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<th>Description</th>
<th>Implementing Agent &amp; Partners</th>
<th>Geographic Scope</th>
<th>Start Date</th>
<th>End Date</th>
<th>Donors &amp; Funds (in USD unless otherwise specified)</th>
<th>Status (as of Mar-10)</th>
</tr>
</thead>
</table>
| **Statistics** | Statistical and Macroeconomic Capacity Building | Enhance the statistical system in Timor-Leste to enable relevant, reliable, and timely statistics to be produced for analysis and dissemination by building on the long-term statistical capacity building program. Enhance the capacity of the National Directorate of Statistics, MoF (govt counterpart) | ADB (implementing agent)  
National Directorate of Statistics, MoF (govt counterpart) | National | Feb-10 | Dec-12 | Total: 630,000  
ADB: 560,000  
GOTL: 70,000 (in-kind) | Initial Stage - consultant recruitment underway |
| **Trade Policy** | Advisory Mission to Timor-Leste on Trade Policy and WTO Accession issue | Assess the TA and capacity building needs and gaps of Timor-Leste in the area of trade policy and WTO accession issues | UNCTAD (implementing agent) | May-06 | May-06 | UNCTAD/German Government | Closed |
| **Trade Policy** | Support to the ASEAN Initiative | TA to the ASEAN Initiative through the MTCI | MTCI (implementing agent) | Jan-09 | Dec-09 | Irish Aid: €150,000 | Closed |
| **Trade Policy** | TA to MTTI | Build capacity in trade negotiations. | EC (implementing agent)  
MTCI, MoF (govt counterparts) | National | Oct-09 | Jun-10 | EC: €150,000 | On-going |

## Chapter 4-6: Value Chain Analysis of Agricultural Exportables, Horticulture Subsector, SPS Capabilities

### Mungbeans

| Mungbeans / Agribusiness / Horticulture / | Dezenvolve Setor Privadu | Strengthen the private sector with support for agribusiness, commercial services, financial services, and the business enabling environment. Promotion of value chains in mungbeans, fresh vegetables, etc. | Development Alternatives, Inc. (implementing agent) | National (policy component)  
Dili  
Aileu  
Liquica  
Covalima  
Baucau  
Viqueque  
Bobonaro | Jul-05 | Jul-10 | USAID: 11,636,149.55 | On-going |

### Agribusiness / Agriculture / Skills Development

| Agribusiness / Agriculture / Skills Development | Integrated Rural Development Programme/ Second Rural Development Program (RDPII) | Increase the range of domestic products from the agricultural, fisheries, and forestry sectors are offered on domestic markets and available for export through training of rural populations, responsible public and private institutions and organizations in the agricultural sector. | GTZ (implementing agent)  
MAFF (govt counterpart) | National | Jan-06 | Dec-11 | Germany: €10,000,000  
EU: €9,000,000 | On-going |

### Coffee

<p>| Coffee / Agribusiness | Coffee Growers Support Project Part | Increase management capacity &amp; cooperative income for sustainable coffee plantation. | PARCIC (implementing agent) | Ainaro | Apr-06 | Mar-09 | JICA: 524,000 | Closed |</p>
<table>
<thead>
<tr>
<th>Coffee / Agribusiness</th>
<th>Improvement with Participation of Women in Coffee Producing Area</th>
<th>Increase income of a group of women coffee farmers through food processing activities.</th>
<th>PARCIC (implementing agent)</th>
<th>Ainaro</th>
<th>Nov-09</th>
<th>Mar-12</th>
<th>JICA: 157,000</th>
<th>On-going</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee / Agribusiness</td>
<td>Project for Extension of Coffee Producers’ Cooperative Model</td>
<td>Create a network and promote cooperation of coffee producer cooperatives.</td>
<td>PARCIC (implementing agent)</td>
<td>Ainaro</td>
<td>Jul-09</td>
<td>Mar-12</td>
<td>JICA: 523,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Coffee / Agribusiness</td>
<td>Promotion of Self-reliance for Coffee Growers Cooperative in Letefoho</td>
<td>Improve coffee growers’ livelihood &amp; develop the coffee industry.</td>
<td>PWJ (implementing agent)</td>
<td>Ermera</td>
<td>Apr-06</td>
<td>Mar-09</td>
<td>JICA: 478,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Coffee / Agribusiness</td>
<td>Promotion of Self-reliance of Coffee Growers’ Cooperative in Letefoho</td>
<td>Increase productivity of high quality coffee, and strengthen cooperative of coffee growers.</td>
<td>PWJ (implementing agent)</td>
<td>Ermera</td>
<td>Nov-09</td>
<td>Mar-11</td>
<td>JICA: 157,000</td>
<td>On-going</td>
</tr>
</tbody>
</table>

**Livelihood Improvement with Participation of Women in Coffee Producing Area**

Increase income of a group of women coffee farmers through food processing activities.

PARCIC (implementing agent)

Ainaro Nov-09 Mar-12 JICA: 157,000 On-going

**Project for Extension of Coffee Producers’ Cooperative Model**

Create a network and promote cooperation of coffee producer cooperatives.

PARCIC (implementing agent)

Ainaro Jul-09 Mar-12 JICA: 523,000 On-going

**Promotion of Self-reliance for Coffee Growers Cooperative in Letefoho**

Improve coffee growers’ livelihood & develop the coffee industry.

PWJ (implementing agent)

Ermera Apr-06 Mar-09 JICA: 478,000 Closed

**Promotion of Self-reliance of Coffee Growers’ Cooperative in Letefoho**

Increase productivity of high quality coffee, and strengthen cooperative of coffee growers.

PWJ (implementing agent)

Ermera Nov-09 Mar-11 JICA: 157,000 On-going

**Coffee / Agribusiness**

Movimento Cooperativa Economico-Agricola (MCE-A)

Establish rice and coffee cooperatives comprising over 2,300 farmers and their families.

Movimento Cooperativa Economico-Agricola (implementing agent)

All 13 districts Jun-06 May-10 NZAID/Oxfam NZAID: NZD 250,000 On-going

**PADRTL - Rural Development Programme**

Support community based nurseries, agroforestry, coffee, and other permanent cash crops, e.g. cashew, coconut, clove, high value forest trees. Provide institutional capacity building to the MAFF.

IPAD (implementing agent)

Aileu Bobonaro Ermera Manufahi Liquiça-Dili Jan-07 Dec-10 Portugal: €911,308.22 On-going

**Timor-Leste Investment Alliance**

Improve the competitiveness of CCT’s coffee. (Global Development Alliance with Cooperative Business International (CBI); funds leveraged $1 m from CBI)

National Cooperative Business Association (implementing agent)

Dili Liquiça Aileu Ermera Covalima Manufahi Oecusse Baucau Bobonaro Jan-08 Jan-10 USAID: 300,000 On-going

**Livestock / Agribusiness**

Oecussi Ambeno Community Activation Project (OCAP)

Improve livelihoods opportunities through community infrastructural investments as well as identification and participation in agriculture and other economic and entrepreneurial activities (including the improvement of cattle production and introduction of upland farming).

UNOPS (implementing agent)

UNDP (supervisor)

Oecussi May-04 May-09 Total: €3,359,257 EC: €3,062,089 UNDP: €297,186 Closed

**Timor Economic Rehabilitation and Development Project**

Build on previous success with coffee to diversify the income sources of Cooperative Café Timor members to include livestock, vanilla, cloves, agro-forestry products, etc. Support training initiatives to improve

National Cooperative Business Association (implementing agent)

Dili Liquiça Aileu Ermera Covalima Manufahi Oecusse Baucau Bobonaro Oct-02 MAR-10 USAID: 17,500,000 On-going
<table>
<thead>
<tr>
<th>Area</th>
<th>Project Name</th>
<th>Description</th>
<th>Implementing Agent &amp; Partners</th>
<th>Geographic Scope</th>
<th>Start Date</th>
<th>End Date</th>
<th>Donors &amp; Funds (in USD unless otherwise specified)</th>
<th>Status (as of Mar-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>agricultural, business, economic, and financial skills.</strong></td>
<td>Manufahi Oecusse Baucau Bobonaro</td>
<td>Manufahi Oecusse Baucau Bobonaro</td>
<td></td>
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<tr>
<td>Horticulture</td>
<td></td>
<td></td>
<td>IPAD (implementing agent)</td>
<td>Maubara</td>
<td>Jul-08</td>
<td>Dec-10</td>
<td>Portugal: €116,167</td>
<td>On going</td>
</tr>
<tr>
<td>Horticulture / Agribusiness / Mungbeans</td>
<td>Cluster Mós Bele</td>
<td>Develop agriculture (horticulture and corn) and fishing activities and assist farmers in accessing credit.</td>
<td>IPAD (implementing agent)</td>
<td>Maubara</td>
<td>Jul-05</td>
<td>Jul-10</td>
<td>USAID: 11,636,149.55</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Dezenvolve Setor Privadu</td>
<td>Strengthen the private sector with support for agribusiness, commercial services, financial services, and the business enabling environment. Promotion of value chains in mungbeans, fresh vegetables, etc.</td>
<td>Development Alternatives, Inc. (implementing agent)</td>
<td>National (policy component) Dili Alienu Liquica Covalima Baucau Viqueque Bobonaro</td>
<td>Jul-05</td>
<td>Jul-10</td>
<td></td>
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<tr>
<td>Other Agriculture, Agribusiness, and Enterprise Development Initiatives</td>
<td>Development of Candlenut Enterprises in Timor-Leste</td>
<td>Improve the quality of Timor-Leste’s candlenut by making improvements at each stage of the value chain.</td>
<td>Catholic Relief Services (implementing agent)</td>
<td>Baucau Viqueque</td>
<td>Sep-06</td>
<td>Sep-12</td>
<td>USAID: 1,493,000</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Multi-country Market Development Facility</td>
<td>Address market blockages and supporting businesses to develop markets for the poor.</td>
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</tr>
<tr>
<td></td>
<td>Project for Promotion of Agribusiness</td>
<td>Formulate Master Plan for the promotion of agribusiness.</td>
<td>JICA (implementing agent)</td>
<td>National</td>
<td>Apr-09</td>
<td>Dec-09</td>
<td>JICA: 2,799,000</td>
<td>Closed</td>
</tr>
<tr>
<td></td>
<td>Promoting Local Markets and Trading Circuits (Dinamização dos mercados e dos circuitos de comercialização locais)</td>
<td>Promote the quality and availability of production by supporting the domains of agro-processing, storage, and commercialization through public private partnerships in agribusiness.</td>
<td>Instituto Marquês de Valle Flor (IMVF) (implementing agent)</td>
<td>Liquiça</td>
<td>Feb-10</td>
<td>July-12</td>
<td>Portugal</td>
<td>Initial Stage</td>
</tr>
<tr>
<td></td>
<td>Susueen Timor-Leste: Domestic Dairy Industry Initiative</td>
<td>Initiate household dairy industry in Timor-Leste</td>
<td>Xanana Vocational Education Trust (implementing agent)</td>
<td>Lautem Bobonaro</td>
<td>Oct-09</td>
<td>Sep-12</td>
<td>USAID: 500,000</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Third Agriculture Rehabilitation Project</td>
<td>Strengthen the capacity of MAFF and assist rural communities in increasing their production and income in a sustainable way. Relevant components included (1) Irrigation Rehabilitation and Management; (2) Services to Farmers (Information, Animal Health, Agribusiness Support); and (3) Strengthen MAFF (implementing agent)</td>
<td>World Bank (supervisor)</td>
<td>National</td>
<td>Dec-03</td>
<td>Dec-08</td>
<td>Total: 11,266,817.53 TFET: 3,000,000 EC: 8,266,817.53</td>
<td>Closed</td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
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</tr>
<tr>
<td>Agribusiness / Agriculture / Skills Development</td>
<td>Integrated Rural Development Programme/ Second Rural Development Program (RDP II)</td>
<td>Increase the range of domestic products from the agricultural, fisheries, and forestry sectors are offered on domestic markets and available for export through training of rural populations, responsible public and private institutions and organizations in the agricultural sector.</td>
<td>GTZ (implementing agent) MAFF (govt counterpart)</td>
<td>National</td>
<td>Jan-06</td>
<td>Dec-11</td>
<td>Germany: €10,000,000 EU: € 9,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agribusiness / Agriculture / Skills Development</td>
<td>Rural Development Program III</td>
<td>Develop national rural development policies and strategies in selected topics while establishing associated activities in Manufahi District (extension services, agribusiness activities and rural roads) to act as a model for development. Expand on activities of the previous RDP I and II while transitioning to program activities under the 10th EDF.</td>
<td>MAFF (implementing agent) Lindell Mills (consultant)</td>
<td>Manufahi</td>
<td>Jul-09</td>
<td>Jan-13</td>
<td>EC: €9,680,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agribusiness / Agriculture</td>
<td>Technical Assistance to the Ministry of Economy and Development</td>
<td>Draft the Rural Development framework Draft the Rural Development framework.</td>
<td>EC (implementing agent) HTSPE LIMITED (consultant)</td>
<td>National</td>
<td>Feb-10</td>
<td>Mar-10</td>
<td>EC: €156,000</td>
<td>Completed</td>
</tr>
<tr>
<td>Agribusiness / Enterprise Development</td>
<td>Second Small Enterprises Project</td>
<td>Generate employment, accelerate economic growth, and improve the competitiveness of SMEs. Components include loans to agribusinesses and SMEs, business development services, development of enabling environment, and rehabilitation of market facilities.</td>
<td>UNTAET (implementing agent) World Bank (supervisor)</td>
<td>National</td>
<td>Mar-02</td>
<td>Dec-07</td>
<td>Total (TFET): 7,500,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Agribusiness / Skills Development</td>
<td>Building Agribusiness Capacity</td>
<td>Support agribusiness education and provide technical training for students of the country’s agriculture high schools. Developed a one-year post certificate program at three technical agriculture high schools administered by the Ministry of Agriculture and Fisheries.</td>
<td>Land O’ Lakes International Development (implementing agent)</td>
<td>Lospalos  Manatuto Maliana</td>
<td>Sep-07</td>
<td>Sep-11</td>
<td>USAID: 6,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agribusiness / Skills Development</td>
<td>Employment Promotion for Young People</td>
<td>Support to MED on vocational training and the setting-up of agribusinesses within value chains.</td>
<td>GTZ (implementing agent) MED (govt counterpart)</td>
<td>National</td>
<td>Sep-08</td>
<td>Dec-12</td>
<td>Germany: €4,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Agricultural Policy Advisor</td>
<td>Advise MAFF on policies and planning for agriculture development.</td>
<td>IICA (implementing agent) MAFF (govt counterpart)</td>
<td>National</td>
<td>May-08</td>
<td>May-10</td>
<td>JICA: 372,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Biological control of two major weeds affecting crop and</td>
<td>Provide long term control of two serious weeds and develop the scientific capacity of MAFF and UNTL staff and students in ACIAR/Charles Darwin University, Australia (implementing agent)</td>
<td>ACIAR/Charles Darwin University, Australia (implementing agent)</td>
<td>National</td>
<td>Jul-04</td>
<td>Feb-09</td>
<td>ACIAR: AUD 523,159</td>
<td>Closed</td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
<td>Geographic Scope</td>
<td>Start Date</td>
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</tr>
<tr>
<td>Agriculture</td>
<td>Building agricultural knowledge and R&amp;D capacity in Timor-Leste: a small projects facility</td>
<td>Investing in micro-projects, valued between $10,000-35,000 and linking Timorese researchers with local agricultural producers.</td>
<td>ACIAR/Curtin University of Technology, Australia (implementing agent)</td>
<td></td>
<td>Apr-06</td>
<td>Sep-09</td>
<td>ACIAR: AUD 420,520</td>
<td>Closed</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Seeds of Life 2</td>
<td>Improve and protect food security and income generation by (1) strengthening seed production, storage, and distribution systems within East Timor; (2) evaluating new germplasm and associated technologies on MAFF research stations; (3) on-farm demonstrations and trials; and (4) capacity building and institutionalization of SoL within MAFF.</td>
<td>MAFF (implementing agent)</td>
<td></td>
<td>Sep-05</td>
<td>Aug-10</td>
<td>AusAID/ACIAR/MAFF: 11,396,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Agriculture / Skills Development / Roads</td>
<td>Rural Development Program IV</td>
<td>Improve agricultural productivity through training of extension officers and relevant training institutions. Rehabilitate and maintain rural and district roads (including capacity building for private sector civil works contractors for community/labor based works).</td>
<td>GTZ, ILO, MoF (implementing agents)</td>
<td>National</td>
<td>2011</td>
<td>2016</td>
<td>EC: €43,500,000</td>
<td>Under appraisal</td>
</tr>
<tr>
<td>Agriculture / Skills Development</td>
<td>Strengthening of Agro-Technical Schools in Timor-Leste</td>
<td>Increase capacity of students in agriculture schools.</td>
<td>Brazilian Ministry of Education (implementing agent)</td>
<td></td>
<td>Aug-08</td>
<td>Dec-09</td>
<td>Brazil/GOTL: 273,000</td>
<td>Closed with pending activities</td>
</tr>
<tr>
<td>Agriculture / Skills Development</td>
<td>Sustainable agriculture development</td>
<td>A grant for water supply and agricultural extension services for communities in Liquica, Maubara, Maubisse, and Ainaro Districts.</td>
<td>Naroman Timor Foun (implementing agent)</td>
<td></td>
<td>Apr-08</td>
<td>Apr-09</td>
<td>NZAID: 50,000</td>
<td>Completed</td>
</tr>
<tr>
<td>Agriculture / Skills Development</td>
<td>Sustainable agriculture development</td>
<td>A grant for water supply and agricultural extension services for communities in Liquica, Maubara, Maubisse, and Ainaro Districts.</td>
<td>Naroman Timor Foun (implementing agent)</td>
<td></td>
<td>Apr-08</td>
<td>Apr-09</td>
<td>NZAID: 50,000</td>
<td>Completed</td>
</tr>
<tr>
<td>Enterprise Development</td>
<td>One village, one product</td>
<td>Identify unique products in certain areas or villages and organize groups to develop common product.</td>
<td>JICA (implementing agent)</td>
<td></td>
<td>2008</td>
<td>2010</td>
<td>JICA: 70,000</td>
<td>On-going (supported by Agricultural Policy Advisor)</td>
</tr>
<tr>
<td>Enterprise Development</td>
<td>Strengthen Livelihood Security for Poor Microentrepreneurs in Timor-Leste</td>
<td>Support small and microenterprise in remote areas in Timor-Leste</td>
<td>Church World Service (implementing agent)</td>
<td></td>
<td>Sep-09</td>
<td>Aug-12</td>
<td>USAID: 450,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Enterprise Development</td>
<td>Women in Self-Employment (WISE)</td>
<td>Create self-employment opportunities for potential women entrepreneurs in Baucau,</td>
<td>ILO (implementing agent)</td>
<td></td>
<td>Jan-08</td>
<td>Dec-08</td>
<td>UNDP: 539,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
<td>Geographic Scope</td>
<td>Start Date</td>
<td>End Date</td>
<td>Donors &amp; Funds (in USD unless otherwise specified)</td>
<td>Status (as of Mar-10)</td>
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<tr>
<td></td>
<td>Viqueque, and Lautem District</td>
<td>Implementing Agent &amp; Partners</td>
<td>UNDP (supervisor) SEROEPE (govt counterpart)</td>
<td>Lautem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Inspection</td>
<td>Institutional capacity building to the MTII</td>
<td>TA – 2 advisors: Advisor 1 to the Minister's Cabinet, Advisor 2 to the Department of Food and Economy Inspection (Inspecção Alimentaria e Econômico)</td>
<td>MTCI (implementing agent)</td>
<td>National</td>
<td>May-09;</td>
<td>Oct-09</td>
<td>Portugal: salaries</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Building Agribusiness Capacity</td>
<td>Support agribusiness education and provide technical training for students of the country's agriculture high schools. Developed a one-year post certificate program at three technical agriculture high schools administered by the Ministry of Agriculture and Fisheries.</td>
<td>Land O'Lakes International Development (implementing agent)</td>
<td>Lospalos Manatuto Maliana</td>
<td>Sep-07</td>
<td>Sep-11</td>
<td>USAID: 6,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Employment Promotion for Young People</td>
<td>Support to MED on vocational training and the setting-up of agribusinesses within value chains.</td>
<td>GTZ (implementing agent) MED (govt counterpart)</td>
<td>National</td>
<td>Sep-08</td>
<td>Dec-12</td>
<td>Germany: €4,000,000</td>
<td>On-going</td>
</tr>
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<td></td>
<td>Employment Promotion for Young People</td>
<td>Support to MED on vocational training and the setting-up of agribusinesses within value chains.</td>
<td>GTZ (implementing agent) MED (govt counterpart)</td>
<td>National</td>
<td>Sep-08</td>
<td>Dec-12</td>
<td>Germany: €4,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Integrated Rural Development Program II (RDPII)</td>
<td>Increase the range of domestic products from the agricultural, fisheries, and forestry sectors are offered on domestic markets and available for export through training of rural populations, responsible public and private institutions and organizations in the agricultural sector.</td>
<td>GTZ (implementing agent) MAFF (govt counterpart)</td>
<td>National</td>
<td>Jan-06</td>
<td>Dec-11</td>
<td>Germany: €10,000,000, EU: € 9,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>Rural Development Program III</td>
<td>Develop national rural development policies and strategies in selected topics while establishing associated activities in Manufahi District (extension services, agribusiness activities and rural roads) to act as a model for development. Expand on activities of the previous RDP I and II while transitioning to program activities under the 10th EDF.</td>
<td>MAFF (implementing agent) Lindell Mills (consultant)</td>
<td>Manufahi</td>
<td>Jul-09</td>
<td>Jan-13</td>
<td>EC: €9,680,000</td>
<td>On-going</td>
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<tr>
<td></td>
<td>Rural Development Program IV</td>
<td>Improve agricultural productivity through training of extension officers and relevant training institutions. Rehabilitate and maintain rural and district roads (including capacity building for private sector civil works contractors for community/labor based works).</td>
<td>GTZ, ILO, MoF (implementing agents) MAFF, Mol, MED (govt counterpart)</td>
<td>National</td>
<td>2011</td>
<td>2016</td>
<td>EC: €43,500,000</td>
<td>Under appraisal</td>
</tr>
</tbody>
</table>

**Chapter 7: Addressing Skills Deficits, Training, and Labor Market Challenges**

- **Agribusiness Skills**
  - Building Agribusiness Capacity
    - Description: Support agribusiness education and provide technical training for students of the country's agriculture high schools. Developed a one-year post certificate program at three technical agriculture high schools administered by the Ministry of Agriculture and Fisheries.
    - Implementing Agent: Land O'Lakes International Development (implementing agent)
    - Geographical Scope: Lospalos Manatuto Maliana
    - Start Date: Sep-07
    - End Date: Sep-11
    - Donors & Funds: USAID: 6,000,000
    - Status: On-going

- **Agribusiness Skills**
  - Employment Promotion for Young People
    - Description: Support to MED on vocational training and the setting-up of agribusinesses within value chains.
    - Implementing Agent: GTZ (implementing agent) MED (govt counterpart)
    - Geographical Scope: National
    - Start Date: Sep-08
    - End Date: Dec-12
    - Donors & Funds: Germany: €4,000,000
    - Status: On-going

- **Agriculture Skills**
  - Integrated Rural Development Program II (RDPII)
    - Description: Increase the range of domestic products from the agricultural, fisheries, and forestry sectors are offered on domestic markets and available for export through training of rural populations, responsible public and private institutions and organizations in the agricultural sector.
    - Implementing Agent: GTZ (implementing agent) MAFF (govt counterpart)
    - Geographical Scope: National
    - Start Date: Jan-06
    - End Date: Dec-11
    - Donors & Funds: Germany: €10,000,000, EU: € 9,000,000
    - Status: On-going

- **Agriculture Skills**
  - Rural Development Program III
    - Description: Develop national rural development policies and strategies in selected topics while establishing associated activities in Manufahi District (extension services, agribusiness activities and rural roads) to act as a model for development. Expand on activities of the previous RDP I and II while transitioning to program activities under the 10th EDF.
    - Implementing Agent: MAFF (implementing agent)
    - Geographical Scope: Manufahi
    - Start Date: Jul-09
    - End Date: Jan-13
    - Donors & Funds: EC: €9,680,000
    - Status: On-going

- **Agriculture Skills**
  - Rural Development Program IV
    - Description: Improve agricultural productivity through training of extension officers and relevant training institutions. Rehabilitate and maintain rural and district roads (including capacity building for private sector civil works contractors for community/labor based works).
    - Implementing Agents: GTZ, ILO, MoF (implementing agents) MAFF, Mol, MED (govt counterpart)
    - Geographical Scope: National
    - Start Date: 2011
    - End Date: 2016
    - Donors & Funds: EC: €43,500,000
    - Status: Under appraisal
<table>
<thead>
<tr>
<th>Area</th>
<th>Project Name</th>
<th>Description</th>
<th>Implementing Agent &amp; Partners</th>
<th>Geographic Scope</th>
<th>Start Date</th>
<th>End Date</th>
<th>Donors &amp; Funds (in USD unless otherwise specified)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Skills</td>
<td>Strengthening of Agro-Technical Schools in Timor-Leste</td>
<td>Increase capacity of students in agriculture schools.</td>
<td>Brazilian Ministry of Education (implementing agent) MAFF (govt counterpart)</td>
<td>Maliana Manatuto Lautem</td>
<td>Aug-08</td>
<td>Dec-09</td>
<td>Brazil/GOTL: 273,000</td>
<td>Closed with pending activities</td>
</tr>
<tr>
<td>Agriculture Skills</td>
<td>Sustainable agriculture development</td>
<td>A grant for water supply and agricultural extension services for communities in Liquica, Maubara, Maubisse and Ainaro Districts.</td>
<td>Naroman Timor Foun (implementing agent)</td>
<td>Liquica Maubara Maubisse Ainaro</td>
<td>Apr-08</td>
<td>Apr-09</td>
<td>NZAID: 50,000</td>
<td>Completed</td>
</tr>
<tr>
<td>Basic Skills</td>
<td>PAS (Prepara Ami ba Servisi/ Preparing Ourselves for Work)</td>
<td>Workforce preparation program that combines off-the-job instruction with on-the-job training. This includes literacy/language learning, employability and life-skills training, financial and entrepreneurship training, and vocational skill building.</td>
<td>EDC (implementing agent)</td>
<td>All Districts</td>
<td>Mar-08</td>
<td>Jan-12</td>
<td>USAID: 5,000,000</td>
<td>??</td>
</tr>
<tr>
<td>Basic Skills</td>
<td>Youth Employment Promotion (YEP) Program</td>
<td>Enhance youth employability through labor-market driven trainings, and create employment opportunities for youth.</td>
<td>ILO (implementing agent) SEFOPE (govt counterpart)</td>
<td>All Districts</td>
<td>May-04</td>
<td>May-09</td>
<td>Total: 18,083,734, AusAID: 8,023,734, GOLT: 10,000,000</td>
<td>On-going</td>
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<tr>
<td>Enterprise Development Skills</td>
<td>Cluster Mós Bele</td>
<td>Strengthen key labor skills for the development of economic activities chains</td>
<td>IPAD (implementing agent)</td>
<td>Maubara</td>
<td>Dec-10</td>
<td></td>
<td>Portugal: €152,757</td>
<td>On going</td>
</tr>
<tr>
<td>Enterprise Development Skills</td>
<td>Enhance delivery of BDS and expand market access for MSEs</td>
<td>Enhance the capacity to deliver market/needs oriented BDS, provide business information, and facilitate market access for MSEs, through value chain analysis and local economic development.</td>
<td>IADE and National Directorate of Rural Development, MED (govt counterpart)</td>
<td>NA</td>
<td>2010</td>
<td>2014</td>
<td>Irish Aid</td>
<td>In design phase</td>
</tr>
<tr>
<td>Enterprise Development Skills</td>
<td>Skills Training for Gainful Employment (STAGE)</td>
<td>Build the capacity of the Secretariat of State for Labor and Solidarity. Establish a national network of training providers to deliver formal and non-formal skills and enterprise training. Empower communities through the delivery of an integrated system of skills and enterprise training.</td>
<td>ILO (implementing agent) UNDP (supervisor) Secretariat of State for Labor and Solidarity (govt counterpart)</td>
<td>All Districts</td>
<td>May-04</td>
<td>May-09</td>
<td>Total: €5,086,994, UNDP: €236,000, EC: €4,650,994</td>
<td>Closed</td>
</tr>
<tr>
<td>Labor Information</td>
<td>Labor Market Information System Project</td>
<td>Enhance the government’s capacity to collect, manage, and disseminate labor market information. This includes TA to support the Labor Force Survey and its dissemination.</td>
<td>ILO (implementing agent)</td>
<td>All Districts</td>
<td>Nov-06</td>
<td>Jun-10</td>
<td>Irish Aid: 470,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Legal Skills</td>
<td>Strengthening the Justice System in Timor-Leste</td>
<td>Strengthen capacity of justice system and improve access for the poor and disadvantaged. Focus areas include strengthening the capacity of justice actors through professional education; deconstraining the formal justice system; improving legal awareness, legal aid, and dispute resolution through formal and informal mechanisms.</td>
<td>UNDP (implementing agent)</td>
<td>National</td>
<td>Jan-08</td>
<td>Dec-13</td>
<td>Total: 34,225,000</td>
<td>On-going</td>
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<td>Skills Development</td>
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<tr>
<td>Skills Development</td>
<td>Capacity development of TVTL</td>
<td>Dili</td>
<td>Dec-08</td>
<td>Dec-09</td>
<td>Brazil/GOTL: 554,000</td>
<td>Closed with pending activities</td>
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<td>Technical and management capacity development of TVTL</td>
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<tr>
<td>Skills Development/</td>
<td>Education Sector Support Project</td>
<td>National</td>
<td>Jan-08</td>
<td>Jan-13</td>
<td>AusAID/World Bank: 12,000,000 (of which US$2.2 million for vocational training component)</td>
<td>On-going</td>
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<tr>
<td>VET</td>
<td>Component 4 of the project supports vocational training, the training of tutors, establishment of a national qualification framework, and the development of Polytechnics.</td>
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<td>Ministry of Education (implementing agent)</td>
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<tr>
<td>Vocational Skills</td>
<td>Professional Training and social promotion in Timor-Leste I</td>
<td>Dili</td>
<td>Apr-09</td>
<td>May-11</td>
<td>Brazil/GOTL: 2,255,000</td>
<td>On-going</td>
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<tr>
<td></td>
<td>Provide vocational training in 9 different subjects in Becora. 225 students follow each semester.</td>
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<td><strong>Implementing Agent &amp; Partners</strong></td>
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<td>SENAI (implementing agent)</td>
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**Chapter 8: Addressing Property Rights and Access to Land**

<table>
<thead>
<tr>
<th>Land</th>
<th>Justice for the Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One of two focus areas is on ‘Customary Systems of Land Management and Rural Development.’ This includes understanding ways in which customary landowners/users encounter the formal sector and formal economy and supporting the development of improved frameworks for negotiation between customary landowners, the state, and investors.</td>
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<td><strong>Geographic Scope</strong></td>
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<td><strong>Status (as of Mar-10)</strong></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Land</th>
<th>Strengthening Property Rights in Timor-Leste I (Ita Nia Rai)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strengthen capacity of (future) Bureau of Land Management, and establish a land titling system. Claims collection pilots underway in Liquica, Manatuto; plans to expand to Aileu, Bobonaro, and Baucau.</td>
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<td><strong>Geographic Scope</strong></td>
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<td><strong>Start Date</strong></td>
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<td><strong>Donors &amp; Funds (in USD unless otherwise specified)</strong></td>
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**Chapter 9: Improving Business Environment to Enhance Export Competitiveness**

<table>
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<th>Better Business Initiative</th>
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<tbody>
<tr>
<td></td>
<td>IFC-supported public private dialogue mechanism between government and private sector, both foreign and domestic, to support and institutionalize a process through which the private and public sector can jointly identify, prioritize and action initiatives to advance private sector development.</td>
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<td></td>
<td>MED (govt counterpart)</td>
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<td><strong>Donors &amp; Funds (in USD unless otherwise specified)</strong></td>
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<td><strong>Status (as of Mar-10)</strong></td>
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<thead>
<tr>
<th>Business Environment</th>
<th>Trade Mission to Timor-Leste</th>
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<tbody>
<tr>
<td></td>
<td>Assist GOTL and businesses in establishing a formal framework for a Chamber of Commerce</td>
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<td><strong>Geographic Scope</strong></td>
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<td><strong>Start Date</strong></td>
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<td><strong>Donors &amp; Funds (in USD unless otherwise specified)</strong></td>
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<td>Area</td>
<td>Project Name</td>
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<tr>
<td>Finance</td>
<td>Inclusive Finance for Under-Served Economy (INFUSE)</td>
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<tr>
<td>Finance</td>
<td>Private Sector Development Initiative</td>
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<tr>
<td>Finance</td>
<td>Support for Moris Rasik Microfinancing</td>
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<tr>
<td>Mediation</td>
<td>Access to Justice Program</td>
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<td>Mediation &amp; Arbitration</td>
<td>Transitional Justice Project</td>
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</tbody>
</table>

**Chapter 10: Improving Transportation and Trade Facilitation**

<p>| Customs              | Automated System for Customs Data Administration (ASYCUDA)                | Enhance the effectiveness and transparency of customs management and control with the view to increase customs revenues and economic planning capacity.                                                   | UNDP (implementing agent) Ministry of Planning and Finance (govt counterpart) | National        | Jul-02     | Dec-08   | Total: 440,691,000 UNDP: 280,042,000 | Closed               |
| Customs              | Automated System for Customs Data Administration II (ASYCUDA II)          | Automate areas that directly impact on the clearance processes. Contribute to strengthening the capacity of customs staff through training on managing automated clearance operations and improving the accuracy of declarations for all the customs regimes, from the point of cargo arrival. | UNDP (implementing agent) MoF (govt counterpart) | National        | Jun-06     | Mar-10   | SIDA: 475,992 | Closed               |</p>
<table>
<thead>
<tr>
<th>Area</th>
<th>Project Name</th>
<th>Description</th>
<th>Implementing Agent &amp; Partners</th>
<th>Geographic Scope</th>
<th>Start Date</th>
<th>End Date</th>
<th>Donors &amp; Funds (in USD unless otherwise specified)</th>
<th>Status (as of Mar-10)</th>
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<tr>
<td></td>
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<td>through customs declarations, to release of the goods.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total: 2,700,000 ADB: 2,500,000 GOTL: 200,000</td>
<td>Initial Stage</td>
</tr>
<tr>
<td>Customs</td>
<td>Capacity Strengthening and Institutional Development for Border Management and Trade and Tourism Development in the Pacific</td>
<td>Improved cross border trade between Timor-Leste and Indonesia by (1) enhancing institutional capacity for border management and border services; (2) strengthening cross-border trade and tourism links; and (3) strengthening capacity for developing and implementing cross-border transport links.</td>
<td>ADB (implementing agent) BOCC, MFAC, MTCI, MoI, Autonomous Region of Oecussi (govt counterparts)</td>
<td>National</td>
<td>Apr-10</td>
<td>Mar-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs</td>
<td>Planning and Financial Management Capacity Building Program</td>
<td>The program has supported a revision of the Customs Code, assisted in the implementation of the Automated System for Customs Data, and conducted a detailed Customs diagnostic study, which provides the basis for reform and modernization of the Customs Directorate.</td>
<td>MoF (implementing agent) World Bank (supervisor)</td>
<td>National</td>
<td>Nov-06</td>
<td>Jul-11</td>
<td>Total: 28,500,000 WB: 7,000,000 Australia, EC, Ireland, Norway, New Zealand: 21,500,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Access Improvements to Markets in Eastern Regions (AIM)</td>
<td>Facilitate access to markets for farmers in Viqueque and Lautem districts by constructing bridges, and increase capacity in the Department of Roads, Bridges and Flood Control.</td>
<td>UNOPS (implementing agent) UNDP (supervisor)</td>
<td>Viqueque Lautem</td>
<td>Oct-04</td>
<td>May-08</td>
<td></td>
<td>Closed</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Assistance to Community Stabilisation in Timor-Leste (ACSTL)</td>
<td>Improve rural community empowerment and livelihoods through community-based infrastructure rehabilitation and development (irrigation schemes, water supply, markets etc) in three districts.</td>
<td>IOM (implementing agent)</td>
<td></td>
<td>2004</td>
<td>2007</td>
<td>EC: €2,715,502</td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Urgent rehabilitation of Mola Bridge</td>
<td>Rehabilitate and improve Mola bridge in Zamalai, Covalima.</td>
<td>MOI (implementing agent) JICA (supervisor)</td>
<td>Dili</td>
<td>Feb-10</td>
<td>Dec-10</td>
<td>JICA: 9,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Ports</td>
<td>Establishing the maritime transport sector</td>
<td>Support an efficient maritime transport sector through the (1) Development Plan of a sustainable National Port System; 2) sustainable safe and regular ferry service to Oecusse and Atauro by BERLIN NAKROMA; and 3) construction of a Maintenance and Repair Facility at Tibar Bay for BERLIN NAKROMA.</td>
<td>GTZ (implementing agent) Ministry of Transport and Communication (govt counterpart)</td>
<td>National</td>
<td>Jan-05</td>
<td>Dec-11</td>
<td>Germany: 16,773,540</td>
<td>On-going</td>
</tr>
<tr>
<td>Ports</td>
<td>Port Management Advisor</td>
<td>Improve the framework of port maintenance and repair.</td>
<td>JICA (implementing agent) APORTIL, MOI (govt counterpart)</td>
<td>National</td>
<td>Sep-09</td>
<td>Jan-10</td>
<td>JICA: 68,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Ports</td>
<td>Project for Rehabilitation of Dili Port</td>
<td>Rehabilitate concrete wharf to maintain stable and effective functioning of Dili Port.</td>
<td>APORTIL, MOI (implementing agent)</td>
<td>Dili</td>
<td>Mar-07</td>
<td>Mar-10</td>
<td>JICA: 9,656,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
<td>Geographical Scope</td>
<td>Start Date</td>
<td>End Date</td>
<td>Donors &amp; Funds (in USD unless otherwise specified)</td>
<td>Status (as of Mar-10)</td>
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</tr>
<tr>
<td>Roads</td>
<td>Our Roads Our Future- Supporting Local Governance and Community-Based Infrastructure Works</td>
<td>Support (1) community participation in feeder road rehabilitation and maintenance plus capacity development for future basic infrastructure works; (2) skills development for rural poor and vulnerable (including basic business skills); and (3) financial and capacity development support for piloting of decentralized rehabilitation and maintenance of feeder roads.</td>
<td>JICA (supervisor)</td>
<td>Bobonaro Covalima Oecussi</td>
<td>Jan-10</td>
<td>Jan-14</td>
<td>Total: 3,456,000 ADB: 3,000,000 GOTL: 456,000</td>
<td>Initial Stage</td>
</tr>
<tr>
<td>Roads</td>
<td>Preparing the Road Network Development Project</td>
<td>Conduct detailed assessment of road improvement needs and undertake feasibility study for the Road Network Development Sector Project: Timor-Leste.</td>
<td>ADB (implementing agent)</td>
<td>National</td>
<td>Nov-08</td>
<td>Jul-09</td>
<td>ADB: 800,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Roads</td>
<td>Project for the Capacity Development of Road works in Timor-Leste</td>
<td>Improve capacity of road construction and maintenance.</td>
<td>JICA (implementing agent)</td>
<td>National</td>
<td>Jun-10</td>
<td>Jun-13</td>
<td>JICA: 3,635,000</td>
<td>Coming Soon</td>
</tr>
<tr>
<td>Roads</td>
<td>Road Network Development Sector Project: Timor-Leste</td>
<td>Support the establishment of a sound and sustainable road network and subregional cooperation with Indonesia by improving border post facilities.</td>
<td>ADB (supervisor)</td>
<td>National</td>
<td>Dec-09</td>
<td>May-15</td>
<td>Total: 52,900,000 ADB: 46,000,000 GOTL: 6,900,000</td>
<td>Initial Stage</td>
</tr>
<tr>
<td>Roads</td>
<td>Road Sector Improvement Project</td>
<td>Improved road infrastructure by establishing systems for road maintenance, rehabilitating and improving three core network roads, and improving MoI capabilities for project management, supervision, and monitoring.</td>
<td>ADB (supervisor)</td>
<td>National</td>
<td>Mar-06</td>
<td>Sep-09</td>
<td>ADB: 10,000,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Roads</td>
<td>Rural Development Program IV</td>
<td>Improve agricultural productivity through training of extension officers and relevant training institutions. Rehabilitate and maintain rural and district roads (including capacity building for private sector civil works contractors for community/labor based works).</td>
<td>GTZ, ILO, MoF (implementing agents)</td>
<td>National</td>
<td>2011</td>
<td>2016</td>
<td>EC: €43,500,000</td>
<td>Under appraisal</td>
</tr>
<tr>
<td>Roads</td>
<td>Rural Road Survey and Plan for Rehabilitation and Maintenance</td>
<td>Conduct a rural road survey and support the development of a plan for rehabilitation and maintenance.</td>
<td>AegisBCEOM (consultant)</td>
<td>National</td>
<td>2009</td>
<td>2010</td>
<td>EC: €320,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Roads/Infrastructure</td>
<td>Infrastructure Project Management</td>
<td>Support the MoI to help deliver capital works programs, including roads, bridges, and flood control systems.</td>
<td>ADB (implementing agent)</td>
<td>National</td>
<td>Nov-07</td>
<td>Nov-11</td>
<td>Total: 15,000,000 ADB: 3,000,000 AusAID: 12,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Roads/Investment Budget</td>
<td>Provide short-term employment opportunities</td>
<td>ILO</td>
<td>All Districts</td>
<td>Jul-08</td>
<td>Jun-10</td>
<td>Total: 8,304,670</td>
<td>On-going</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
<td>Geographic Scope</td>
<td>Start Date</td>
<td>End Date</td>
<td>Donors &amp; Funds (in USD unless otherwise specified)</td>
<td>Status (as of Mar-10)</td>
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</tr>
<tr>
<td>Infrastructure</td>
<td>Execution Support for Rural Infrastructure Development and Employment Generation (TIM-Works)</td>
<td>to 36,000 beneficiaries through rural infrastructure related works (rural roads repair/rehabilitation, irrigation canals cleaning and restoration, etc.).</td>
<td>(implementing agent)</td>
<td></td>
<td></td>
<td></td>
<td>ILI: 197,000 Norway: NOK 13,500,000 EC: 2,022,403 Ireland: 1,290,211 GOTL: 2,392,800</td>
<td></td>
</tr>
<tr>
<td>Roads/ Infrastructure</td>
<td>Serbisu ba Dame Project (Work for Peace)</td>
<td>Provide short-term employment to 45,569 project participants including rural roads repair/rehabilitation, irrigation canals cleaning and restoration, weed control, and drainage of national and district roads.</td>
<td>ILO (implementing agent)</td>
<td>Apr-07</td>
<td>Sep-07</td>
<td></td>
<td>EC: €2,449,946</td>
<td>Closed</td>
</tr>
<tr>
<td>Other Trade-Related Areas</td>
<td>Energy Services Delivery Project</td>
<td>Stabilize power services in Dili by restoring or improving operational efficiency, reliability, safety and availability of power supply; and promote long-term sustainability of the power sector. The project consists of emergency repair and maintenance of Comoro Power Station, rehabilitation and upgrading of Dili Power Distribution System, distribution of energy efficient light bulbs, and institutional capacity building.</td>
<td>Mol, Directorate of Corporate Services Unit (implementing agent)</td>
<td>Dili</td>
<td>Jul-07</td>
<td>Dec-11</td>
<td>WB: 2,500,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Energy</td>
<td>Gas Seep Harvesting Community Developed Carbon Fund Project</td>
<td>Assist GOTL in the preparation of the Gas Seep Harvesting Community Development Carbon Fund (CDCF) Project. The main objective of this project is to harvest natural gas currently escaping into the atmosphere to secure carbon credits for Timor-Leste, and to the extent feasible, utilize the gas for power generation to benefit local communities.</td>
<td>Mol (implementing agent)</td>
<td>Viqueque as pilot</td>
<td>Sep-04</td>
<td>Apr-06</td>
<td>Total (TFET): 274,065</td>
<td>Closed</td>
</tr>
<tr>
<td>Energy</td>
<td>Gas Seep Harvesting Project</td>
<td>Assist GOTL in determining the technical and economic viability of harvesting seep gas from natural gas seeps to produce reliable and affordable power for isolated rural communities.</td>
<td>Mol (implementing agent)</td>
<td>Viqueque as pilot</td>
<td>May-07</td>
<td>Dec-11</td>
<td>Total (TFET): 3,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Energy</td>
<td>Institutional Strengthening of the Water Resources and Power Sectors in Timor-Leste</td>
<td>Improve efficiency and effectiveness of the water resources and power management. The project has 3 components: Water Resources Management, Power Development, and Institutional development.</td>
<td>MOI (implementing agent)</td>
<td>National</td>
<td>Sep-09</td>
<td>End-14</td>
<td>Norwegian: NOK 50,000,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Area</td>
<td>Project Name</td>
<td>Description</td>
<td>Implementing Agent &amp; Partners</td>
<td>Geographical Scope</td>
<td>Start Date</td>
<td>End Date</td>
<td>Donors &amp; Funds (in USD unless otherwise specified)</td>
<td>Status (as of Mar-10)</td>
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</tr>
<tr>
<td>Energy</td>
<td>Participatory rural energy development in Timor-Leste (PREDP) + UNDP Thematic Trust Fund for Access to Energy</td>
<td>Support rural energy development by (1) building capabilities for planning, implementing and managing rural energy systems at local, district/sub-district and national levels; (2) creating a favorable atmosphere for rural energy development and planning by supporting the establishment of an institution and supporting structures at various levels; (3) promoting adoption and adaptation of rural energy technologies by local people/entrepreneurs.</td>
<td>UNDP (implementing agent)</td>
<td>Dili Liquica Ainaro Manatuto Oecussi Bobonaro</td>
<td>Oct-04</td>
<td>Feb-09</td>
<td>UNDP: 150,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Energy</td>
<td>Power Sector Priority Investments</td>
<td>Improve EDTL's generation capacity, as well as generation and distribution efficiency.</td>
<td>EDTL (implementing agent)</td>
<td>Dili</td>
<td>Apr-05</td>
<td>Mar-08</td>
<td>Total (TFET): 1,390,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Fishery</td>
<td>Fishery Rehabilitation Project</td>
<td>Support income generation for fishermen in Ira-ara and Tutuala villages</td>
<td>IKUEI (implementing agent)</td>
<td>Lautem</td>
<td>Aug-07</td>
<td>Aug-10</td>
<td>JICA: 399,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Fishery</td>
<td>Support to aquaculture and fishery production in Timor-Leste</td>
<td>17 Timorese technicians funded to visit Brazilian institutions in the areas of aquaculture and fisheries in order to collect information and study the demand for these products for the design of a future 2nd phase of the project.</td>
<td>Brazilian Special Secretary of Fisheries (implementing agent)</td>
<td>Manufa Ermera Baucau Lautem Bobonaro Aileu Ainaro</td>
<td>Jun-09</td>
<td>Nov-09</td>
<td>Brazil/GOTL: 258,000</td>
<td>Closed</td>
</tr>
<tr>
<td>Tourism</td>
<td>Cluster Mós Bele</td>
<td>Develop economic activities related to handicrafts and integrated sustainable tourism to enable equity and social inclusion of targeted groups, particularly women and youth.</td>
<td>IPAD (implementing agent)</td>
<td>Maubara</td>
<td>Jul-08</td>
<td>Dec-10</td>
<td>Portugal: €581,783</td>
<td>On going</td>
</tr>
<tr>
<td>Tourism</td>
<td>Developing of Tourism Law</td>
<td>Support the government in its ambition to draft a new tourism law and establish an adequate legal framework regulating and developing the tourism industry.</td>
<td>IFC (implementing agent)</td>
<td>National</td>
<td>2008</td>
<td>NA</td>
<td>NA</td>
<td>On hold</td>
</tr>
<tr>
<td>Tourism</td>
<td>Online travel booking system</td>
<td>Launch an online marketing and booking system for Timor-Leste that will connect local tourism enterprises with the global travel market.</td>
<td>IFC (implementing agent)</td>
<td>National</td>
<td>Jul-08</td>
<td>Jan-11</td>
<td>IFC (Australia, NZ, Japan): 50,000</td>
<td>On-going</td>
</tr>
<tr>
<td>Tourism</td>
<td>Turismo Etnico em Tutuala</td>
<td>Promote local development at the level of the Tutuala suco through the introduction of an income-generating activity in the area of ethnic tourism.</td>
<td>CIDAC (implementing agent)</td>
<td>Lautem</td>
<td>Nov-04</td>
<td>Aug-08</td>
<td>EC: €639,000</td>
<td>Closed</td>
</tr>
</tbody>
</table>

**Definitions:** implementing agent—the agent who conducts the procurement; supervisor—agent who supervises government procurement; government counterpart—any government partner who is not conducting the procurement.

**Source:** All project information (except USAID projects) has been cross-checked with the donors. Information for USAID projects were based on data from the USAID website and National Priorities Secretariat.
ANNEXES
ANNEX 2.1: Addressing Access to Energy

Introduction

1. **Timor-Leste currently has a costly electricity generation system, which impacts adversely on private sector competitiveness.** The poor state of energy supply infrastructure in the country and delays in the reconstruction of major energy facilities have meant that more than 90 percent of households use wood as their primary cooking fuel, and wood supplies more than 50 percent of the total energy consumed in the country.² Electricity is scarce outside the cities. For the country as a whole, approximately 45,000 households (32 percent) had access to electricity in 2007.³ Roughly 60 percent of these connections are located in Dili. The cost of supplying electricity in the country is very high. Fuel subsidies are used to fill the gap between generation costs and tariffs. The impacts of current supply infrastructure on the country’s trade competitiveness will be examined along with potential improvements due to proposed investments.

Electricity Supply: A Critical Bottleneck

*Description of the System*

2. **Timor-Leste’s power system consists of a central node in Dili, along with unconnected smaller diesel generators throughout the country.** Capacity in Dili consists of 22 small diesel gen-sets with a total nameplate capacity at the Comoro station of 31.5 MW with an available capacity of 22.4 MW. Distributed medium and high-speed diesel generation outside Dili in the Electricidade de Timor-Leste (EDTL) system exceeds 20 MW, mostly in other urban centers. Not all of the capacity outside Dili performs at its nameplate capacity. Another 10 MW of captive generating capacity is used for plantation crops processing, mostly coffee. Figure 9.1 shows the main electrified areas in the country as of 2006. Since that time, Baucau has improved its generation and distribution and now has 24-hour electricity service.

**Figure 2.1-A: Electricity Service Map of Timor-Leste**


3. **Generation costs are high because the average efficiency of the system is low due in large measure to the heavy reliance on small diesel prime movers.** In Dili the average efficiency of the diesel engines is 33 percent, dropping to 25 percent outside Dili. The World Bank has supported improvements in the Dili generating system at Comoro, providing funds for a new 4.7 MW generating unit installed there in 2007. With all of the very small generating units and considering the poor condition of many of these units, the management consultants for EDTL, Manitoba Hydro (MHI), have urged the replacement of all 22 gen-sets at Comoro with 4x10.5 MW (42 MW total) used gen-sets from China. These gen-sets would be used until a more permanent generating solution is provided for the EDTL system.

**What are the Key Performance Problems in Electricity Supply?**

4. **There are five distinct categories of problems that afflict the EDTL system today.** Each has an important impact on the ability of the national power system to support economic competitiveness in Timor-Leste. These problems are:

- **Financial** – generation costs exceed revenues; the more EDTL sells the more they lose. Using MHI’s efficiency figures for generation, the fuel-only cost of generation is 15¢/kWh in Dili and 19¢/kWh outside Dili. Accounting for other costs of generation, MHI has calculated the average cost of generation in 2009 (through June) at 28.7¢/kWh. With electricity selling for 12¢/kWh, demand growth creates tremendous financial exposure for EDTL, which must be covered by the government, leaving nothing for new investment. For the first six months of 2009, through the end of June, the discrepancy between generating costs and revenues based on the average electricity price was more than $25 million. For the year, these financial losses approximate 10 percent of the net oil and gas receipts.\(^4\)

- **Commercial** – losses are very high; EDTL bills only 50 percent of electricity sent out in Dili and less than 30 percent elsewhere in the country. Most of these losses are commercial, not technical. MHI estimates that roughly 85 percent of losses are commercial. Meters are bypassed; the billing division of EDTL cannot cut off power to all non-payers; and there are other commercial problems that lead to losses. The commercial losses exacerbate the financial losses of the company. The financial losses noted above presumed an efficient collection system. Given that only about 40 percent of electricity sent out nationwide is billed, sales of electricity cover just 18 percent of the cost of generation. An improvement in the collections ratio, from 40 percent to 60 percent would increase generation cost coverage to about 25 percent—the equivalent of a 50 percent increase in average tariffs, from 12¢/kWh to 18¢/kWh. Without robust billing and collections, even operational expenses must be obtained from the government or donors, making consistent capital budgeting and maintenance difficult, further impairing performance.

- **Technical** – As noted by Norplan, fewer than 50 percent of the nation’s MV lines currently have conductors in them, and the condition of transformer stations is noted by MHI as problematic as well. Overall, these technical problems lead to losses in excess of what is achievable with current voltages.\(^5\) On the generation side the use of a very large number of small gen-sets from eight different vendors and in more than twenty-one sizes has resulted in recurring problems of reliability and spare parts purchases and availability. Outside Dili and Baucau, electricity is only available for 6-12 hours per day and long outages are not uncommon.

- **Operational** – In addition to the unstable financial condition of EDTL and mindful of its significant technical and commercial problems, there is also continuing difficulty in the management structure of the company. In the past five years, there have been two different management contracts—Macau Electricity Cooperation (CEM) and MHI—without the establishment of appropriate managerial autonomy. For planning, the company still relies on


\(^5\) The Government’s subsidy allocation for EDTL is $35 million per year for 2009-2012. Whether this amount is either appropriate or sufficient is almost entirely a matter of imported oil prices. See La’o Hamutuk, “Heavy Oil Electricity Plants and Grid,” *La’o Hamutuk Bulletin*, Vol. 10, No. 1 (Jun 2009) for a discussion of the subsidies in electricity generation.

\(^6\) Due to the very high level of commercial losses and the lack of full metering, it is not possible to calculate technical losses. However, both the World Bank and MHI have stated that these losses are well in excess of what is achievable technically.
either MHI or on donor/vendor entities. The most visible evidence of this lack of planning and operational autonomy is the proposal by a foreign company to construct more than 180 MW of heavy fuel oil (HFO) generation to augment a reconstruction of the transmission system.

- **Network** – Timor-Leste does not have a national electricity grid. With the lack of connectivity and the high technical losses characteristic of 20 kV lines now used in the country, it is not at this time possible to consolidate the many small gen-sets into far fewer large prime movers (generating stations) connected by a higher voltage network. *In a small market, it is not feasible to separate network and generation ownership and operations.* As a result, planning and investment for the network must relate to the type and location of the generating stations in the system. It is better if the two segments of the electricity business are planned together. If not, then the adaptation of one segment (generation or network) to the “facts on the ground” of the other segment will leave both segments performing sub-optimally, imposing higher costs on the country’s economy.

**How do These Electricity Sector Problems Affect the Country’s Financial and Economic Competitiveness?**

5. **High generation costs for electricity represent significant opportunity costs for the country’s economy.** The very high generation costs for electricity — estimated variously at 29-37¢/kWh for generation only — are 2-3 times higher than the costs for generation using more efficient technologies. At these costs for supply, it would appear that electricity generation represents roughly 10 percent of non-oil GDP. If such a large sector of the economy is not efficient, and if the electricity is used primarily for non-paid residential consumption, then much of the imported fuel, generation sets, and spare parts will represent a loss for the economy of the country.

6. **Industries that add value to natural resources using electricity (sawmills, coffee roasters, food processors, fish canning, and freezing) will all face higher costs compared with countries accessing less costly electricity.** Moreover, if customers do not pay the full cost of this electricity, then they have little incentive to use efficient and up-to-date equipment, another burden on competitiveness. Finally, if the quality of supplied power is low, then process industries cannot use modern equipment that relies on microprocessors, further disadvantaging their prospects. In effect, much of the electricity sold by EDTL represents an in-kind transfer payment and is not counted as a part of GDP or as an economic benefit.

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**Box 2.1-A: Why High Electricity Generation Costs Matter, and What it Costs in Neighboring Countries**

The cost of generating electricity is a critical element in economic competitiveness. If power generation is not efficient, then modern equipment used to add value to natural resources cannot be employed, creating additional disadvantages for the country’s processing industries. Added to the burdens imposed on industrial firms by inefficient and poor quality electricity generation will be the costs imposed on the services sectors—modern hotels and offices, telecommunications—which rely heavily on electricity.

Electricity prices in Indonesia are subsidized to remain at a low level. Nevertheless, the PLN, the national utility, has been able to calculate its cost of supply as $0.12/kWh at the high voltage busbar and $0.15/kWh at distribution voltage. Industrial users pay more than half the cost of supply while residential customers pay just 30 percent of supply costs. These tariffs are currently set at $0.073 and $0.043 per kWh, respectively.

Electricity in Australia, generated from local fuels in large central stations, costs on average about $0.04 at the generation busbar. Electricity is not subsidized in Australia.

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7. **The current arrangements for the generation and distribution of electricity in Timor-Leste do not encourage value added activities if the primary users of electricity are residential.** Electricity must be seen as adding value to economic output. The primary way that this is accomplished is to make the costs of doing business lower and to facilitate the essential services required by business—finance, legal, freight, and processing. Electricity makes the lives of its users better and more convenient, but it does not compensate

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7 150,000,000 kWh of annual generation at 29-37¢/kWh represents $44-56 million, or 9-11% of the $499 million non-oil GDP recorded in 2008.
for the use of diesel engines in processing industries, nor does it promote the essential business services required to turn that output into salable goods.

8. Moreover, if the insolvency of EDTL, due to high costs and low revenues, deprives the company of the fiscal autonomy that a company needs to manage its affairs, then electricity sector management will respond primarily to the priorities and schedules of those who provide the funds. In many cases, the donors or lenders will supply these resources in good faith and will set appropriate priorities. However, in some cases, the priorities of various donors/lenders may vary from one another and from those of EDTL and Timor-Leste.

9. When priorities and approaches differ, EDTL will find its ability to plan expeditiously for its future supply needs will be put off, perhaps dramatically. Already, the generation system is over-reliant on more than 60 small heterogeneous generation units, most of the recent ones representing stop-gap purchases due to planning and funding exigencies. Delays force EDTL to continue to satisfy its generation requirements with short-term gen-set purchases. Since the only way to reduce generation costs is to use more efficient prime movers, further delay in the adoption of a long-range generation strategy induces yet more short-term and high cost generation solutions.

10. With the management’s attention focused on short-term financial crisis mitigation, it is difficult to plan, prioritize, and execute a network rehabilitation and expansion plan that supplies reliable power to areas outside Dili and Baucau. Here again the lack of financial resources permits conflicting donor visions to compete for attention. In addition, the company must devote inordinate attention to its billing and collection procedures, thus diverting staff and management from other activities.

11. While it is true that conditions in Timor-Leste are extraordinary and have been since the end of Indonesian rule, a sense of normalcy needs to reenter its infrastructure planning and provision of services. At present, Timor-Leste can “afford” to spend 10 percent or more of its annual petroleum receipts on electricity subsidies. However, such subsidies compete for budgetary resources needed for social sectors and other infrastructure that cannot pay off financially — schools, roads, water, clinics, etc. — and represent a direct diminution of the government’s ability to provide such services. Since these infrastructure services are ultimately important elements of economic productivity and competitiveness, it is critical to identify those activities capable of financial self-sufficiency from those not so capable. Where energy subsidies are used as a policy tool, they have inesorably grown — once instituted they become a “right.” Eventually, as in neighboring Indonesia, energy subsidies can grow to dominate the government’s investment activities, far surpassing other investment priorities for the country.

12. Once energy subsidies displace other potential uses of the funds, then the subventions will have direct impacts on competitiveness — poor roads, dirty water, a poorly trained labor force. This reduces the value of goods that the country can export or that can compete against imports. Moreover, the poor quality of electricity service that is provided by an insolvent utility will not permit the use of modern industrial or processing equipment, further harming competitiveness.

Looking Ahead: Required Electricity Supply Architecture

13. There are numerous proposals for improving the supply of electricity to business, industry, and residential users in the country. Broadly speaking, these proposals cluster around two poles: reliance on large central generation stations with a unified national grid versus use of small prime movers and distributed generation to meet local needs. These options can be represented on an axis such as the one below (Figure 2.1-B):

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8 Using a new slow-speed diesel engine (~41 percent efficient) would reduce the variable costs of generation to something on the order of 8-9¢/kWh. For the types of slow speed diesels now under discussion (~35 percent efficient) the cost of generation (fuel only) is likely to come in around 10¢/kWh. These calculations assume a price of HFO = $65/bbl ⇔ price of oil = $80/bbl.
14. **These generation options are not mutually exclusive.** Given the challenges facing the country, it is not likely that all villages can be electrified within the next decade nor is it likely that gas supplies from the Sunrise field or from onshore resources can be developed quickly. However, not all of these options can be developed fully over the next ten years and some may conflict with others as regards to the financial, engineering, and managerial resources both at the level of EDTL and at the provincial level.

15. **In addition to the question of centralization, there is also the matter of the use of indigenous resources for power generation.** The alternative proposals feature significant divergence, which may be represented on another axis, as in Figure 2.1-C.

16. **Local resources are often seen as available with little or no opportunity cost to the country.** For example, the growth of the Jatropha plant as a fuel crop to supplement diesel in existing generation stations and trucks is probably technically feasible in Timor-Leste, though there are no agronomic studies of large scale cultivation in the country. In looking at the issue of such energy crops, it was shown that growing sufficient Jatropha to replace 5-10 percent of diesel use (known as B5 and B10 programs) would require the following:

- Use of arable land rather than marginal land;
- employment of fertilizers, pesticides, and irrigation water, in addition to cultivation labor; and
- importation of equipment and chemicals for the conversion of the raw oil to a form easily miscible with diesel.

---

9 The plant was brought to Timor-Leste by the Portuguese, probably from Central America, to use as a lamp fuel.
17. However, all of the activities listed above, each necessary to make Jatropha a commercially viable operation, carry opportunity costs with respect to other energy and agricultural activities. Since Jatropha is expensive to grow and process, the government will need to subsidize growers. At current prices for oil, the grower subsidies needed for a B10 program are around $4 million per year. Such a program would generate net foreign exchange savings of less than $400,000 per year in comparison with simply importing the diesel fuel.10

18. Similarly, village biogas programs entail significant costs11 for the areas in which they are installed. Whether such costs are economically justifiable will revolve around the number of animals and the willingness of the owners to keep these animals confined at a central location. A serious effort to supply a village with electricity is likely to entail real opportunity costs, though these may be outweighed by the benefits of electricity and improvements in livestock operations. As with Jatropha, only a serious commitment is likely to pay off economically. A commitment of a scope that is sufficient to make a biogas program worthwhile economically is likely also to generate non-energy benefits—in this case livestock management and secondary products. Ultimately, the use of local resources may have little or no bearing on whether an energy source is beneficial for the country, given the balancing forces of cost, performance, imported intermediates, and the like. Consequently, such a local sourcing criterion is probably not appropriate unless other economic or cost factors favoring that energy source are in its favor.

19. One way to rank possible investment is to look at generation cost only. Figure 2.1-D provides approximate all-in generating costs for the options facing EDTL.

![Figure 2.1-D: Full Costs of Electricity Generation for EDTL Investment Options](image)

Note: Figures are approximate for 2009 capital and operating costs

20. Basing the expansion of electricity supplies on such a simple cost comparison would overlook some important considerations for EDTL’s system planners:

- Not all options can be implemented for all areas of the country quickly or even at all;
- supply of feedstocks for process cogeneration is limited;

10 These figures were calculated for the World Bank’s Energy Policy Assessment Report for Timor-Leste (ongoing).
11 Such costs typically include the digester works, confinement pens for the animals, piping and engines, and the electricity distribution system.
• PV is not suitable for large concentrated continuous loads;
• biogas is not suited for large loads or for urban areas;
• gas-fired CCGT (combined cycle gas turbine) is contingent on future development of Sunrise gas field and supply to the island from that field; and
• Jatropha may be a value subtractor, not a value adder, especially at high production levels.

21. The use of indigenous resources may be economically justifiable, even at a high cost, in the case that:

• The region has no other feasible electrification option for the foreseeable future and residents are willing to pay at least the operating costs of the proposed electricity source;
• the generation option adds value to local production activities — e.g. livestock, forestry;
• the supply of electricity permits improved communication, water supply, health, and education and makes other government initiatives more productive; and
• the supply option can be integrated in a “reasonable” manner with grid-supplied power in the future.

22. High cost isolated-grid alternatives notwithstanding, the economy of the country cannot be made more competitive with continued investment in high cost/low quality power supply options. Nor can the economy thrive with reliance on generation options that require indefinite operating cost subsidies. As was seen with Jatropha, even a relatively modest program can engender significant subsidy expenditures without much of a net import replacement.

23. A power supply system that can support Timor-Leste’s economic strengths should have the ability to accommodate distributed generation from the various processing industry sources and its various hydrocarbon sources, both onshore and offshore. The country’s putative economic strengths include its high potential output from agriculture and forestry, fishing resources, tourism in the medium and long-term, and, of course, hydrocarbons. Such a power system may require more than a few large generating stations, especially if the potential for process cogeneration in forestry is taken into account. Also, the gas and oil seeps on the island, if they are to contribute to overall grid stability and local development, will need to receive more intensive investigation as to the potential production or collection rates, the recoverable resources in these seeps, and least cost grid integration.

Subsidies and EDTL Financial Stability

24. To justify a subsidy, an electricity generation technology should satisfy the criteria cited above — regarding lack of alternatives in the near-term and specific contribution to economic value added in the locale and other economic benefits in terms of education, health, etc.

25. Ultimately, the best way to get out of the subsidy bind is to create a low cost, efficient generation and network system. To get the system to stand on its own feet financially, it may be necessary to pass through a phased withdrawal of the subsidies to accompany the build-out of more efficient supply infrastructure. A first step, often used in rural electrification projects, is to charge customers the variable fuel and operating costs of the electricity that they consume. In the present condition, such charges are likely to lead to even greater payment evasion problems among EDTL’s customers. One variant of this step is to charge the variable fuel and operating costs of the generation system (based on HFO or gas) that is under construction rather than the one that exists.

• The first stage in moving toward cost recovery would be to base the tariffs on the variable fuel and O&M of, for example, the proposed Chinese HFO system. Fuel costs for generation have been estimated at 10¢/kWh. Adding in the costs of maintenance, spares, and transmission

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12 A generation alternative that is now gaining wider acceptance is the 8-9 MW Wartsila gas engine. This engine is capable of fast starts and runs off natural gas. The engines provide excellent backup for intermittent power sources (in the US some utilities use these engines to back up gas as a lower cost alternative to using combustion turbines). Such an engine could effectively back up process cogeneration and even the HFO units if appropriately sized.
variable costs only initially) would bring a variable cost recovery tariff to about 15¢/kWh. The government will have to cooperate in the establishment of such a future oriented tariff by cooperating as well as it can in the finalization of system expansion plans, including the financing of such expansion. At this point, process industry cogenerators, if they exist, can be encouraged to sell surplus electricity to the system for a payment of the variable fuel + operational costs that customers pay (known as the marginal energy cost).

- **Stage two** would be to add the fixed costs of retail distribution — billing, collections, local repairs, etc. — to the bills as a fixed monthly fee.

- **Stage three** might come when customers have become accustomed to higher prices and those that vary with fuel costs. In this stage, EDTL could add a capital recovery factor for its generating stations.¹³

Once costs have been placed on a full cost recovery basis, EDTL can encourage private investors, whether process cogenerators or IPPs, to invest in the construction of power plants for the sale of firm capacity to EDTL.

26. **In rural areas and those not likely to be served by the main grid for a number of years, a key issue will be the choice of electrification technologies in the interim period.** It would be wonderful if all of the choices were: (i) available to all; (ii) cost effective; and (iii) easily conformable to the ultimate build-out of the main grid. This is unlikely and the need to keep subsidies under control means that costs of isolated and rural grids will need to be closely monitored and controlled.

27. **In those areas where there is a willing buyer-willing seller transaction with regard to an isolated grid, EDTL should encourage such activities that do not use public funds.** In particular, EDTL should make every effort to identify sources from energy for agro and forest products firms, and it should plan system network connections appropriately since these process cogeneration energy sources not only provide energy but also system services and grid stability if appropriately accommodated. Such process firms are likely to be among the first firms in the country to add significant value to raw material output. Few projects outside the process industries will fall into such a beneficial category.

28. **For other electrification projects first priority should be given to those that can add value to some economic process—livestock, dairy, poultry.** Secondary attention should be given to broader development goals such as health and education. Experience in other countries has shown that the promotion of enhanced economic activity can often justify higher electricity costs than those of an optimal urban network.¹⁴ Rural towns not on the short-term network connection list should be encouraged to develop proposals to generate electricity using alternative technologies and energy sources. These generation methods should be among those that add value to existing economic activities and should not compete away resources from other activities that can add greater value to the region. Understanding that donors may be willing to pay for much of the capital cost of installation of isolated rural systems, EDTL should insist that all variable costs of generation, including spare parts be covered by the tariffs charged. If operating costs are subsidized in these rural systems, then it will create difficulties down the road when it is time to provide energy from the grid to such areas.

29. **The effective elimination of subsidies requires goals and timetables, as well as the same managerial ‘software’ that is necessary to build out EDTL’s generation and network.** Indonesia has been trying to rein in subsidies for more than 20 years. Without a timetable and in a small economy, such subsidies are capable of far more damage than that suffered by the larger economies of Indonesia or Malaysia.

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¹³We do not advise that EDTL investigate private investment sources for its generating stations (IPPs) until tariffs have reached full cost recovery. Perhaps the greatest single source of IPP project failure is the inability of the purchaser to pass on costs to its customers, leading to insufficient payments to the generators. Private investment can be brought into the generation mix only after prices to consumers reflect costs.

¹⁴In one recent case, an isolated electricity generation grid in Zambia was examined as a part of a program to boost local economic activity in a heavily forested region of the country. Purchase of a small diesel generator, along with a small electric sawmill was found to provide economic rates of return in the 20-30 percent range even with oil prices above $75/barrel. Villagers were found to be willing to pay the electricity rates required to support the sawmill, provided the burden was equally shared and that the sawmill’s tariffs paid for the fixed system costs.
However, to have a chance at reducing or eliminating the subsidies, the government will need to make the supply side far more efficient and low cost.

Planning to Add Value

30. **EDTL’s planning process must be developed in a manner that contributes most effectively to the nation’s economic growth.** Specifically, this means: (i) minimizing and planning to eliminate financial subsidies; and (ii) weeding out value subtractor energy sources at the planning stage. By combining the non-economic criteria—distributed generation and local resources—with standard cost considerations, it may be possible to look at how such different generation resources can contribute to economic growth and development. Figure 2.1-E shows how different generation technologies can be evaluated in terms of cost-effectiveness (how well do they deliver energy services per dollar spent) and whether they promote primarily urban or rural development (or neither).

31. In Figure 2.1-E more value is added when a generation technology is cost effective and targeted to rural or urban/industrial development. The most cost effective technologies, cogeneration, gas CCGT, and HFO also best promote development because they are reliable and compatible with a well-designed network and do not take resources away from other investment activities. Those technologies are found in quadrants I and IV. The closer to the vertical axis the less a generation technology is likely to contribute to development. This may be due to excessive costs (competing for resources with end-user industries), poor reliability, or incompatibility with network extension. These technologies are found in quadrants II and III.

![Figure 2.1-E: Development Promotion and Cost Effectiveness of Alternative Generation Technologies](image)

Conclusion and Recommendations

32. **Timor-Leste, currently afflicted with an electricity generation system that is costly, unreliable, and difficult to manage and limited in service scope, has good alternatives open to it in the future.** At present, the country’s competitiveness is sapped by high cost generation that contributes minimally to more efficient resource utilization. Most of the electricity generated in the country does not promote industrial growth or new value adding processing industry investments. In fact, processing industries must invest defensively in electricity generation using high cost methods, something that detracts directly from their competitiveness.

33. Furthermore, subsidies, which now take 10 percent of the country’s non-oil GDP, threaten to crowd out government investment in other sectors and create significant future liabilities. At the same time, the many proposals to develop fuels, generation, and network resources may not all be compatible or equally effective from either cost, development, or growth standpoints. Some may actually retard growth.
Recommendations related to energy services include:

(a) Develop a plan with clear goals and timetables to (i) reform existing subsidies in a multi-step manner such that initially, tariffs charged throughout the country cover the variable fuel and operating costs of a future efficient system; and (ii) eventually eliminate all subsidies for electricity consumers.

(b) Identify a small number of alternatives that are cost effective and compatible with ultimate designs for the network, including the development of indigenous hydrocarbons.

(c) Identify potential sources of process cogeneration from agro and forest products industries.

(d) Revise network design proposals and refine network layout so that they are compatible with both process cogeneration from agro and forest products industries and the future supply of domestic fuels. Both of these may call for some refinement of the network layout so that the system is not solely oriented around power plants using HFO that may not be consistent with longer term development options.

(e) Encourage rural towns outside the short-term network connection list to develop proposals to generate electricity which add value to existing economic activities by using alternative technologies and energy sources. As with network customers, rural customers should at all times pay a tariff that covers the variable fuel and operating costs of supply.
## ANNEX 3.1: Timor-Leste Customs Duty and Other Indirect Taxes on Imports

<table>
<thead>
<tr>
<th>Tax Levies on Imports</th>
<th>Tax Coverage and Tax Base</th>
<th>Exemptions</th>
<th>Tax Rates/Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Prevailing Tariff Schedule and the Rates of Other Levies on Imports (Effective From July 2008)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Import duty (i.e. customs duty)</strong></td>
<td>Applies to all imports at an ad valorem rate (except for selective items)</td>
<td>Duty exempted imports include: (i) When brought in by arriving individuals for personal use: • 200 cigarettes and 2.5 liters of excisable beverages • Non-commercial goods up to a value of $300 • Household effects brought in by returning former residents, and other accompanying personal goods (ii) Imports by UN and Specialized Agencies, and diplomats (iii) Re-imported goods (iv) Imported goods for which import duty is $10 or less</td>
<td><strong>2.5 percent</strong> of ‘customs value’</td>
</tr>
<tr>
<td><strong>2. Sales tax</strong></td>
<td>Sales tax is applicable to imported and to domestically produced/ sold goods and services • The tax base for imports is the sum of customs value plus customs duty and the excise tax when payable (The sales tax is <strong>0%</strong> with respect to the sale of domestically produced taxable goods and services)</td>
<td>Sales tax does not apply to imports that are exempted from import duty</td>
<td><strong>2.5 percent</strong> of the total of customs value of the imported good plus the import duty plus the excise tax payable</td>
</tr>
<tr>
<td><strong>3. Excise tax</strong></td>
<td>Excises tax is levied on alcoholic beverages, tobacco, petroleum products, motor vehicles, arms and ammunitions, cigarette lighters, smoking pipe, private yachts, and aircrafts • Excise tax is levied at specific and ad valorem rates • For imports, the tax base (excise value) is the customs value plus the import duty • For excisable goods produced by a registered manufacturer in Timor-Leste, the excise value is the ‘fair market value’ of the goods at the time of removal of goods from the manufacturer’s warehouse</td>
<td></td>
<td>Tax rate: Beer $1.90 per liter Wine, other fermented bev $ 2.50 per liter Other alcoholic beverages $ 8.90 per liter Tobacco &amp; products $ 19.00 per kg Petroleum products $ 0.06 per liter Small passenger vehicle 35% of the excise value Arms and ammunitions 200% of the excise value Cigarette lighters/smoking pipe 12% of excise value Pleasure boats, private aircraft 20% of excise value</td>
</tr>
</tbody>
</table>
I. Import Tariff Schedule and Other Levies on Imports (Effective During July 2002 to July 2008)

<table>
<thead>
<tr>
<th>1. Import duty (i.e. customs duty)</th>
<th>Duty exempted imports included:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to all imports at an ad valorem rate (except for selective items)</td>
<td>(i) When brought in by arriving individuals for personal use:</td>
</tr>
<tr>
<td></td>
<td>• 200 cigarettes and 2.5 liters of excisable beverages</td>
</tr>
<tr>
<td></td>
<td>• Non-commercial goods up to a value of $300</td>
</tr>
<tr>
<td></td>
<td>• Household effects brought in by returning former residents, and other accompanying personal goods</td>
</tr>
<tr>
<td></td>
<td>(ii) Imports by UN and Specialized Agencies, and diplomats</td>
</tr>
<tr>
<td></td>
<td>(iii) Re-imported goods</td>
</tr>
<tr>
<td></td>
<td>(iv) Imported goods for which import duty is $10 or less</td>
</tr>
<tr>
<td></td>
<td><strong>6 percent</strong> of customs value</td>
</tr>
</tbody>
</table>

2. Sales tax

- Sales tax was applicable to imported and to domestically produced/sold goods and services
- The tax base for imports was the sum of customs value plus customs duty and the excise tax when payable
- **The sales tax was not collected on the sales of domestically produced goods and services**

- Sales tax does not apply to imports that are exempted from import duty
- **6 percent** of the customs value plus customs duty plus excise tax when payable

3. Excise tax

- Excises tax was levied on alcoholic beverages, tobacco, petroleum products, motor vehicles, arms and ammunitions, cigarette lighters, smoking pipe, private yachts, and aircrafts
- Excise tax was levied at specific and ad valorem rates
- The tax base (excise value) was the customs value plus the import duty
- **Excise tax was applicable on the same products when they are domestically produced. However, it was not collected given that these products were not produced locally**

- Sales tax does not apply to imports that are exempted from import duty

**Tax rate:**

**a. Specific rates**

- Soft drinks: $0.65 per liter
- Beer: $1.90 per liter
- Wine: $0.06 per liter
- Alcoholic beverages: $8.90 per liter
- Tobacco: $19.00 per kg
- Gasoline, diesel fuel: $0.06 per liter

**b. Ad valorem rates:**

- Fruit juices/ice cream: 12%
- Cigarette lighter/pipe: 12%
- Audio electronic goods: 12%
- Mobile phones, TV, videos: 12%
- Perfumes: 18%
- Arms/ammunitions, fireworks: 120%
- Motor cars: the greater of 36% of excise value, or $500+36% over $20,000
- Private yachts and aircrafts: 12% of excise value, in excess of $20,000—36%
II. Import Tariff Schedule and Other Levies on Imports (Effective During July 2000 to July 2002)

<table>
<thead>
<tr>
<th>1. Import duty (i.e. customs duty)</th>
<th>Applied to all imports at an ad valorem rate</th>
<th>5 percent of customs value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Sales tax</td>
<td>Sales tax was applicable to imported and to domestically produced/ sold goods and services</td>
<td><strong>5 percent</strong> of the customs value plus customs duty plus excise tax when payable</td>
</tr>
<tr>
<td></td>
<td>The tax base for imports was the sum of customs value plus customs duty and the excise tax when payable</td>
<td><strong>5 percent</strong></td>
</tr>
<tr>
<td></td>
<td>Sales tax does not apply to imports that are exempted from import duty</td>
<td></td>
</tr>
<tr>
<td>3. Excise tax</td>
<td>Excises tax was levied on alcoholic beverages, tobacco, petroleum products, motor vehicles, arms and ammunitions, cigarette lighters, smoking pipe, private yachts, and aircrafts</td>
<td>Tax rate:</td>
</tr>
<tr>
<td></td>
<td>Excise tax was levied at specific and ad valorem rates</td>
<td>8703- Motor Cars: 30% of customs value</td>
</tr>
<tr>
<td></td>
<td>The tax base (excise value) was the customs value plus the import duty</td>
<td>In excess of $20,000: 30% of customs value plus $400</td>
</tr>
<tr>
<td></td>
<td>Excise tax was applicable on the same products when they are domestically produced. However, it was not collected given that these products were not produced locally.</td>
<td>Bodies of cars, motorcycles, binoculars: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clocks, watches, straps &amp; parts: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toys and games, sports accessories: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smoking pipes, cigarette lighters: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scent sprays, powder puffs: 10% of customs value</td>
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<tr>
<td></td>
<td></td>
<td>Worked ivory, bone, shell, horn, coral: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Works of art, antiques: 10% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arms and ammunitions: 100% of customs value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private yachts and private aircraft: 30% of customs value in excess of $20,000</td>
</tr>
</tbody>
</table>
ANNEX 3.2: ASEAN Background

ASEAN was established on 8 August 1967 in Bangkok by the five original Member Countries, namely, Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Brunei Darussalam joined on 8 January 1984. These countries are often referred to as the ASEAN-6. ASEAN grew to 10 members when the “CLMV countries” were added: Vietnam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999.

As set out in the ASEAN Declaration, the aims and purposes of ASEAN are:

i. To accelerate the economic growth, social progress, and cultural development in the region through joint endeavors in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations;

ii. To promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries of the region and adherence to the principles of the UN Charter;

iii. To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific, and administrative fields;

iv. To provide assistance to each other in the form of training and research facilities in the educational, professional, technical, and administrative spheres;

v. To collaborate more effectively for the greater utilization of their agriculture and industries, the expansion of their trade, including the study of the problems of international commodity trade, the improvement of their transportation and communications facilities, and the raising of the living standards of their peoples;

vi. To promote Southeast Asian studies; and

vii. To maintain close and beneficial cooperation with existing international and regional organizations with similar aims and purposes, and explore all avenues for even closer cooperation among themselves.

In their relations with one another, the AMC have adopted the following fundamental principles, as contained in the Treaty of Amity and Cooperation of 1976:

i. Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations;

ii. The right of every State to lead its national existence free from external interference, subversion, or coercion;

iii. Non-interference in the internal affairs of one another;

iv. Settlement of differences or disputes by peaceful manner;

v. Renunciation of the threat or use of force; and

vi. Effective cooperation among themselves.

The ASEAN Charter entered into force on 15 December 2008. It is a legally binding agreement among the 10 AMC and will be registered with the Secretariat of the UN, pursuant to Article 102, Paragraph 1 of the Charter of the UN. It serves as a firm foundation in achieving the ASEAN Community by providing legal status and institutional framework for ASEAN. It also codifies ASEAN norms, rules, and values; sets clear targets for ASEAN; and presents accountability and compliance.

Unlike joining the EU, the ASEAN membership process is more subjective. Article 6 of the ASEAN Charter describes the admission criteria as follows:
i. The procedure for application and admission to ASEAN shall be prescribed by the ASEAN Coordinating Council;

ii. Admission shall be based on the following criteria:
   a. Location in the recognized geographical region of Southeast Asia;
   b. Recognition by all ASEAN Member States;
   c. Agreement to be bound and to abide by the Charter; and
   d. Ability and willingness to carry out the obligation of membership;

iii. Admission shall be decided by consensus at the ASEAN Summit, upon the recommendation of the ASEAN coordinating Council; and

iv. An applicant state shall be admitted to ASEAN upon signing an Instrument of Accession to the Charter.

On 15 December 1997, the Heads of State/Government of ASEAN gathered in Kuala Lumpur to chart a vision for ASEAN on the basis of today’s realities and prospects in the decades leading to the Year 2020. The ASEAN Vision 2020 described ASEAN as a “concert of Southeast Asian nations, outward looking, living in peace, stability and prosperity, bounded together in partnership in dynamic development, and in a community of caring societies.” It goes on to say “We resolve to chart a new direction towards the year 2020 called, ASEAN 2020: Partnership in Dynamic Development which will forge closer economic integration within ASEAN.”

The ASEAN Community is comprised of three pillars, namely the APSC, AEC, and ASCC. Each pillar has its own Blueprint, and, together with the Initiative for ASEAN Integration (IAI) Strategic Framework and IAI Work Plan Phase II (2009-2015), they form the Roadmap for an ASEAN Community 2009-2015. Table 3.2-A identifies the elements found with each of the communities.

<table>
<thead>
<tr>
<th>ASEAN Political-Security Community</th>
<th>ASEAN Economic Community</th>
<th>ASEAN Socio-Cultural Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN Ministerial Meeting</td>
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- **APSC.** The goal of the APSC is to create a region where countries live in peace with one another and with the world in a just, democratic, and harmonious environment. Intra-regional differences are settled peacefully, and member’s boundaries are respected. It has the following components: political development; shaping and sharing of norms; conflict prevention; conflict resolution; post-conflict peace building; and implementing mechanisms.

- **AEC.** The goal of the AEC is to develop a highly competitive economic region by 2015, which is fully integrated into the global economy and facilitates the free movement of goods, services, investment, skilled labor, and capital.
• ASCC. The goal of the ASCC is to ensure everlasting unity among the people of the ASEAN Member States in a manner that is people-oriented, socially responsible, and inclusive in order to improve their standard of living. It focuses on nurturing the human, cultural, and natural resources for sustained development.

The AEC Blueprint is intended to transform ASEAN into “a single market and production base, a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy.” By becoming a member of ASEAN and by joining the AEC, Timor-Leste would become part of the single market and production base.

The AEC will permit ASEAN to achieve regional economic integration as described in the Vision 2020. The AEM held in August 2006 in Kuala Lumpur, Malaysia, agreed to develop “a single and coherent blueprint for advancing the AEC by identifying the characteristics and elements of the AEC by 2015 consistent with the Bali Concord II with clear targets and timelines for implementation of various measures as well as pre-agreed flexibilities to accommodate the interests of all AMC.” At the 12th ASEAN Summit in January 2007, the AMC agreed to move forward the AEC’s establishment date from 2020 to 2015.

The AEC Blueprint is a clear departure from ASEAN’s tradition since the document is a binding declaration of commitments by all the AMC. ASEAN has never devised a Blueprint before in order to achieve its objectives. The process of regional cooperation and regional community building was typically left open-ended. In many cases, the slowest adopter drove the rate of implementation.

In establishing the AEC, the AMC agreed to act in a manner that is open, outward looking, inclusive, and consistent with a market-driven economy that is rules based in order to facilitate compliance and implement economic commitments. It recognizes the converging economic interests of its members by setting-up a framework and identifying methodologies that can be used to address these issues.

Because of the importance of external and intra-ASEAN trade, it will focus on creating a single market and production base, provide opportunities for equitable economic development, and facilitate the implementation of new and existing economic initiatives especially in priority sectors. Skills and knowledge will be transferred through the frictionless movement of people among the countries.

The AMC will cooperate in areas like human resources development and capacity building; closer consultation on macroeconomic and financial policies; trade financing measures; enhanced infrastructure and communications connectivity; integrating industries across the region to promote regional sourcing; and enhancing private sector involvement. Cooperation initiatives will also be provided to the CLMV countries in order to address the development disparity and accelerate their integration into the Association.
ANNEX 3.3: Needs assessment for Timor-Leste’s AEC Blueprint

The AEC Blueprint is organized along the AEC’s four primary objectives: (A) a single market and production base; (B) a highly competitive economic region; (C) a region of equitable economic development; and (D) a region fully integrated into the global economy. This annex contains a description of the first three AEC Blueprint sections, along with a list of the specific needs that Timor-Leste will be required to address in order to implement these sections.

A. Single Market and Production Base

A single market for goods and services facilitates the development of production networks in the region. It also enhances ASEAN’s capacity to serve as a global production center or be part of the global supply chain. An ASEAN single market and production base includes five core elements:

- Free flow of goods;
- Free flow of services;
- Free flow of investment;
- Freer flow of capital; and
- Free flow of skilled labor.

A.1 Free flow of goods

The free flow of goods and services requires the removal of tariffs as well as non-tariff barriers (NTB). The implementation of the AFTA has made significant progress towards lowering and removing tariffs. At the beginning of this year, all tariffs for products in the Common Effective Preferential Tariff (CEPT) Inclusion Lists of the ASEAN-6, representing 99.65 percent of total tariffs, were totally eliminated for intra-ASEAN trade. Unlike the EU, AFTA does not apply a common external tariff on imported goods. Rather, each AMC may impose tariffs on goods entering from outside ASEAN based on its national tariff schedules. However, for goods originating within ASEAN, members must apply a tariff rate of between 0 percent and 5 percent. Along these lines, Timor-Leste’s 2008 tax reform package reduced its tariffs to “near-zero” levels.

As for Free Trade Agreements (FTA) in East Asia, the networks have centered on ASEAN. AFTA was enacted in 1992. Most of the ASEAN dialogue partners like Japan, China, Korea, New Zealand, Australia, and India have concluded FTA with ASEAN by 2008. As a result, intra-ASEAN trade is increasing at a pace of 11 percent over the past 15 years, which exceeds the Association’s economic growth rate. Timor-Leste needs to address a number of issues to facilitate the free flow of goods.

NEEDS:

- Tariffs on all intra-ASEAN goods will need to be eliminated in order to align with the CEPTs for AFTA Agreement and other relevant Agreements/Protocols;
- Commit to halting or eliminating NTB. Timor-Leste has no quantitative import restrictions, but it needs to develop capacity to enforce SPS standards which are not for protection purposes but for ‘animal, plant, and food safety standards’ in conformity with international norms—see Chapter 6 for details; and
- Transparent tariff notification and surveillance systems will need to be developed and implemented.

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15 Dr. Surin Pitsuwan, Secretary-General of ASEAN, “Keynote Speech: Building an ASEAN Economic Community in the heart of East Asia,” East Asia Beyond the Global Economic Crisis (1 Dec 2009).
16 Pitsuwan.
With respect to trade facilitation, the ASEAN Single Window facilitates the integration of the operations of each AMC’s National Single Window in order to enhance export competitiveness by creating a single market for goods, services, and investments and by developing a single production base. National Single Windows allow for a single submission of data and information, a single and synchronous processing of data and information, and a single decision making for customs clearance of cargo. This expedites customs clearance and reduces transaction time and costs, thus enhancing trade efficiency and competitiveness.

Systems of standards, quality assurance, accreditation, and measurement are crucial to promote greater efficiency and enhance cost effectiveness of production of intra-regional imports and exports. The ASEAN Consultative Committee on Standards and Quality has sought to harmonize national standards with international standards and implement mutual recognition arrangements on conformity assessment to achieve its end goal of “One Standard, One Test, Accepted Everywhere.”

The CEPT applies only to goods originating within ASEAN. Thus, with respect to ROO, the general rule is that local ASEAN content must constitute at least 40 percent of the free on board value of goods. The local ASEAN content can be cumulative; the value of material, labor, and processing inputs from various AMC can be combined to meet the 40 percent requirement.

NEEDS:

- Implement the ASEAN Harmonized Tariff Nomenclature;
- Comply with ASEAN Customs Vision 2020;
- Accede to and implement the ASEAN Agreement on Customs;
- Implement the Customs Code of Conduct, 1995;
- Implement the Customs Code of Conduct, 1983;
- Comply with the ASEAN Customs Policy Implementation & Work program, 1999;
- Comply with the ASEAN Cargo Clearance and ASEAN Customs Declaration Document for processing of cargoes and shipments;
- Implement the ASEAN Customs Transit system which facilitates movement of goods and means of transport;
- Implement the ASEAN Customs systems dealing with special customs regimes such as Temporary Admission, Outward Processing, and Inward Processing with the view to facilitate integration of production and supply chains;
- Comply with the ASEAN’s Rules of Origin;
- Comply with the Guidelines for Mutual Assistance to combat Customs Fraud and Smuggling, 1998;
- Implement ASEAN e-Customs;
- Adopt risk management techniques and audit-based control;
- Accede to the Agreement on the ASEAN Harmonized Electrical and Electric Equipment Regulatory Regime;
- Accede to and implement the Agreement on the Cosmetic Regulatory Scheme;
- Comply with the ASEAN Policy Guideline on Standards and Conformance;
- Develop SPS standards for a multitude of critical areas;
- Establish enhanced technical infrastructure for and competency in laboratory testing, calibration, inspection, certification, and accreditation based on regionally/internationally accepted procedures and guidelines; and
- Establish post market surveillance systems that ensure the successful implementation of the technical regulations.
A.2 Free flow of services

ASEAN exports of commercial services to the world market have grown steadily from $57.4 billion in 1998 to $132.2 billion in 2007.\(^{17}\) During the same period, ASEAN imports of commercial services from the world market grew steadily from $66.5 billion in 1998 to approximately $176.3 billion in 2007.\(^{18}\) Recognizing the growing importance of trade in service, AMC officially launched a joint effort to work towards liberalizing trade in services in the region through the *ASEAN Framework Agreement on Services* (AFAS). AFAS is aimed at substantially eliminating restrictions on trade in services between AMC in order to improve the efficiency and competitiveness of ASEAN service suppliers.

AFAS provides the broad guidelines for the AMC to progressively improve market access and ensure equal national treatment for service suppliers. All AFAS rules are consistent with international rules for trade in services as provided by the General Agreement on Trade in Services (GATS) of the WTO. In fact, liberalization of services trade under AFAS shall be directed towards achieving commitment beyond AMC commitments under GATS—known as the GATS-Plus Principle.

Subject to domestic regulations and to the extent possible, ASEAN companies should not be restricted from providing their services or establishing companies across national borders within the Southeast Asian region. *This would include the recognition of professional qualifications with a view to facilitate their movement within the region.*

The *ASEAN Framework Agreement on Trade in Services* (AFTATS) was adopted at the Bangkok Summit in December 1995. AMC are negotiating intra-regional service liberalization in several sectors, including *transport, business services, construction, financial services, maritime transport, telecommunications, and tourism.* Although some sectors, such as air transport, have liberalized more rapidly, others remain the subject of continued negotiations, as do efforts to expand the scope of the agreement.

**NEEDS:**

- Accede to and implement the AFAS
- Accede to and implement the AFTATS
- Implement the ASEAN Mutual Recognition Arrangement Framework for the following:
  - Accountancy Services
  - Medical Practitioners
  - Dental Practitioners
  - Engineering Services
  - Nursing Services
  - Architectural Services
  - Surveying Qualifications
- Develop its own set of recognized professional qualifications in accordance with internationally accepted standards

A.3 Free flow of investment

Investment liberalization and facilitation are integral parts of economic integration since investment is vital to regional economic integration. Liberalization permits the adjustment of business strategies and the identification of opportunities emerging from freer flow of goods and services. Adjustments

\(^{17}\) *Association of Southeast Asian States.* 07 May 2010. <http://www.aseansec.org>  
\(^{18}\) *Association of Southeast Asian States.*
such as moving to a more competitive location, changing and upgrading production technology, 
enlarging production capacity, and providing support services and industries might be required.

A free and open investment environment is crucial to further strengthening strong growth prospects 
and boosting competitiveness of the AMC. It allows them to attract and compete for FDI as well as 
for intra-ASEAN investment. In this regard, Timor-Leste is in the process of passing a new 
investment law.

ASEAN investment cooperation is being implemented through the Framework Agreement on the 
ASEAN Investment Area (AIA). Under the AIA, all industries (in the manufacturing, agriculture, 
fishery, forestry, mining and quarrying sectors, and services incidental to these five sectors) are open 
and national treatment will be granted to investors. The *AIA’s main principles are*:

- The opening of all industries to investment, with exclusions to be phased out according to 
schedules;
- the immediate granting of national treatment to ASEAN investors (exception may be 
required);
- the elimination of impediments to investment;
- the streamlining of investment processes and procedures;
- the enhancement of transparency; and
- the undertaking of measures to facilitate investment.

Investment protection is accorded under a separate agreement, i.e. the ASEAN Agreement for the 
Promotion and Protection of Investment or commonly referred to as *ASEAN Investment Guarantee 
Agreement (IGA)*. ASEAN Comprehensive Investment Agreement (ACIA) builds upon the existing 
AIA Agreement and ASEAN IGA to cover the following pillars:

- **Investment Protection**: Provide enhanced protection to all investors and their investments 
by being covered under the comprehensive agreement.
- **Facilitation and Cooperation**: More transparent, consistent, and predictable investment 
rules, regulations, policies, and procedures.
- **Promotion and Awareness**: Promote ASEAN as an integrated investment area and 
production network.
- **Liberalization**: Progressive liberalization of AMC’s investment regime to achieve free 
and open investment by 2015.

**NEEDS:**

- Pass the new Investment Law
- Accede to and implement the following agreements: AIA, ASEAN IGA, and ACIA

**A.4 Freer flow of capital**

Capital market development in Timor-Leste is at its infancy. In November 2009, the parliament 
approved an updated Law on Budget and Financial Management which says that the government has 
to propose to Parliament the maximum amount to be borrowed for the year as part of its budget. The 
law also assigns responsibility for entering into debt agreements, maintaining debt records, etc. to the 
MOF. Given that Timor-Leste has not borrowed in the past, debt management capacity will need to 
be built, and this is an area that donors are looking to provide technical assistance.

**NEEDS:**

- Further study and analysis in capital market development may be required for the 
Blueprint, and it is unlikely that this section of the Blueprint can be fully developed in the
short-term. Timor-Leste might want to seek an exception under the ASEAN minus X formula.

A.5  Free flow of skilled labor

In accordance with domestic regulations, ASEAN is seeking to facilitate the movement of skilled labor to locations that are in need of their services. ASEAN is seeking to facilitate the issuance of visas and employment passes for professionals and skilled labor that are engaged in cross-border trade and investment related activities. By the end of 2015, it will have developed core competencies and qualifications for all sectors.

NEEDS:

- An assessment will have to be performed in order to access and plan for Timor-Leste’s compliance with this section.

A.7  Food, Agriculture, and Forestry

ASEAN cooperation in the agriculture sector dated back as early as 1968, with cooperation in food production and supply. In 1977, the scope of cooperation was broadened to include the greater area of agriculture and forestry as the needs have increased. Currently, the specific areas under the ASEAN cooperation in food, agriculture, and forestry include food security, food handling, crops, livestock, fisheries, agricultural training and extension, agricultural cooperatives, forestry, and joint cooperation in agriculture and forest products promotion scheme.

The basic objective of the ASEAN cooperation in food, agriculture, and forestry is to formulate and implement regional cooperation activities to enhance the international competitiveness of ASEAN’s food, agriculture, and forestry products, as well as further strengthen the food security arrangement in the region and take joint positions in international fora.

In line with the guidance of the Fourth ASEAN Summit in 1992 to strengthen regional cooperation in the areas of development, production, and promotion of agricultural products, the ASEAN Ministers on Agriculture and Forestry identified seven priority areas as reflected in the Ministerial Understanding (MU) on ASEAN Cooperation in Food, Agriculture, and Forestry signed in October 1993 in Bandar Seri Begawan. The MU acts as the umbrella of the ASEAN cooperation in food, agriculture, and forestry.

- Strengthening food security in the region
- Facilitation and promotion of intra- and extra-ASEAN trade in agriculture and forestry products
- Generation and transfer of technology to increase productivity and develop agribusiness and silvo-business
- Agricultural rural community and human resource development
- Private sector involvement and investment
- Management and conservation of natural resources for sustainable development
- Strengthening ASEAN cooperation and joint approaches in addressing international and regional issues

For the forestry sector, ASEAN specifically developed five strategic thrusts, namely:

- Sustainable forest management;
- Strengthening ASEAN cooperation and joint approaches in addressing international and regional forestry issues:
• Promotion of intra- and extra-ASEAN trade in forest products and private sector participation;
• Increasing productivity and efficient utilization of forest products; and
• Capacity building and human resources development.

In response to the sharp increase in international food prices in 2007/2008, the Leaders pledged to embrace food security as a matter of permanent and high priority policy, and they adopted a Statement on Food Security in the ASEAN Region, which commits, among others, to the implementation of the ASEAN Integrated Food Security Framework and the Strategic Plan of Action on Food Security in the ASEAN Region (2009-2013).

NEEDS:

• Accede to and implement the Agreement for the establishment of ASEAN Animal Health Trust Fund
• Accede to and implement the Agreement on the ASEAN Food Security Reserves

B. Competitive Economic Region

B.1 Competition Policy

The main objective of a competition policy is to foster a culture of fair competition. Institutions and laws related to competition policy have recently been established by only four AMC: Indonesia, Singapore, Thailand, and Vietnam. Each country has its own competition law and competition regulatory bodies. Malaysia has not passed any nationwide competition law but has instead relied on sector-level regulations to ensure and enforce competition in markets. ASEAN is seeking to have all its AMC introduce competition policy by 2015.

NEEDS:

• Develop a competition policy
• Develop and implement competition laws and regulations
• Set-up the judicial facility to enforce the laws and regulations

B.2 Consumer Protection

ASEAN has made consumer protection a basic tenant of any competition policy. Moreover, consumer protection measures are already being developed in tandem with the proposed economic measures.

NEEDS:

• Develop a consumer protection policy
• Develop and implement consumer protection laws and regulations
• Set-up the judicial facility to enforce the laws and regulations

B.3 Intellectual Property Rights (IPR)

Intellectual property (IP) laws give the creator of a new and unique product or idea a temporary monopoly on its use. The value of IP to an individual or company is not based on physical properties, such as size and structure. Instead, IP is valuable because it represents ownership and an exclusive right to use, manufacture, reproduce, or promote a unique creation or idea. In this way, it is perhaps the most valuable asset a person or small business can own.
IPR can influence the way products and/or industries are developed and investments are made. Regional cooperation in IPR has been guided by the ASEAN IPR Action Plan 2004-2010 and the Work Plan for ASEAN Cooperation on Copyrights which aim to develop a culture of learning and innovation supported by a friendlier IP profile to businesses, investors, inventors, and creators in ASEAN. In addition, these two plans are also designed to foster better public awareness, coordination and networking, predictability, capacity building, and contribution of IP industries.

**NEEDS:**

- Because ASEAN seeks to have all AMC accede to the Madrid Protocol, Timor-Leste should endeavor to do so since it is not a party to this convention. It has not acceded to any World Intellectual Property Organization (WIPO) Convention and Conventions Administered by WIPO.
- Develop and pass national IP legislation.

### B.4 Infrastructure Development

**Transport Cooperation.** The AFATA is dependent on an efficient, secure, and integrated ASEAN transport network. Such a network also enhances the attractiveness of the region as a single production, tourism, and investment destination, and it narrows development gaps. ASEAN transport is also critical in linking ASEAN with the neighboring Northeast and South Asian countries. The ASEAN Transport Action Plan 2005-2010 covers maritime, land and air transport, and transport facilitation.

**NEEDS:**

- Accede to and implement the ASEAN Framework Agreement on the Facilitation of Goods in Transit
- Accede to and implement the ASEAN Framework Agreement on Multimodal Transport
- Accede to and implement the ASEAN Framework Agreement on the Facilitation of Inter-State Transport
- Specific to maritime and air transport, it will have to:
  - Adopt the general principles and framework for an ASEAN Single Shipping Market
  - Implement the ASEAN Single Aviation Market
  - Implement relevant International Maritime Organization (IMO) conventions
  - Implement the ASEAN Open Sky Policy

**Information Infrastructure.** ASEAN hopes to leverage AMC national information infrastructures (NII) by integrating them to form a region-wide network. NII are based on a nationwide network of networks and will supposedly allow the people of the AMC to take advantage of their country's information, communication, and computing resources. The NII will include current and future public and private high-speed, interactive, narrow-band, and broadband networks. It is the:

- Satellite, terrestrial, and wireless communications systems that deliver content to homes, businesses, and other public and private institutions;
- information and content that flow over the infrastructure whether in the form of databases, the written word, a film, a piece of music, a sound recording, a picture, or computer software;
- computers, televisions, telephones, radios, and other products that people will employ to access the infrastructure; and
people who will provide, manage, and generate new information, and those that will help others do the same.

Equal emphasis has been given to improving trust and confidence in using the Internet and to assuring security of electronic transactions, payments, and settlements. All these components capture the vision of a nationwide, invisible, seamless, dynamic web of transmission mechanisms, information appliances, content, and people. The development of a NII is not an ASEAN requirement. Timor-Leste is starting on the path of developing a NII by liberalizing its telecommunication industry and building an Internet backbone. It could benefit from the cooperation and expertise of other AMC.

**Energy Cooperation.** The growing economies of developing countries have called for new investments in energy production and infrastructure development. This is an opportunity to shape the energy policies of these countries to follow a more sustainable path. The ASEAN Energy Cooperation is a promising alliance that can be used to achieve regional or transnational sustainable energy development.

The ASEAN 2020 Vision envisioned an energy-interconnected Southeast Asia through the ASEAN Power Grid (APG) and the Trans-ASEAN Gas Pipeline Projects (TRGP). These ventures call for regional cooperation in pooling and maximizing efficient utilization of energy resources. The APG involves 14 electricity interconnection projects and the TAGP, seven gas interconnection projects. It is anticipated that both projects will stimulate the ASEAN economy.

At the ASEAN Ministers on Energy Meeting in 2004, it was estimated that the 10 AMC have a total of 22 billion barrels of oil, 227 trillion cubic feet of natural gas, 46 billion tons of coal, 234 gigawatts of hydropower, and 20 gigawatts of geothermal capacity.

The Power Grid is interconnected through a cooperative agreement among the power utilities/authorities of the 10 AMC. The aim is to pursue optimum use of energy resources. Although it is a regional grid, agreements are made bilaterally between the countries. The Heads of ASEAN Power Utilities/Authorities (HAPUA), a specialist organization under ACE, oversees the implementation of the Power Grid.

The ASEAN Power Grid also adds strength to the regional economic integration by complementing the needs of each other. In some cases, the construction of a new power plant might not be necessary if power can be re-routed from another part of the grid.

**NEED:**

- Timor-Leste should investigate the possibility of participating in the APG and/or TAGP.

**B.5 Taxation**

Through a network of bilateral agreements, ASEAN is targeting the elimination of double taxation between all AMC by 2010 (to the extent possible).

**NEED:**

- Negotiate bi-lateral agreements.

**B.6 E-Commerce**

The policy and legal infrastructure for electronic commerce within ASEAN has been implemented through the e-ASEAN Framework Agreement and based on common reference frameworks.

**NEED:**
• Accede to and implement the e-ASEAN Framework Agreement.

C. Equitable Economic Development.

C.1 SME Development

The ASEAN Policy Blueprint for SME Development (APBSD) 2004-2014 outlines the framework for SME development in the ASEAN region. It comprises strategic work programs, policy measures, and indicative outputs. Its objectives are to:

i. Accelerate the pace of SME development by taking advantage of the diversities of AMC;
ii. Enhance the competitiveness and dynamism of ASEAN SME by facilitating their access to information, markets, human resource development and skills, finance, as well as technology;
iii. Strengthen the resilience of ASEAN SME to better withstand adverse macroeconomic and financial difficulties, as well as the challenges of a more liberalized trading environment; and
iv. Increase the contribution of SME to the overall economic growth and development of ASEAN as a region.

NEED:

• Assess the requirements for implementing the APBSD.
ANNEX 4.1: Female Participation in Trade and Economic Development

1. **There are a number of constraints in Timor-Leste that limit women’s participation in trade and economic development.** These include: (i) the double time burden of economic and social obligations; (ii) limited access to education, information, and training; (iii) limited access and control over other productive resources such as land and finance; and (iv) discriminatory formal and informal rules and institutions. Some of these issues are covered in the main report, in particular as they relate to women’s participation in the agriculture sector and how women are affected by the skills gap. This annex provides additional information on women’s participation in the labor market, access to productive resources, and the impacts of the legal framework in Timor-Leste.

2. **Women’s participation in the labor market is lower than men, and unemployment is higher among females.** Female labor force participation rate in the 2004 Census was estimated at 40 percent, which was only half that of men. The World Bank report on *Enterprise, workers, and skills in urban Timor-Leste* notes that such a low female labor force participation rate is unusual given the high rates of poverty.\(^{19}\) In 2007, the female labor force participation rate increased to around 48.5 percent.\(^{20}\)

3. **While women are largely absent from the formal sector, Timorese women are very active in the informal sector with 43 percent of informal businesses owned by women.** Anecdotal evidence suggests that much of the informal female workforce is focused on activities such as handicrafts, bakeries, and tailoring.\(^{21}\) Unfortunately, this also means that opportunities for women in the informal economy tend to be concentrated in lower income generating activities.\(^{22}\) In contrast, only 16 percent of formal enterprises are owned by women\(^{23}\) and formal wage employment is typically dominated by men who have better access to education and skills.

4. **Aside from agricultural work, self-employment is the second most popular type of employment identified in Table 6.1 of the Census, with 13 percent of females being self-employed.** Women account for slightly over half of all self-employed workers. In terms of private industry, 48 percent of private industry workers are women.\(^{24}\) According to the IFC report on *Gender*

\(^{19}\) Das.


\(^{21}\) Sonali Hedditch and Clare Manuel, *Gender and Investment Climate Reform Assessment: Pacific Regional Executive Summary* (Jan 2010, Joint Publication of IFC and AusAID).

\(^{22}\) ADB, *Gender and Nation Building in Timor-Leste: Country Gender Assessment* (Joint Publication of ADB and UNIFEM, Nov 2005)

\(^{23}\) Das.

\(^{24}\) Census Table 6.1.
and Investment Climate Reform in Timor-Leste, women working in non-agricultural sectors are mainly engaged in petty trading, including selling produce in markets and managing kiosks.\textsuperscript{25} The 2007 TLSLS indicates that 3.6 percent of employed women had their main jobs in the wholesale trade, retail, restaurants, and hotels industry versus 1.3 percent among employed men.

5. **Gender inequalities exist not only in terms of limited employment opportunities for women but also wage differentials.** UNDP estimates that male earnings are eight times higher than those of females.\textsuperscript{26} Sectors where women predominate are also typically associated with lower wages and skills.\textsuperscript{27} When looking at gender gaps by skill levels, the gender gap is most pronounced among manual jobs, as well as higher skilled occupations such as technical and managerial jobs. The ratio of women to men in these sectors is one woman for every seven men. The gender gap is smaller among service and administrative workers where the gap narrows to two women for every seven men.\textsuperscript{28}

6. **Women have extremely limited access to other productive resources, such as land, credit, production materials, and equipment.** Savings facilities and products are generally unavailable or inaccessible to rural women. Some progress, nonetheless, has been made through Moris Rasik which provides micro-credit funds to rural women in Timor-Leste.\textsuperscript{29} With respect to land, property rights are typically passed along the patriarchal line except in a few matrilineal societies. Although Article 54 of the Constitution guarantees equal rights to ownership of land, in reality, women have limited rights to own and inherit property other than usufructuary relationships through their husband’s right to land.\textsuperscript{30} Furthermore, women also have very minimal rights over community land, which constitutes the vast majority of land held in Timor-Leste.

7. **The lack of land ownership is a serious impediment for women since it places women in weak economic positions where they are dependent on male family members.** This can perpetuate gender discrimination while also limiting opportunities for women to improve their livelihoods. In particular, this decreases incentives for females to make productive investments in the land. This is further exacerbated by how Timorese women also have minimal control over the production and income from land. In short, with men controlling the family assets and appropriating any increases in their wives’ income, women not only have limited means but also reduced incentives to invest in, expand, or formalize their economic activities. At the same time, the inability to use land as collateral for loans may also further impede the ability of women to access finance.\textsuperscript{31}

8. **In addition to discrimination in land ownership rights, there is evidence of discrimination in other areas of the existing legal framework and institution.** The Constitution and Civil Code both contain provisions that are discriminatory or provide inadequate protection for females. This includes provisions in the Indonesian Civil Code where the husband gains the right to manage his wife’s personal assets and where the wife is required to gain written consent from her husband to dispose or acquire land.\textsuperscript{32} Although the Draft Civil Code will overcome some of the discriminatory practices in the Indonesian Code, further revisions are required to enhance women’s full economic participation.

9. **Equally concerning is the common application of customary law, which tends to discriminate against women.** Customary law is particularly important in rural areas, which

\begin{itemize}
\item \textsuperscript{25} Hedditch.
\item \textsuperscript{26} ADB, Gender.
\item \textsuperscript{27} Hedditch.
\item \textsuperscript{28} Das.
\item \textsuperscript{29} AusAID, Multi-Country Market Development Facility: Program Design Document (Dili: 17 Sep 2009).
\item \textsuperscript{30} Daniel Fitzpatrick, Land Claims in East Timor (Asia Pacific Press, 2002).
\item \textsuperscript{31} Hedditch Timor-Leste.
\item \textsuperscript{32} Hedditch Timor-Leste.
\end{itemize}
constitutes 73.5 percent of the population. It reinforces the dominant position of men and is typically administered by men who uphold the established social order and traditional gender roles. In the case of the traditional “adat” justice system, women are marginalized and usually do not have the right to speak during the dispute resolution process. The adat system is seen to be more accessible and rapid than the more costly and complex formal justice system. Both systems, however, are male-dominated and discriminatory towards women. In such a context, community-based meditation can offer a more neutral option going forward, particularly when coupled with the training of female mediators.

10. **The government has demonstrated strong commitment towards gender mainstreaming.** Timor-Leste has adopted the Millennium Development Goals and is a signatory to the Convention on the Elimination of All Forms of Discrimination against Women. The principles of gender equality are also embedded in the Constitution, and the Office of the Secretary of State for the Promotion of Equality is committed to building the capacity of different ministries to conduct gender analysis and mainstream gender issues. Gender Focal Points now exist in each ministry, and MAFF has been particularly pro-active in drafting a Gender Policy in Agriculture Development.

11. **A number of immediate actions can be taken to address gender issues.** For example, skills trainings and extension services can use female extension workers and trainers and be better designed to take into account women’s skills gaps and needs, household schedules, and mobility constraints. With respect to the justice system, potential measures include revising discriminatory or conflicting provisions in the law and civil code. At the same time, actions can be taken to ensure that the new Mediation Law is responsive to women and that female mediators are trained and appointed. The draft Land Law and proposed civil code also provide platforms by which the government can ensure measures such as joint ownership of family land by husband and wife and the existence of non-discriminatory land dispute resolution processes.

12. **It is critical to develop deliberate and systematic gender responsive interventions to enhance the overall efficiency of the economy and maximize the positive impacts of trade for both sexes.** More thorough gender analysis is required to understand the different needs, priorities, and modes of participation of women and how existing institutions and practices hamper female participation and productivity. We cannot assume that general improvements in these areas will necessarily translate into higher participation and productivity among both males and females.

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34 MED, “Gender Equality.”
35 Hedditch *Timor-Leste*. 
ANNEX 4.2: Example of Focus Group SWOT Value Chain Analysis by RDP II

Preliminary focus group sessions were held to:

- discuss product value chain environment in project areas;
- consider competitive advantages, strength, and opportunities for value adding in chains;
- identify competitive disadvantages and constraints at the main bottlenecks in the chains; and
- list interventions likely to support future development in chains.

The findings of the session on mungbean are presented in the table below:

**Table 4.2-A: Mungbean SWOT Analysis**

<table>
<thead>
<tr>
<th>Green Mungbean</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-domestic and export market demand for green seeds</td>
<td>-few rural buyers &amp; collectors</td>
<td>-strong export potentials for organically grown green varieties</td>
<td>-unreliable rainfall</td>
</tr>
<tr>
<td></td>
<td>-competitive farm gate price for export</td>
<td>-non-organized small growers</td>
<td>-strong export potential for black seed</td>
<td>-pests</td>
</tr>
<tr>
<td></td>
<td>-local green seed variety of export quality</td>
<td>-potential Timorese exporters not linked with growers</td>
<td>-turn wet season upland and dry season idle rice fields into production of high value mungbean</td>
<td>-insufficient seed management program</td>
</tr>
<tr>
<td></td>
<td>-identifiable market chain &amp; identified Timorese exporter(s)</td>
<td>-export quality of dull appearance</td>
<td>-substitute out-of-season import (WFP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-no import competition</td>
<td>-public &amp; private sector limited management skills</td>
<td>-increasing demand from school feeding program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-large number of farmers</td>
<td>-improved farm technologies services not available</td>
<td>-improve export quality by brushing technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-existing production base &amp; agro-ecological large potential areas</td>
<td>-lack of quality seed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-simple farm technologies;</td>
<td>-no storage technology and infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-dual purpose crop: soil improvement &amp; high nutritional value</td>
<td>-lack of black variety seed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-low input crop for upland intercropping &amp; dry season rice fields</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-seeds with farmers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-GOTL support</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANNEX 4.3: Selection of Subsectors for VCA

For the DTIS, several product categories were selected with three specific (proxy) products representing them. These include: (i) coffee; (ii) grains and pulses (mungbean being the focus product), and (iii) livestock (priority being cattle). In addition to the scale of their impact on rural poverty (in terms of the number of households which might be assisted) the reasons for their selection and prioritization are as follows:

No.1 Coffee: This product has a competitive advantage; a small price premium is paid by international buyers for Timor-Leste’s organic coffee; and there are about 67,000 producing households, all of whom are very poor. Some support initiatives by MAFF are already in place and several donors are involved in assisting smallholders and the private sector to increase on-farm cherry production, improve quality standards and grades, access niche markets (such as the fair trade and organic sectors), and engage more directly in overseas trade. The momentum underpinning these developments should be further strengthened by providing immediate, long-term TA and material support to scale up the rehabilitation of smallholder coffee plantations and upgrade processing practices, thereby significantly increasing productivity and turning around the seriously deteriorating state of Timor-Leste’s coffee industry.

No. 2 Grains and pulses (priority mungbean): Given that agronomic conditions are conducive for restoring production and exports to pre-independence levels, effective promotion efforts will benefit about 11,000 smallholders through trade expansion with Indonesia and other Asian countries. Increased production will improve food security for poor farmers, meet the additional demand for mungbeans created by MTCI’s school-feeding program, and contribute to improving soil fertility. Donor assistance programs (MAFF/RDP II and the former USAID-funded DSP) have supported mungbean smallholder development. This includes upgrading the capacity of service providers, such as those providing certified seed, improving cultivation practices, and assisting rural traders with operational funds and linkages with farmers.

No. 3 Livestock (priority cattle): Timor-Leste has potential for cattle production and there is a large market for live cattle export to Indonesia. The industry could expand by improving breeds, pastures, supplies of fodder, and delivery of veterinary services and by encouraging about 44,000 smallholders to produce cattle for sale. Expansion of live cattle exports would have a direct impact on rural incomes. The MAFF is developing support programs for cattle husbandry demonstrations in the Same District and strengthening veterinary services. Other donors, such as the USAID, are involved in cattle industry development projects. For example, CCT’s smallholder cattle farm management and fattening program includes the introduction of improved feeding practices and the upgrading of veterinary services to farmer members.

37 The rice value chain was earlier analyzed by a MED/GTZ team, although conclusive results are yet to be made available. Moreover, with the Government’s extensive interventions in rice marketing (through subsidies) severely distorting local production, rice milling and market demand, the rice chain was not included in the DTIS study.
38 GTZ (2006), West Timor Market Study, by Adam Sendall & NGO Timor Membangun.
39 Based on the information obtained from the four coffee exporters during October-November 2009 DTIS mission to Timor-Leste.
ANNEX 4.4: RDP II Value Chain System Analysis and Promotional Steps

Once opportunities of using the value chain system analysis for agricultural development were realized, it was introduced by MAFF Agribusiness Directorate and the RDP II under Component 3, Private Sector Support Services and Agribusiness. RDP II has provided TA with promotional activities during two agricultural seasons, targeting the two western-most districts in Timor-Leste, Bobonaro and Covalima. As time, local circumstances, and resources permitted, a series of focus group discussions and interviews were undertaken with key stakeholders from different parts of selected value chains and the promotion of the value chain system concept is systematically carried out in several steps in order to help chain stakeholders better understand the concept. In principle, the sequence of steps applied is:

Step I  Selection of products for value chain promotion. Hold focus group discussions among national and regional stakeholders and cooperating partners for rapid initial analysis, screening, and selection of product value chains.

Step II  Value chain analysis and field study of selected chains.

Step III  Formulation of chain operators’ interventions.

Step IV  Determine chain operators’ actions and tasks, outlining their responsibilities, agreements, and assistance to implementation.

Step V  Chain operators’ routine working group meetings.

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40 Based on: Larsen, Oct 2007.
ANNEX 4.5: Specific Cross-cutting Value Chain Constraints to Agricultural Development\(^{41}\)

Social and Political Considerations

1. Communities have for long periods been traumatized by civil war and ongoing social unrest, disrupting traditional structures. Reportedly, there is a high level of mistrust and suspicion and villagers and clans are unable to work together. Given this situation, interventions must be designed to build confidence, establish credibility and develop trust and, consequently, the following has to be taken into account when formulating agricultural development programs:

   - There is a high possibility that community meetings will be perceived to have a hidden political agenda. This mainly refers to suspicions over the motives for the meeting being associated with local level political maneuvering by various factions and individuals. Thus, the objective of any meeting must be clearly understood by authorities and the concerned communities.

   - With the exception of life cycle and agricultural cycle ceremonies and customs, communities are not used to thinking and planning ahead. They would have little time for a detailed program formulation, i.e. to prepare proposals for specific target groups. The present atmosphere in rural communities (survival mode) further reinforces the need to engage communities on concrete development issues for which action can be taken.

   - There is a real danger that, if a specific proposal prepared by a community is not funded, (for instance because of lack of human resources and institutional capability, or it is technically not feasible) it could result in the community’s rejection of the program and fuel envy towards other communities that do receive project assistance. Such situations have been experienced to lead to acts of sabotage and conflict between communities.

Adaptation to Market Economy

2. For the rural population, development is occurring at such a pace that isolated communities are unable to adapt to the changes in a way that supports economic development. Their response has occasionally been to commercialize traditional ceremonies, i.e. villagers try to outdo each other by holding more prestigious ceremonies and wedding feasts, which can be a primary motivation for obtaining credit supposedly to be used for income generating activities and to stimulate growth of the market economy, and the villagers may not consider this to be a problem.

3. Another response is the ‘subsidy syndrome’ and ‘handout mentality,’ observed by many projects and NGOs as a significant constraint. This is also found in neighboring West Timor and is due to previous unconditional grant aid programs. The handout mentality has developed into a perception that assistance is for consumption rather than for inputs or as a resource for investment. Given this, village level planning tends to focus on requests for physical inputs, e.g. livestock, seedlings, equipment such as hand tractors, and infrastructure development, like water supply and irrigation. The major weakness with such planning process is:

   - It is seen as an exercise to secure government or donor funds for what can be termed ‘conventional procurement’ for physical inputs.
   - It is often based on shallow problem analysis due to lack of facilitators’ skills and inadequate technical backstopping, resulting in proposals that are technically unfeasible.

\(^{41}\) Excerpted from Larsen, Oct 2007 7-12.
• Authorities and donors are often presented with the task of prioritizing ‘one line’, or a shopping list, i.e. project proposals with little or no supporting information, which opens up opportunities for abuse of the planning process.

Lack of Demand for Agricultural Extension Services

4. Field studies have revealed a general lack of appropriate extension material and knowledge, as well as lack of demand for services, which applies to farmers, extension workers and higher level support staff. Furthermore, there is little appreciation for the strength of traditional farming systems in which practiced crop mixtures maximize the use of rainfall, whereas in the promoted mono-culture entire cash crops fail due to unstable seasonal rainfall. The importance of these aspects of rural development has not been considered in depth in this brief analysis.

Domestic Market Absorption Capacity

5. The purchasing power of the majority of the Timor-Leste population is a decisive factor in the decision of whether to expand a particular agricultural production. While rising imports are a clear indication that the domestic market is expanding, the absolute basis is small and additional supplies can only be added to the domestic market slowly, except for rice currently imported in increasing quantities. Below are some market characteristics occurring in Timor-Leste, typical in a transitional economy, such as:

• Strong import competition, resulting in low prices;
• Production depends on imported input supplies and on-farm productivity;
• Inferior produce quality;
• High marketing costs, making it cheaper to import than purchase domestically produced products from rural areas.

Support Service Providers’ Capacities

6. Following the exodus of Indonesian technical staff, including traders and artisans, after Independence, the rural day-to-day government functions and basic services were disrupted, affecting the local economy severely. The remaining private enterprises are still operating at a high degree of risk.

7. In general, the capacity of technical agencies in the districts, as well as of local NGOs working in the project area, is reportedly very limited and their ability to participate in agricultural development activities is weak, made worse by the demand from competing aid projects. The diagnostic study clearly shows the need to increase the number and capacity of service providers and to improve the relevance and quality of their services.

Other Cross-cutting Factors

8. The diagnostic field study focused on the immediate and underlying causes of the constraints to value adding opportunities. Many of the constraints identified can to a certain extent be tackled by implementing specific technology based value chain programs and linking players in the chain. There are, however, a number of cross-cutting factors affecting not only the selected value chains, but also having an overall impact on the rural and national economy. The major ones are:

• Land tenure security
• Water resource management
• Deforestation
- Budgetary support to agriculture institutions
- Public administration reforms
- Governance

9. These wider cross-cutting factors are closely related to a range of constraints inhibiting economic growth. They point to the need for general policy and institutional reforms to property rights, governance and infrastructure. Although it is useful to have a general understanding of some of these constraints, it is not within the scope of the RDP II analysis to outline what type of intervention is needed to address these factors. While this analysis provides an indicative overview of the situation at each step in the formulation process for value chain interventions, for certain products, data becomes increasingly difficult to obtain and it is often less reliable when moving up the value chain, as the raw commodity is transferred into a range of higher value products, many of which bear no resemblance to the original raw material.
ANNEX 7.1: Structure of Employment in Timor-Leste

1. The structure of employment is primarily agricultural. The 2004 census reported 314,400 employed persons, with 79 percent of the population engaged in agriculture, fishing, or forestry. 78 percent of males and 80 percent of females worked in these sectors. 3.9 percent of the population reported that they worked in “wholesaling, retailing, and selling” and a similar percentage (3.8 percent) was working in UN agencies and diplomatic missions.\(^{42}\)

2. International employers, including the UN and other international agencies, are the wage leaders (see Table 7.1-A). This is followed by the public sector, where skills in office administration and some technical skills open doors to employment. The next lowest segment contains artisans, carpenters, plumbers, masons, and mechanics, where skills gaps are filled by imported labor. The lowest paying work, but holding the largest section of the workforce, is found in the agricultural sector. The result is that many of the brightest young Timorese are attracted to international employers in the urban economy, whose presence in the country may not be long-term and where high rewards for good work ethics, technical knowhow, and English language are skewing the demand for training towards these skills.

| Table 7.1-A: Earnings by Employment Segment of the Labor Market \(^{43}\) |
|-----------------------------|------------------|
| **Occupation**              | **Salary Range (US$ per month)** |
| **International Organization:** |                      |
| Messenger                   | 201-284           |
| Driver                      | 287-405           |
| Clerk, typist, secretary    | 287- 621          |
| Senior secretary/Senior accounts assistant | 504-1,331         |
| **Government:**             |                      |
| Levels 6-7 Manager          | 510- 663          |
| Senior professional          | 374 - 489         |
| Levels 4-5 Technical professional | 298-374       |
| Senior technician            | 221-272           |
| Level 3 Intermediate technician | 166- 217        |
| Levels 1-2 Basic technician  | 136-162           |
| **Private:**                |                      |
| Artisan workers US$3.5-9 per day | 77-198            |
| Coffee farmers:             |                    |
| Rural female coffee factory workers (US$2.5 per day) | 25-33            |
| Rural male coffee factory workers (US$3.5 per day) |                      |

Source: “Survey participant’s report,” Birches group; the budget Annex 6; and observations during mission field trips.

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\(^{42}\) Census Table 6.3.

\(^{43}\) Data for international organizations and government based on published pay profiles. No formal data exists for the private sector; estimates are based on discussions with a small sample of workshop owners.
ANNEX 7.2: Comparative Wages in Selected Asian Countries

<table>
<thead>
<tr>
<th>Country/City</th>
<th>Monthly Minimum Wage</th>
<th>Exchange Rate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local Currency</td>
<td>USD</td>
<td>Per USD 1 (as of 05-Jun-10)</td>
</tr>
<tr>
<td>Thailand</td>
<td>3,624-4,944 baht¹</td>
<td>111-151</td>
<td>32.65 baht</td>
</tr>
<tr>
<td>Indonesia</td>
<td>568,193-1,020,000 rupiah</td>
<td>62-111</td>
<td>9,175 rupiah</td>
</tr>
<tr>
<td>Philippines</td>
<td>4,272-9,168 pesos³</td>
<td>92-198</td>
<td>46.33 pesos</td>
</tr>
<tr>
<td>China</td>
<td>580-1120 yuan⁴</td>
<td>85-164</td>
<td>6.83 yuan</td>
</tr>
<tr>
<td>Vietnam</td>
<td>730,000-1,340,000 dong⁵</td>
<td>39-71</td>
<td>18,960 dong</td>
</tr>
<tr>
<td>Timor-Leste (implicit)</td>
<td>84-144 dollars⁶</td>
<td>84-144</td>
<td></td>
</tr>
</tbody>
</table>

¹ For Thailand, the minimum wage is set as a daily minimum wage (151-206 Baht depending on the province). This has been converted to a monthly level assuming 24 work days per month (~5.5 workdays/week). Source: Thailand Board of Investment <http://www.boi.go.th/english/how/demographic.asp>
² Source: <http://www.indonesiamatters.com/1509/minimum-wage/>
³ For the Philippines, the minimum wage is set as a daily minimum wage (178-382 pesos). This has been converted to a monthly level assuming 24 work days per month. Source: Department of Labor and Employment - Philippines <http://www.nwpc.dole.gov.ph/pages/statistics/stat_currentRegional.html>
⁶ Based on feedback from interviews, the daily minimum wage is estimated at 3.5-6 USD.
ANNEX 8.1: Potential strategies for addressing land tenure and facilitating private sector investment in the modernization of the coffee sector

Depending on the outcome of a preliminary rural land tenure assessment, suitable strategies for addressing land tenure aspects and facilitating greater private sector investment in the modernization of the coffee sector could include the following:

- **Support for lease-based industry-community partnerships on community land**: Current indications are that the evolving land regime (under Chapter V of the *Transitional Land Law* and supporting regulations) will include provisions for community members to register areas of community land based on *customary ownership claims*, and then, if desired, enter into leasing agreements with investors. As part of the post-DTIS action program, direct technical support for the development of lease-based industry-community partnerships in the coffee sector could be considered to test the hypothesis that communities will be more willing to work with investors in circumstances where they have tenure security and access to other benefits (including training and employment options).

- **Re-issuing of leases over state plantation land**: In areas where the state claim to coffee plantation land remains respected by community members, it may be possible for leases to be re-issued, either to existing individual users, user-cooperatives, investors, or user-investor partnerships. Re-issued leases could be targeted for specialist extension services and/or required to rehabilitate the land under leases over time in accordance with best-practice principles.

- **Issuing titles to smallholders with substantiated long-term claims**: In areas where coffee plantation tenure is characterized by multiple smallholder claims and no state claim (or where the state is willing to forgo any claim it may have or be prepared to ‘sell’ to smallholders), the best option may be to issue titles to smallholders where long-term claims can be substantiated (possibly, depending on the nature of the state claim, this should be in exchange for symbolic payments). Titling of smallholdings may not facilitate investment by external private sector actors (although it could) but could increase tenure security and might provide smallholders with collateral which could be used as a basis for borrowing money to invest in rehabilitation activities. Whether banks would be willing to lend against a coffee smallholding is something which should also be researched.

Note that land tenure initiatives in the coffee sector could also play an important role in areas subject to donor-supported rehabilitation programs. Specifically, titling of estate land prior to the commencement of intensification activities could reduce the risk of conflict occurring once land has increased in value as a result of rehabilitation.

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44 Based on discussions with a representative of the MoJ legal drafting during November 2009.
ANNEX 9.1: Additional Information on Business Start-Up

1. **With the business start-up process taking 83 days on average, this is relatively long compared to regional comparators.** Aside from Cambodia and Lao, the remaining countries require 60 or less days to complete the process. The top ten fastest countries globally only require 1 to 5 days for the completion of the process while the slowest ten countries take more than 100 days for the process. As a result, there is room for significant improvements in the length of the process.

2. **The business start-up process in Timor-Leste is also cumbersome since it currently requires 10 procedures.** Within the comparator group, this places Timor-Leste among the top three countries, alongside Vietnam and the Philippines, with the most number of procedures. However, aside from Singapore, other regional counterparts are also not performing particularly well in this area with most of them requiring at least 7 procedures (see Figure 9.1-A). The top ten countries globally with the fewest procedures require only 1 to 3 procedures to complete the process while the ten countries with the most procedures require between 15 and 20 procedures.

![Figure 9.1-A: Procedures and Costs to Start a Business](image)

Source: Interviews with MoJ; Doing Business 2010 East Asia & Pacific

3. **The main steps involved in the registration process are presented in Table 9.1-A.** The procedure of obtaining a criminal record clearance is being required in practice although it is not based on any legal provision. Similarly, a number of documents are being required by the MoJ for the filing of the company statute, some of which are also not required by law.

![Table 9.1-A: Procedures for Starting a Business in Timor-Leste](image)

Source: Interviews with MoJ; Doing Business 2010 Timor-Leste

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45 Indonesia, Malaysia, Papua New Guinea, Philippines, Singapore, Solomon Islands, Thailand, Vietnam
47 IFC, *Doing Business*. 
4. There are no official fees for business registration, but there is a $100 fee for the temporary business license issued by MTCI. At only 4.1 percent of income per capita, the official cost of starting a business is the second lowest in our comparator group (see Figure 9.1-A). Singapore, which has the lowest cost as a percentage of income per capita, is at 0.7 percent. The average for the remaining countries in our selected group is 34.4 percent, with Cambodia pulling up the average with its high of 138.4 percent. Unfortunately, the Doing Business Report does not provide any data or estimates on the cost of bribes. As a result, the actual cost of registration may be significantly higher.

5. On the other hand, the minimum capital requirements for starting a business are also the highest in East Asia, Southeast Asia, and the Pacific. The minimal capital requirement is set out in the Commercial Companies Law Sections 16, 188 and 222 and Business Registry Code, Article 34 (d). The amount specified for a “sociedades por quotas” is $5,000 and for a “sociedades anonimas” is $50,000. Relative to the size of the enterprise and economy, these minimum capital requirements are quite high and should be eliminated. The regional average as a percentage of per capita income is 21.3 percent with Timor-Leste at 202.9 percent for sociedades por quotas. Within our comparative group, all but the Philippines, Cambodia, Indonesia, and Timor-Leste, have opted to eliminate the minimum capital requirement. Even other small island economies such as Vanuatu, Fiji, Samoa, and Sao Tome e Principe have no minimum capital requirements. In short, while official registration fees are negligible in Timor-Leste and offset the high minimum capital requirement somewhat, $5,000 is still a significant barrier to many small enterprises.

6. The elimination of the minimum requirement will require a number of revisions to the Commercial Companies Law and Business Registration Code. By cutting this one procedure, the total cost of starting a business will be reduced by 202.9 percent of GNI per capita for sociedades por quotas. According to the 2010 Doing Business Report, this was among the five most popular reform features in 2008/09 for simplifying start-up formalities. Among the top ten global reformers in starting a business, there was a 99 percent average improvement from 2008 to 2009. In addition, sociedades por quotas are also constrained by a maximum share requirement of $500,000. While this requirement has not been a binding constraint to date, it does not follow international best practices and should also be eliminated.

7. The practice of issuing temporary business licenses should also be eliminated as it can increase the cost of business start-up, particularly since it creates greater opportunities for corruption. The MTCI has been using its authority to issue a temporary business license, which costs $100 and is valid for one year. Although this is being used to overcome registration capacity issues, a business license is not equivalent to business registration, which includes a legal verification of the structure of the company. On the other hand, business licensing is expected to verify that the entity meets the necessary security and physical conditions to carry out its intended activity. Part of the confusion may arise from the fact that both MoJ and MTCI require some of the same documentation. For example, MTCI requires the articles of association even though licensing does not require an assessment of the legal aspects within such a document. Local service providers indicate that they often receive a temporary license and continue to renew their temporary licenses.

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48 MoJ.
49 The paid-in minimum capital requirement reflects the amount of money that an entrepreneur needs to deposit in a bank or with a notary before registration and up to 3 months following incorporation. The concept of minimum capital is to reserve funds in order to pay creditors in case of insolvency; more specifically, distribution to shareholders. A minimum capital requirement is a common practice but many countries are eliminating this requirement in order to facilitate enterprise development.
50 In the Portuguese system, these are among the most common forms of incorporation.
52 MTCI.
without completing the registration process. They also mentioned the possibility of corruption related to the issuance of temporary licenses.

8. Additionally, the requirement that a business license be needed for all firm activities is also inconsistent with global best practices. Despacho Ministerial N.º 1/2008 de 6 de Fevereiro requires a temporary business license for all firm activities. This requirement places an excessive burden on all entrepreneurs. Instead, this should be replaced with targeted permanent licenses for only those activities posing a danger to the public. With the suggested reform, a company with health and safety risks, such as a chemical producer or a construction company, would need to have a license. However, a software firm or law office, assuming legal registration, would not require a license.

9. Additional recommendations to improve business start-up include:

   (a) Streamlining incorporation and registration procedures by (i) eliminating or reducing minimum capital requirements; and (ii) eliminating the requirement, by the same office, of documents that are not prescribed by the law.

   (b) Abolish business licenses for all firm activities and require licenses for only those activities posing a danger to the public. Also, eliminate the practice of issuing temporary licenses.

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53 FIAS.
ANNEX 9.2: Proposed legislative measures for the business registration reform

(circulated for public consultation in May 2010)\textsuperscript{54}

1) Creation of a special procedure concerning the formalization and registration of companies, involving the following acts and conditions:
   a) The business registration office executes the company's name approval (with exemption of a certificate issuance), the incorporation's formalization and its registration, in a single act executed in the presence of interested parties;
   b) The company's incorporation formalization will be executed by using legal standardized articles of association;
   c) The formalization in the business registration office cannot be requested if any of the shareholders pay his/her capital share's subscription by means of transfer of immovable property, situation which will continue to require a formalization by means of a public deed;
   d) Immediately after the registration, the registry office communicates that fact, electronically, to the ministries interested in the disclosure of data about the company's incorporation registration (including the ones that hold competences for the allocation of a tax identification number, for the company's activity and operating conditions licensing, for granting economic benefits and incentives in the scope of investment operations, for residence authorization or issuance of a work visa procedures, and for inspection of work conditions).
   e) This service will be provided in the in the Public Registry Department of the Ministry of Justice, in Dili, and, in the future, it may be extended to registration business offices that may be created in other administrative districts of East Timor.

2) Requirement that the signatures of a company or cooperative's founders on the correspondent Memorandum and Articles of Association, formalized by a private document, are executed before the notary or business registration officer legally empowered, who must certify that fact;

3) Decrease of the level of formalization in the incorporation of high grade cooperatives and 1st grade cooperatives subject to a special regime of formalization by public deed by means of a private document, with the certification, by a notary or business registration officer legally empowered, of the entity founding members' signatures, put on the document before the official authority;

4) Approval of a regime concerning the sole ownership operator and legal persons' name registration;

5) Abolishment or reduction of the requirement of a minimum share capital for the incorporation of some legal types of companies (sociedades por quotas and sociedades anónimas), as well as the maximum share capital for the incorporation of sociedades por quotas;

6) Abolishment or reduction of the requirement, prescribed in the general regime applicable to cooperatives, of a minimum initial share capital for the incorporation of those entities;

7) Abolishment of business registration' s acts publication, with declaratory effects, in the official gazette and the local newspapers and its replacement by a mere monthly publication notice in the national gazette (it may be also foreseen the publication of the same information in the Ministry of Justice, as a board information);

8) Attribution of competence to translate (and certify the translation) of documents written in foreign language to other entities beyond notaries, specifically to the Timorese consulate in the country of

\textsuperscript{54} Excerpted from “Business Registration Reform.”
the document issuance, to the consulate of the referred country in East Timor or to any other official entities who may be considered qualified for that purpose;

9) Abolishment of the requirement of trade entities' legal books authentication in the business registration office;

10) Possible abolishment of some of the trade entities’ books that are required by current law and/or provision of the possibility of adoption of other document supports.
ANNEX 10.1: Road Transport

Road Network

1. The road network in Timor-Leste is extensive but of poor quality. The total network is estimated to be about 6 thousand kilometers of which about 12 percent are urban roads, 25 percent are national roads, and another 14 percent are district roads. The core system accounts for about half of the total. It connects the thirteen districts. The primary links are the two coastal roads (northern and southern) and five north-south routes connecting the coastal roads. About 80 percent of this is paved but most links are in poor or very poor condition (Table 10.1-A). The rural roads provide access to villages and communities but are mostly undeveloped tracks.

<table>
<thead>
<tr>
<th>Road Condition:</th>
<th>National (%)</th>
<th>District (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>9</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Poor</td>
<td>26</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Very Poor</td>
<td>65</td>
<td>96</td>
<td>70</td>
</tr>
<tr>
<td>Total Surveyed (km)</td>
<td>1,362</td>
<td>258</td>
<td>1,610</td>
</tr>
</tbody>
</table>

Source: ADB, TA Road Network

2. Road construction is difficult because of the terrain. About 44 percent of the total land area lies between 100 and 500 meters in elevation, and 35 percent lies above 1,000 meters. Because of the terrain, two standard narrow pavement widths, 3.2 or 4.5 m, were used. The road network was constructed using relatively low standards of design and materials. In mountainous regions, the roads lack shoulders and the horizontal and/or vertical alignments limit the line of sight. Drainage is a problem and a large portion of the network is inaccessible during the rainy season, which can last 4-8 months.

3. The Directorate of Roads, Bridges, and Flood Control (DRBFC) manages the development and maintenance of the road network. The current master plan for road development emphasizes maintenance of the existing network and provides for rehabilitation of slightly more than 2/3 of the national roads over the current decade. The government has recently increased its annual budget for road maintenance from $10 million to $63 million. The government is currently developing a strategic plan. However, there are still problems in prioritizing road rehabilitation projects especially in developing protection against landslides. The ADB has a commitment for $46 million to upgrade about 230 kilometers of roads. The difficulty is that DRBFC and the local contracting industry lack capacity for maintaining the roads. At the same time, it is difficult to prepare projects of sufficient scale to attract foreign contractors.

4. There is no existing program for improving the district and rural roads, both of which are in poor condition. The EU and GTZ are currently developing programs to rehabilitate this network including developing an inventory and evaluating improvements to specific sectors.

Traffic

5. Traffic volumes outside of Dili are very low. Counts on the national roads in early 2009 produced an average daily volume of about 475 motorized vehicles of which 55 percent were motorcycles. The district roads had volumes of only about 100 with about the same percentage of motorcycles. The only significant traffic levels are along the northern coastal road with volumes in excess of 1,000 vehicles, excluding motorcycles. However, traffic volumes are increasing by as much
6. The formal cross-border traffic is limited in volume largely because of demand but also because of the additional cost and time for crossing the border. At present there are less than 20 trucks per day crossing the Batugade border. The Timorese trucks are mostly 6-wheel (5 tons) or less due to the condition of the roads, whereas 12 wheel trucks are used in Indonesia where the roads are in much better condition. Although the Timorese trucks are allowed to operate in Indonesia, there is a tendency to transfer cargo at the border.

7. The transport fleet has been growing rapidly as shown in Table 10.1-B. In 2008, there were about 15,000 cars and 4x4s, 2000 small/medium trucks, and about 100 heavy trucks and specialized vehicles in Timor-Leste (Table 10.1-C).

<table>
<thead>
<tr>
<th>Year</th>
<th>Motorcycle</th>
<th>Car and 4WD</th>
<th>Minibus</th>
<th>Pickups</th>
<th>Bus Trucks</th>
<th>Heavy and Specialized</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-2002</td>
<td>6,830</td>
<td>6,697</td>
<td>1,414</td>
<td>122</td>
<td>1,131</td>
<td>21</td>
</tr>
<tr>
<td>2002-2003</td>
<td>3,443</td>
<td>1,731</td>
<td>435</td>
<td>14</td>
<td>330</td>
<td>3</td>
</tr>
<tr>
<td>2003-2004</td>
<td>3,726</td>
<td>2,542</td>
<td>620</td>
<td>-</td>
<td>254</td>
<td>-</td>
</tr>
<tr>
<td>2004-2005</td>
<td>2,867</td>
<td>1,774</td>
<td>375</td>
<td>17</td>
<td>195</td>
<td>3</td>
</tr>
<tr>
<td>2005-2006</td>
<td>1,262</td>
<td>479</td>
<td>93</td>
<td>-</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>2006-2007</td>
<td>1,089</td>
<td>629</td>
<td>108</td>
<td>2</td>
<td>88</td>
<td>16</td>
</tr>
<tr>
<td>2007-2008</td>
<td>4,073</td>
<td>1,673</td>
<td>78</td>
<td>-</td>
<td>87</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>23,305</td>
<td>15,539</td>
<td>3,123</td>
<td>155</td>
<td>2,127</td>
<td>89</td>
</tr>
</tbody>
</table>

Source: Directorate of Road Transportation

Table 10.1-C: Estimated Total Vehicle Fleet

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>2005</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycles</td>
<td>11,012</td>
<td>32,305</td>
</tr>
<tr>
<td>Private cars, taxis, jeeps, and 4WD</td>
<td>5,414</td>
<td>15,539</td>
</tr>
<tr>
<td>Pickups, vans, and minibuses</td>
<td>3,303</td>
<td>3,123</td>
</tr>
<tr>
<td>Medium and large buses</td>
<td>200</td>
<td>155</td>
</tr>
<tr>
<td>Light and medium trucks</td>
<td>2,167</td>
<td>2,127</td>
</tr>
<tr>
<td>Heavy and specialized trucks</td>
<td>61</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>22,157</td>
<td>44,323</td>
</tr>
</tbody>
</table>

Source: ADB estimates.

Freight Transport

8. The major sources of demand for freight transport are the distribution of fuel and construction materials, the delivery of imported goods, and the delivery of agricultural products (both the collection of production from rural areas and the distribution of imported rice). There is very little intercity truck traffic that does not originate or terminate in Dili. The principal traffic flow is along the northern coast between the border with Indonesia and Baucau (Figures 10.1-A and 10.1-B). A smaller volume of traffic moves on the North-South corridor from Dili through Hermara to Suai on the South coast. The northern coastal road and the section of the North-South route through Hermara are in reasonable condition.
9. Reported average speeds on the major links are: 42 km/hr for Jeeps/4WD (maximum link averages 60 km/hr, minimum 15) and a maximum of 50 and minimum of 33 for pick-ups and vans. Trucks have slower speeds, typically 30-35 kph on the relatively flat terrain and 15-20 in the mountainous areas. Typical trip times from Dili are shown in Table 10.1-D.

10. The trucking industry consists of the usual collection of independent operators and transport companies. There are five major companies that provide 3rd party trucking using fleets of 10-40 trucks. Most of their movements are within Dili but some provide transport to the interior. There are also fleets operated by the construction companies and the major coffee producers located outside

55 Romante, Bacchi, IOM, EDS, and Troy Logistics.
of Dili, e.g. CCT and Timor Global. The majority of the trucks providing commercial services have capacities of 2.5 to 5 tons. These are especially popular for hauling construction material. For containers and large shipments, there are 16 sideloaders, a larger amount articulated trucks with chassis, and a smaller number of tipper trucks with capacities of 25-30 tons.

**Figure 10.1-C: 2009 Estimated Average Daily Traffic**

11. Transport is undertaken using waybills issued by the cargo owners, but there is no standard format to allocate responsibility. Third party insurance is available through foreign companies but is very expensive, and there is no cargo insurance. Some of the larger transport companies provide storage space, but none are involved in the business of inventory management.

12. Most of the containerized cargo imported for destinations in the interior is transported as loose cargo. The exceptions are project cargo for which the concern for the safety of the cargo and avoiding double handling justify the much higher cost of container transport.56

### Operating Costs

13. The cost for transport is relatively high because of:

- the low level of utilization, averaging less than 40 thousand kilometers per year;
- the requirement to import relatively new trucks; and

56 For example: shipments to Baucau and Maliana for the construction of hospitals and equipment for the new electronics factory in Manatuto.
• the high level of consumption of fuel and parts due to the rough terrain and condition of the road.

14. Restrictions on the age of trucks that can be imported limit them to five years; formerly it was 10 years. However, there is no requirement for an annual inspection. Rough estimates of the operating costs are $1.25-1.45 per kilometer with only 10 percent backhaul for the 3.5-5 ton trucks and $2.25-2.75 for a 14 wheel articulated truck. For transit trade with Oecussi, the Timorese trucks are charged a $45 transit fee and a $30 visa fee for the driver for each direction. In addition, there are delays at the two borders which can add several hours a journey for which the travel time is only about five hours.
ANNEX 10.2: Ports

Facilities

1. The Port of Dili is located in the middle of the city in a natural harbor protected from waves by the reefs. There is a short approach channel with marker buoys. The port has a 300-meter wharf of which 180 meters has a 20 meter apron adjoining the backup area and 120 meters is an extension that is 12 meters wide and connected to the backup area by a bridge. The wharf is raised about 1.5 meters above the backup area requiring a ramp for the boxes moving to and from the wharf. The wharf has been under repair for a number of years. Two of the berths have been repaired and one should be completed before the end of the year. However, only one is operational. The second has yet to be commissioned. The port has two loading ramps for ferries. The newer one was built in 2007 but has never been commissioned because of design flaws. The older one is in use but is located in the middle of the storage creating a safety problem.

2. The backup area is a narrow curved area that covers about 2.7 hectares. Less than half of this area can be used for the storage of containers. This is because of the configuration and the presence of several large structures (a passenger terminal, two warehouses, and an office building). The port facilities are used primarily to handle containers but also for some loose, primarily bagged cargo. The two warehouses are used for long-term storage of loose cargo. The passenger terminal is used as offices by the government and the construction firm. The port offices are located in an office building close to the gate. The surrounding area is used to store vehicles awaiting clearance. The western end of the port behind the new ferry terminal is used to store construction material. This should become available later this year once the rehabilitation of the wharf is completed. Because of these obstructions, the backup area can hold only 300 TEU assuming three-high stacking. This is equal to half the weekly throughput of the port and just adequate for the boxes transferred by one ship.

Management

3. The Administração dos Portos de Timor-Leste (APORTIL) administers all the ports in Timor-Leste including Dili (Decree-Law No. 3/2003, of 10th March). It is mandated to ensure that ports are developed and provide an efficient service, but its role has so far been limited to generating and managing income. It has neither the staff nor authority to plan and develop facilities, which is left to the Ministry of Infrastructure. APORTIL also manages the Nakroma ferry service between Dili and Oecussi.

4. *The Port of Dili operates as a landlord.* It does not own any equipment, provide pilot or dredging services, or participate in state control. It collects fees for storage, wharfage, navigation, anchorage, and supply of water and power. Cargo handling is performed by three private stevedoring companies, which are also responsible for managing the storage of the storage yard. Their activities are subject to regulation by port officials, but this is minimal.

Traffic

5. The growth in container traffic in the port of Dili has fluctuated over the last decade. There was a downturn in 2005 and 2006 as a result of the departure of the UN followed by political turmoil. This was followed by a restoration to previous levels with the return of the UN forces, but not until 2009 was there significant growth as a result of economic expansion stimulated by the exploitation of oil resources. Traffic reached about 33.5 thousand TEU in 2009 (Figure 10.2-A).

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57 It is awaiting formal handover from JICA to the Government.
58 The ramp was damaged by the ship’s ramp undercutting it. It appears that the design did not take into account the variation in tides. A similar problem occurred with the ferry ramp in Oecussi.
6. The volume of non-container cargo grew steadily over the same period as shown in Figure 10.2-B. Most of this is import of construction material and food mostly in bags. The volume of both container and breakbulk cargo is dependent on government expenditure.

7. About 95 percent of the containers are 20’ boxes because the ships’ gear cannot handle the larger boxes unless they are lightly loaded, and the equipment available to handle the larger boxes is limited. Assuming that the loaded boxes account for about 55 percent of the boxes and these average 15 tons/TEU, the proportion of general cargo that is containerized is only about 64 percent. The forecasts of container and non-container traffic shown in Figures 10.2-C and 10.2-D assume that the overall volume of cargo will increase at an average rate of 8-10 percent per year. The percentage transported in containers is expected to increase from 60 to 85 percent over the next ten years and reach 90 percent by 2025. At the same time, the average amount per loaded TEU would increase from 12.5 to 13 tons by 2020 and 13.5 tons by 2025. The volume of breakbulk cargo is expected to fluctuate as a result of public sector imports of grains and construction materials and to gradually decline as the level of containerization increases as shown in Figure 10.2-C.

8. Currently, there are three container lines calling at the port on a regular basis. General cargo is shipped in charter vessels. Perkins provides a service between Singapore and Darwin with a stop in Dili. Its feeder vessels call every 10-14 days. These 250 TEU vessels have an LOA of 90 meters and a draft of 6.5 meters. On average they handle about 100 TEU on and 100 TEU off. Meratus provides a shuttle service between Dili and Surabaya. It calls every 4 days using two vessels, one 120 TEU and the other 256 TEU. They have drafts ranging from 5.0 to 6.4 meters. On average these transfer about 100 TEU on and a similar amount off. Crocodile provides a service between Singapore and Dili, which also calls at Surabaya. This calls four times a
month with 120 TEU vessels that transfer about 90 TEU in each direction.

**Figure 10.2-E**: 250 TEU Self–sustaining Container Vessel

9. As the volume of container traffic increases so will the average size of the vessels calling at the port. Ultimately their size will be limited by the existing draft to 500 TEU with a length overall of 100-120 meters and draft of 6.5-7 meters. The vessels currently call at multiple ports but as the traffic increases, these would provide shuttle services transferring up to 900 TEU per call. The projection of vessel calls and average number of containers transferred per call is shown in Figure 10.2-F.

10. The general cargo vessels calling at Dili are relatively small, less than 3000 DWT due to the limited draft. In 2009, a total of 69 vessels called at the port transferring an average of 1800 tons. This is expected to increase slightly with the result that the annual number of vessels calls will decrease over time.

**Operations and Occupancy**

11. The container handling activities in the port of Dili are similar to the traditional practice in breakbulk operations. Competing private stevedoring companies provide all of the equipment and perform the entire movement from vessel to gate. While nearly all large container terminals have abandoned this arrangement in favor of a single operator because of increased efficiency, smaller ports with limited traffic and financing have continued with this practice. In the case of Dili, this arrangement has served the port well by providing reasonable efficiency and low handling costs. The problem is that as the traffic increases, a better arrangement will be needed to maximize the throughput of the port’s limited storage space.
12. Three stevedoring companies, Timor, Troy Logistics, and Toll,\textsuperscript{59} control port operations. They provide yard container handling equipment, trucking services to move the boxes to and from the terminal, and bonded storage for the container cargo. The yard equipment is older toploaders, primarily Hyster and Kalmar. These are in reasonable operating condition and some newer equipment is being purchased to meet the growth in demand. They are used to stack the boxes 3 high in rows 3 deep. The stevedoring companies use their regular employees for equipment operation and supervision but otherwise employ casual labor from a common pool.

13. In 2009, an average of 15 containers vessels called monthly, transferring an average of 170 TEU per call (about 80 containers on and 80 containers off) in an average time at berth of 16 hours. As a result, the average occupancy for container vessels was equivalent to about .3 berths. Because only one berth is operational, delays in berthing occasionally occur when there is a bunching of vessel arrivals. This occurred during the end of the year as shown in Figure 10.2-G.

14. Berth productivity varies between 100 and 250 boxes per day depending largely on the characteristics of the vessel being unloaded. Most have cranes that can move containers between the vessel and the wharf faster than the yard equipment can move the boxes to/from the storage yard. The amount transferred affects the overall berth productivity. The average vessel time at berth is 16 ½ hours during which about 170 TEU are transferred.

15. The vessels calling at the port are self-sustaining. There is no ship-to-shore gantry crane or mobile wharf crane. However, the introduction of such a crane would provide little benefit since the backup yard is not configured to support the rapid transfer for boxes between the vessel and storage.

16. The projection of demand for berths assumes that the average handling rate at the berth will increase from the current level of 10 TEU (9 boxes) per vessel hour to 16 TEU by 2020 and 20 TEU by 2025. At the same time, the percentage of 40’ boxes is expected to increase to 10 percent by 2020 and 11 percent by 2025. The resulting occupancy for a two berth facility is shown in Figure 10.2-H. This suggests that the single berth will be adequate up to 2017-2019 and beyond that the two berths will be required.

17. In 2009, the average amount of general cargo offloaded per call was only 1,800 tons and a majority was offloaded directly to trucks.\textsuperscript{60} The average time in port was about 6 days. This implies an average handling rate of only about 300 tons per day; however, much of this is thought to be idle

\textsuperscript{59} Formerly Patricks which was purchased by Toll, which also controls PDL Toll.

\textsuperscript{60} There is also petroleum imports delivered in small tankers that offload at the petroleum berth near the main wharf. In 2009, there were 27 calls and typical berth utilization was 30 hours per month.
time. Therefore, the average berth utilization of about 1.1 berths can be reduced substantially. Once a new container terminal is constructed, then the three berth facility will provide sufficient capacity for breakbulk cargoes for the foreseeable future, although the landside access to the port will become increasingly congested.

18. The allocation of yard space is managed by the port and the stevedores. The ship agent informs the port of the arrival of the vessel one week in advance. Prior to the vessel’s arrival, the agent informs them of the boxes to be transferred, and the port assigns an area for the boxes to be stored in. The storage yard has no marked areas or designated ground slots. The stevedoring companies assume responsibility for stacking the inbound boxes, keeping track of their location, and subsequently loading them onto trailers for transfer to their destination. They are also responsible for block stacking outbound containers, most of which are empties delivered to the port by the ship agent 24-48 hours prior to the arrival of the vessel.

19. The projection of demand for the yard is computed assuming that the average dwell time for boxes from the time they are delivered to the yard to the time they exit the port will decline from 3 to 2.5 days by 2020 and then to 2.2 days by 2025. At the same time, it is assumed that all of the 40’ boxes will be delivered direct to the ODCY. For a maximum yard capacity of 1000 TEU, the average occupancy remains below 50 percent until 2017-2018 and below the acceptable operating level of 70 percent through 2020 as shown in Figure 10.2-I. This suggests that the maximum yard capacity should exceed 500 TEU by 2014 and 750 TEU by 2017-2018 and that the latest a new terminal can be introduced would be 2022-2023. However, the maximum amount transferred per vessel is expected to exceed 750 TEU by 2015 and 900 TEU by 2018. Thus, the maximum yard should be increased to 1000 TEU by the end of 2017.

20. The movement of the container from the port to their inland destination is arranged by the consignee or shipping agent. Side-loaders are used for the heavier boxes and for consignees that lack container-handling equipment. Chassis are used to deliver lighter boxes and to bring empties to the port. For multiple container movements, transfers are sometimes done at night to avoid the traffic. The government is currently considering a ban on truck operations during daylight hours but this would create additional problems since most consignees are not equipped to receive shipments after working hours. In the future, as the port traffic increases and congestion on the urban streets grows, it will be necessary to introduce a strategy which allows for most of the containers to be moved in and out of the port during non-peak hours.

Ferry Service

21. The ferry is Nakormah, and it provides a twice weekly service to Oecussi and a weekly service to the island of Atauro. Although this appears adequate to meet projected demand, there is a problem when the vessel has to go in for its annual survey. There are on-going discussions with the Government of Germany regarding the procurement of the second ferry.

22. The vessel is a small interisland ferry with capacity of about 300 passengers and 170 tonnes of freight, including up to 21 vehicles. It is the main transport link between Oecussi and the rest of
the country, providing a substitute to the difficult land-crossing. The passenger tariff is subsidized at $4.5 one way but the rate for cars is not. The charge of $175 for transporting a vehicle between Dili and Oecussi is meant to compete with the cost for road transport, which incurs a $45 transit fee and $30 visa fee for the driver. The ferry is unloaded to the east of the wharf. Both passengers and cargo must traverse the container storage area to exit the port.

Increasing Storage Capacity

23. From an operational perspective, the configuration of the port is a nightmare. It is only through the ingenuity of the stevedoring companies that it has been able to function as well as it has. However, even a modest rate of growth in traffic will create congestion unless there are radical changes in the configuration of the facility, specifically in the layout of the storage area. While there has been discussion of establishing a new port, there has been no serious planning, and the availability of suitable sites is limited. It is not practical to expect that a new port can be planned and built within the next decade. Given the cost of developing a greenfield port and the lack of road infrastructure, the volume of cargo is not sufficient to justify such an expense.

24. In order to make optimum use of the yard, it should be limited to storing 20’ containers. The maximum dwell time for inbound boxes would be 3 days during which the boxes would either be cleared or would be transferred to the ODCYs. The yard could be divided into five sectors as shown in Figure 10.2-J. Sections A and B would be for storage of 20’ inbound containers. These would be block-stacked four high under RTGs (height one over four and width five plus one). Area A would have parallel stacks 10 containers long while Area B would have a single stack 12 containers long. The maximum capacity would be 640 TEU. Area D would be used for outbound containers, most of which would be empties, block-stacked four high under an RTG. The two parallel stacks would be 10 containers long for a capacity of 400 TEU.

25. The remaining two areas in the terminal would be used for inspecting containers (Area E) and for ferry operations (Area F). The inspection area would be positioned so that trucks exiting the terminal would pass through the scanner. If the decision were made to perform a physical inspection then the truck would make a left turn into the inspection area where a covered unloading dock would be used.

26. The Ferry options would take place at the new ferry terminal, which is currently not operational because of problems with the original design. During the transition period, breakbulk cargo operations would continue to be performed and part of Area A would be used for storing some of this cargo but most would be handled direct from the vessel to the inland warehouse.

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61 Although frequent mention is made of a plan for a port at Tibar, the only planning is an architect rendering prepared for promotional purposes by a private firm.

62 40’ containers require wider turning radiuses for the yard trailers. For a tractor with a 40’ trailer, the overall length is approximately 17 ½ meters. The turning radius is about 13 meters and the minimum turning area is about 35 meters by 31 meters. For a truck with a 20’ trailer and overall length of about 12 meters, the turning radius is about 9 meters. The minimum turning area is 24 meters by 21 ½ meters.
Figure 10.2-J: Proposed Storage Yard Set-Up
Tariffs

27. The current freight rates for these services are approximately A$1200 per TEU from Darwin, US$800 from Surabaya and US$1200 from Singapore. The latter has dropped as a result of the competition between Meratus and Crocodile. These rates include the port handling charge in Dili, although there is discussion of transferring this charge to a THC.

28. The principal port charges are wharfage, port handling, and storage. These are set out in the port tariff except for the port handling which is negotiated with the stevedores. The port collects the wharfage from the ship agent who then collects it from the shippers and consignees. The stevedoring company collects port handling charges from the shippers and consignees. Port storage is collected directly by the port from the consignee. There is no charge to the shipper since outbound boxes do not stay in the port longer than the free time. For import containers, the free time is 5 days after which a uniform charge of $25 per TEU is levied. For imported vehicles the charge is the same but the free time is only 3 days.

29. The port earns relatively little from storage since most boxes are removed from the port within 3 days. The total income generated from the approximately 300 thousand tons of cargo handled annually is only about $1.5 million. The port handling charge is currently about $70/TEU, although discounted rates are offered. The outbound cargo is transported from the shipping line depots to the port by the shipping agent. They are delivered to the port using a shuttle operation generally during nighttime. The cost for the empty shuttle is about $20 per TEU. The inbound boxes are delivered to their destinations in Dili by the stevedoring companies or other transporters determined by the consignee. The charge for delivery to a destination in Dili using a side loader is about $85/TEU, but much lower rates are charged when a chassis is used. For the occasional container moved to an inland destination, the charge is based on distance and generally involves a move to an intermediate storage facility. At present, there is only one company willing to transport containers to inland destinations because of the difficult road conditions.
ANNEX 10.3: National Directorate of Customs

Performance

1. The efficiency and effectiveness of customs is a critical component of any country’s efforts to facilitate trade. However, it assumes greater importance in Timor-Leste because of limitations on the country’s primary international gateway, the Port of Dili. Unlike many other developing countries, customs revenues represent a relatively small proportion of government revenues. Therefore, there has been less emphasis on introducing intrusive and redundant procedures in order to maximize the revenues from duties and taxes. Although the annual budget contains an item for customs revenues, there are no specific revenue targets for customs. On the other hand, there is an emphasis on security that has led to more stringent procedures than might otherwise be justified.

2. The reduction of duties and taxes as well as the introduction of single rates, 2½ percent for duties and 2½ percent for sales tax, has removed much of the incentive for misrepresentation in the declaration of imports. Also, there is no VAT and the excise is limited to about 10 commonly restricted items, e.g. tobacco and alcohol. At present the typical time for clearance of imports is quite reasonable 1-2 days unless there is a requirement for physical inspection in which case the time is normally 3 days. This results less from efficiency than from a lack of rigor, but the benefits to the country are positive given the limitations on port capacity.

Process

3. The sequence for processing declaration is in the process of transition to an electronic system with risk management. The ASYCUDA system has been introduced to automate the processing of documents, but the lack of trained staff and reliable communications has limited the extent to which the system can be utilized. At present only three major consignees, SDV, DHL, and the UN, can submit declarations electronically from their offices. About 20 other companies have software with which to prepare declarations that can be submitted as CDs at the customs offices. The remaining consignees must lodge their documents at the customs offices and input the information directly into the ASYCUDA system.

4. Declarations are submitted by customs brokers. There are about 72 companies that are designated by customs as Clearing and Forwarding Agents, although relatively few handle most of the shipments. These companies must have at least one certified broker on their staff. The brokers are responsible for submitting the declaration including determining the commodity code and computing the duties and taxes. For all consignees receiving goods at the Port of Dili, except the three mentioned above, the broker presents a folder with a preliminary copy of the declaration and supporting documents (e.g. Bill of Lading, Invoice, Packing List) to a separate customs office. These are checked for discrepancies or lack of original supporting documents. If problems are found, the broker must make the corrections and resubmit the folder at a later time. At present there is a relatively high rejection rate, which effectively adds a day to the clearance process. Since the customs officers are not trained in classification and valuation procedures, it appears that the high rate of rejection is due to errors on the part of both parties to the transaction.

5. This initial review of documents can begin at any time; however, a recent regulation requires the original bill of lading be included. This is usually not a problem since the shipper sends the B/L by courier. Once the document has passed this hurdle and the vessel manifest has been entered into

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63 Customs contributes about 1/3 to tax revenues, but this is small compared to petroleum revenues.
64 This includes the usual caveat that there are no problems with the cargo documentation.
65 Timor-Leste has the usual problem of a large number of inexperienced freight forwarders who prepare incorrect declaration, but this appears to be more a result of inexperience than malfeasance.
the ASYCUDA system, then the declaration can be lodged with customs. Although customs lacks the capacity to receive electronic manifests, this process of entering a manual copy does not usually delay the clearance process.

6. In order to lodge the declaration, the broker proceeds to the ‘long room,’ enters the information into the ASYCUDA system and prints out three hard copies. After this is completed and the cargo has arrived in port, then the broker submits a folder with the copies of the declaration and the supporting documents to a customs officer for review. This last step is required for all declarations including those submitted by SDV, DHL, and the UN. After this last review, a determination is made as to the level of inspection required. This decision, which is initially made by the ASYCUDA system but often overridden by the customs officer, can take up to a day. In the end, the cargo is assigned a clearance channel. There are the four common channels:

- green for clearance based on documents;
- yellow for clearance after receiving additional documents;
- blue for x-ray scanning; and
- red for physical inspection.

7. If the shipment is assigned to the green channel, the consignee pays the duties and taxes at the bank located at the customs facility and the goods are then cleared. The same applies to the yellow channel, although there may be a delay in producing the additional documents required. The payment is cash or check if drawn on the same bank. If the cargo has to be inspected, then the payment is made after the inspection. The green and yellow channels account for 70 - 75 percent of the shipments cleared through the port.

8. Although the blue channel is not yet fully operational, the procedure when implemented will require that the container be moved from the container yard to the scanner. If no anomalies are observed, then the duties and taxes will be paid and the cargo cleared. If there are anomalies or the shipment has been assigned to the red channel, then the container is moved to the inspection area. There a customs officer inspects the contents of the container. The sampling rate is at the discretion of the officer and often involves a cursory check, e.g. opening the door of the container, looking at the packing, and closing the door. After the inspection is complete, the container is returned to the storage area; the duties and taxes are paid; the cargo is cleared; and the pickup is arranged. Although the actual inspection requires relatively little time, the process of moving the container to the inspection area and back to the storage area and then arranging pickup adds 1-2 days to the clearance process.

9. The current inspection procedures leave much to be desired. The port lacks a designated facility for inspection. Instead containers are placed on the ground in the eastern end of the port near a trailer used by the inspectors. After inspection, the container is placed on a trailer and moved through the scanner and out of the port. This arrangement is used to build up experience in using the scanner but, surprisingly, it has detected anomalies missed in physical inspections.

10. The time required to clear cargo is greatest for vehicles and for cargo that is excluded from paying taxes, since both require additional documentation. For the former, the approval must be signed by representatives of the MTCI, Land Transport, and Customs. The exclusion from duties is supposed to apply to cargoes imported by the UN and other aid agencies and both project and humanitarian cargo imported by government, as well as for imports related to private investment (see Chapter 3 for details). The approval must be signed by the Minister of Finance, but because of delays, the Director of Customs is now allowed to sign for the Minister.

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66 This is a common requirement but in the case of ASYCUDA a necessary precondition to processing declarations.  
67 Often in return for a gratuity.
Challenges

11. Customs is in the process of upgrading its procedures with the support of TA funded in part by the World Bank. The challenges are significant because the NDGC is a young organization and lacks the experience and procedures of a more established organization.

12. Customs is attempting to introduce a modern risk management system. However, it lacks the technical expertise to develop risk profiles and the experience for intelligence gathering. It has yet to introduce an Authorized Economic Operator (AEO) program, in part because of the lack of a capacity for performing post clearance audits. Since the five largest shippers account for about half of all shipments and are willing to cooperate in a program that provides expedited clearance, it is important to introduce this program even if enforcement is limited to random inspections. This would reduce the demand on the customs officers and allow a more effective use of scanning and physical inspection system for the remaining shipments. The challenge is to introduce procedures that are clear but not rigid in order to limit gratuitous inspections. The current informal sampling procedures implemented by the individual customs officers needs to be replaced with more transparent and sophisticated procedures.

13. The greatest challenge for customs is in the area of human resources. Despite significant overstaffing (166 permanent and 72 temporary personnel), there is a lack of trained personnel. Very few of the cadre were in customs prior to Independence. In addition, there was a setback to efforts to organize customs when the customs records and procedural manuals were destroyed when the customs house was burned down in 2006. There have been a number of efforts to provide training, but lack of experience with traditional procedures or knowledge of current procedures continues to hamper the effectiveness of customs. One area requiring immediate attention is the techniques used for assessing valuation and classification. Another is the procedures used for inspecting cargo. Although there has been considerable training provided both locally and outside the country, the skills of the staff remain below what is required. One of the challenges is to reduce the size of the cadre actively involved in cargo clearance activities and to focus training efforts on this core group.

14. Lack of discipline is also a problem. This is most visible in the failure to have customs officials available during the scheduled operating hours. Contributing to this is the cramped facilities allocated by the port for customs operations. This will be addressed with the planned move of the customs long room and supporting offices from the cramped offices within the port to the new headquarters across the street from the port.

15. Another challenge is the poor condition of the telecommunications services. The lack of bandwidth prevents customs from:

- Developing reliable connections with its border facilities and with the customs brokers;
- receiving and processing electronic manifests, thereby delaying the clearance of goods delivered from Darwin; and
- introducing internet-based services.

16. It also reduces the reliability of the services provided by the customs officials operating in the Port of Dili. The on-going national connectivity project and the proposal to allow competition in the

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68 The 2004 Customs Law calls for 100 percent inspection. It is unclear if this refers to the percentage of containers to be inspected or the sampling rate of the containers physically inspected. Neither is implemented nor should they be.

69 In order to make the best use of the scanner, it is necessary to regularly calibrate the unit. Due to lack of technical skills, it may be necessary for Customs to contract out this service.

70 There has been some success with courses conducted in Bahasa by Malaysian customs but there is a need for a curriculum which focuses on the problems confronting Timor-Leste.
provision of cellular phone services is expected to address this problem, but it is unclear what priority will be given to applications that affect customs.

**Scanning**

17. The x-ray scanner recently introduced at the port and airport is expected to play an important role in expediting the inspection of cargoes. However, attempts to use the scanners so far have been hampered by difficulties in integrating their use into the inspection process. The role of the scanner is limited by its ability to identify individual items in a container. They work well in identifying anomalies for containers with homogeneous cargo, about 40 percent of the port traffic, but are of limited use for containers with mixed consignments or non-homogeneous cargoes. They are particularly useful for large shipments of similar cargo in multiple containers. Although the scanner nominally has capacity to inspect all of the import containers, this is neither practical nor helpful. It is important that a strategy for effective use of the scanners be developed. This would include regular calibration of the units and comparisons of the results of physical inspections with the results from the scanning.

18. Another issue to be addressed is the location of the scanner in the port and the traffic pattern used for inspecting containers. The latter is important because of the limited size of the port backup area. The scanner is a Smith Heinman CAB 2000. Although referred to as a mobile scanner, it is a fixed position unit. The containers must be placed on a truck and then driven past the scanner. Once the container has passed through the scanner, it would either complete the clearance procedures and exit the port or proceed to the area designated for physical inspection. Since the container is already on a chassis, it makes little sense to return it to the storage area or to remove it from the chassis for inspection purposes. Therefore the scanner and inspection area should be connected. Also the inspection area should include a loading dock so that the removal of cargo from the container can be done efficiently. An arrangement for doing this is shown in Figure 10.3-A. The area required is 5 x 4, where the units are truck length. Given the limited dimensions of the port, this facility can be designed for trailers with 20’ chassis containers but would present a problem with 40’ chassis.

![Figure 10.3-A: Inspection Area – Scanner, Loading Dock, Port Gates](image)

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71 Eventually scanners will also be introduced at the six border crossings.

72 Except when looking for a specific contraband, e.g. weapons
ANNEX 10.4: Bonded Storage

1. Most of the imports clear customs prior to leaving the port. However, some of the large importers use bonded storage either to speed the movement of sensitive cargo out of the port or to store cargo that is imported for sale at duty-free outlets. Bonded storage is also used for CFS operations. The port does not have the facilities to destuff LCL containers and clear individual consignments. To meet this demand, Perkins shipping operates a CFS where cargo can be deconsolidated from the container and loaded directly on trucks rather than being first unloaded and stored in a warehouse.

2. Dili has 5 bonded warehouses, two of which are equipped with scanners. The containers are transferred to these warehouses. Customs does a periodic inventory of the contents of the bonded storage. There are also off-dock storage facilities used by transporters as intermediate points for delivery of goods but not bonded. The introduction of bonded off-dock yards to speed the removal of containers from the port has been discussed but so far there has been no need for this service since customs have been able to clear cargo quickly. The situation is expected to change as the volume of traffic increases and customs procedures improve. If bonded ODCYs are established to receive shiploads, the transfer would have to be done during the nighttime. Currently, a truck can do 2-3 trips during an evening shuttle operation. This could be increased to 4 but would still require 12-15 trucks to transfer a typical shipload of inbound containers (2 TEU per truck). This space required for this operation would be 2-3 hectares with additional space if the area is to be allocated to the different shipping lines or stevedoring companies. This facility should be located so as to have uncongested road access to the terminal for nighttime movements. This transfer would be done using bonded trucks and documented using the ships manifest (rather than individual bills of lading). This would require that the containers be scanned as they leave the port.

73 A low density top loader/reach-stacker operation with storage height 3 high could accommodate 500 TEU per hectare. This is about 5 shiploads with current traffic. A 1.5 hectare site with a 1.0 hectare storage yard would allow an average dwell time of up to one week. Within ten years, the size of shiploads and traffic are expected to double and total area would have to be increased to 3 hectares.

74 It would not be necessary to review the scans at the time the containers leave the port but rather these would be stored and reviewed at the time the containers are cleared from the ODCY.

Table 10.4-A: Service-related Strategies in National Development Plan for Port Sector

- Establishment of the port administration as a semi-autonomous self-financing authority; definition of port limits and regulatory controls therein; a code of maritime law.
- Review and revise the port tariff structure.
- Tender, on a competitive basis, an operational concession for providing, as a public service, a tug for the port of Dili to assist in the maneuvering of ships entering and leaving the port, for fire fighting, and marine rescue services.
- Develop, as a first phase, basic port services at the ports of Suai and Oecussi; as a second phase, extend basic port services to the ports of Caravel and Com. The development of regional ports will be linked to the development of the maritime coastal transport between national ports.
- Complete, with current Japanese bilateral and multilateral assistance, the current projects with the aim of complete rehabilitation of the port installations at the port of Dili.
ANNEX 10.5: Airports and Air Cargo

1. The Dili airport is a low volume airport receiving only a few flights per day. Current traffic includes a daily flight to Denpassar (B-737), a flight to Darwin five times per week (Embraer 170), and a twice weekly flight to Singapore (Airbus 319). The airport is also used by the UN and the military. The length of the runway, 1850 meters, limits the size of the commercial aircraft to B-737-300 and equivalent. The runway is only 30 meters wide and has no parallel taxiway. Options for lengthening the runway to accommodate larger aircraft are limited to an additional 50 meters since it is bounded on the east by a riverbed and on the west by the seafront. However, this will allow the introduction of B-737-400 and similar aircraft. The runway has problems with rutting and pooling of water and requires resurfacing.

2. The airport does not have ILS but is equipped with Visual Approach Slope Indicator. Operations are controlled from the tower during daylight, and there is Pilot Controlled Lighting (for approach and runway lighting) to allow nighttime operations, if necessary. Ground handling is provided by two companies SDV serving AirNorth and STAT serving Merpati and AirSilk.

3. Airfreight operations are limited by the size of the aircraft. The goods are carried as belly cargo. Capacity is limited to 1-3 tons by the size of the aircraft landing at Dili airport. These range from the Embraer E-170 to Boeing 737/300. The cargo load factors are relatively low. The majority of the air cargo is mail, courier shipments, and unaccompanied luggage. There is some resupply of spare parts from Singapore.

4. While capacity is limited by the size of the aircraft and the frequency of flights, it is unlikely to limit the growth in airfreight. Current load factors for flights to/from Singapore and Denpassar are less than 20 percent. Potential volumes are not sufficient to justify freighter operations and only the twice-weekly flights to Singapore offer direct international shipments.

5. The ability to process air cargo is limited. Customs is not equipped to receive the Master Bill electronically, and the newly installed x-ray scanner is not calibrated on a regular basis. While the air cargo volumes are small, suitable storage facilities need to be developed at the airport and the x-ray scanning unit needs to be integrated into the inspection process in the short term.
STATISTICAL APPENDIX
## Timor-Leste BOP 2004-2008

### Current Account (including international assistance)

<table>
<thead>
<tr>
<th>Year</th>
<th>Trade Balance</th>
<th>Exports of goods</th>
<th>Imports of goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>-115</td>
<td>8</td>
<td>122</td>
</tr>
<tr>
<td>2005</td>
<td>-115</td>
<td>8</td>
<td>112</td>
</tr>
<tr>
<td>2006</td>
<td>-104</td>
<td>9</td>
<td>101</td>
</tr>
<tr>
<td>2007</td>
<td>-91</td>
<td>9</td>
<td>101</td>
</tr>
<tr>
<td>2008</td>
<td>-169</td>
<td>14</td>
<td>176</td>
</tr>
</tbody>
</table>

### Trade Balance

-115, -104, -91, -169, -339 (in millions of U.S. dollars)

### Services (net)

-187, -131, -199, -263, -407

### Income (net)

151, 363, 645, 1,331, 2,415

### Current Transfers (net)

215, 133, 185, 278, 351

### Capital and Financial Accounts

57, -289, -609, -1,031, -2,041

### Overall Balance

121, -29, -70, 147, -20

### Changes in foreign assets (increase -)

-121, 29, 70, -147, 20

### Non-oil GDP at current prices

309, 332, 327, 398, 499

### Public foreign assets (end-period)

135, 524, 1,096, 2,316, 4,407

### Source

IMF 2009, Table 5, 29.

/a: With respect to merchandise import figures for years 2006 and 2007, there are differences between Timor-Leste’s recorded customs data on imports and the IMF’s BOP import figures for the same years. This is because for some months of 2006 and 2007 import figures were not entered in the Customs data base. The IMF’s BOP data provide estimates of merchandise imports for 2006 and 2007.

/b: These merchandise export figures exclude proceeds of oil and gas exports from the Bayu Udan field. This is due to the lack of detailed production/export data on the oil/gas sector.

<table>
<thead>
<tr>
<th>Source Countries:</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Average Share (in %) /1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>17.6</td>
<td>13.9</td>
<td>na</td>
<td>na</td>
<td>13.8</td>
<td>15.1</td>
</tr>
<tr>
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<td>1.6</td>
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<td>na</td>
<td>2.1</td>
<td>1.6</td>
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<tr>
<td>Indonesia</td>
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<td>47.0</td>
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<td>na</td>
<td>42.5</td>
<td>47.4</td>
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<tr>
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<td>1.4</td>
</tr>
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<td>100.0</td>
<td></td>
<td></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Memo Item:

ASEAN-4’s share: /2 71.9 67.1 68.5 69.2


/2: Here only 4 of ASEAN’s 10 members are included in the calculations. The actual share of ASEAN in Timor-Leste’s imports exceeds 70% when other members are taken into account.