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Abstract

The situation in East Timor is turbulent and future growth prospects are indeterminate. This paper discusses the economic challenges facing East Timor. Most inhabitants depend on subsistence farming and there is a need to both modernize agriculture and to foster a modern sector that can generate employment for the growing population. Public expenditures play an important role in this development and East Timor is fortunate to have a large petroleum fund to utilize for economic growth and development. Unfortunately, the fund is about to dry up. There are also clear signs that a large part of investments and development efforts are misplaced. Political conflicts and weak institutions are explaining some of the failures to generate a more growth enhancing economic environment.

UNEVEN ECONOMIC GROWTH

Economic growth in East Timor has displayed dramatic volatility since the country's independence in 2002. The first few years were years of very low growth, increasing steadily to very high figures after increases in public expenditure after the political turbulence in 2006, followed by stagnation during the six years leading up to 2016. Unfortunately, the last few years have been plagued by low growth of GDP and, as a result, even lower growth of GDP per capita. GDP at current prices decreased to 2.8 percent in 2017 and 2.6 percent in 2018, mainly because of political deadlocks and concomitant low public expenditure (Ministry of Finance of Timor-Leste 2019, p. 6). Since population growth remains high, GDP per capita declined by 4.7 percent in 2017 and 4.5 percent in 2018. A positive economic turnaround took place in 2019 when public expenditures increased and growth resumed to around 4 percent (World Bank 2019a, p. i). This is, however, still far below the target of the 2011–30 Strategic Development Plan: an annual growth rate of 7 percent, required for East Timor to become an upper middle-income country by 2030 (República Democrática de Timor-Leste 2011). Positive and high economic growth is crucial for increasing the living standard of the large share of the population who is still living in poverty. Unfortunately, the COVID-19 pandemic and collapsing oil prices in 2020 are likely to result in a low and perhaps even negative economic growth rate. The latest prediction from the World Bank suggests a negative growth of 2.8 percent in 2020 (World Bank 2020, p. 20).

POVERTY

When East Timor became independent, in 2002, it was a very poor country. The economy was dominated by subsistence agriculture and the country had virtually no modern private sector, but not only that. When the Indonesian occupation forces withdrew in 1999, they resorted to scorched earth tactics, destroying as much as they could of the country's infrastructure, with the result that all economic and social indicators pointed to a substantial decline in the living standard (Lundahl and Sjöholm 2019a, pp. 223–26).

The young nation was faced with a serious challenge, and poverty eradication became the number one political priority. However, developments have been slow. If the uncertain available statistics are to be believed, the incidence of poverty increased during the first post-independence years, up to 2007, but the figure for the latter year may be influenced by the severe political turmoil in 2006 (cf. next section). After that, as it seems, the situation has improved. Economic growth has led to increased per capita income, with the exception of the last few years, and such indicators as ownership of consumer durables, school enrolment and child health also point to improvements (Lundahl and Sjöholm 2019b, chapter 3).

Still, poverty remains a problem. Everybody has not benefited equally from the economic growth that characterized the first half of the 2010s, up to 2016, and thereafter, growth has slowed down. In the countryside, in particular, with its primitive economic structure, poverty continues to be widespread. Many districts in East Timor face recurrent, seasonal food shortages, and the situation of the country remains worse than that of almost all other parts of Southeast Asia. Overall, East Timor was ranked as number 132 of 189 countries on the UNDP Human Development Index score for 2018, above Laos, Myanmar and Cambodia. However, its index figure has shown substantial improvement since 2000. To what extent this is a truthful representation of the domestic economy is uncertain, since much of the improvement is due to increases of revenue from offshore oil and gas production which has virtually no linkages to the domestic economy and which are likely to face a substantial reduction in the not too distant future (cf. discussion below).

POLITICAL PROBLEMS

Economic growth in East Timor is heavily dependent on public expenditures since the private sector is small. Public expenditures amount to around 72 percent of total GDP, among the highest levels in the world (World Bank 2019a, p. 18). This leaves East Timor very vulnerable to political conflicts that affect public expenditure and, with that, economic growth and poverty alleviation. Such conflicts delayed the approval of the 2018 budget to September that year and the 2019 budget to February 2019 (International Monetary Fund 2019, p. 4). The rewritten 2020 budget will not be presented to the parliament until September, after having been first withdrawn and thereafter rejected by the legislature (La'o Hamutuk 2020).

Conflicts between Timorese politicians are not new. They go back to the decades before independence in 2002, the years of struggle against the Indonesian occupant. These conflicts have mainly centered around the two key opponents, Xanana Gusmão and Mari Alkatiri, and they have resurfaced from time to time: at independence, when Alkatiri, as Prime Minister, attempted to limit Gusmão's presidential role to the purely ceremonial, in 2006, when Gusmão forced Alkatiri to resign from his office, during the frictions in the following decade, and in

2017, when the Alkatiri-led Fretilin government was brought down after only eight months in power by a parliamentary coalition led by Gusmão. President Lu-Olu Guterres then refused to appoint 12 ministers in the new government taking over from Alkatiri. Other ministers refused to be sworn in as a gesture of solidarity. The situation was chaotic (Lundahl and Sjöholm 2019b, p. 100).

The political differences have not been settled. In February 2020, Prime Minister Taur Matan Ruak announced that he would resign after failing to get the budget approved by the parliament, because Gusmão refused to support it, despite being part of the coalition government. Gusmão in turn announced his intention to form a majority coalition, including six parliamentary parties, with himself as Prime Minister. However, in April, Ruak stated that he would continue because of the COVID-19 pandemic. The political situation remains fragile.

The overall situation in East Timor is turbulent and the future growth prospects are uncertain. The past economic development of the country highlights how important public expenditures are for economic growth. The private modern sector of the economy is weak, and to compensate for that the government has relied on heavy public spending to propel economic growth. These expenditures are dependent on withdrawals from the Petroleum Fund. The poor performance of the modern sector also means that most Timorese are compelled to make a living in the agricultural sector. These matters which will be discussed in the following sections along with the oil and gas sector.

THE OIL SECTOR

Unlike most low-income countries, East Timor has not faced any serious budgetary constraints in its development efforts. The oil and gas reserves located in the Timor Sea, south of the island, bring in large revenues and fund around 90 percent of the government expenditures. Exactly how much of these oil reserves that belongs to East Timor has been the subject of a long dispute with Australia. However, in 2017, the two countries announced that they had agreed on the maritime boundary in the Timor Sea and in 2018, they agreed on how to share the revenues from the oil and gas endowments in the area.

The major concern now is where the oil and the gas will be processed. The East Timorese government wants to do it at a new petrochemical facility on the south coast of East Timor, as will be discussed below. The international oil companies involved, in turn, prefer to ship it to processing facilities in Darwin on the north coast of Australia. In 2018, the Timorese government agreed with ConocoPhillips and Shell Australia to acquire their shares in the joint venture of extracting gas and oil from the Sunrise Field (International Monetary Fund 2019, p. 19). The combined cost was US $650 million, and the purchase will enable the government to push the East Timor processing proposal.

Oil and gas revenues relax the budget constraint on East Timor's development, but there are plenty of examples across the world where such revenues have proved to be an obstacle to development rather than an asset. In the first place, they may lead to what is known as Dutch Disease: increased domestic spending leads to an increased price of non-tradable goods and divert resources to sectors producing the latter from sectors producing export goods. Large revenues may also lead to increased spending on poor development projects, as we will come back to. Third, there is a risk that natural resources lead to corruption and political conflict when different actors fight over the control of the resources, and hence also to a deterioration of the quality of institutions (Lundahl and Sjöholm 2008, 2019b, pp. 293–97).

Being aware of the potential risks, East Timor decided to set up a petroleum fund, where oil and gas revenues were invested abroad. The Estimated Sustainable Income (ESI), which is the return on the fund, together with the return on anticipated future revenue, can be used for government expenditures. However, no more than three percent of the value of the fund can be spent in a single year. The existence of the fund limits the risk of abuse and excessive withdrawals but does not eliminate it. Calculating future revenue is difficult, which leaves room for discretion when deciding on how much to withdraw from the fund. Also, the rules are not compulsory.

The rules on withdrawals from the Petroleum Fund were strictly adhered to until 2008 when a policy shift took place, partly as a result of the turbulent years after the riots in 2006 and the need for increased spending on the veterans from the resistance against the Indonesians. Excess withdrawals have since been the norm, amounting to US $600 million in 2017 and US $450 million in 2018 (Ministry of Finance 2019, p. 8). Excess withdrawals continued in 2019, although their amount is unclear, and were supposed to increase further in the 2020 budget that was, however, not approved by the parliament. Recently, the president has vetoed changes in the law governing the fund, changes that would have enabled the government to substantially increase the withdrawals (World Bank 2019a, p. 18).

The problems facing the Petroleum Fund have continued in 2020. The only oil field in production, Bayu-Undan, is about to dry up. Also, the value of sales of the extracted oil is dependent on international prices, which were at a record low of around US $25 per barrel at the beginning of the second quarter 2020, less than half the price in 2019. This means that the value of the oil and gas revenues has declined substantially. Moreover, most of the revenues to the Petroleum Fund will continue to come from returns on overseas investments until production and processing of oil and gas from the Greater Sunrise Field begins. The very large drop in stock market values in early 2020 meant that the value of the investments in the Petroleum Fund declined. Estimates suggest that the fund had lost around US $2 billion at the beginning of April 2020, or about 12 percent of its value (Neves 2020). Thereafter, stock prices have increased strongly again (Trading Economics 2020a), but forecasts for the rest of 2020 and the first half of 2021 are negative (Trading Economics 2020b). Also, in spite of a partial recovery from the low-water mark of late April, as of mid-July 2020, oil prices remain at a level around 40 percent below the one prevailing in early January (Statista 2020).

As things stand at present, there are no guarantees against further drops in oil revenues and returns on overseas investments in the near future, which would mean that government withdrawals either have to decline or the life of the fund will be shortened. The original idea of the fund was that it should guarantee inter-generational equality, in the sense that only the return of the investments should be used so that the fund would benefit future generations as well. This idea has, however, been abandoned and the question does not seem to be if, but rather when, the fund will be exhausted. Many observers believe this will happen within the next decade (Lundahl and Sjöholm 2019b, p. 282).

As noted above, many resource-rich countries show poor economic performance. Oil dependent countries, as a group, tend to fare worse than most other countries, partly because oil resources tend to foster corruption. There is no question that this is a potential threat to development in East Timor as well, considering the country’s low level of institutional, political and economic development, its tradition of gift-giving, and the importance of traditional power structures. The situation is, however, presumably comparable to that in neighboring countries, or countries at a similar development level. Most observers suggest that the relationship between the private sector and the political sphere is where the risk of corruption is highest. In East Timor, the private sector is to a large extent focused on winning bids for public infrastructure contracts. Most firms report that they give gifts and bribes to government officials as a way to obtain such contracts (World Bank 2019a, p. 30). This behavior seems to be more common in East Timor than in all other Southeast Asian countries and there is a high risk that it will develop into patron-client networks across the economy.

How corruption will continue to develop is largely dependent on the quality of the judiciary. Unfortunately, in East Timor, the latter is not good (Lundahl and Sjöholm 2019b, pp. 306–08). It is seriously understaffed with lawyers and judges. For many years, the system worked at a rudimentary level with the help of foreign judges. However, the government ordered all foreign personnel in the judiciary out of the country after a conflict in 2014. A difficult situation became worse. Today, there is still a huge backlog of cases and court procedures are very slow.

The media are another important institution that can help counter corruption. There have been some attempts to restrict media freedom in East Timor, notably a media regulation law which was passed in 2014 (Lundahl and Sjöholm 2019b, pp. 92, 308). Other problems facing the media when it comes to reporting on corruption are how to reach out to the population and how to ensure high-quality journalism.

THE MODERN SECTOR

The modern sector of the East Timorese economy is very small and the private part of it even smaller. The large majority of the population is, therefore, dependent on subsistence farming (Joseph and Hamaguchi 2014, p. 63). Although the productivity in subsistence farming is low, this sector has to absorb a majority of new entrants into the labor force (Lundahl and Sjöholm 2019b, p. 137). In the rapidly growing urban areas, migrants and labor market entrants tend to end up in the informal sector. Less than 30 percent of all employment in East Timor is wage-based and is primarily found in the public sector or publicly financed infrastructure projects. The public sector has expanded in an attempt to create employment for more citizens. The expansion has been large and quick, from around 27,000 public servants in 2011 to probably more than 35,000 today (Lundahl and Sjöholm 2019b, p. 148). In relation to the total population, public employment is higher than in almost all other countries in the region.

The growth in public sector employment does not correspond to any similar growth in the non-agricultural private sector, which only employs around 20 percent of the population. Surveys also suggest that the number of such jobs declined between 2014 and 2016 (General Directorate of Statistics 2017, p. 8). Political conflicts and the resulting difficulties in implementing public work programs, the low oil price, and the global recession caused by COVID-19 all suggest that employment growth will continue to be slow.

The lack of a modern sector is a serious constraint on the successful development of East Timor. There is ample evidence in the region and elsewhere that migration of labor out of subsistence farming to the modern sector have a beneficial impact on welfare. An expanding modern sector that can absorb the workers trying to make an exit from agriculture is required for such positive development to take place. As discussed above, this is not the situation in East Timor.

There are many reasons for the poor performance of the modern private sector. Most aspects of the business environment are poor. In 2019, the World Bank *Ease of Doing Business* survey ranked East Timor 181 out of 190 countries (World Bank 2019b). The trend was already negative, from rank 167 in 2015 to 175 in 2016. The problems include uncertain land rights, an inefficient bureaucracy, difficulties in getting access to capital, and lack of skilled workers. It is hard to find areas in the business environment where East Timor is doing relatively well or is at least progressing. However, there are a few exceptions, as electricity is widely available and infrastructure investments have been plentiful and have resulted in a substantial extension of the network of paved roads.

A poor business environment leads to weak firms. A recent World Bank survey on private sector firms showed that productivity levels were lower in East Timor than in neighboring countries (World Bank 2019a, p. 23). Estimates by the International Monetary Fund suggest that annual economic growth could increase by 2.5 percentage points if labor productivity growth could reach the average level of middle-income countries (International Monetary Fund 2019, p. 11). When asked about business constraints, company managers pointed to political instability followed by corruption (World Bank 2019a, p. 25). The former hurts the business sector by stopping or delaying public and private investments and by hurting consumer confidence. It is of crucial importance to address these constraints and, thereby, increase labor productivity and performance, if East Timor is to be anywhere near the goal of becoming an upper-middle-income country by 2030: the goal stated in the 2011–30 Strategic Development Plan.

A difficulty facing domestic firms is that the wage level is very high, especially when the low productivity is taken into consideration (Lundahl and Sjöholm 2019b, pp. 176–78). The administration of East Timor by the United Nations between late 1999 and early 2002 saw the implementation of an informal minimum wage of US $85 per month, a level that was very high compared to wages in other sectors of the economy, and in relation to the level of productivity.

This high minimum wage set a standard that has persisted. Only 42 out of 197 countries had higher minimum wages than East Timor in 2018 (Minimum-Wage.org 2018).

It is important to note that the minimum wage is adhered to by formal sector employers. Not only is the official minimum wage high but so are real wages. Some estimates indicate that the average wage amounts to around 100 percent of GDP per employed person, suggesting that everything that is produced is just enough to compensate workers, leaving no surplus for the capital owners (World Bank 2013). The combination of high wages and low productivity makes it extremely hard for firms to compete in the import or export markets, and it makes the expansion of labor-intensive, export-oriented manufacturing impossible. This unfortunate policy of high minimum and high real wages has not changed, perhaps because of the political risks involved in doing so. The situation is very much one of insiders and outsiders in the labor market, where the lucky few to get a job in the formal sector make a very good living but where most East Timorese are locked out by the high wages prevailing there.

Employment generation is perhaps even more important in East Timor than in most developing countries because of the very young population and the large cohorts that will enter the labor market in the coming years. High fertility rates in East Timor have been a key demographic characteristic ever since the independence of the country, meaning that the population growth rate is high. Moreover, the median age in East Timor in 2016 was 17 years, one of the lowest in the world (UNDP 2018) and slightly above 40 percent of the population is below 15 years of age (General Directorate of Statistics et al. 2018, p. 20). Such a young population underscores the importance of job creation. Around 15,000 to 20,000 young Timorese enter the labor market each year. The track record of job creation for young people is not encouraging as employment rates for young men and women are among the lowest in the world (World Bank 2013, p. 5).

Hence, to generate employment for young people is a major challenge. Failure to do so can have a devastating impact on the economic and political development of East Timor. On the economic side, poverty will remain high if there are no jobs. On the political side, a large group of unemployed young men can be very destabilizing, as has been the case historically. The tradition of martial arts gangs, ethnic conflicts, and a highly masculine, military identity among Timorese adolescents can cause problems, and minor political conflicts run the risk of throwing the country into violence and turmoil.

LARGE-SCALE INDUSTRIALIZATION PROJECTS

Although the business climate can be improved upon in most dimensions, the government is not paying enough attention to this issue. The focus, instead, is on two large-scale industrialization projects. The first has been initiated and run by Mari Alkatiri and consists of an industrial zone in the Oecusse enclave. The second is Xanana Gusmao's project to build a petrochemical-based industrial cluster on the south coast: the Tasi Mane project.

Oecusse is not a natural place for an industrial cluster since it is situated inside West Timor (Indonesia) and since, located roughly 170 km away from the rest of the country, it does not have a common border with East Timor proper. Hence, there is a risk that the links between the industrial zone and other parts of East Timor will be limited due to geographic isolation. The main reason for its location is presumably that the chosen area is very poor and that rapid industrialization, if successful, would bring prosperity (Meitzner Yoder 2019). However, the fact that Oecusse is poor also means that it may be difficult to initiate large-scale industrialization there. The poverty of the region is caused by a low degree of market participation because of the isolated location. The level of education of the population is low and the area displays poor agricultural conditions. Industrialization will therefore require large investments in infrastructure and massive efforts in education or imports of skilled workers from other parts of the country. Improvements of agriculture are necessary if the suggested agro-based industry is to become competitive, as suggested in an evaluation by the World Bank (Beck 2016, pp. 6–7).

Some of these aspects are dealt with by the government. In particular, a number of infrastructure investments have been made in recent years. An airport and a large power plant have been built, as well as a highway, a port, and a large irrigation dam. The number of planned investments is large, amounting to more than US $4 billion, according to the government (Lundahl and Sjöholm 2019b, p. 187). However, most of these investments are said to come from private sources, something that seems highly uncertain to materialize.

The intention is that infrastructure investments will attract industrial investments, both domestic and foreign. Additionally, the special governance status of the zone includes the right to set individual policies and taxes without having to follow national norms. The level of ambition for the zone is very high: the government states that it expects clusters of firms from logistics, finance, tourism and research to form. This is hardly a realistic scenario and very few firms have relocated to Oecusse so far. It seems fair to say that the future of the zone is looking rather bleak. Unfortunately, the lack of transparency in government communications makes it difficult to pursue any rigorous cost-benefit analysis of the Oecusse industrial zone (Davidson 2017).

In the worst-case scenario, the Oecusse industrial zone could result in the waste of a large amount of money. This would be very unfortunate, but it is nowhere near the cost that a failing Tasi Mane would imply. The amount of money planned and already invested in Tasi Mane is huge and its failure could mean the loss of the Petroleum Fund. Oil and gas revenues from the fund account for around 90 percent of public expenditures. Hence, failure would mean a substantial cut in public expenditures that would result in devastating effects on health and education.

The idea behind Tasi Mane is to build an industrial cluster based around a liquid natural gas plant, using the gas from the Timor Sea. As already pointed out, the scheme is based on the assumption that the resources will be processed in East Timor rather than in Darwin, despite the technical difficulties of doing so, and despite the deal with Australia which states that a smaller share of the revenue would go to East Timor if the gas is processed there. It has been agreed that East Timor will receive 80 percent of the revenue from the Greater Sunrise Field if the processing takes place in Darwin, but only 70 percent if in East Timor. Hence, the East Timorese government anticipates the social and economic benefits of having processing facilities located in East Timor to exceed 10 percent of the gas revenues. The main reason for assuming these benefits is that an industry cluster may grow in strength over time and even be competitive when the Timor Sea natural gas is depleted, and the plant has to rely on gas imported from abroad. A strong industry will benefit the government in the form of revenue. It will benefit the population both through public expenditures made possible from government revenues and employment in the industrial cluster. The government expects the cluster to generate 10,000 direct jobs and 50,000 indirect jobs (International Monetary Fund 2019, p. 19). These numbers are, of course, highly uncertain.

The choice of location on the south coast of East Timor is reasonable considering its relative vicinity to the Timor Sea and the Greater Sunrise Field. To establish an industry cluster of this magnitude, however, requires substantial investment since there are no existing industrial facilities on the underdeveloped south coast. The zone will include a supply base in Suai, a liquid natural gas plant in Beaço, and a refinery in Betano (Rahmani 2019). These hubs are connected by a new highway, a new airport has been built, and a port is about to be constructed. Hence, a substantial amount of infrastructure has already been developed and more projects are about to be finished. The total cost for the investments is expected to end up somewhere between US $10 and 15 billion (Rahmani 2019). However, as yet, no actual production has taken place. The government plans/hopes that it will start in 2026 (Murtaugh 2019).

The government is committed to proceed with the Tasi Mane project. Whether this will be a success or ruin public finances remains to be seen. The concerns raised are similar to the ones related to Oecusse: there is a patent absence of rigorous cost-benefit analysis and a lack of transparency (Dias 2015, Strating 2017). There are also concerns that the lack of skilled workers means that guest workers from abroad will have to be employed. The probability that Tasi Mane will turn out to be a white elephant is as real as it is frightening.

AGRICULTURE

The lack of an expanding modern sector that can provide jobs for a growing and poor population translates into an increased pressure on the agricultural sector. Some job seekers will make a living in the urban informal sector, but the majority will need to eke out their existence in agriculture. As previously mentioned, agriculture in East Timor amounts to subsistence farming. It is also characterized by a large surplus of labor and consequently low labor productivity. Hence, increasing the number of people working in agriculture will increase production only marginally. As a result, output per person and thereby, welfare, will fall when the number of people in agriculture increases. This scenario can only be avoided by productivity improvements that raise output per employed person. Such improvements will bring additional benefits to East Timor (Lundahl and Sjöholm 2019b, p. 199). Linkages will provide a boost to the modern sector. These could include both pecuniary linkages working through increased demand when rural incomes increase and linkages from food products to modern food-based industries. Agricultural growth will also provide better food security. Food production has not kept pace with the rapid population growth, which means that food imports have increased since independence.

The challenge is huge. The geography and climate of East Timor are far from ideal for agriculture. The island is very dry, and when the rains come, they are frequently torrential. The topography of Timor is extreme. A large portion of the territory consists of mountains. No less than half of the land is found on slopes of 40 percent or more (Joseph and Hamaguchi 2014, p. 64). Only around one-quarter of East Timor is considered suitable for agriculture (World Bank 2019c, p. 10) and erosion rates are potentially high, which may result in a situation where even less land will be suitable for agriculture in the future (Lundahl and Sjöholm 2019b, pp. 245–48).

Considering these geographic characteristics, it comes as no surprise that agricultural productivity is low. It has been argued that agriculture in East Timor is among the least developed in the world, and well below that of other small poor island states (World Bank 2019c, p. 2). Studies indicate that the production per acre of rice and maize, the two largest crops, are lower than in neighboring countries (Lundahl and Sjöholm 2019b, pp. 207–08). Output has not increased in recent years and this is worrying when you take into account that the population growth is high and that an increasing number of people will be working on the land. If yields per unit of land do not increase, yields per unit of labor are likely to fall. This is confirmed by a study by the World Bank (World Bank 2019c, p. 3) which demonstrated that agricultural value added per worker increased steadily after independence and peaked at over US $1,800 in 2009. Since then it has, however, declined, and in 2016, it amounted to no more than US $1,500. This decline in agricultural productivity means that rural incomes are likely to fall.

Productivity in agriculture can be increased through an increased use of fertilizers, access to irrigated water and a higher degree of mechanization (Lundahl and Sjöholm 2013). Some progress can be noted in these areas since independence, but the situation remains problematic. Less than 10 percent of the agricultural households have access to a tractor or use irrigation, and less than 15 percent use any sort of chemical inputs such as fertilizers, pesticides, and herbicides (World Bank 2019c, pp. 9–10).

The government can provide much more assistance to agricultural households. However, it has made little effort when it comes to making improvements. Increased use of extension services is one way of helping farmers to adopt new seeds and new production methods, but few farmers have access to such extension services (Lundahl and Sjöholm 2019b, p. 237).

Proper incentives for the farmers are necessary for more substantial improvements to materialize. In particular, growers must be able to sell their output in markets, but many do not. Figures for 2014 suggest that less than half of the rural households sold any of their produce (World Bank 2019c, p. 9). It is unclear how the situation has developed since then, but there are reasons to believe that it remains by and large identical. One reason for a low degree of market involvement is that many Timorese live a long way from the nearest town or marketplace. The large investments in roads in recent years have improved the situation but it should be noted that most road constructions have consisted of large paved roads, rather than simple feeder roads that would connect isolated farmers with local markets (Jouanjean 2013, p. 18).

Most farmers grow either rice or maize. Improvements in the farming practices of these crops would have a major impact on the well-being of agricultural households and improve food security by reducing the large reliance on imported food. Given the poor conditions prevailing in agriculture, it is, however, not realistic to believe that these crops will be internationally competitive or provide a base for a large internationalized food industry.

Coffee is the cash crop with the biggest potential for improving rural growth and development. It is already East Timor's largest export (excluding oil and gas) and it has been growing in the island since colonial days. Coffee is also important because it engages a large share of the Timorese rural population. It has been estimated that close to 70,000 rural households have some involvement in coffee production and that the sale of coffee constitutes the main cash income for these families (Lundahl and Sjöholm 2019b, pp. 208–10).

Unfortunately, coffee production has been declining. It averaged around 14,000 tons annually from independence to 2008. In recent years it has decreased to around 10,000 tons (Lundahl and Sjöholm 2019b, p. 209). This is even less impressive if one considers that it amounted to around 45,000 tons annually at the end of the Portuguese colonization. There are several reasons why coffee production is modest and could presumably be increased quite substantially if the issue received more attention from the government.

The main causes of low production are that very little investment has been made in the coffee sector and very little maintenance takes place of existing coffee bushes. Most coffee bushes grow almost wild and unattended by the owners. Pruning, cleaning, weeding, pest and disease control, does not take place. The farmers merely pick the beans when they are ripe.

Public investment in coffee has been negligible, despite its importance for rural households and, thereby, for poverty eradication (World Bank 2017). The government has recently admitted that too little focus has been put on increasing coffee production and it has therefore launched a strategic plan for the sector (Visit East Timor 2019). The aim is to increase both the quantity and quality of coffee production. The plan is vague on how this will be achieved, but extension services that bring good farming practices to farmers seem to be one of the core elements of the policy. The plan also aims at helping farmers link up with regional and international coffee buyers. It remains to be seen if the policies will succeed. It should be noted that coffee has been identified as a national priority in numerous reports and government statements over the years, however, with little impact on actual production (Lundahl and Sjöholm 2019b, p. 209).

CONCLUDING REMARKS

The main problem of East Timor is its poverty, something that has characterized the little island state throughout its entire existence as a sovereign nation. Poverty eradication consequently was made a top priority by the first national government, under circumstances that left a lot to be desired. At independence, East Timor lacked all the necessary institutional structure required for running a country, let alone to make it progress from utterly dire circumstances, partly structural, partly caused by a quarter of a century of brutal Indonesian occupation. The situation was not made easier by the old tension between the two leading political actors: Xanana Gusmão and Mari Alkatiri, a tension that has been brought into the open time after time up to the present.

The East Timorese economy is an economy in acute need of modernization. The vast majority of the population consists of subsistence farmers with little contact with the market, and agricultural production in the country is not on the level where it is sufficient to avoid recurrent, annual, food shortages among large population segments. The agricultural sector needs reform, notably an increased degree of market-based transactions, which in turn means that the market system will have to be expanded. Unfortunately, the modern sector is small, especially the private segment, and it grows only slowly, at a rate which is not sufficiently rapid to absorb the new entrants into the labor force, which in turn means that agriculture has to act as a 'sink', providing low-income jobs for them, a task which is likely to become difficult in the future, given the high rate of population growth. During the post-independence period, whatever growth that has taken place in modern-sector employment has come mainly from the public administration. The private sector, in turn, is struggling with a business climate which, seen in an international perspective, is anything but propitious to growth. East Timor consistently ends up close to the bottom on indices measuring the ease of setting up and running companies.

The East Timorese economy is also suffering from a second imbalance. It is highly dependent on the revenues that derive from exploitation of the oil and gas reserves in the Timor Sea. The latter for several years contributed between 75 and 85 percent of the country's total GDP, before dropping to around one-third as a result of falling oil prices (Lundahl and Sjöholm 2019b, p. 320), however, without contributing to domestic employment (other than indirectly). The government budget is completely dependent on the petroleum revenue for its operations. This is very unfortunate, since evidence is accumulating which indicates that the oil and gas reserves are likely to be exhausted in the not too distant future.

This will put the government in a difficult position, since the Petroleum Fund is already overtaxed. Annual withdrawals exceed the estimated sustainable income that guarantees the maintenance of the fund also in the future. This, in turn, must be put against the fact that in recent years, the East Timorese government has embarked on the Tasi Mane and Oecusse large-scale ventures, rather than improving for example the educational system. These two projects are both of dubious value to the country. No systematic evaluation has been made of their economic and social effects, and both of them run a considerable risk of ending up in the 'white elephant' category, as monuments to mistaken populist political ambitions rather than vehicles for sustained development. The likelihood that East Timor will have graduated to the upper middle-income country category in 2030, as envisaged in the 2011–30 Strategic Development Plan, is not overly high.

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