

Economic growth for human development

Progress in human development in East Timor will also mean setting out on a new economic path, making agriculture more productive and developing other opportunities, including tourism and oil and gas. But economic development will have to focus firmly on bringing clear benefits to the majority of East Timor's people.

East Timor is a poor country, with a per capita GDP in 2001 of only \$478 and a fragile economic base. Agriculture offers low earnings to the mass of the population, while a growing service economy is appearing in the cities. As figure 5.1 shows however, the largest sector by value is public administration which accounts for more than one-quarter of GDP.

Today's economy has to a large extent been shaped by both Portuguese and Indonesian administrations (box 5.1). During the Portuguese era income came chiefly from plantations and the economy as a whole stagnated. During the Indonesian period however, East Timor's economy, like that of other provinces of Indonesia, underwent a steady structural change—relying less on agriculture and expanding into urban-based services. As a result, the contribution of agriculture declined from around 60% in 1981 to 42% in 1986, 37% in 1990, and to 25% in 1998.

Most of this change was the result of government activity and investment. For more than two decades, government expenditure accounted for around 20% of GDP, and construction for another 20%. Trade, hotels, and restaurants also expanded but manufacturing and mining remained limited.

This change was accompanied by rapid economic growth. The early period of Indonesian rule—1975-82—was a period of consolidation and stabilization, but thereafter the economy started to grow at a respectable rate. Over the period 1983-90, real annual GDP growth was 7.8% and over the period 1990-96 the economy expanded annually by around 10%. Then in 1997, as a

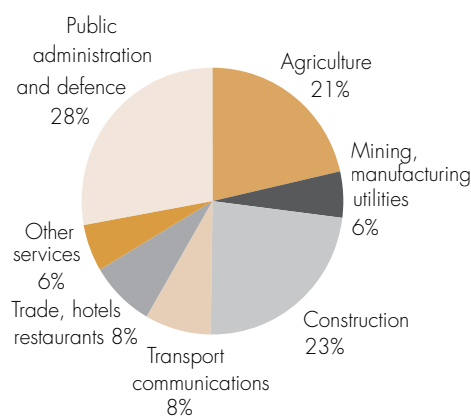
result of the Asian crisis, growth slowed to 4% and finally in 1998 the economy shrank by 2%. Much of this growth was stimulated by direct grants from Jakarta, which in the mid-1990s were worth around \$150 million per year. The Indonesian government was spending much more than it gained locally in revenue—the fiscal deficit in 1997 for East Timor has been estimated at around two-thirds of GDP.

While the government invested, the private sector, foreign or domestic, was largely absent. Scarcely any foreign investors entered the province. And even local entrepreneurs were hard to find: by mid-1999 the Board of Investment had registered only 10 projects from domestic investors.

Despite its reliance on Indonesian government expenditure, East Timor's economy grew marginally faster than that of Indonesia as a whole; over the period

Figure 5.1

GDP by sector



Source: See annex table 8

1983-97, average growth was 5.6% per year, compared with 5.1% for Indonesia. Unfortunately, many of the fruits went to non-East Timorese. Although local people did benefit from roads built for the military, and from public investment in health and education, the major beneficiaries were Indonesians. These included civil servants in the higher echelons of government and members of the military, almost all of whom came from outside East Timor. Most of the building contractors also came from outside the province.

The other main beneficiaries were migrants who had arrived from the eastern parts of Indonesia, the *pendatang*. Many of them were related to civilian and military officials, or paid bribes to them, and eventually they dominated trade and other services. Meanwhile the East Timorese, especially the educated, had increasing difficulty in finding work. Although the statistics for unemployment are suspect, estimates suggest that in 1998 open unemployment was about 6% and underemployment around 11%. This period also saw the establishment of a two-speed economy. For although agriculture continued to employ three-quarters of the workforce, its share of GDP shrank while urban services expanded.

By 1996 East Timor was one of the poorest provinces of Indonesia. Its per capita GDP, at \$429, was less than half of the Indonesian average (\$1,153). Its levels of poverty were twice as high, with around 32% of households living in income poverty. Social indicators were also much worse: life expectancy at 54 years was ten years below the Indonesian average, and its infant mortality rate of 100 per thousand live births was among the highest in the world.

Economic devastation in 1999

Poor as the people of East Timor were, they were to be further impoverished by the outbreak of violence that began on August 30, 1999. The ensuing destruction caused enormous human suffering and forced more than half the population to leave their homes. But the violence also cut deep into the country's economic and social infrastructure.

- *Social infrastructure*—Around 80% of schools and clinics were completely or partially destroyed.

- *Agriculture*—This was partially disrupted and a significant proportion of the livestock was lost. According to the Suco Survey households lost 58% of goats, 48% of cattle, and 47% of pigs.
- *Energy*—Dili lost around one-third of its electricity-generating capacity. The district capitals lost even more—some at least 50% and some 90%.
- *Communications*—Most of the 12,000 telephone landlines were damaged, markets collapsed and there were severe shortages of transport.
- *Administration*—Government archives and other documentation were lost.
- *Banking*—The regional office of the central bank, along with those of other banks, were looted or destroyed. All transactions shifted to a cash basis.

Just as serious for the economy, however, was the loss of trained people. Of the civil service of around 28,000, around one-quarter were non-Timorese and these filled the top positions in the administration, including judges, prosecutors and police. As a result of this destruction, the economy shrank dramatically—between 1998 and 1999 real GDP fell by 33%. Inflation rocketed: between August and October 1999

Box 5.1	
Periods of economic development	
<i>Portuguese Administration 1900-60</i>	Agricultural development: Coffee plantations Founding of the agricultural company, SAPT Introduction of new seeds
<i>Portuguese Administration 1960-75</i>	Plano de Fomento (Five-year Development Plan) Introduction of new plants (cinnamon, cacao and other fruits) Infrastructure, agriculture, education, and health.
<i>Indonesian war economy 1975-80</i>	Destruction, rehabilitation, consolidation, and restructuring
<i>Indonesian-led development 1980-99</i>	Short-term development plan Five-year development plan Priority given to agriculture, education, health, public sector, transportation and communications and rural development.
<i>UNTAET 2000-02</i>	Reconstruction and rehabilitation. The creation of a bubble economy

the consumer price index for the poor in Dili rose by 200% and the price of manufactured goods rose by over 500%.

Economic revival under UNTAET

In September 1999, the first multinational force, INTERFET, arrived to restore peace and security. Meanwhile a number of East Timorese organizations and communities mobilized quickly to begin the process of reconstruction. These included the National Council for Timorese Resistance (CNRT), the Catholic Church and a number of local NGOs.

The international community was also coordinating its support. This included:

- *The United Nations Transitional Administration in East Timor (UNTAET)*—On October 25, 1999 the UN Security Council established UNTAET to administer the territory and exercise legislative and executive authority during the transition period. UNTAET was to have a budget of \$700 million per year from the UN assessed contribution budget.
- *Joint Assessment Mission*—In October/November 1999 the World Bank led a mission to identify reconstruction objectives and estimate the external financing needs.
- *Trust Fund for East Timor (TFET)*—On December 9 the World Bank established the TFET to assist East Timor in the transition to independence. The TFET has been administered by the World Bank.
- *International Donors' Conference*—On December 17, 1999 in Tokyo, donors from more than 50 countries and international agencies pledged a total of \$523 million for three years to rebuild East Timor. They agreed to donate to TFET for reconstruction projects in all sectors, and also to contribute to a consolidated fund for East Timor (CFET), administered by UNTAET, to pay for the administrative costs of government and for projects to develop the capacity of the East Timorese.

Despite numerous obstacles, donors have managed to achieve reasonable levels of disbursement and have established a number of aid institutions. To date, the largest pledges have come mainly from five countries: Japan (\$129 million), the US (\$98 million), Portugal (\$91 million), the European Union (\$68 million), and Australia (\$44

million). The greatest lag between commitments and disbursements has been for infrastructure, while disbursements for capacity building and technical assistance have been more in line with commitments.

Macroeconomic and fiscal outlook

This external support and the restoration of law and order has helped stimulate an economic revival. The reconstruction effort was particularly intense during 2000/01 and 2001/02 and total investment is projected to average about 50% of GDP during these years. Growth was 15% in 2000, and 18% in 2001. Projected growth for 2001/02 is also strong at 15%, though it will be much slower thereafter.

Although there has been a recovery across most sectors the more recent surge in growth has come in Dili from housing reconstruction and the expansion of services catering to international personnel. But

Table 5.1

Budget and external financing estimates, 2002-06 (\$ millions)

	2002-03	2003-04	2004-05	3-year total	2005-06
<i>On-budget forward projections</i>					
Recurrent Expenditure	67	82	85	235	90
Capital & Development ¹	30	30	30	75-105	32
Of which: CFET Capital (Administration & Justice)	13	18	18	48	19
Sectoral Capital & Development	17	12	12	27-57	13
Total on-budget expenditure ¹	97	112	115	310-340	122
Domestic Revenues	34	51	71	156	185
External public sector financing requirement ¹	63	61	44	154-184	
<i>Forward estimates for bilateral projects:</i>					
Anticipated (including existing projects) ¹	50	35	25	100-120	10
Additional HR needs: 200 posts ²	10	10	10	30	10
Capital & development costs of transition	10	5	5	20	-
Total off-budget financing estimate ¹	70	50	40	150-170	20
Total external financing estimate ¹	133	131	84	150-170	20
Memo item: TFET disbursement estimates	51	13	0	304-354	0

Notes: 1. Single figures represent the mid point of possible annual ranges. 2. UNDP preliminary estimate USD 24 million per annum. However, the additional costs are likely to be significantly less depending on the extent to which the positions will be filled through existing bilateral Technical Assistance, UNVs or other volunteer programmes. Discrepancies in totals are due to rounding.

Source: UNTAET/ETTA/World Bank (2001).

in December 2001. This shows that in 2002/03 out of a total budget of \$100 million, only \$34 million can be met from domestic revenue collection, leaving \$64 million to be met from external aid—though this is supplemented by further bilateral aid flows which are considered ‘off-budget’ financing. Projections for further years anticipate that domestic tax revenues will increase and by 2005/06 should be generating a budget surplus.

This change in fortune by the middle of the decade is largely the result of anticipating substantial oil revenues—sufficient to cover the CFET expenditures and also for a modest capital investment programme to succeed that of the TFET. However, the longer-term objective must be to depend more on the private sector for non-oil revenues. This should be able to permit recurrent expenditure to rise 3% annually during the 20 years of oil revenues as well as to allow sufficient savings to be made from the oil income to fund future expenditures.

Planning for the future

East Timor needs to establish a planning framework for the design and implemen-

tation of development policies. The objectives include:

- To strengthen and diversify the economic base;
- To promote more equitable distribution of the benefits of development;
- To widen the opportunities for productive social and economic activity;
- To increase economic self reliance;
- To use natural resources sustainably

Moving East Timor’s economy toward its optimal growth path will require substantial investment—in infrastructure, in expanding the capacity of the productive sectors of the economy, in raising the institutional and administrative capabilities of both public and private sectors, and in the maintenance of sound and flexible economic policies. It will also require a clear and stable regulatory environment. But above all it will need consistent investment in people—in their health, education and skills.

Rural development

For the foreseeable future agriculture will continue to employ almost three-quarters

Agriculture must be at the core of any human development strategy

of the workforce. According to the 2001 Suco Survey, agriculture is the main source of income in 94% of sucos, so although it may not be a dynamo of economic growth—expanding at only around 6% per year—productive agriculture must still be at the core of any human development strategy. The main efforts should go into helping poor farmers improve yields of their staple crops (table 5.2), but there is also considerable scope for developing important plantation crops, particularly coffee, cocoa, and bananas

East Timor has broadly three types of subsistence system:

- *Upland corn growers*—The majority of the population of East Timor have always lived in the hills, primarily growing corn, along with cassava, rice and sweet potato. Of the 120,000 corn-growing families, around one-third also have coffee trees from which they generate a cash income. A smaller number will also have access to a wetland paddy field. But the majority, probably up to 70,000 families, who are the poorest people, have little or no way of gaining a cash income. A brief profile of a typical family is given in box 5.2.
- *Wetland rice growers*—These, of whom there could be between 6,000 and 12,000 families, tend to have a more secure existence, primarily growing rice but also with a little corn so as to spread their risk. During the Indonesian era most also produced a surplus, but now the majority have reverted to subsistence mode, waiting to see how the market will develop and how much they will have to spend on inputs.
- *Coastal fishing families*—Probably around 10,000 families depend at least partly on

fishing, though most will also grow a staple crop along with some vegetables and fruit.

The majority of rural families are now in a very uncertain situation. The emergency food relief, seed-replication, and rapid-impact programmes have worked fairly well. And there have also been community-based projects for rural rehabilitation, including irrigation schemes and access roads. But the impact has been uneven and markets generally are not working efficiently. Farmers are unsure what services the government will provide, and what kind of market is likely to develop. Box 5.3 indicates a typical division of labour within the home.

Nevertheless thanks to favourable climatic conditions agriculture is projected to grow strongly. Coffee output is expected to be about 8,000 tonnes in 2000 and 2001, having recovered from less than 5,000 tonnes in 1997 and 1998. Rice and maize production could reach as much as 75% of the 1996/7 bumper levels.

Any plans for agricultural development also have to be seen as part of an overall strategy for rural development—taking into account the needs of rural people for better roads, water supplies and sanitation and micro finance. This means aiming more broadly to boost rural livelihoods. This will also require a style of development based on the existing strengths of rural communities and on empowering them to pursue the livelihood strategies that best fit their own capacities and circumstances. Such a strategy must be demand driven, based on local concerns and on community planning.

The first priority should be to enable the poorest communities to build food security and alleviate rural poverty—reducing their vulnerability to climatic and economic shocks. This means, for example, targeting more assistance at upland farmers, helping them to improve their farming practices, introduce naturally resistant cropping systems and diversify their crops. Much of this will also rely on extension and other services that will build the capacity of local communities in the production of food crops, forestry and animal husbandry.

Maize

To improve food security, one of the first priorities should be to improve the output of maize. Most of this is currently of tra-

Table 5.2
Food production, 1998

	Tons
Maize	58,931
Cassava	32,092
Rice	36,848
Sweet	11,989
Peanuts	4,669
Soybeans	690
Maize	58,931

Source: Annex table 9

ditional varieties with low yields—of 700 to 1,500 kilograms per hectare. Increasing output while providing security for farmers would depend, however, on exploring hybrid varieties that are tolerant of local conditions and that farmers can afford and use with some degree of security.

Rice

Rice yields are very low at 1.5 tons of grain paddy per hectare. Most farmers use primitive methods without fertilizers or pesticides. This means that East Timor has to import much of its rice needs—around 17,000 tons of rice were imported in 2000/01. With higher-yielding varieties of seed together with fertilizer and other essential inputs, it should be possible to obtain at least 3.5 tons per hectare and meet the domestic requirements. Presently, however East Timor lacks the necessary facilities for research and adaptive testing. Nor does it have the personnel. The small number of government agricultural staff have limited skills. This is clearly an area where external support is needed and proposals have been made to develop the necessary resources within the Ministry of Agriculture.

Livestock

During 1999, a significant proportion of livestock was lost so most farmers are only slowly replenishing their resources. Future possibilities for developing livestock include the raising of beef cattle on the Los Palos plateau in the east of the country. There should also be options for improving native silage using grasses developed in the northern territories of Australia.

Coffee

While the main priority will be to ensure the output of staple crops, it will also be important to maximize the potential of crops that generate cash incomes for farming households. Far and away the most important cash crop is coffee. This is a vital source of cash income as well as of foreign exchange. Even in the most difficult years the output has been remarkably resilient. In a good year East Timor has in the past produced annually about 10,000 tons green bean equivalent (table 5.3). This provides an income for around 40,000 households as well as seasonal employment for labourers and those involved in processing

and transport. Some is also grown on larger estates.

At 2001 prices this has been estimated as worth \$10 million on the international markets, of which the farmers themselves could expect to see around half—the equivalent of \$127 on average per coffee-farming household. Actual output in 1997 was only 5,000 tons. The 1999 violence, however, came after the harvest and therefore did not affect production. Output is expected to be around 8,000 tons in 2000 and 2001.

About one-fifth of East Timor's coffee is robusta while the rest is a high quality and sought-after arabica variety, *Hybrida da Timor*, which is organically grown in the upland areas in the centre of the country. This is a local hybrid of arabica and robusta, which has the great advantage of being resistant to local diseases and more tolerant of poor soil and drought. As with other crops, however, yields are low. Coffee is typically cultivated on overgrown plots with little pruning or mulching. Farmers often pick the unripe berries and process them not very efficiently since many do not have sufficient water for wet fermentation.

Marketing of the high-quality speciality coffees for export is organized through Cooperative Coffee Timor (CCT) which

Box 5.2

A typical subsistence corn-growing family

The typical subsistence, corn-growing family is likely to consist of around seven persons. They live near extended family in an aldeia on a home plot around which the woman of the family typically grows a range of vegetables. Depending on the locality and the soils, these may include sweet potato, squash, cassava, Irish potato, long beans, mung beans, pigeon pea, and a variety of greens. There are usually also fruit trees. At some distance from the home the man will have cultivated around half a hectare of corn, which may be interplanted with squash, cassava, sweet potato and beans. Average yield from the plot is likely to be 900kg of corn—indicating perhaps 130 kg per person.

None of this corn is sold, although a little bartering may take place. Dryland rice is of little significance—grown by a minority of families with poor yields. Cassava, taro and sago are valued because they can be eaten when corn and vegetable crops fail.

The number of livestock owned by the family is a good general indicator of wealth. The poorest of the poor families will have no livestock, or at best a few head of poultry. Poor families will generally have a few poultry and may have a pig. Those who are a little wealthier will have several pigs or goats. Moderately wealthy families will have several cattle or buffalo and very wealthy families will have many.

Historically all but the more wealthy upland rural families have always subsisted outside the monetary economy. Current expectations of the upland households with no coffee or livestock are low. They see no future other than subsistence. When asked about their hopes or expectations, most will only shrug their shoulders.

Some will say they want to see their children get an education. For the most part they find it hard to think about anything other than the daily grind of life and the ongoing battle for survival.

involves around 17,000 coffee-producing households. The CCT works with the US-based, and USAID-supported, National Cooperative Business Association (NCBA) which has a programme that helps with production, training, and extension services as well as the development of processing, transport and warehousing facilities.

Currently the world price of coffee is very low, however, and this is discouraging some growers from even picking their crops. East Timor can do nothing about the world price, but it can increase incomes by boosting quality, especially if this enable Timorese coffee to achieve international certification as organic produce.

This would involve not just replacing trees but also delivering more of the produce for centralized processing. Support for this kind of upgrading will probably have to rely on foreign investment in processing complemented with extension workers through the government and NGOs. Meanwhile some of the more marginal coffee producers might have to switch to other crops. Further investment in coffee and other plantation crops is, however, limited by doubts over land ownership with claims that date back to Portuguese rule.

Other cash crops

Given the low coffee price, farmers in East Timor should also consider other crops. These include Irish potato, onions and cab-

ages coconuts, cocoa and cashew nuts, as well as sandalwood. One promising option is vanilla, which fetches around \$130 per kilo on world markets. The NCBA has been paying \$18 per kilo which has encouraged more farmers to plant the crop.

Fisberies

East Timor has a large fishery potential with many valuable varieties, including tuna, skipjack, snapper and prawns. Around 10,000 families depend at least partly on fishing. Half live around Dili or on Ataúro Island. Potential fisheries output has been estimated at around 600,000 tones per year, though probably less than 1% of this is currently harvested. The most common form of vessel is a dugout canoe along with many other boats with outboard motors.

Future income from fisheries can be boosted by increasing investment in the national fishing capacity and by licensing foreign vessels. The main obstacle at present is the lack of internationally recognized fishing zones. This has created considerable uncertainty and also encouraged widespread irregular fishing that could be depleting important resources. One priority for the new government therefore will be to establish economic and fishing zones. This would enable the government to gain income from fishing licenses, of perhaps \$2 million per year, as well as an income for the East Timorese Navy from fines.

The Ministry of Agriculture and Fisheries has outlined a fishing strategy for East Timor which says that the fishing grounds will be about 33 times that of the past and that the annual catch could be worth between \$25 and \$35 million.

The fishing strategy must however consider such issues as sustainability and protecting the interests of traditional fishing communities. Government agencies, the fishing industry and local communities, will need to work closely together to find ways to increase capacity and productivity. Since local fishing communities do not yet have sufficient technical capacity for large-scale fishing operations using trawlers and netters the government will have to issue most of the licences to foreign operators.

Forestry

East Timor has in the past generated considerable income from forestry. But wide-

Box 5.3

Division of labour in a farming household

Food preparation, child care	<i>Women</i>
Building house etc	<i>Men</i>
Land preparation	<i>Men</i>
Planting of corn and of rice	<i>Primarily women</i>
Weeding	<i>Men, women and children</i>
Cutting rice and corn	<i>Women</i>
Carrying corn and rice	<i>Men</i>
Threshing	<i>Women</i>
Growing vegetables	<i>Women</i>
Selling vegetables and chickens	<i>Women</i>
Selling rice and cattle	<i>Men</i>
Firewood	<i>Men, women and children</i>
Tending cattle	<i>Men and children</i>
Tending Pigs	<i>Women and children</i>
Tending Goats	<i>Women and children</i>
Tending chickens	<i>Women and children</i>
Carrying water	<i>Women and children</i>

spread clearing of land for cultivation or for rearing livestock has reduced most of the former forest territory to scrub and grasslands. One estimate suggests that human activity has now shaped the vegetation of around 90% of the territory. Any future income from forestry, whether from sandalwood or other products would therefore have to be based on careful planting and management of forest areas.

Manufacturing

East Timor has relatively little manufacturing industry. In 1996, manufacturing accounted for only 3.5% of GDP, most of which was in small-scale activities—some 4,000 enterprises employed around 10,000 people. The enterprises that employed the most people in 1996 were those involved in weaving traditional cloth (tais) and furniture. However, the larger and more productive enterprises were those related to coffee processing and sandalwood. Even some of this manufacturing capacity was lost during 1999 when machinery was sent to Indonesia or burned.

The immediate potential for manufacturing is limited, given East Timor's shortage of skilled labour, relatively high local living costs and wages, and poor transport links. So far attempts to encourage large-scale investment have been unsuccessful and only a handful of enterprises in retail, construction and infrastructure-related businesses seem to be thriving. The best options for the future appear to be via foreign investment in textiles and footwear.

A strategy for human development

Table 5.3

Coffee in East Timor, 2001

Crop yield	10,000 tons green bean equivalent
International value (c.i.f.)	\$10.2 million
Farmgate cost of green beans	\$0.26/lb
Local transport and processing	\$0.02/lb
Domestic value (f.o.b.)	\$0.28/lb
Total payment to farmers	\$5.1 million
Total local transport and processing	\$1.2 million
Total domestic value	\$6.2 million
Coffee-farming families	40,000 families
Cash income per family	\$127

Source: Pomeroy, J. (2001)

One of the dangers of promoting the kind of market-based rapid economic growth that East Timor needs is that of widening inequalities—particularly between the rural and urban areas. Some of these biases arise within the operation of free markets. But there are also ways in which government policies can work in the same direction. These urban biases can arise in the taxation system—implicitly taxing agricultural products through support prices, for example, or an overvalued exchange rate, or by directly taxing agricultural exports and subsidizing imports. Policies can also work against the rural poor if they involve subsidies for capital-intensive technologies or if they favour export crops as opposed to food crops. There is also a risk of establishing systems of landowning and tenancy that favour large landowners and commercial producers while also giving them easier access to credit and to publicly provided extension services. The aim therefore should be to promote growth with equity—creating opportunities for the private sector while also protecting the interests of the poor.

Working with the private sector

East Timor's future will depend ultimately on establishing a thriving private sector that can generate output, savings, private investment and trade. Public policy must therefore foster an environment in which the private sector can expand and flourish. This will require:

- *Establishing clear rules*—The government has to establish and maintain simple, transparent and stable rules for private sector activities. These should include competition policies to limit the scope for monopolistic practices.
- *Investing in human development*—particularly in health and education, to ensure that the poor can take advantage of these new opportunities.
- *Establishing a strong legal system*—This will mean dealing with such difficult issues as land claims and property rights, building a strong judicial system and maintaining law and order. It will also need to cover company, contract and bankruptcy law.
- *Fostering macroeconomic stability*—Establishing the fiscal, monetary, trade and invest-

Market-based growth can widen inequalities

Micro-finance needs to be combined with business services

ment policies that will allow resources to be allocated efficiently.

- *Infrastructure*—Ensuring reliable supplies of power and water, appropriate roads, and efficient ports and airports.

Pro-poor growth

East Timor from the outset has the opportunity to set out on a new path, pursuing labour-intensive, pro-poor growth. This will also mean opening up opportunities for the poor, using micro-finance schemes with proper business development services, for example, that increase employment opportunities for women and other groups who may be outside the formal labour force.

This underlines the importance not just of boosting agriculture but also of ensuring the kind of balanced development that allows the benefits to be spread across the country. East Timor's rural economy is already relatively open to private trade. But private-sector marketing facilities are fairly primitive. Many rural regions remain relatively untouched by the opportunities that a dynamic private sector should stimulate.

Critical to this will be the development of rural infrastructure—particularly the reliable roads and communications systems that allow agricultural markets to work efficiently and to boost the prices that poorer farmers get for their produce. At the same time East Timor should be considering a rural finance system—one that would help boost investment in the rural areas and also provide a secure home for rural savings. This could involve, for example, short-or medium-term liquidity credits to farmers and traders as well as investment credits to food processors, trucking companies and other enterprises that are prepared to invest in rural areas.

Several regions of the country, particularly the rice-growing areas have very fertile soils, a favourable climate and offer opportunities for more intensive agriculture. But this also needs public and private investment in the kind of agricultural research that will indicate the best techniques for sustainable livelihoods.

Improving rural infrastructure should also serve to boost non-farm rural activities—including low-skill, labour-intensive manufacturing and related service activities. Here the aim should be to boost the earn-

ings of farm households particularly during the off-peak seasons.

Tourism

Many small island states rely heavily on tourist income. East Timor certainly has many attractions for tourists—with the most immediate markets being Australia, New Zealand and the ASEAN countries. Apart from the rich national culture, East Timor can offer spectacular mountains, lakes and hot springs, as well as white, sandy beaches with surf reefs. There are also many interesting colonial buildings, including fortresses and churches.

Thus far, however, the country has seen relatively few tourists. Over the period, 1989-95 annual arrivals of foreign tourists were only around 1,500 per year. The Indonesian government did in theory make some efforts to invest in tourism but achieved relatively little. In practice Indonesia was more interested in closing East Timor to the outside world to avoid people witnessing the continuing violations of human rights.

But even with the prospect of a peaceful environment in an independent East Timor there are still a number of obstacles. These include the lack of suitable accommodation, especially outside Dili, the lack of skilled people to operate tourist facilities, particularly those who can speak English, and also the general weakness in infrastructure, including water supplies and sewerage. International air links to East Timor are also limited. The only flights are from Bali and Darwin and, with little competition, they can be quite expensive.

While the lack of experience in tourism may be seen as a disadvantage, it can also be an opportunity. East Timor could avoid many of the social and environmental pitfalls of rapid tourist expansion. The new government has the opportunity to establish the niche East Timor should occupy in the regional and international tourist market. The easiest tourists to attract initially would be the more adventurous backpackers. These would be welcome in the short-term, but they do not spend a great deal and cannot be seen as the basis of a viable industry.

One option would be to develop individual resorts intensively and there are some hopeful signs of pioneer developers who

may be prepared to invest. Another option would be to capitalise on East Timor's unspoilt character by focusing on ecotourism. However this can be even more capital- and skill-intensive; maintaining an ecotourism industry requires considerable effort to sustain environmental standards.

Most kinds of tourist development will require foreign investment and expertise. A number of sailing and diving companies have already invested. These and other developments in tourist areas can help improve facilities in accommodation, water supplies, telecommunications, and transport. But they should also be linked to human development priorities generally. And contracts with foreign corporations will need to maximize the potential for training East Timorese staff.

This will require close community involvement. The people of East Timor have to be partners and beneficiaries of the process, aware of the likely negative and positive impacts of tourism—on the society and on the environment.

Oil and gas

One of the major determinants of East Timor's economic future will be the way it uses revenues from oil and gas. Although there is some oil and gas onshore, the largest deposits are to be found offshore between East Timor and Australia. The full scale of the deposits is unknown but will certainly provide a substantial short-term income (box 5.4).

The uncertainty that persisted over this field arose because when Australia and Indonesia drew up their mutual seabed boundary in 1972 East Timor was then a Portuguese colony. This left a gap in the boundary—the 'Timor Gap'. Australia and Indonesia signed a treaty in 1991 that created a Zone of Cooperation in which both countries were to share the resources equally in the Timor Gap in an area that corresponded to the overlap between their respective 200-mile exclusive economic zones.

Portugal contested the validity of this treaty at the International Court of Justice in the Hague, arguing that since Indonesia had invaded East Timor contrary to international law it had no valid claim to sovereignty and thus no right to come to an agreement on the Timor Gap. In June 1995 the International Court of Justice stated that

although it recognised the rights of indigenous people to self determination, it could not make a ruling since Indonesia did not recognise it as a Court of Jurisdiction.

When East Timor voted for independence, UNTAET and East Timorese leaders renegotiated the treaty and on July 5, 2001 signed the Timor Sea Arrangement. This again does not fix the boundary between East Timor and Australia but treats the oil and gas fields as a single shared entity—the Joint Petroleum Development Area (JPDA). This agreement is much more favourable than the earlier one, since East Timor will now get 90% of the production within the JPDA.

The main implications are for two fields. The first is the Bayu-Undan field which falls entirely within the JPDA; the second is the Greater Sunrise field, 20% of which lies in the JPDA. In the two decades after 2004, oil and gas revenues are expected to bring in around \$7 billion.

Fiscal policy

Around the middle of this decade the Government of East Timor is likely to have ongoing annual costs, recurrent and capital, of somewhere between \$120 million and

Box 5.4

The Timor Sea Arrangement

On 5 July 2001, representatives of UNTAET/East Timor and Australia initialled the Timor Sea Arrangement, a document that will govern petroleum operations in the Timor Sea. This is the first time that the UN has negotiated a bilateral treaty on behalf of a soon-to-be independent country. The negotiating team included East Timorese leaders and UN officials. The Arrangement will be ratified as a treaty following East Timor's independence.

The Arrangement also provides for the continuation of contracts held by companies under the 1989 Treaty with Indonesia for the existing Bayu-Undan and Greater Sunrise fields. The Bayu-Undan field, operated by Phillips Petroleum Company Australia Pty Ltd, has estimated reserves of 400 million barrels of condensate and liquid petroleum gas (LPG) and 3.4 trillion cubic feet (TCF) of gas. The current participants of Bayu-Undan are Phillips (50.3%), Santos (11.8%), Inpex (11.7%), Kerr-McGee Corp. (11.2%), Petroz (8.3%) and Agip (6.7%).

The second field is the Greater Sunrise field, which is operated by Woodside Australian Energy, and has reserves estimated to be 321 million barrels of condensate and 9.16 TCF of gas. The current participants in Greater Sunrise are Woodside Energy (33.4%), Phillips Petroleum (30%), Royal Dutch/Shell Group (26.56%) and Osaka Gas (10%).

The first significant petroleum development in the JPDA to go forward is the gas-recycle phase of the Bayu-Undan field. In 2004, this project is expected to begin producing and processing the gas, separating and selling the liquids, and reinjecting the gas back into the reservoir. The estimated benefit to East Timor from the gas recycle development is approximately \$2 billion over the 15-year life of the field.

One complication which has contributed to a delay in building a pipeline from the Bayu-Undan field to Darwin, Australia is uncertainty over the royalties that East Timor will charge.

\$170 million. It will have three main sources of finance:

- *Domestic taxation*—This would include taxes on production, services and trade;
- *Donor funding*—This would include not just grants, but also concessional lending from multilateral institutions, such as the World Bank and the Asian Development Bank;
- *Timor Sea revenue*—Revenues from oil and gas fields.

On the domestic front, agriculture will of course have to make a strong contribution to public revenue. But it is important to ensure that in the early years East Timor is investing in agriculture rather than trying to extract too much from it. The government may be tempted to reach for the most readily available sources of funds: taxes on land and on agricultural exports. But taxing heavily at this crucial juncture could prove counter-productive for economic growth in the long term.

In the lead-up to the 2002/03 budget, East Timor will undertake a comprehensive review of its revenue system. This will explore potential new revenue sources: taxes on the users of land; taxes on gambling or national lotteries; additional user charges; and local fees and charges. At the same time the government will need to step up compliance—reducing smuggling across the land border with Indonesia, and increasing its capacity to collect user charges.

Aid funds will also be crucial but they will need to be used carefully. One area of concern will be to avoid taking on too many loans from multilateral agencies. These may be on concessionary terms but they can steadily accumulate into an international debt burden. The government has already said it will not borrow for the first three years.

Managing oil revenue

How should oil revenue be managed? The common view is that the country should not use all the revenues to fund current activities. Instead it should bank at least half of them in a trust fund that would store up some of the value for the next generation. There is clearly a balance to be struck here. Saving too high a proportion would mean foregoing some development opportunities and perhaps increasing the risk of the

savings leaking away through corruption. Saving too little, however, might expose the country to financial problems in the future—especially given the uncertainties in oil prices. East Timor could consider a four-part fiscal strategy.

1. *Control public expenditure*—Giving priority to spending on health and education so as to expand people's capacities and stimulate human development.
2. *Avoid subsidizing the wealthy*—Funding some public services at least partly from user fees.
3. *Build donor confidence*—Maintaining a stable social, economic and political environment and a respect for human rights is not only vital for human development it also encourages donors who want to concentrate their resources on the poorest countries, but only those that have a supportive environment where aid can be used well.
4. *Guard oil and gas revenues*—Using them sparingly for investment since they are a one-off opportunity that will only last around 20 years.

The challenge for East Timor is to maintain sufficient fiscal discipline to ensure essential investment in human development and stimulate private enterprise, while resisting the temptation to spend oil and gas revenues on current consumption.

Attracting foreign investment

Given the low rate of savings in East Timor and the limited amount of entrepreneurial ability or experience, much of the stimulus for future economic and human development through the formal sector will have to come from foreign direct investment (FDI). Private capital can not only boost productivity but also widen human development choices by allowing the East Timorese develop their capacities through the training and experience they gain from working in foreign enterprises.

At first sight East Timor might not seem the most attractive destination for foreign investors. The population is small and levels of consumption are low. The industrial base is almost non-existent and a large proportion of the workforce lacks many of the skills needed by modern enterprises. Moreover, the shortage of domestic capi-

Agriculture should not be taxed too heavily in the early years

tal makes it difficult to raise enough domestic credit in the banking system and to find national partners for some investment projects.

As in other small and poor countries, establishing themselves the challenge for East Timor is to overcome these obstacles and attract sufficient investment, while not compromising national independence. That is why it is so critical for East Timor to pursue not just economic development but human development. A human development strategy is based on expanding human capabilities and on democratic participation in decision making. This is as critical in policies on foreign investment, because unless investment decisions are achieved with democratic consent they can provoke a popular backlash that might destabilize both the economy and the society.

There is no standard international model on the use of foreign investment. Even the fast-growing countries of East Asia have successfully demonstrated contrasting models. The Republic of Korea, for example, decided to manage without too much foreign investment. The government protected national companies and funded investment from nationalized banks—buying in most of the technology it needed or acquiring it through limited participation by foreign companies. Singapore on the other hand went all out to attract foreign investment and took great efforts to ensure that its economic and social environment was attractive to foreign companies who would bring new technology with them.

East Timor will have to strike a balance between these two approaches. On the one hand it needs to create the conditions that will allow local people and national businesses room and opportunities to develop their full potential. But it also urgently needs to attract FDI in certain strategic sectors.

At present most foreign investment in East Timor is in the accommodation and service sectors. And much of this business is currently sustained by the presence of large numbers of UN and other international personnel. There is a real risk that when these people leave the investors will leave with them. Thus far, few of these businesses have transferred much expertise to East Timorese staff. A survey in 2001 by the Department of Economic Affairs and Development found that fewer than half

these businesses were developing human resource capacities in any meaningful way. Most of the businesses reported that for jobs that required technical skills, in management or accounting, for example, they usually employed people from the investing company's country of origin.

Strategic sectors for FDI

Foreign direct investment could provide an important stimulus in key sectors.

- *Agriculture*—Foreign participation could be particularly useful in the cultivation and processing of coffee and vanilla. This would not be as landowners, however, but as trainers and traders.

- *Fisheries*—There are a number of investment proposals for harvesting marine life such as tuna and prawns. Here cooperation between the government, local fishing communities and the private sector can help develop technical and human capacities. The Government might, however, only issue fishing licenses on the condition that the licensees train nationals or create joint ventures with local companies.

- *Tourism*—East Timor's tourist industry it will need international investment. But again this should be conditional on the transfer of expertise to local staff.

- *Manufacturing*—Here the best starting points, as they have been for many other developing countries, are probably garments, textiles and footwear. However, foreign competition in these products is fierce, not least from China and other Asian countries. East Timor will have to ensure that it has the infrastructure and the employment legislation in place to satisfy companies that this is a country worth investing in. One advantage East Timor can offer is that as a 'least developed country' it has preferential access to some markets. This advantage is less marked than it was a few decades ago since many tariff barriers have now fallen. But some potential investors have been attracted by access to the European Union via the Cotonou Agreement for African, Caribbean and Pacific countries.

Barriers to flows of FDI

Given the extent of competition, East Timor will have to work hard if it wishes to attract foreign investors. There are a number of critical barriers:

Fishing licenses can be based on joint ventures

Foreign investors are concerned about property rights

- *Land tenure*—The greatest barriers centre around property rights and specifically the ownership of land. At present there is no mechanism for registering titles to land. During the transition period the ‘Temporary Land Use Mechanism’ made some land available for investment purposes. But the longer term picture is uncertain. Many individuals and entities have been granting leases to land that they do not own. And investors know that if they lease land they risk conflict and illegal occupations. Solving the land issue is also vital for promoting enterprise in general since banks often need to accept land title as collateral for loans.

- *Use of the US dollar*—East Timor adopted the US dollar as the quickest way of dealing with the sudden need for a currency. But this may not be the best long-term option. Dollarization has its advantages in imposing monetary discipline, but it also has the disadvantage that the country loses an important degree of flexibility in dealing with local circumstances and events. It may find, for example, that imports become too cheap and exports uncompetitive—as Argentina found to its cost. East Timor will also have to compete with countries such as Indonesia that can devalue their currency to achieve competitive advantage.

- *High costs*—Many investors see East Timor as a relatively high-cost country. This is partly a matter of high wages—some estimates suggest that wage costs in East Timor are two to three times higher than in Indonesia. But there are also more indirect expenses of doing business. The poor infrastructure and undeveloped legal system create unpredictable and expensive hazards. Investors may, for example, think they have all the authorizations needed to establish their business but later find that yet another vital permit is missing.

- *Labour issues*—Currently labour laws are unclear about the rights and duties of workers and there are no quick mechanisms for settling labour disputes.

- *Legal uncertainties*—East Timor lacks a firm legal framework for business activity. UNTAET Regulation 1999/1 does establish that most Indonesian laws apply in East Timor except where these have been overruled by UNTAET regulations. Unfortunately, due to a lack of administrative capacity and legal knowledge, this legislation is difficult to enforce and companies find

themselves vulnerable to random and arbitrary decisions. This applies in many crucial areas, including insurance, bankruptcy, town planning, labour and land use, as well as in company law and building codes.

Foreign investment guidelines

During 2001 the provisional cabinet considered a draft Foreign Investment Regulation and Directive that tried to balance the value of FDI and its capacity to stimulate growth and transfer knowledge against any real or perceived loss of control over the national economy. But this became stalled during the transition period. Promulgating such a directive would go a long way towards removing investment uncertainty.

This kind of regulation would need to establish different categories of business—some to be reserved for nationals, others to be open to all comers, and others to allow for foreign investment under certain conditions. It could be argued, for example, that the domestic transport sector does not require foreign investment and could be reserved for nationals. The same might be true of wholesaling and retailing of consumer goods. But in other areas, such as petroleum and fuel distribution which are more technical and capital intensive, joint ventures would be more appropriate.

Agriculture may also be a sector reserved for nationals—apart perhaps for pioneering and speculative projects that are highly capital intensive. However the purchase and export of agricultural produce would certainly benefit from foreign expertise.

On the industrial side, construction has already demonstrated the benefit of joint ventures. And the same situation would probably apply for sectors requiring heavy plant and machinery. Here though, it would be important to establish mechanisms for building national capacity. In addition, the investment regime could establish a minimum threshold for investment since this would also have the effect of concentrating investment in areas where local resources were inadequate.

Fiscal issues

Most countries offer fiscal incentives to investors, national or international. Some will allow write-offs of capital depreciation, for example, or exempt investors in strategic industries from import duties and taxes,

particularly if the companies are producing for export. The East Asian countries made good use of these techniques. Certainly in a country like East Timor where most capital and goods used in the modern sector need to be imported, excessive taxation on imports is a major disincentive to investors. Some level of tax is necessary since, with few income-tax payers, East Timor has to rely to some extent on taxes on trade. So it will have to strike a balance between the short-term need for government revenue and the long-term need for investment.

Regional organizations

East Timor is gaining its independence in an era of globalization when it is important to establish economic links through global and regional organizations. Of these, the most important is the World Trade Organization of which membership is more or less inevitable. Another useful move would be for East Timor to join the Africa Caribbean Pacific (ACP) countries that are party to the Cotonou Agreement—the successor to the Lomé Convention which offers the benefit of preferential access to EU markets along with some financial support.

As far as regional economic organizations are concerned there are two main options—either to join the Association of Southeast Asian Nations (ASEAN) or the South Pacific Forum. In fact this choice, which has both political and economic implications, has probably already been made

since the East Timorese leadership has opted for deepening relations with ASEAN.

This should offer access to adjacent export markets and cheaper imports. However in the longer term there may be a conflict between membership of ACP and ASEAN. Another regional body is the Asia Pacific Economic Cooperation forum.

Economics for people

The original architect of the global human development reports, the late Mahbub ul Haq, was himself an economist and a former finance minister. But he was in no doubt where the real priorities lay:

We are rediscovering the essential truth that people must be at the centre of all development. The purpose of development is to offer people more options. One of their options is access to income—not as an end in itself but as a means to acquiring human well-being.

As East Timor moves on from decades of political struggle to the new challenges of independence there are many policies to make and decisions to take. Some of the most urgent decisions will concern economic development—on how to lift the levels of income in one of the world's newest but poorest countries. But the final test of all these decisions—whether on agriculture, or industry, or tourism, or the oil industry—is whether or not they will directly improve the lives of poor families.