materialize the gains in production aimed with its recent investment in the renewal of cocoa plantations.[58]

288. **The creation of new export-driven cocoa cooperatives will require complementary investment in transport infrastructures**. The EU has sponsored important work on road reconstruction in the recent past. But additional investment is needed (on roads but also on maritime

[57] This the international norm for rights to use agricultural land, as in the cases of Ethiopia and China.

[58] The EU has sponsored some important work on infrastructures, namely road reconstruction, in the recent past. FIDA sponsors the FIC (Fundo de Infraestructuras Comunitárias or Community Infrastructure Fund), an organization that finances the rehabilitation and construction of irrigation infrastructures, feeder roads, and small processing facilities (e.g. drying units). The effect of this programs on irrigation infrastructure seem however limited, as this is a recurrent problem reported by the different agricultural sectors and cocoa in particular.

transportation and port capacity to facilitate cocoa exports) in order to include cocoa producers currently far from good road infrastructure in the international cocoa markets.

289. **Additional lines of support should be provided to capacity building on information for the agricultural sector**. Agricultural research and development services provided by CIAT are of crucial importance for the modernization of STP's agricultural sector and its ability to disseminate and adapt new varieties or species to local agro-ecological conditions. FENAPA, the national small farmer association, also plays an important potential role in decentralizing agricultural extension, even though its current organization may need to be adapted to the changing conditions in the cocoa market. In summary, technical and financial support to these two institutions should be considered by donors as an important and relatively low cost way to support the country's modernization and renewal of the cocoa sector.

6.3 Sectoral Diversification in Agriculture

290. **The economy, and in particular the exports of Sao Tome and Principe, have been centered in cocoa production for more than a century.** This overexposure of the country to exporting a single agricultural commodity has increased the economy's vulnerability and volatility in face of shocks in the international cocoa market. Indeed, as recently as in 1998, low cocoa demand and international prices were leading to a generalized abandon of cocoa production. Since then the trend has changed, but no additional insurance mechanisms against the downside risk have been put in place.

291. **In this context, efforts to promote export diversification, overall and within the agricultural sector, seem of crucial importance to Sao Tome and Principe.** Broad sectoral diversification, encompassing sectors other than agriculture, such as tourism, is vital. In addition, export diversification within the agricultural sector is also desirable as a way to insure against cocoa market specific risks – not only related to international demand, but also domestic production as is the case of insect plagues or other conditions that are idiosyncratic to cocoa production in STP.

292. **Existing agricultural export diversification strategies include the promotion of organic coffee, organic pepper and palm oil exports.** The formation of farmer cooperatives for organic coffee and organic pepper has only been moderately successful (as can be seen in Table 19) and requires further investment if these cooperatives are to fulfill their potential. Palm oil plantations have in the last years been benefiting from large inflows of investment from a foreign investor. These plantations, subject to environmental safeguards that need to be put in place, are likely to become a successful export case in the near future.

Table 19: Main agricultural exports in 2011

	Value a/	Percent of total
Cocoa	92,037,654	96.47%
Coconuts	1,643,959	1.72%
Pepper	840,502	0.88%
Copra Oil	610,000	0.64%
Coffee	271,289	0.28%
Flowers	26,950	0.03%

a/ In thousand dobras
Source: National Statistics Office; and CEPIBA for Pepper Exports.

293. **Additional agricultural diversification may be pursued through the promotion of alternative cultures such as high-value exotic flowers and tropical fruits (such as passion fruit or guava) that can be exported, or traditional cultures such as taro[59], breadfruit or cassava, which support the national food security strategy**. Given the diversity of microclimates within STP, there are several areas less suited to the production of cocoa or coffee (in the humid mountainous Sao Tome island center or in areas of Principe, for instance), but that are ideal to grow flowers and fruits that are high-value and can be exported. Flower exporting has been successful in recent years, but has recently collapsed (as is clear from Table 19), arguably due to difficulties with air transportation. Simultaneously, promoting traditional cultures may also be a desirable agricultural diversification strategy. This strategy can be particularly useful in a context of high commodity prices to ensure food security in an economy that imports a great fraction of the food it consumes, as recognized by the recent National Plan for Food and Nutritional Security supported by the FAO - for additional details see the PNSAN (2012).

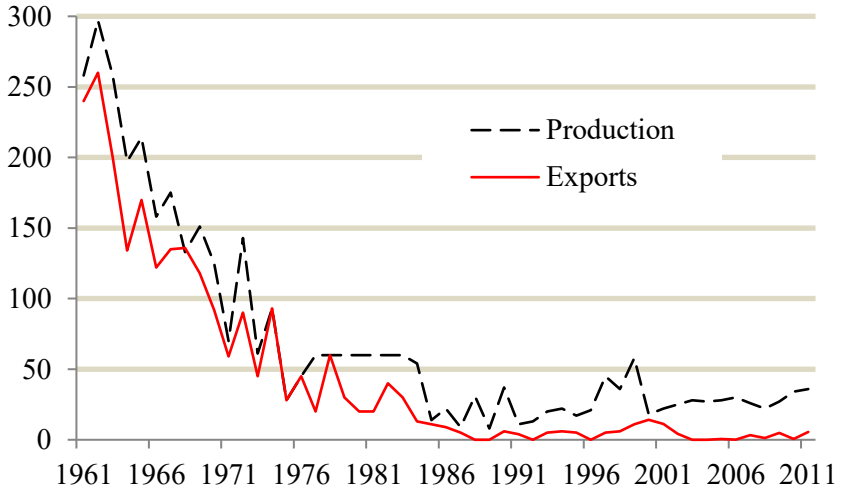
6.3.1 Coffee

Background

294. **Coffee production was never nearly as significant for Sao Tome and Principe as cocoa production**. As can be seen in Figure 51, even at its peak in the 1960s, coffee production never surpassed 300 tons, which compares to about 10,000 tons of cocoa production at that time. Coffee production has reached around 50 tons at most in the period after independence. Coffee production has however been following a positive low growth trend since 1985, although this production has mostly not been exported. An (small scale) exception has occurred in 2011 and 2012 when the organic coffee farmer cooperative, CECAFEB, started exporting about 6 tons of green coffee beans in each year.

[59] Taro is also known as cocoyam or "*matabala*" in Portuguese.

Figure 51: Coffee production and exports in STP from 1961 to 2011 (in tons)



Source: FAOStat and STP National Statistics Office.

Positive results

295. **Coffee production has been following a modest positive growth trend since 1985, growing at an average annual rate of 6%.** This growth in production does not seem the result of a continued or homogenous process. In the most recent years, since 2009, this growth in production can be attributed to Libyan foreign investment at Monte Café, which at that time started employing 250 workers to work in the coffee plantations, both cultivating and replanting, as well as to the creation also in 2009 of the organic coffee farmer cooperative CECAFEB, which employs 200 farmers living in six different communities.

296. **CECAFEB is a cooperative of organic coffee farmers formed in 2009 under the support of PAPAFPA.** The first meetings with farmers happened in 2009, but export activities only started in 2011 with 200 farmers living in 6 different communities. The cooperative was started under the initiative of PAPAFPA, which found the international buyer and drafted a program under which support to CECAFEB will be provided until 2015. Under this program, PAPAFPA provides technical assistance (including field visits to other countries to allow contact with international best practices in organic coffee exploration), transportation and other equipment, in addition to financial support to allow coffee cherry transformation into green coffee beans. The sole output buyer, a French company named Malongo, paid in 2011 and 2012 10,000 dobras per Kg of coffee cherry (8,000 dobras to be paid at the time of sale in September, and 2,000 dobras to be paid around Christmas time) for a total production of about 56 tons and 65 tons of cherry coffee in 2011 and 2012, respectively. Malongo also funds a “fair trade social prize” for the communities where producers are most engaged with the farmer cooperative, but does not provide any type of technical assistance to the farmers in the cooperative.

Challenges - now and ahead

297. **Only 16% of the coffee produced in STP between 1985 and 2011 has been exported**. In the years since 2009, for example, the large investment at Monte Café did not result in any exports, a managerial choice of the private group that manages the coffee plantation. A new management is expected to be in place in 2013, with new strategic orientations for this investment. CECAFEB is responsible for nearly all of STP coffee exports in 2011 and 2012, respectively 5.2 ton and 6.2 ton in each of these years.

298. **Promoting coffee exports requires overcoming several challenges, mostly related to international branding and creation of international demand for the coffee of Sao Tome and Principe**. Currently, the organic coffee farmer cooperative CECAFEB relies on a single buyer (French company Malongo) that pays a low price relative to international standards. As recognized by PAPAFPA (2011), this price is not at all competitive, and has not created incentives for enough farmers to join the cooperative. Marketing the quality of organic coffee from STP is an essential component of any successful export strategy, as the coffee value perceived by buyers must be high enough so as to overcome the costs of STP's insularity and isolation. Complementary to investment in international branding that recognizes the high quality of organic Sao Tomean coffee, increasing exports requires additional work identifying organic coffee buyers in the international market. This would be a task best performed by an active National Agency for the Promotion of Exports and Foreign Investment.

299. **CECAFEB needs to be able to renegotiate the terms of its exclusivity contract with Malongo**. This contract states that Malongo will buy to buy up to 40 tons of coffee at a relatively low price. The contract terms have however not been beneficial enough to promote involvement and appropriation of coffee farmers to levels that generate the envisaged production and export levels. Indeed PAPAFPA (2011) recognizes the lack of incentives offered to farmers who could potentially adhere to farmer associations within CECAFEB. Complementary to investment in international branding that recognizes the high quality of organic Sao Tomean coffee, increasing exports requires identifying additional international buyers in the international market, which can potentially be interested in signing contracts that allow CECAFEB to provide the necessary incentives to attract and create additional organic coffee farmers. Note that within the six communities where CECAFEB operates it is reported that there are idle plots of land, which were old coffee plantations, abandoned and not being currently explored.

300. **To attain financial sustainability, CECAFEB must keep guarantee additional PAPAFPA support to keep investment in the renovation and replanting of coffee trees in its plantation area, increase the plantation area, as well as keep investing in the technical preparation of its staff, so as to improve quality and increase the productivity and total area of its plantations**. Investing in increases in both total plantation area and productivity, as well as in improvements in quality is crucial to overcome export barriers posed by the countries small size and isolation. CECAFEB's current production of 6 tons of green coffee is still very low relative to the 40 tons goal. Provided there are international buyers interested in participating in this venture at a higher purchasing price, and with PAPAFPA's continued support, CECAFEB should have working conditions to endure the 2 to 3 years after plantation of new trees without additional production from these new plants and reach the full production stage 5 years after plantation of the

new coffee trees. At that stage CECAFEB should be in good shape to start exporting at a larger scale and attain financial sustainability.

6.3.2 Pepper and vanilla

Background

301. **The exporting farmer cooperative for organic pepper CEPIBA was created at the end of 2007 using PAPAFPA financing. CEPIBA initially worked with 8 communities and about 115 farmers, reached 27 communities and 290 farmers in 2011, and fell in 2012 to 26 communities but an increased number of 344 farmers**. One community was excluded from the cooperative in 2012 after having received full support (inputs, equipment and technical assistance) from CEPIBA and not having delivered any output to the cooperative for two consecutive years.

302. **The only output buyer, French company Hom et Ter, contracts a minimum price (unilaterally determined) and is available to purchase up to 80 tons of organic pepper**. Hom et Ter provides no technical assistance, but sends bags for output export, as well as generators and other utilities for the farmer communities that work with CEPIBA.

303. **Plantation and export of organic vanilla was attempted over the same initial period as organic pepper, but it was found not be a viable line of investment**. The agro-ecological context of STP was found not be adequate to pursue exploring the plantation of vanilla for commercial purposes.

Positive results

304. **CEPIBA started its operations in 2008 and was able to increase organic pepper exports in response to higher export prices until 2011, as shown in Table 20**. Production and exports fell strongly in 2012 as a direct result of a scale insect (or “cochonilha” as it is locally known) plague, which could not be timely prevented or treated. This may be related to the fact that there is currently no resident senior technical support for organic pepper farming available to this cooperative.

Table 20: Organic pepper exports by CEPIBA from 2008 to 2012

	Export Quantity	Export Price
2008	<3 Ton	
2009	3 Ton	€4.5/Kg
2010	3.5 Ton	€5.4/Kg
2011	5.3 Ton	€6.4/Kg
2012	3.0* Ton	€7.0/Kg

Source: Mission estimates

Challenges - now and ahead

305. **CEPIBA's operations are still far from being financially sustainable**. In 2012 the organic pepper plantation area was 67ha, which contrasts with the financial sustainability goal of 120ha. Financial sustainability would require the export of 20 tons of pepper, a number which is very far from the maximum production of 6 tons achieved in 2011, and which could not be sustained in 2012. These numbers point to the need to improve productivity, in addition to, and perhaps even more urgently than, increasing the plantation area. In fact, planting of new pepper trees has been intensively pursued by the CEPIBA, which also has strongly invested in technical assistance, inputs and equipment (such as stakes to support plants or trucks and tractors to transport workers, plants and production).

306. **Similarly to cocoa, the investment in planting new pepper trees to increase tree density and productivity within the plantation area is not immediately visible**. It takes at least three years for young pepper trees to become productive, and about five years for them to become fully productive. In the meanwhile, young trees are very sensitive to droughts, a perverse effect that has killed between 33% and 90% (depending on the community) of young plants in the 2010 drought.

307. **Improvements in irrigation infrastructure are well needed to reap the rewards of investment in increasing pepper plantation productivity**. While PAPAFPA has invested substantial resources in providing farmer cooperatives with inputs, equipment and technical support, irrigation is a key requirement for agricultural export to succeed. Existing irrigation infrastructure is highly deficient and still dates from colonial times. Pepper, as cocoa, plantations and the efforts to invest in new trees and higher tree density have been severely affected by the recent drought years. At the current stage of investment in farmer cooperatives, it would seem highly critical to invest in irrigation infrastructures as a way to increase production.

308. **CEPIBA faces challenges in terms of farmer appropriation, as a fraction of its members choose to sell their output domestically, instead of delivering it to the cooperative for export.** Farmers working with CEPIBA need to pay only 10% of the cost of inputs (such as new plants, stakes to support new and old plants, and technical support), with the remaining 90% if the cost paid by PAPAFPA. They also benefit from CEPIBA's infrastructures (namely, transportation, staff to process, dry and prepare pepper to be exported), resources that consume about half of the export revenue. Because domestic prices for pepper (regardless of its organic or conventional origin) are 50% to 100% higher than the ones paid by the cooperative, farmers supported by the

cooperative often prefer to sell directly in the domestic market.[60] This should be regarded as a sign that CEPIBA is not being able to secure a good export price, which is not surprising given its lack of managerial capacity and bargaining power, which depends on the small size of its production and significant export transportation costs involved. Another possibility is that revenue is not being well managed and that payments to farmers in the cooperative could be increased under the current setting. In any event, the sustainability and growth of organic pepper exports in STP looks highly dependent on the possibility of paying farmers higher prices for their production.

309. **Overall, the organic pepper line of export promotion mostly needs stronger investment in human resources, both technical, managerial and administrative, to make it viable.** Current facilities are likely not enough to support the aimed increase in production, but the most crucial need that can be identified at CEPIBA at the moment are human resources. As is recognized in the 2011 PAPAFPA annual report, there is currently no resident senior expert on the production of organic pepper in the structure of CEPIBA. Currently, the president of the cooperative has to divide himself between planting new trees, managing the cooperative and meeting visitors. The support staff is also very limited and has little technical training for the preparation of quality organic pepper. There is also lack of managerial and administrative support: apparently export prices are dictated by the single international buyer without anyone in the cooperative having the notion of whether the prices they are being paid are close to those in international markets. In addition, records with volume and price of exports were not easily accessible, and prices to be paid to farmers were not clearly visible. Bargaining power, organization and transparency, which are some of the strengths of the farmer cooperative model, naturally suffer with the lack of human resources at CEPIBA and this feature is likely to limit trust, appropriation and attractiveness of membership for pepper farmers. Ultimately, unless there is clear investment in the staffing and organization of CEPIBA, it does not look like a viable strategy despite its recognized potential.

6.3.3. Palm oil

Background

310. **Palm oil was one of the main agricultural exports of STP from the mid-1980s until the beginning of the 2000s.** Palm oil production as high as 2000 tons of palm oil per year was achieved by the public company Emolve from a 600ha plantation. This company was started in 1983 and closed doors in 2009, when palm trees were no longer productive and the company's factory was in deteriorating condition.

311. **Agripalma is the company created in 2009 to renovate the former Emolve palm oil exploration in the south of the Sao Tome island and promote palm oil exports.** It is 88% owned by the Belgian group Socfinco, and 12% owned by the state. The total investment to be made between 2010 and 2013 in the palm tree plantation, processing facilities and social infrastructure was 8 million Euros. Agripalma employs currently 400 workers, of which 200 are temporary plantation workers.

[60] CEPIBA pays 200,000 dobras per Kg of fresh pepper, whereas the price in the domestic pepper can often be 300,000 to 400,000 dobras per Kg.

312. **The initial business plan put forward by Agripalma included a US$30 million investment in processing factories alone**. One to be located in Sao Tome to serve 3225 ha of plantation (1725 ha Agripalma's own plantation and 1500 ha family plantations) and the other to be located in Principe. The 1275 ha of palm oil plantation projected for the Principe island could not be achieved due to local resistance over environmental concerns. The government has so far allocated 1600 ha in the island of Sao Tome, where new palm trees have already been planted, and is expected to allocate an additional 1400 ha to compensate for the area that could not be attained in Principe.

313. **Agripalma aims at processing palm oil from the output of small farmers exploring about 1500 ha of small palm tree plantations**. The barrier encountered to achieve this objective is similar to that reported by cocoa and pepper farmer cooperatives. Small farmers lack financial means to purchase new palm trees for replanting, inputs (such as fertilizers, insecticides and fungicides) and technical assistance. This investment would be required in order to improve productivity to good levels. However, these farmers do not have access to credit. A possible alternative would be Agripalma supplying these inputs directly to farmers and taking its cost out of farmer output revenues – but this agreement could only be implemented if exclusivity contracts between Agripalma and these farmers were predicted and enforceable in the current legal framework to avoid moral hazard problems.[61] Agripalma is currently not willing to provide inputs to small farmers in the absence of legal guarantees for the implementation of exclusivity contracts and is looking for willing creditors to small palm tree farmers.

Environmental concerns

314. **The exploration of palm oil raises several environmental concerns that were not tackled in an environmental mitigation plan.** The original business plan by Agripalma that was provided to our team by this company did not include an environmental mitigation plan, even though some explanations were provided regarding practical mitigation strategies under implementation.

315. **Fauna and flora were severely affected by the extensive palm tree replantation operations of Agripalma, which are located at the border of natural reserve Obo**. Given the particularly high number of rare flora species in the Obo natural reserve, it has been recognized since 1988 as the second most important African forest in terms of biodiversity out of the 75 classified African forests. Agripalma cut down large tree areas (1600 ha) to plant new palm trees in the new palm oil exploration area. The method chosen to plant the new trees was to cut down every single tree and take out all existing vegetation in the new plantation area. This approach led to the loss of many animals and trees at the border of the Obo natural reserve, which should be subject to strict environmental protection rules. Additional plantation efforts should be monitored more closely.

316. **Another environmental concern brought about by Agripalma's palm oil exploration is the need to leave a safety distance between palm tree plantations and rivers**. This is of particular concern in STP where river floods have been a governmental concern. World Bank

[61] Farmers would have incentives to accept inputs from Agripalma under an exclusivity contract, but to break this contract afterwards and sell output to other buyers at an higher price than the one paid by Agripalma after taking out the cost of inputs provided in advance.

experts currently recommend that a 100-metre safeguard distance is left between any river and plantations, which does not seem to have been put in place by Agripalma at all times. Again, the compliance of additional plantation efforts to these rules should be monitored more closely.

317. **Palm trees are very demanding and quickly exhaust soils, contributing to soil erosion**. It is very hard to grow other culture in a palm tree plantation, although Agripalma has been complementing the palm tree plantation with the leguminous plant Pueraria, which contributes to soil fertilization.

6.3.4 Exotic flowers and fresh tropical fruits

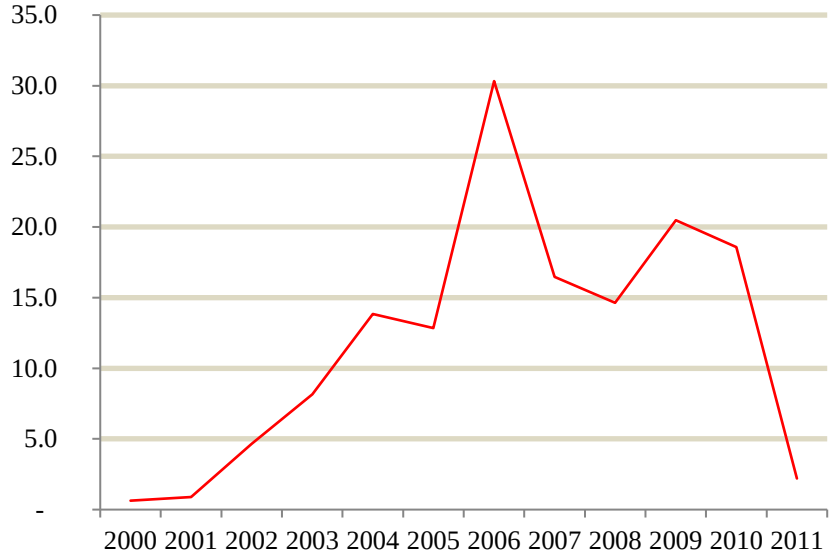
Background and export potential

318. **Given the diversity of microclimates within Sao Tome and Principe, there are several areas ideal to grow exotic flowers and fresh tropical fruits that are high-value and can be exported to niche markets abroad.** Indeed, there are several areas less suited to the production of other export crops such as cocoa or coffee that could be potentially used for planting tropical fruits such as passion fruit, guava, soursop[62] or safu, which are lightweight and have an international high-value, the same being true of exotic flowers grown in Sao Tome. Some of the areas where this new line of exports could be launched are the humid mountainous Sao Tome island center or south and some areas in the Principe island, for instance.

319. **Exotic flower exports have already operated successfully from the island of Sao Tome.** The successful operation started in 2000 with the creation of the Flora Speciosa company, but recently collapsed. Flora Speciosa operated a model under which its exported quality flowers from growers to whom it provided technical assistance. The fall in export activities was arguably due to difficulties imposed by air transportation. This experience highlights the vulnerability of this type of fresh product export to airline transportation, which would need to be negotiated and regulated so as to create favorable conditions for this type of export to be feasible.

[62] This fruit is known as "*sape-sape*" or "*graviola*" in Portuguese.

Figure 52: Flower exports in STP from 2000 to 2011 (in tons)



Source: STP National Statistics Office.

6.3.5 Taking stock: DTIS 2006

320. **The situation of the agricultural sector in 2005 described by the previous DTIS has changed substantially**. The large increase in international cocoa prices, followed by the development of active export-driven cocoa farmer cooperatives and the arrival of foreign investors to the cocoa market, has led to investment and renewal of many cocoa plantations. This change did not contribute in itself for agricultural diversification. However, the fact that the price of food imports has also been rising led to an increase in the production of traditional crops such as taro or cassava.

321. **As described by the DTIS in 2005, the substitution of export crops by horticulture production is still happening to some extent in the case of coffee plantations.** The export-driven coffee farmer cooperative has not managed to bargain a high enough price for the coffee it sells, so that many smallholders are not persuaded to join the cooperative and instead prefer to plant horticultures, such as cabbage or carrots, in their land plots. In other cases, smallholders just leave their land plots vacant.

322. **Regarding the export model possibilities described in the previous DTIS, the association of local smallholders is the current dominant model in the agricultural sector.** Indeed, in several sectors including cocoa, coffee and pepper, more or less successful farmer cooperatives were created and are currently exporting to international high-quality niche markets. They were as successful as to one of them achieving financial sustainability in just a few years.

6.3.6 Actions to be implemented: DTIS 2013

323. **The promotion of agricultural export diversification should be in line with the overall export promotion strategy for STP of aiming at high-end markets**. Export-led agricultural diversification should target the export of quality crops with high value that can be sold in international niche markets. This is the only possibility to compensate for the significant fixed costs associated with small scale production, and the considerable transportation costs associated with the insularity and geographical isolation of the country. Promoting the export of organic coffee and organic pepper has been pursued in recent years is a worthwhile diversification effort, but has experienced limited success up to this moment.

324. **Promote the effective activation of a National Agency for the Promotion of Exports and Foreign Investment to improve the bargaining power of export-driven farmer cooperatives.** Export-driven farmer cooperatives have developed in the organic coffee and organic peppers production. Their success has however been limited much because they have not been able to establish a high-end position in international markets, and have little bargaining power in setting prices and other benefits (such as technical assistance, equipment or organic certification costs) with their single output buyers.

325. **Export-driven cooperatives should experience further continued support in order to allow them to succeed.** Conditional on securing additional output buyers and more positive terms of trade, coffee and pepper cooperatives, as well as any additional new cooperatives aimed at exporting fresh fruits and flowers, will need further technical and financial support to secure an effective organization model and the investment necessary to increase the number of cooperative members, and modernize land plots.

326. **Improvements in irrigation infrastructure are well needed to reap the rewards of investment in increasing pepper plantation productivity. Existing irrigation infrastructure is highly deficient and still dates from colonial times**. Pepper plantations and the efforts to invest in new trees and higher tree density have been severely affected by the recent drought years. At the current stage of investment in farmer cooperatives, it would seem highly critical to invest in irrigation infrastructures as a way to increase production.

327. **Additional export diversification requires complementary investment in transport infrastructures**. The EU has sponsored important work on road reconstruction in the recent past. But additional investment is needed on roads, but also on maritime transportation and port capacity, as well as on air transportation to facilitate exports of coffee, pepper and fresh flowers and fruits. Indeed for the latter type of export to be feasible, airline transportation would need to be negotiated and regulated so as to create sufficiently favorable conditions.

328. **A final note is due to the fact that fauna and flora need to be protected from environmental damages inflicted by new investments made in the country**. Mitigation plans should be requested of all new investors —especially in the case of the exploration of palm oil, and also especially if this is in the border with any natural reserve, like the Obo Park, or rivers, which have been prone to flooding in the recent past.

6.4 Fisheries sector

6.4.1 Current situation

329. **Fishing is very important to the living of STP nationals, but the fisheries sector is mostly composed of small traditional fishing infrastructure.** This sector employs up to 30,000 fishermen whose households are typically among the poorest in the country. Fish accounts for about 80 percent of the population's protein intake. Because of the very fragile nature of the traditional fishing infrastructure, which makes up nearly all of the fishing capacity of the country, there is currently a relative depletion of fishing resources near shore. Indeed there are about 2000 to 3000 small boats which account for more than 90% of fisheries. The exception is about twenty 16 to 20 meters semi-industrial fishing boats in the whole country, which also cannot venture too far away from the coast.

330. **The near absence of preservation, processing and distribution of fisheries create serious bottlenecks for the development of the fishing sector**. Fishing often exceeds local demand and is simply wasted given the lack of capacity to distribute it to other villages where there may be demand. Excess production has also to do with poor infrastructure for fish preservation, including a near complete lack of refrigeration facilities. The creation of food transformation capabilities could generate value added and productive employment to the sector.

331. STP has signed fishing agreements, namely with the EU and Japan. For instance, the agreement signed in 2007 with the EU was made against an annual compensation of EUR 663,000 for this concession, in addition to licensing fees paid by ship-owners. However, the authorities have no capacity to control industrial fishing and no actual way of verifying adherence to this agreement by foreign fishing boats.

6.4.2 Taking stock: DTIS 2006

332. **There have not been many positive developments relative to the description of the fisheries sector in Sao Tome and Principe provided by the previous DTIS relative to 2005**. The current situation described in the previous section and also in the recent SNPRS II (2012) is very similar to that identified in 2005, and little progress has been made towards achieving sustainability for the fisheries sector in the country.

333. **There have been a few recent isolated positive exceptions, which are mostly uncoordinated and raise problems of their own**. A recent positive development was the opening of a preservation (refrigeration) center for fishing inaugurated on October 2012 at the Neves village, financed by the Spanish cooperation. Another positive development expected in the near future is the donation by Taiwan of a semi-industrial boat. The problems posed by this type of initiative have to do with its uncoordinated nature and the fact that maintenance for this isolated investments will be hard to guarantee.

6.4.3 Actions to be implemented: DTIS 2013

334. **Investment in the improvement of traditional boats should be prioritized.** Adding stabilizers (made of environmentally-friendly materials) to traditional boats is a simple way of making them safer and allowing traditional fisherman to venture further away from shore, where fishing resources may be under less pressure.

335. **Adopting a fisherman cooperation model could be a successful way forward**. The creation of fishing associations with the financial capacity to buy fiberglass boats taking 3- to 5-fishermen crew would allow safe fishing further away from shore, thereby increasing the potential fishing supply and potentially generating additional employment.

336. **The creation of food transformation capabilities could generate value added and productive employment to the fisheries sector**. In particular, if the country were to increase its fishing supply (which already exceeds local demand given the lack of transportation and preservation infrastructure), it would be critical to promote a light preservation and transformation of food industry. This industry could target clients such as hotels, the domestic school network, animal feed from maize and fish, and domestic consumption. In this setting, the creation of such a light industry would link the primary sector to the services sector, and serve to support and complement the export of services, such as the tourism industry. It would also serve as an instrument for food security and for the reduction of the food import dependence, while simultaneously allowing for job creation. According to a study on the introduction of a canning factory in the Sao Tome Island, provided by the NGO Marapa, this seems a viable strategy according to a study.

337. **Immediate attention and financial resources are also required for the control of maritime borders.** Evidence points to a large fraction of STP's fishing resources being extracted by unlicensed foreign boats in deep waters. The national coast guard has no boats that enable it to limit this phenomenon, and strengthening its capacity would be a way to promote future fishing sustainability in STP's waters.

References

Abbas, Ali; A. Klemm, S. Bedi and J. Park (2012), "A Partial Race to the Bottom: Corporate Tax Developments in Emerging and Developing Economies"; IMF working paper WP/12/28; Washington, DC: International Monetary Fund.

338. AFD (2012), Too many ports handle Africa's maritime trade traffic - few of them large enough to attract major shipping lines, online report.
339. AfDB, et al. (2012), "São Tomé & Príncipe", in African Economic Outlook 2012: Promoting Youth Employment, OECD Publishing. http://dx.doi.org/10.1787/aeo-2012-49-enSao Tome &Principe in African Economic Outlook.

AGER (2013), *Considérations d'investissement*, mimeo.

340. Avasant (2010), "Globalization of Services: Developments in the Outsourcing Sector – Implications for Both Developed and Developing Countries", Presentation by Kevin Parikh, CEO Avasant, at the World Bank, Washington DC, December 8.

Bacchetta, Marc; M. Jansen, R. Piermartini and A. Amurgo-Pacheco (2009), "Export Diversification as an Absorber of External Shocks"; mimeo, Geneva: WTO.

Cadot, Olivier; A. Estevadeordal, A. Suwa-Eisenmann, and T. Verdier (2006), *The Origin of goods: Rules of origin in regional trade agreements*; London: CEPR.

341. Cali, Massimiliano, and D. W. te Velde. (2009) "Aid for Trade in Small and Vulnerable Economies*"*, Trade Hot Topics, *Commonwealth Issues* 59.
342. ENAPORT (2012), *Relatorio e Contas do ano 2011*, São Tomé: Enaport.
343. EU (2007), Document de Stratégie Pays et programme indicatif national pour la période 2008-2013 ; Sao Tome : STP and EC.

Gwilliam Ken (2011), "Africa's Transport Infrastructure Mainstreaming Maintenance and Management"; Washington DC: World Bank, mimeo.

Harding, Palsson, and G. Raballand (2007), "Port and Maritime Transport challenges in West and Central Africa"; SSATP Working Paper 84.

ICA (2012) Angola invests in Sao Tome port and airport, http://www.icafrica.org/en/news/infrastructure-news/article/angola-invests-in-sao-tome-port-and-airport-1893/

Isik Gozde (2012), "Logistics Connectivity in the Caribbean: Current Challenges and Future Prospects"; Washington DC: World Bank, mimeo.

James, Sebastian (2009), *Tax and Non-Tax Incentives and Investment—Evidence and Policy Implications*"; Investment Climate Advisory Service, Washington, DC: The World Bank.

344. Kunaka, Charles (2011), "Logistics in Lagging Regions"; Washington DC: World Bank, mimeo.
345. — (2012), "Transshipment Options for Nepal's Third Country Operation"; Washington, DC: The World Bank, mimeo.

Laporte, Bertrand, and L. Helder (2008), *Impact budgétaire de l'adhésion à la CEMAC, de la participation à l'APE "Afrique Centrale" et de l'accession à l'OMC pour Sao Tomé et Principe*; Sao Tome: mimeo.

346. Martins, Pedro and L. Alan Winters (2005), “Small Isn't Beautiful: the Cost Disadvantages of Small Remote Economies”; *Center Piece* 10, 24-28.
347. Ocean shipping Consultants, Ltd., Africa Infrastructure Country Diagnostic – Beyond the Bottlenecks: Ports in Sub-Saharan Africa, AICD Background Paper 8. Washington DC: World Bank, June 2008.
348. PAPAFPA (2012), Rapport global 2011; Ministério do Plano e Desenvolvimento, República de São Tomé and Príncipe.
349. PNSAN (2012), Programme National de Sécurité Alimentaire et Nutritionnelle; Ministério do Plano e Desenvolvimento, República de São Tomé and Príncipe.

Ranganathan, Foster (2011), “ECOWAS Infrastructure: A Regional Perspective”; Washington DC: World Bank, mimeo.

Rapports d’État des Systèmes Éducatifs Nationaux (RESEN). 2013. *Le système éducatif de Sao-Tomé et Principe : Une analyse sectorielle pour une amélioration de l’efficacité du système* , *ministério da educação, cultura e formação*, UNESCO, Pôle de Dakar and The World Bank.

Sachs, Jeffrey, and A. Warner (2001), “Natural Resources and Economic Development: The Curse of Natural Resources”; *European Economic Review* 45, 827-838.

STP (2008), *Accession de la République Démocratique de Sao Tomé-et-Principe à l’Organisation Mondiale du Commerce : Aide-mémoire sur le régime de commerce extérieur* ; Sao Tomé : mimeo.

350. STP (2009), Assitência Técnica para a Definição de em Política de Tranporte em São Tomé e Príncipe; Sao Tome: Ministry of Public Works.

STP (2012), *Second National Poverty Reduction Strategy II (2012-2016)*; Sao Tome: Ministry of Planning and Development.

351. STP (2012), The Customs São Tomé and Príncipe, http://www.alfandegas.st/search/instituicao.php?target=ainstituicao

Treviño, Juan-Pablo (2011), “Oil-Price Boom and Real Exchange Rate Appreciation: Is There Dutch Disease in the CEMAC? *IMF working paper* WP/11/268; Washington, DC: International Monetary Fund.

352. UN-OHRLLS (2011), Small Island developing states, Small Islands Big(ger) Stakes, New York: United Nations.
353. Winters, L. Alan, and P. Martins (2004), “When comparative advantage is not enough: business costs in small remote economies” *World Trade Review* 3, 347-383.
354. Winters, L Alan; P. Martins and M.G. Pedro (2004). “Beautiful but Costly: Business Costs in Small Remote Economies” *Economic Paper 67*, Commonwealth Secretariat.
355. World Bank (2005) Sao Tome and Principe: Diagnostic Trade Integration Study; Washington, DC: The World Bank.

— (2006), Where Is the Wealth of Nations? Measuring Capital for the 21st Century; Washington, DC: The World Bank.

— (2008), *Doing Business: An Independent Evaluation Taking the Measure of the World Bank-IFC Doing Business Indicators*; Washington, DC: Independent Evaluation Group, The World Bank.

— (2010), Diagnostic Trade Integration Study: Democratic Republic of Congo; Washington, DC: The World Bank.

— (2011), São Tomé and Príncipe Country Economic Memorandum Succeeding Beyond Petroleum; Washington, DC: The World Bank.
— (2011). Sao Tomé and Principe Country Economic Memorandum: Succeeding Beyond Petroleum. Washington, DC, The World Bank.
—
— (2012), Exporting Services: a developing Country Perspective; Washington, DC: The World Bank.
— (2013), Doing Business 2013: Smarter Regulations for Small and Medium-Size Enterprises; Washington, DC: The World Bank.

— (2013a), *A Diversification Strategy for Gabon*; Libreville: The World Bank.

— (2013b), Program Document for a proposed grant to the Democratic Republic of Sao Tome and Principe for a second governance and competitiveness development policy operation; Washington, DC: The World Bank.
— (2012), NPRS II, "Second National Poverty Reduction Strategy II (2012-2016)"; República de São Tomé and Príncipe.
— (2012), Logistics Performance Index. http://lpisurvey.worldbank.org/