Timor-Leste's petroleum-dependent economy and state budget

By Charles Scheiner, La’o Hamutuk
Swinburne/Flinders Timor-Leste Intensive
16 April 2019

What is La’o Hamutuk?

- Timorese and international people “walking together” on the journey to create a new Nation.
- An independent, Timorese, non-governmental organization which does research, policy analysis, public education and advocacy.
- A force for participatory, equitable, sustainable and evidence-based policies and practices.
1. The cash economy runs on oil money processed through the state, but most people live outside of it.

2. The state budget is almost entirely financed by exporting petroleum reserves.

3. As the oil and gas are depleted, future prospects are precarious.

### 1. Timor-Leste’s economy

Timor-Leste has been one of the world’s most petroleum-export-dependent countries.

The country has almost no industry and a tiny private sector.
Basic Statistics

- Nearly half of Timor-Leste’s people live in poverty, 64% in multi-dimensional poverty.
- Two-thirds of people live in rural areas, largely by subsistence farming.
- Poor sanitation and malnutrition are endemic.
- About 1,200 Timorese children under 5 years old die from preventable conditions every year ... 30 times as many people as die from homicide.

Petroleum Dependency (nominal USD)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum GDP</td>
<td>$4,234</td>
<td>$2,591</td>
<td>$1,496</td>
<td>$820</td>
<td>$895</td>
</tr>
<tr>
<td></td>
<td>(75%)</td>
<td>(64%)</td>
<td>(48%)</td>
<td>(33%)</td>
<td>(36%)</td>
</tr>
<tr>
<td>Non-oil GDP</td>
<td>$1,403</td>
<td>$1,451</td>
<td>$1,597</td>
<td>$1,684</td>
<td>$1,593</td>
</tr>
<tr>
<td></td>
<td>(25%)</td>
<td>(36%)</td>
<td>(52%)</td>
<td>(67%)</td>
<td>(64%)</td>
</tr>
<tr>
<td>Productive (agr. &amp; manuf.)</td>
<td>$305</td>
<td>$307</td>
<td>$288</td>
<td>$287</td>
<td>$284</td>
</tr>
</tbody>
</table>

- State revenues in 2018:................. $191 million
  -$460 million was lost by investing the Petroleum Fund
  $447 million from oil and gas revenues
  $204 million from non-petroleum sources

- Executed 2018 State Budget:........ $1,159 million ($1,277m appropriated)
  $983 million transferred from the Petroleum Fund
  $157 million from non-petroleum (domestic) revenues
  $39 million from loans which will have to be repaid

- State activities, paid for with oil money, are nearly half of the “non-oil” economy because some of this money circulates in the local economy.

- Petroleum and investment “income” goes to the state, not the people.

Only South Sudan, Libya (and Equatorial Guinea?) are more dependent on oil and gas exports than Timor-Leste was before 2014.
Oil GDP fell 85% between 2012 and 2016.

The non-oil, non-state GDP per capita is stagnant. Productive sectors have not grown since independence.
The graph shows legal goods trade only. Three-quarters of donor spending and two-thirds of state spending leaves the country.

Since 2015, more money goes out than comes in.

<table>
<thead>
<tr>
<th>2018 trade</th>
<th>services</th>
<th>non-oil goods</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td>$447m</td>
<td>$613m</td>
<td>$1,060m</td>
</tr>
<tr>
<td>Exports</td>
<td>$ 98m</td>
<td>$ 25m (85% coffee)</td>
<td>$123m</td>
</tr>
<tr>
<td>Deficit</td>
<td>-$349m</td>
<td>-$588m</td>
<td>-$937m</td>
</tr>
</tbody>
</table>

Timor-Leste's External Balance of Payments

- Goods exports (non-oil)
- Goods imports
- Services exports
- Services imports
- Trade Balance (including oil & investment income)
- Trade balance (excluding oil & investment income)
The potential workforce grows by 20,000 people every year, but private sector employment dropped 12% from 2014 to 2017.

Agriculture got 1.3% of state expenditures in 2018, although it is the livelihood of 65% of the population.
Dili is very different from the districts.

Table 2.6: Wealth quintiles

<table>
<thead>
<tr>
<th>Residence/region</th>
<th>Poverty</th>
<th>Weakest</th>
<th>Second</th>
<th>Middle</th>
<th>Third</th>
<th>Fourth</th>
<th>Highest</th>
<th>Total</th>
<th>Gini coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1.2</td>
<td>3.4</td>
<td>8.8</td>
<td>30.0</td>
<td>66.2</td>
<td>100.0</td>
<td>16,539</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>26.6</td>
<td>26.2</td>
<td>24.2</td>
<td>16.3</td>
<td>6.4</td>
<td>100.0</td>
<td>44,030</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Municipality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aileu</td>
<td>16.6</td>
<td>33.3</td>
<td>27.2</td>
<td>17.1</td>
<td>5.9</td>
<td>100.0</td>
<td>2,357</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Ainaro</td>
<td>35.4</td>
<td>27.1</td>
<td>20.8</td>
<td>13.5</td>
<td>3.7</td>
<td>100.0</td>
<td>3,076</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Baucau</td>
<td>20.0</td>
<td>22.4</td>
<td>22.5</td>
<td>22.8</td>
<td>12.6</td>
<td>100.0</td>
<td>6,994</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Bobonaro Grounds</td>
<td>15.0</td>
<td>20.0</td>
<td>29.6</td>
<td>22.5</td>
<td>10.0</td>
<td>100.0</td>
<td>4,797</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Dili</td>
<td>2.3</td>
<td>4.4</td>
<td>6.8</td>
<td>28.0</td>
<td>88.3</td>
<td>100.0</td>
<td>12,978</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>Ermera</td>
<td>10.6</td>
<td>32.9</td>
<td>21.9</td>
<td>11.2</td>
<td>4.1</td>
<td>100.0</td>
<td>5,818</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Lautem</td>
<td>15.1</td>
<td>20.8</td>
<td>25.4</td>
<td>26.5</td>
<td>12.2</td>
<td>100.0</td>
<td>3,374</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Lique</td>
<td>17.0</td>
<td>28.3</td>
<td>24.1</td>
<td>18.8</td>
<td>15.9</td>
<td>100.0</td>
<td>3,966</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Manufahi</td>
<td>18.7</td>
<td>19.3</td>
<td>25.5</td>
<td>21.7</td>
<td>14.9</td>
<td>100.0</td>
<td>2,795</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>SAR of Oecussi</td>
<td>24.2</td>
<td>22.7</td>
<td>20.2</td>
<td>21.6</td>
<td>11.3</td>
<td>100.0</td>
<td>3,201</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Viqueque</td>
<td>30.3</td>
<td>22.0</td>
<td>24.3</td>
<td>15.0</td>
<td>8.3</td>
<td>100.0</td>
<td>4,012</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
<td>60,989</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

60% of Dili’s population are among the wealthiest 20% of Timorese, while only 7% are below the poverty line.

More than half of the families outside Dili live in poverty.

Businesses don’t invest in themselves.

How businesses spend the money they receive

Graph by Le'a Hamutuk based on OEC Business Activities Survey 2017
Timor-Leste’s working age population is increasing by about 20,000 every year.

In 2017, total private sector employment was 45,900, 12% lower than it had been in 2014.

Real Threats to Real Security

- Human security is health care, food, education, employment, housing, etc.
- 20 times as many Timorese children under five die from avoidable conditions as people are killed by violence.
- These children will not be helped by police, soldiers or judges, but many donors prioritized the “security sector,” seeing everything through a conflict lens.
- We must diversify our economy and strengthen our people and workers to prepare for the day our oil runs out and we can no longer pay for imports.
**Signs of the “resource curse” (1)**

- **Acting as if the oil money will last forever**  
  Kitan is finished; Bayu-Undan will be dry by 2022.

- **Borrowing today, to repay tomorrow**  
  TL may borrow more than a billion dollars in the next few years, often for projects with little chance of return.

- **Lack of realistic long-term planning**  
  The Strategic Development Plan 2011-2030 is but a dream; Tasi Mane and ZEESM Oecusse may not produce returns.

- **Using money to ‘solve’ every problem**  
  It’s easier to buy a scholarship than to run a university.

- **Spending without thinking**

**Signs of the “resource curse” (2)**

- **Import dependency**  
  TL’s non-oil trade deficit is over a billion dollars every year.

- **Ignoring non-oil development and revenues**  
  Farming is too hard to envision, even if oil may not last very long.

- **Benefits flow to the urban and political elite.**  
  Most people won’t use highways, airports and oil facilities … but will share the costs of paying for them.

- **Petroleum “captures” decision-making.**  
  Agriculture, tourism, small industries, etc. don’t get a “fair go.”
2. The State Budget is financed from finite petroleum reserves.

From 2008 through 2016, Timor-Leste’s government spending grew faster than nearly every other country. It was not invested in the people, but for infrastructure of dubious value.

The money doesn’t match the promises.

Graph by La'o Hamutuk based on 2019 State Budget. March 2019
Budgeted & executed spending

Little investment in human resources.
Spending exceeds income.

State (including Petroleum Fund) income and expenditures
- Domestic revenues
- Oil and gas revenues
- Return on P.F. investments
- Loans taken out
- Executed state spending

Graph by LoLo Hamutuk based on data and projections in Ministry of Finance 2019 Budget Books and Transparency Portal, Feb. 2019

Timor-Leste’s Petroleum Revenue Streams

Purchasers of oil and gas from Bayu-Undan and Kitan
more than $5,300

Bayu-Undan and Kitan joint ventures
Company operating costs & profit $1,272 TL taxes
PF Investment income $401
FTP (royalty) $2,173 Australia taxes $141
National Petroleum Authority (Australia-TL joint agency)
TL share 90%, Australia share $1,957 $217

Timor-Leste Petroleum Fund
End-of-2012 balance $11,775 million
Autonomous agencies $19
Domestic revenues $128 $665 Est. Sustainable income transferred $830 transferred above ESI

Timor-Leste State Budget
$1,195 million spent during 2012
Donor-funded projects $254 $691 recurrent $503 capital
Infrastructure, education, administration, veterans, health, social assistance, development, police, agriculture, F-DTL, courts, etc.

State operations & services
$671 carried over to 2013
Economy/Budget for Flinders & Swinburne

15 April 2019

We’ve moved from oil dependence to relying on our declining savings.

The Fund’s balance is the same as it was 4½ years ago.
It dropped a billion dollars in the fourth quarter of 2018.

We’re spending down our birthright.

The Petroleum Fund peaked at $17.1 billion in mid-2015 and had dropped to $15.8 bn at the end of 2018, the lowest in 5 years.
Timor-Leste is in debt.

- Laws in 2009 opened the door to foreign loans.
- In 2012, Timor-Leste signed contracts to borrow $107 million from Japan and from the ADB.
- In 2013, TL signed for $90m more from ADB and World Bank. In 2015, TL signed for $12m more from ADB. In 2015, TL signed for $50m from China’s Ex-Im bank.* In 2016, TL signed for another $126m from the ADB. In 2017, TL signed for $35m more from the World Bank.
- Future borrowing is unclear. The government plans one more $60 million road loan, but Sunrise and Tasi Mane could also be financed by borrowing.
- In a few years, debt service payments will exceed $20m/year.

* This loan was rejected by the Audit Court.

Important to consider

- Implementing the SDP will require borrowing billions, probably at commercial rates.
- Even at concessional rates, repaying loans depletes the assets in the Petroleum Fund.
- TL’s oil and gas reserves are limited, non-renewable, and 95% exhausted already.
- TL will have to prioritize repaying loans above spending on people’s needs or developing other sectors.
- Our children and grandchildren will inherit the debt after the oil wells have run dry.
If current plans continue, TL may be unable to finance its budget by 2027. The Boundary Treaty and Sunrise help a little, but not enough.

This model does not yet incorporate Timor-Leste buying into the Sunrise Joint Venture or the 2018 or 2019 State Budgets.

3. Petroleum cannot continue to carry the country.

Kitan and Elang-Kakatua are empty, and Bayu-Undan is 95% depleted.

Greater Sunrise is not a secure enough basket to carry all the country’s eggs.

There may not be any other fields.
Economy/Budget for Flinders & Swinburne

15 April 2019

Oil and gas income has been falling since 2012.
Production is dropping faster than prices, and will not go back up.
The price will be irrelevant when we have nothing left to sell.

We don’t have very much oil.

<table>
<thead>
<tr>
<th></th>
<th>Timor-Leste (70% Sunrise)</th>
<th>TL without Sunrise</th>
<th>Australia</th>
<th>Brunei</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known oil and gas reserves per person at end of 2017</td>
<td>657 barrels</td>
<td>69 barrels</td>
<td>1,050 barrels+ (1,040 without Sunrise)</td>
<td>6,300 barrels</td>
</tr>
<tr>
<td>How long reserves will last at 2017 production rates</td>
<td>21 years</td>
<td>2 years</td>
<td>32 years+</td>
<td>24 years</td>
</tr>
</tbody>
</table>
Our seas have been explored for half a century, and our land for longer.

There may not be any other fields.

Since 1910, oil companies have drilled 95 exploration wells in Timor-Leste’s land and sea. They found eight commercially viable reserves. Kitan is the only one discovered in the last 20 years.

Number of oil and gas wells drilled each year in Timor-Leste’s territory

- Exploration
- Development
- Production

Map by Liv McMeekin based on information from the AGI, National Petroleum and Minerals Authority. September 2018
Sunrise and maritime boundary dispute

- Australian companies began exploring Sunrise in the early 1970s, after Australia and Indonesia divided our maritime resources without involving Portugal. In 1989, they closed the “Timor Gap” to share illegally occupied resources in the Joint Development Area.

- The 2006 CMATS treaty banned maritime boundaries discussion for 50 years. It divided Sunrise upstream revenues 50-50.

- Australia put its greed for oil before respect for its sovereign neighbors or international law.

- Based on UNCLOS, TL owns fields north of the median line, and lateral boundaries should move outward.

- In January 2017, Australia accepted Timor-Leste’s request to revoke the entire CMATS Treaty. A permanent boundary treaty was signed in March 2018.

Australia and Timor-Leste have agreed on a boundary and on Sunrise revenue split – but the gas pipeline is still unresolved.

Map by Lo’s Hamutuk, based on maps by Timor-Leste and Australia at the opening of the Conciliation process in August 2016 and from the Boundary Treaty signed in March 2018.
In 2010, TL began the South Coast Petroleum Corridor.
During 2011-2018, Timor-Leste spent more than $400 million on it.
The 2019 budget anticipates $1.46 billion more in 2019-2023, but leaves out the most costly items.
Timor-Leste just bought ConocoPhillips’ and Shell’s shares of Greater Sunrise for $650 million... and will now have to pay 57% of offshore development costs.
Total project costs could be $10-20 billion (more if Timor-Leste pays for the refinery, pipeline or LNG plant). No investors are interested.
TL signed its largest contract ever with Hyundai in 2015: $719 million to build the Suai Supply Base.
A court rejected it in 2015 but was reversed in 2017. Hyundai has lost interest.

The Tasi Mane Project includes the Suai supply base, Betano refinery, Beaçu LNG plant, a 156-km highway, onshore and offshore pipelines, 2 airports and 2 seaports.
The Greater Sunrise obsession

• The project had been stalled because Timor-Leste and the companies did not agree on how it should be developed.
• Woodside and its partners Shell, ConocoPhillips and Osaka Gas believe that a pipeline to the Darwin LNG plant used for Bayu-Undan would be most profitable.
• Timor-Leste wants a pipeline from Sunrise to Beaçu, to get more tax revenues and anchor the Tasi Mane project.
• The negotiations for the 2018 Boundary Treaty could not agree on where the pipeline will go.
• Timor-Leste is buying Conoco-Phillips’ 30% share and Shell’s 27% share in order to make the decision.

Buying into Greater Sunrise

• TL will pay $650 million for 57% of the Sunrise Joint Venture.
• The other partners do not want to build a pipeline to Beaçu and an LNG plant there, but might go along if TL pays all the costs.
• This will use billions of dollars and reduce TL’s share of upstream revenues from 80% to 70%.
• Spinoff benefits may be a mirage, and environmental, social and financial costs and risks have not been fully analyzed.
• The deal is being done with little accountability and weakened oversight. Few think about lost opportunity costs, more realistic and sustainable development, or what else the money could be used for.
15 April 2019

Economy/Budget for Flinders & Swinburne

What will Tasi Mane really cost?
Most expenses have never appeared in state budget forecasts.

<table>
<thead>
<tr>
<th>Component</th>
<th>Location</th>
<th>Status</th>
<th>Spent through 2018</th>
<th>Budgeted 2019</th>
<th>Budgeted 2020-2023</th>
<th>Estimated total capital cost</th>
<th>Percent budgeted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport</td>
<td>Suali</td>
<td>Constructed</td>
<td>70</td>
<td>10</td>
<td>3</td>
<td>90</td>
<td>62%</td>
</tr>
<tr>
<td>Supply base</td>
<td>Suali</td>
<td>Tender pending</td>
<td>6</td>
<td>10</td>
<td>668</td>
<td>850</td>
<td>80%</td>
</tr>
<tr>
<td>Highway</td>
<td>Suali-Fatukai</td>
<td>Mostly built</td>
<td>267</td>
<td>50</td>
<td>8</td>
<td>340</td>
<td>95%</td>
</tr>
<tr>
<td>Highway</td>
<td>Fatukai-Beaçu</td>
<td>Not started</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1,320</td>
<td>0%</td>
</tr>
<tr>
<td>Airport</td>
<td>Viqueque</td>
<td>Not started</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>60</td>
<td>0%</td>
</tr>
<tr>
<td>Oil refinery &amp; pipelines</td>
<td>Betano</td>
<td>Pending design</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1,500</td>
<td>0%</td>
</tr>
<tr>
<td>Gas pipeline, LNG plant &amp; port</td>
<td>Sunr, Beaçu</td>
<td>Pending design</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>0,800</td>
<td>0%</td>
</tr>
<tr>
<td>57% share of Greater Sunrise Joint Venture</td>
<td>Offshore</td>
<td>May be taken directly from Petroleum Fund</td>
<td>-</td>
<td>650</td>
<td>-</td>
<td>650</td>
<td>100%</td>
</tr>
<tr>
<td>57% of Sunrise upstream capital expenditure</td>
<td>Offshore</td>
<td>If ownership approved</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,840</td>
<td>0%</td>
</tr>
<tr>
<td>Administrative and other costs</td>
<td>DIB</td>
<td>49</td>
<td>12</td>
<td>50</td>
<td>400</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>410</strong></td>
<td><strong>732</strong></td>
<td><strong>729</strong></td>
<td><strong>18,050</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

Problems with the Tasi Mane project

- It prolongs TL’s dependency on oil and gas.
- Dubious concepts and planning; it is unlikely to provide a reasonable return on investment.
- It neglects sustainable development (agriculture, tourism, small industries etc.), exemplifying the obsession with oil.
- Nearly all the billions spent will go to foreign companies, providing hardly any local livelihoods or subcontracts. The petroleum industry creates fewer jobs than any other option.
- It will create social conflict, take up land, displace people, worsen health and degrade and endanger the environment.
- Cost projections leave out 90% of investment obligations.
- We can be brave, but we should also be smart.

The Government has made many unrealistic promises about revenues, profit-sharing, jobs and other benefits.
In 2014-18, RDTL spent $572 million on ZEESM with no accountability. Oecusse has 6% of Timor-Leste’s population.

What are Oecusse’s competitive advantages?

Can ZEESM justify a $4 billion investment?

Who benefits: residents of Oecusse or Fretilin leadership?
Thank you.

You will find more and updated information at

• La’o Hamutuk’s website
  http://www.laohamutuk.org

• La’o Hamutuk’s blog
  http://laohamutuk.blogspot.com/

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