

EAST TIMOR
HUMAN DEVELOPMENT REPORT
2002

Ukun Rasik A'an

The way ahead

United Nations Development Programme





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Message from the President-Elect of East Timor

On the eve of our independence, we have much to celebrate. We have liberated our country, and with the support of the international community and the family of the United Nations, we are building an independent future on foundations of peace and democracy.

From independence we must now go on to develop our country. We must choose which path is most appropriate for our development. We must ensure that the basic needs of our people are met, and that living standards are improved.

Recently the people of East Timor participated in a remarkable nationwide consultation. In every village, they described their vision of East Timor in the year 2020. They told us what they hoped for in the development of our country. Their vision shows that they are determined to improve education and health.

Selecting their top three priority areas for development, 70% said that education is the most important priority for East Timor, whilst 49% chose health. They also spoke of the need to improve agriculture and roads, to provide water and electricity, increase employment and protect the environment. Above all, they were determined to participate in development, meeting their needs by involving themselves as actively as possible.

Yet in developing our country, we face many challenges. More than two in five people in East Timor live on less than 55 cents per day. Life expectancy is only 57 years. Women die unnecessarily in childbirth. Many children die from preventable illness and disease before they reach 5 years of age. 43% of the population is illiterate. 46% have never attended school. Many young people are unskilled and unemployed.

The East Timor Human Development Report contributes to our understanding of the challenges we face, and shows how we can begin to address them. Together with our National Development Plan, published on the eve of independence, it shows us how we can develop each sector of our economy, meeting the needs of human development.

We must ensure that the strategies we develop focus constantly on meeting these needs, that we promote economic growth to improve living standards and reduce poverty.

For many long years, we dreamed of independence. Our dream has become a reality. Now we must all play a part in developing our country. Government, the private sector, civil society and communities must work together to reduce poverty, and promote economic growth that is sustainable and equitable.

**Kay Rala Xanana Gusmão,
President-Elect,
Democratic Republic of East Timor**

Message from the Special Representative of the UN Secretary-General

The Secretary-General of the United Nations, Kofi Annan, has described the concept of the Human Development Report as “reflecting [the] profound conviction that what matters in development is not quantities produced, but the quality of life lived by human beings.”

Following the overwhelming violence that was triggered by the massive vote in favour of independence on 30 August 1999, the East Timorese people found their homeland in complete ruin and very few choices available to them in terms of their quality of life. They were faced with the physical destruction of much of the country, significant loss of life, rape and assault, massive displacement of the population, the total collapse of the economy and the destruction or removal of most of their cultural heritage and institutional memory. All institutions of state collapsed—both administratively and physically. Reconstruction, in everything, had to commence literally from scratch.

The United Nations responded by establishing the United Nations Transitional Administration in East Timor (UNTAET) with a mandate for governmental authority unprecedented in its breadth. UNTAET was given responsibility for security, law and order, establishing an effective administration, developing civil and social services, ensuring the provision of humanitarian aid, supporting capacity building for self-government and assisting in establishing the conditions for sustainable development. Whilst UNTAET has succeeded in some aspects of its mandate, in others we have experienced shortcomings; I think that these past two-and-a-half years have provided an educational experience for us all.

Following the most immediate of our tasks—the rapid amelioration and conclusion of the humanitarian crisis and stabilisation of the security situation - UNTAET had to commence its more onerous and less well-chartered challenges of establishing institutions for governance and

public administration, whilst supporting capacity building for self-government and creating the conditions for sustainable development. It is both an excuse and a fact to state that we were not given a blue-print by which to carry out these hugely complicated tasks.

Politically, UNTAET has chartered a course of gradual devolution of executive and legislative power to the East Timorese, a task that has been challenging and not without difficulty. This has meant the maintenance of a constantly evolving relationship between UNTAET and newly established institutions of government. This has taken us from consultation with the National Consultative Council, through to the First Transitional Cabinet comprising East Timorese and international cabinet members, and the establishment of the proto-legislative body, the all-East Timorese National Council. Then came the transformation from appointed government institutions to elected ones, Constituent Assembly elections, an East Timorese process for the drafting and adoption of the Constitution, a Second Transitional Cabinet consisting entirely of East Timorese ministers, a Presidential election, and imminently, independence on 20 May. That is quite some journey, although some might argue (and have argued) that it should have moved at a faster pace. We, UNTAET and the East Timorese, were the pioneers: the successes and the mistakes were ours.

Simultaneously, UNTAET has endeavoured to establish the institutions of public administration and governance. This process has been hampered by the competing imperatives of speed versus consultation; substantive operational output versus capacity building; and immediate empowerment versus skills development. In some areas we have been too ambitious and have moved at a speed that may not have allowed for the establishment of sufficiently resilient foundations. One such example of this may prove to be in the area of law and order,

where a national judiciary, prosecution and defence service were established quickly, but were perhaps not supported as well as they should have been with capacity building and strong institutional structures.

Of course, independence, which is now just around the corner, will come before the full range of objectives set out in Resolution 1272 are completed. For instance, the complete development of a civil service and an effective administration and the development of the social services will take many more years. East Timor must now move forward on the longer-term process of national capacity building for sustainable development. But it will not be doing so alone. There will be donor support and a sizeable UN successor mission.

It is in this context that I commend to all the readers the first National Human Development Report for East Timor which, I hope, will direct thinking and stimulate debate on future development as well as attract more support from development partners. The process of human develop-

ment is a continuous one, with UNTAET having played only the first role since the path to nationhood was laid. Of course, the process is far from over. Nevertheless, it is my hope and belief that UNTAET has been able to lay the foundations for development which can be measured not only in quantities produced, but most importantly in the quality of life experienced by human beings in this new nation.

Human development is the process of enlarging people's choices, providing every individual with the opportunity to make the most of his or her abilities: to lead a long and healthy life, to acquire knowledge and to access the resources necessary for a decent standard of living. Availability of these choices provides the means for the enjoyment of political, economic and social freedoms. I know that the newly independent government of East Timor will be ready and eager to take up the challenge of sustainable development, to achieve progress in human survival, knowledge, communications and productivity.

**Sergio Vieira de Mello,
Special Representative of the
UN Secretary-General, and
Transitional Administrator**

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Foreword

It gives me great pleasure to introduce the first national Human Development Report for East Timor. It seems especially appropriate that we publish this report just as East Timor prepares for one of the most momentous days in its history: the day its people finally achieve the independence they have sought for so long.

Although this is a time for celebration, there can be no doubt that the challenges faced by the people of East Timor are immense. As this report makes clear, this country is the poorest in Asia and one of the poorest in the world, and will remain so for some time to come. Until revenues from the exploitation of the Timor Gap become available, and even after that time, this country will continue to need considerable support from the international community.

But the situation is far from hopeless. Throughout their history, the East Timorese people have displayed a remarkable resilience and determination. They need now to use those qualities to build their future, to weave their individual strengths into a strong national fabric.

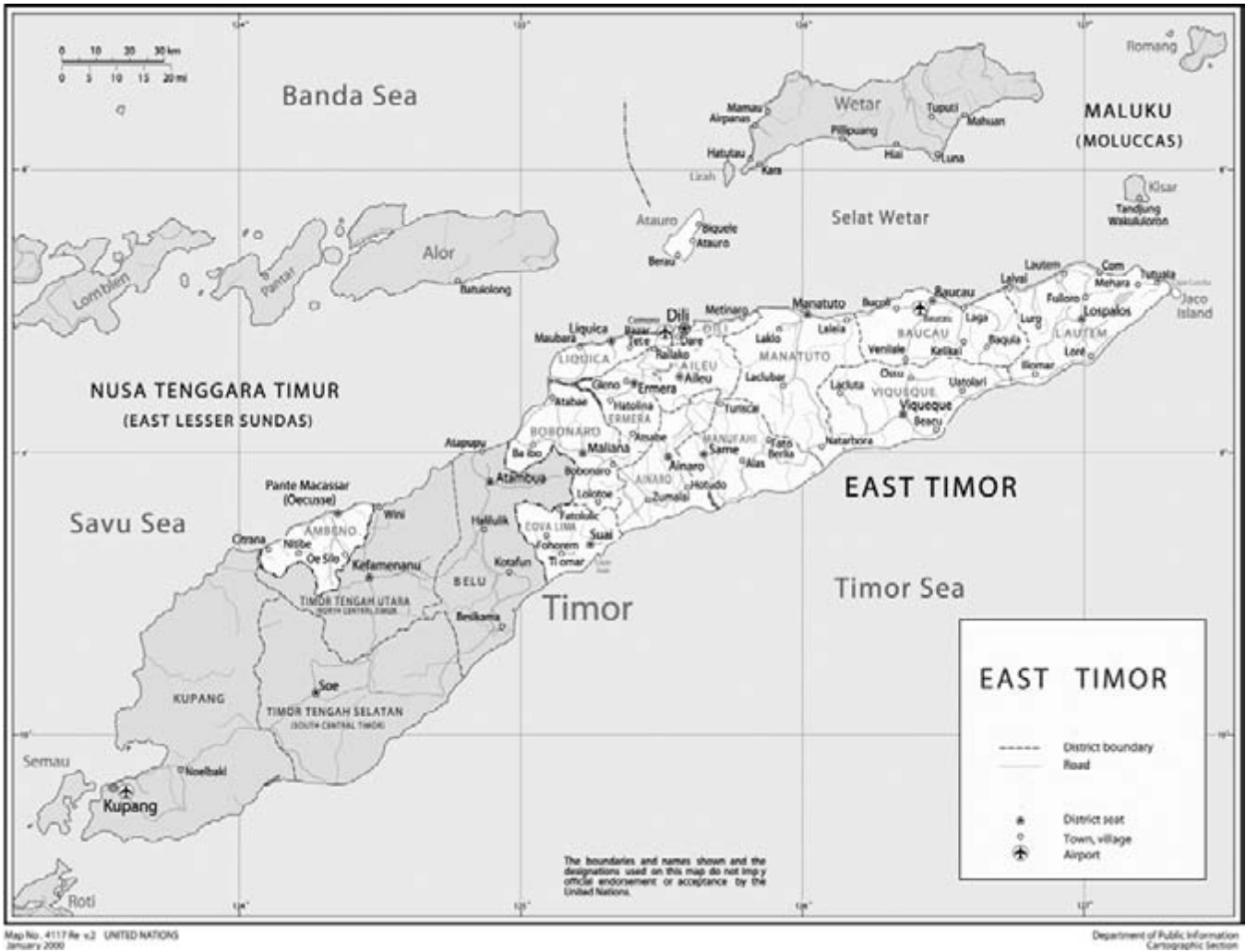
Creating this national fabric is the essence of human development, which is defined as the process of expanding people's choices and is about far more than just eco-

nomie development. It is about enabling them to live long and healthy lives, during which they have the opportunities to achieve a decent standard of living, to develop their potential, and through this to create a better future for their children and their country. It is about education, about building a strong system of government and an equally strong civil society.

This national Human Development Report for East Timor is the latest addition to a series that spans the globe. More than 375 national and sub-national reports have been produced so far by 135 countries. The production of this report has been a strongly collaborative process that has benefited from contributions and suggestions from many people. It does not therefore necessarily represent the views of UNDP.

It is UNDP's hope, however, that this report will provide some guide for human development in East Timor, both for the government and the international community. There are huge difficulties ahead for East Timor, but there is huge potential here too. For many years, East Timor worked almost alone to achieve independence. In the future, more hard work will be needed, but East Timor will not be alone. UNDP looks forward to working with the people of Timor to build their future.

Finn Reske-Nielsen
UNDP Representative, East Timor



East Timor, or Timor Lorosae—'Timor of the rising sun'—is situated on the eastern part of the island of Timor, the easternmost of the Lesser Sunda islands. It is bordered on the west by the Indonesian province of Nusa Tenggara Timur. To the north lie the Savu Sea and the Strait of Wetar. To the south, 500 kilometres across the Timor Sea, is Australia. Also part of the national territory of East Timor is the enclave of Oecussi in the western part of Timor island and the islands of Atauro and Jaco.

Timor's relief is broadly characterized by a core of rugged hills and mountains consisting of a confused mass of knife-edged ridges and craggy upland blocks. The land rises to 2,000 metres and above, including Mount Tatamailau at 3,000 metres. Around 44% of East Timor may have a slope

of approximately 40%, which, combined with heavy rainfall, encourages soil erosion. The climate is hot, with an average temperature of 21°C and around 80% humidity. During the dry season, East Timor has moderate winds and slightly milder temperatures—18°C on the coastline and 10°C or lower in the mountains. But between November and April, in the monsoon season, the rivers become torrents due to extremely high precipitation.

During this period, the average temperature on the coast is about 25°C. On the northern coast, the rainfall ranges from 500 to 1,000 millimetres per year and there is only one harvest. The southern coastal plain, however, can receive over 2,000 millimetres and has two wet seasons and two harvests. The island is also affected by El Niño-related weather anomalies.

Abbreviations

ACP	African Caribbean Pacific group of states
ACFOA	Australian Council for Overseas Aid
ADB	Asian Development Bank
AIDS	Acquired immunodeficiency syndrome
APEC	Asia-Pacific Economic Cooperation Forum
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Agency for International Development
BPS	Indonesian Central Statistics Bureau
CBO	Community-based organization
CCA	Common Country Assessment
CCT	Cooperative Coffee Timor
CFET	Consolidated Fund for East Timor
CNRT	National Council of Timorese Resistance
CSO	Civil Society Organization
ETADET	East Timor Agriculture and Development Project Foundation
ETPA	East Timor Public Administration
ETSCC	East Timor Student Solidarity Council
ETTA	East Timor Transitional Administration
ETWAVE	East Timor Women Against Violence
FDI	Foreign direct investment
FOKUPERS	Women's Communications Forum
FRETILIN	Revolutionary Front for Independent East Timor
GDI	Gender-related development index
GDP	Gross domestic product
GEM	Gender-empowerment measure
GFFTL	Young Women's Student Group of East Timor
GNP	Gross national product
HDI	Human development index
HDR	Human development report
HIV	Human immunodeficiency virus
HPI	Human poverty index
ILO	International Labour Organization
IMF	International Monetary Fund
IMR	Infant mortality rate
INTERFET	International Force in East Timor
IOM	International Organization for Migration
IUD	Intra-uterine device
JAM	Joint Assessment Mission
JPDA	Joint Petroleum Development Area
JICA	Japan International Cooperation Agency
KPG	Academy Education Teachers
NCBA	National Cooperative Business Association
NGO	Non-governmental organization
OCHA	Office for the Coordination of Humanitarian Affairs
OMT	Organization of Timor Women
REDE	East Timor Women's Network
SPG	School Education Teachers
SSTL	Survey of Sucos in East Timor
TFET	Trust Fund for East Timor
TLHS	East Timor Household Survey
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNTAET	United Nations Transitional Administration in East Timor
UNTIL	National University of East Timor
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

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The way ahead

In many respects East Timor is embarking on its development journey afresh. This first national human development report assesses some of the difficulties but it also demonstrates how a commitment to human development can set the country on a peaceful and productive new course.

East Timor's immediate economic outlook may be difficult but the human potential is strong. Through the long years of colonization and occupation, the people of East Timor retained an unquenchable desire for freedom. That kind of courage and determination should serve them well in the years ahead as they tackle the major challenges of human development.

- *Health*—Standards of health are low: overall life expectancy is only 57 years. Many people are dying from preventable diseases such as malaria, respiratory tract infections and diarrhoea. Maternal mortality is high: some 420 women die for every 100,000 live births.
- *Education*—East Timor also has a lot of ground to make up on education. More than half the population are illiterate.
- *Food security*—Three-quarters of the population live in the rural areas where most households are engaged in subsistence agriculture. But their productivity is low and for decades East Timor has had to import basic foods. Around 45% of children under five are underweight.
- *Income poverty*—Some 41% of the population live in income poverty—having less than the national poverty line of \$0.55 per person per day. A higher proportion of people are poor in the rural areas than in the urban centres—46% compared with 26%. Of these, the poorest groups are in households that have many children and those that have small landholdings and little livestock, and those that live in areas that are prone to flooding and soil erosion.
- *Sustainable livelihoods*—With the population growing at around 2.5% annually, around 20,000 young people will join the labour force each year. Most of these will

seek livelihoods in agriculture and more generally in the 'informal economy'.

- *Gender*—Poverty particularly affects women who bear the brunt of the impact of polluted water and poor sanitation and have to spend time looking after sick children and other family members. Women also have less power; and gender-based violence is a serious and under-reported issue.
- *Natural resources*—Most of the terrain is steep with only a thin covering of soil, much of which is being washed away in flash floods. One of the most valuable natural resources is offshore oil and gas in the Timor Sea.
- *Human security*—Compared with the years of Indonesian administration and the traumatic period following the referendum, most people now feel safer, and the reported crime rate is low. In a household survey 43% of respondents reported greater safety as the single most important improvement from before the violence.
- *Freedom and participation*—On August 30, 2001 a remarkable 91% of the electorate voted to elect a Constituent Assembly, 27% of whose members were women. The presidential election of April 2002 also had a striking turnout—more than 86% of voters cast their ballots.

The human development index

The UNDP human development index (HDI) combines indicators on life expectancy, knowledge and standard of living, to produce a single overall index. For East Timor in 1999 the value was 0.395 and in 2001 it was 0.421, which is a slight improvement. The figure for 1999, the year for which the latest global HDIs have been calculated, is the lowest in Asia and is identical to that of the Central African state of

The people of East Timor retained an unquenchable desire for freedom

Any weakness in government services will be a serious obstacle to human development

Rwanda which for that year was ranked number 152 of the 162 countries for which HDIs were calculated.

Of the component parts of the HDI, East Timor performs moderately on life expectancy: its average life expectancy of 57 years is comparable with that in Cambodia and Myanmar (56 years), but it is much lower than that in other ASEAN countries, such as Indonesia (65) and Vietnam (68). However, the worst HDI performance is on per capita income—which to some extent reflects the disruption in 1999. In fact, East Timor's estimated per capita income of \$337 for 1999 would put it in last place in a GDP ranking of these 162 countries.

The HDI takes no account of differences between regions or social groups. Although in principle HDIs can be calculated for regions or districts, at present it is not possible to do this for each of East Timor's 13 districts since there is insufficient data. Nevertheless data from the Indonesian period indicate the HDI to be highest in Dili and lowest in Manufahi.

One of the most important differences in human development achievement is between men and women. To help assess this UNDP has devised a gender-related development index (GDI). The greater the degree of inequality, the more the GDI lags behind the HDI. In 2001 East Timor had a GDI of 0.347—12% lower than the HDI, compared with a 1% lag for Indonesia and Cambodia, for example. This difference in HDI is largely the result of the difference in earnings between men and women.

The human poverty index

Poverty is usually assessed simply in terms of a lack of income. But people can be impoverished in many ways beyond just a shortage of income. They can be in poor health, for example, or they may lack access to education, or they may have few opportunities for productive employment. To take this into account UNDP has devised a 'human poverty index' (HPI). The HPI combines measures of longevity, knowledge, and overall economic provisioning, giving an overall score between 0 and 100: a high score in this case, however, means a high level of human poverty. The 1999 HPI for East Timor was 46.0 and for 2001 it was 49.0.

The 2001 global human development report had sufficient data to calculate HPIs for 90 developing countries in 1999. If East Timor had been inserted into this list, increasing the total to 91, it would have occupied rank number 81. East Timor has the highest rate of human poverty of all the Asian countries for which a HPI can be calculated.

Goals for the future of East Timor

These measures indicate just how far East Timor has to go along many dimensions of human development. But how quickly should the country be aiming to make these improvements? There is already some guidance on this from the UN General Assembly which has set a range of development goals to be achieved by the year 2015. These encompass most aspects of human development—including achieving 100% primary school enrolment, reducing infant mortality to below two-thirds of its 1990 level, and reducing maternal mortality to below two-thirds of its 1990 level. One way of estimating how long it would take for East Timor to reach these kinds of targets would be to assume the same rate of progress as in recent years. On this basis there is more optimistic news: for infant mortality, for example, East Timor should achieve the infant mortality target by 2011.

Building a capable public administration

In the early years of independence the people of East Timor will rely heavily on the competence and capacity of government services. Any weakness or failure of these services will be a serious obstacle to progress in human development. Though in many respects East Timor is building a new administration from the ground up, it will also inherit some of the structures and ethos of its colonial past. The Indonesian structure was autocratic. This may have speeded up the delivery of some services. But from the perspective of human development it created a civil service with serious flaws. These included overstaffing, a complex form of administration, and a culture of dependence that left staff with little confidence to do anything other than 'wait for orders' from above. This structure also closed off many opportunities for public participation while fostering widespread corruption. The

development of the public service in East Timor will face a number of crucial issues. These include:

- *Staffing*—The new government will face pressure to increase the number of civil servants both to generate more employment and to offer more extensive services. Given the shortage of resources, however, it will not be possible to expand the services in this way so it is vital that civil servants work efficiently, cutting down on absenteeism, establishing better systems of coordination between government departments, development agencies and NGOs—and ensuring that they deliver services in a lean and cost-efficient manner. The government will also need to pay adequate salaries to attract East Timor’s best trained people, many of whom may also want to work for NGOs, the UN Agencies or international development projects. For the next few years, however, the civil service is also going to need some international staff working closely with local personnel.
- *Work ethic and competence*—The Indonesian administration did not encourage a strong work ethic. Staff worked short hours and were not given much responsibility. The new civil service will need to achieve and enforce a full and productive working week. Staff competence and performance can be improved through coaching and mentoring that encourages people to take greater initiative.
- *Language*—The East Timorese between them speak about 30 languages or dialects. The 2001 Household Survey concluded that 82% of the population spoke Tetun, while 43% could speak Indonesian. Only 5% spoke Portuguese, while 2% spoke English. The Constitution declares that the official languages are Tetun and Portuguese while in the meantime additional working languages within the civil service will be Indonesian and English. This four-language environment presents a very expensive challenge. The Planning Commission estimates that around 2,000 core staff in the civil service will need training in Portuguese, 400 in Tetun, and up to 150 in Indonesian. Beyond this, the government will need a smaller group of English speakers to communicate with other countries in the region and with the international oil industry. In addition, many other public servants, in-

cluding teachers, health workers, and judicial staff will need language training. Another expensive process will be the translation of official documents.

Local government

East Timor is divided into 13 districts and 65 sub-districts—based on the divisions inherited from the Portuguese and Indonesian administrations. The Constitution establishes the importance of decentralization but for the first few years at least, East Timor will find it difficult to devolve much central authority, so decentralization is likely to take the form of deconcentration, as core departments—education, health, agriculture, housing and water and sanitation—establish regional offices to provide basic local services.

A Local Government Think Tank has proposed three main regions, east, west and south while giving a special status to Dili and the enclave of Oecussi. Under this system each region would have its own Director General working with a special body to coordinate all the groups that have local responsibilities.

Preventing corruption

East Timor will have to address the perennial issue of corruption. This is largely a legacy of the Indonesian years but it may also arise if there are large discrepancies between salaries in the public and private sectors and if the government fails to work equitably and accountably. The government can prevent corruption if it builds strong administrative structures that have simple procedures and clear lines of responsibility and accountability. Nevertheless it also needs mechanisms for dismissing corrupt politicians and civil servants. The experience of other countries suggests that the best approach is to establish an independent anti-corruption agency. The Constitution provides for two watchdog institutions: an Ombudsman’s office and a High Administrative, Tax and Audit Court. These bodies will only function properly, however, if they are given sufficient powers and have strong support from political leaders.

The judiciary

The Indonesian government suborned the legal system and corrupted both courts and the judiciary and as a result many East

The four-language environment will be expensive

Civil society organizations will need strong and open channels of communication

Timorese had little faith in legal institutions. Then in 1999 the courts were destroyed along with much of the legal infrastructure and archives.

If the people of East Timor are to have fair access to the courts—and if companies are to have confidence that contracts will be honoured—both civil and criminal systems will need to be overhauled so as to simplify their procedures.

But the government will also have to ensure that there are sufficient qualified legal personnel—particularly judges, public defenders and prosecutors—while investing more in the management and administration of courts so that they can deliver justice efficiently in a complex, multi-lingual environment.

New roles for civil society

East Timor's independence is the culmination of a long struggle against colonialism by many groups in civil society—community organizations, religious groups, students and others. The Indonesian government was reluctant to allow the growth of independent organizations. Nevertheless a number did manage to survive, some of the most effective of which were linked to the Catholic Church. Youth and student movements were also very active—often at great personal risk.

An important development in 1998 was the creation of the East Timor NGO Forum which has since become the main umbrella body for NGOs—with 77 national and 33 international members.

Building new relationships

In the democratic era all civil society organizations (CSOs) will have adjust to different circumstances, and build new relationships—with the state, with each other, and with international organizations.

- *With the state*—East Timor's civil society organizations have to deal not just with the political state but also with the civil service and the judiciary. In this new environment CSOs will also have to shift their perspective—from the politics and tactics of opposition to those of constructive partnership. But the government too will need to work at this potentially difficult relationship. It has to recognise that civil society organizations played a vital role in the struggle for

independence. Now it has to find ways of maintaining their energy and commitment in the struggle to build a new nation.

- *Within civil society*—CSOs will also need to work closely with each other. Many of the potential obstacles and pitfalls can be avoided by ensuring strong and open channels of communication within and between organizations. But CSOs also need to communicate closely with the communities they exist to help.

- *With international organizations*— Many official donors now prefer to channel at least some of their funds either directly or indirectly to NGOs. This means that NGOs in particular will find themselves dealing with a large number of different agencies and will have to become more familiar with the way these institutions work.

Multiple roles

Civil society organizations in East Timor will be operating on many different fronts.

- *Architects of development* – Many NGOs and CBOs want to work in a constructive partnership with the government. But the extent to which they can help develop policy will depend on their capacity to innovate and present alternative viewpoints.

- *Advocacy*—Many groups see their primary task as being to influence the actions of others. Given the different capacities of these groups, and the fact that they have many common interests and objectives, it often makes sense for them to pool their resources and act collectively.

- *Monitoring*—Good governance everywhere relies on a system of checks and balances. The groups of civil society play an important part in this, ensuring that the government, the private sector and international organizations maintain high standards. But they will only be able to do so if they maintain such standards themselves—operating transparently with clear financial and democratic accountability.

- *Services*—For many NGOs the main task is to provide services—in health, for example housing or education, either by filling gaps left by government, or by supplementing government activities, as in non-formal education.

- *Information*—Civil society organizations play an important part in offering information and stimulating debate, occupying a

middle ground between the government and the local communities. On the one hand they should be pressing the government to take action on the issues they feel passionately about, but at the same time they should be aiming to maximize public participation in the workings of democracy.

All the CSOs in East Timor will need to re-examine their roles and responsibilities in the democratic era—looking again at their visions and philosophies and ensuring that they have something unique to offer.

The education horizon

East Timor has a major educational challenge ahead—not just dealing with widespread illiteracy but also coping with a multiplicity of languages. The Indonesian government was determined to achieve universal primary education and by around 1985 almost every village had a primary school. This expansion certainly enrolled many more children but it had two main flaws. The first was low quality: the standard of teaching was poor, and schools lacked funds, textbooks, and basic equipment. The second flaw was that the government in Jakarta tried to use education to ‘Indonesianize’ the people of East Timor—and drafted in many staff from elsewhere in the country who could teach in Indonesian.

Although eventually more East Timorese became teachers, most of these had themselves not progressed far beyond fourth grade. And because they earned very little they had to take extra jobs to survive. As a result the standards of education were low and teachers were frequently absent. This in turn discouraged both parents and children: around 30% of children were not enrolled at all. The weakness at the primary level carried through to secondary school. In the final year of Indonesian administration net enrolment had still only reached 36% at the lower secondary level and 20% at the upper secondary level.

Previously some parents were reluctant to have their children taught by foreign teachers in a foreign language and many could not afford the fees. Now these obstacles have been removed, but others remain. The most basic issue is poverty. Although there are no enrolment fees, there are still costs to sending children to school. And many children spend at least part of

their time working on the family farm or on household chores.

East Timor is currently rebuilding its education system but it faces a number of major challenges. These include:

- *Language*—The government has decided to introduce Portuguese progressively as the language of instruction. This has created immediate problems since few teachers speak Portuguese. They and school administrators will need quickly to gain a strong grounding in the language. In these circumstances the government might look again at the possibility of mother-tongue teaching. Children learn more quickly if they first become literate in their mother tongue and then acquire a ‘national’ language, in this case Portuguese or Tetun, as a second language. And when children are learning about their legends and culture in their mother tongue they also get greater encouragement and reinforcement from their parents.

- *Teachers*—There are two main issues for the teaching profession. The first is to raise overall numbers so as to reduce the pupil-teacher ratio which is currently around 60 in primary schools. The second priority is to upgrade the skills of teachers. Those studying to become teachers need to be properly prepared. Not only will they need to become familiar with a new curriculum and a new language, they will also have to encourage more active learning. At present teachers still use traditional methods that rely on rote learning rather than on encouraging children to acquire and understand information for themselves.

- *Curriculum development*—So far there have been few efforts at curriculum development—a result partly of the uncertainties of the transition period. The basic subjects and contents of the curriculum will need to be arrived at through extensive consultations between teachers, parents and children. International experience and resources can also help East Timor to learn from teaching practices elsewhere and attain internationally accepted standards.

- *Community involvement*—The Indonesian system was highly centralized, offering little scope for local initiative by either teachers or parents, and thus wasting potential resources of commitment and energy. If teachers, parents and other community leaders jointly take responsibility for run-

Children learn more quickly if they first become literate in their mother tongue

The university could concentrate on training teachers

ning schools they are likely to invest more time and energy in the schools and take a greater pride in what they and their children can achieve.

- *Technical and vocational education*—The Indonesian vocational training system bore little relation to the real needs of the workplace. So in conjunction with local employers, the government will have to refashion the system to train young people in competences that are in real demand.

- *Tertiary education*—The University of East Timor could find itself with many poorly qualified students crowded into courses that offer few prospects for employment. It could therefore re-examine its priorities, aiming for a smaller institution that emphasizes quality. And for the next ten years or so it might concentrate most resources on the faculty of education in order to train the next generation of secondary school teachers.

Civic education

There is also the question of what knowledge the population as a whole will need to sustain the new state. So far civic education has understandably concentrated on the mechanisms of voting and elections. But the human development philosophy takes a much broader and more inclusive view of democracy, not just as an objective but as a continuing process—as a way of life. For this purpose civic education would need to promote civic knowledge, civic skills, and also civic virtues—the character traits needed to sustain and enhance democratic governances and citizenship.

The same abilities are also the building blocks of a peaceful society, both between communities and within the household, where there is still much violence directed against women. Many other issues can also benefit from civic education. One priority would be to educate people about the risks of HIV/AIDS of which most know very little. To some extent civic education will have to start with teachers, relying on them to communicate ideas not just in the schools but also to the community at large.

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 production. But plans for economic development will have to concentrate on bringing clear benefits to the majority of East Timor's people.

The devastation of 1999 that caused enormous human suffering also cut deep into the country's economic and social infrastructure. UNTAET and the East Timor Transitional Administration helped restore law and order, and this and substantial external support helped stimulate an economic revival over the past three years. Projected growth for 2001/02 is around 15%.

The more recent surge in growth has come in Dili as a result of building houses and catering to international personnel. But this was a temporary boost that will disappear as UN personnel withdraw. For 2002/03 it seems likely that growth will shrink to zero.

Thereafter, a more balanced and sustainable form of development could set the country on a steadier upward path. This will require substantial investment—to improve infrastructure, to build the capacities of both public and private sector institutions, and to maintain 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 of the workforce, so the core of any human development strategy must be to make agriculture more productive—helping poor farmers improve yields of their staple crops, while developing cash crops.

Any plans for agricultural development also have to be seen as part of an overall strategy for rural development—improving roads, water supplies and sanitation and offering micro-finance. This will also require a new style of development—driven by local demand and based on the existing strengths of rural communities and on empowering them to pursue the livelihood strategies that best fit their own circumstances and capacities.

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 output. Much of this will also rely on extension services that will build the capacity of local communities in the production of food crops, forestry and animal husbandry.

While the main priority will be to ensure the output of staple foods, it will also be important to maximize the potential of crops that generate cash incomes. There are a number of possibilities here including coconuts, cocoa and cashew nuts as well as vanilla. But the most important cash crop remains coffee, which is a vital source of cash income and foreign exchange. At present the world price is very low, but East Timor should nevertheless be able to increase its income from coffee by boosting quality, especially if this enables Timorese coffee to achieve international certification as organic produce.

East Timor also has a large fishery potential. Around 10,000 families depend at least partly on fishing. Future income can be boosted by increasing investment in the national fishing capacity and by licensing foreign vessels. The main obstacle is the lack of internationally recognized fishing zones. The fishing strategy must, however, aim for sustainability and protect the interests of traditional fishing communities.

Economic strategy

East Timor's future will depend ultimately on establishing a thriving private sector that can generate output, savings, private investment and trade. Public policy for the years ahead must therefore sustain an environment in which the private sector can expand and flourish. Among the most important measures will be:

- *Establishing clear rules*—The government has to maintain simple, transparent and stable rules for private sector activities.
- *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.

- *Fostering macroeconomic stability*—Developing the fiscal, monetary, trade and investment policies that will allow resources to be allocated efficiently.
- *Infrastructure*—Ensuring reliable supplies of power and water, appropriate roads, and efficient ports and airports.

One of the dangers of promoting market-based rapid economic growth is that of widening inequalities—particularly between the rural and urban areas. Some of these biases arise within the workings of free markets. But government policies also risk accentuating these trends through the taxation system or by offering subsidies that in practice are only accessible to richer farmers. The aim therefore should be to promote growth with equity—creating opportunities for the private sector while also protecting the interests of the poor.

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. 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 developing a rural finance system, including micro-finance schemes, particularly for women and other groups who may be outside the formal labour force. Improving rural infrastructure should also foster non-farm rural activities—including low-skill, labour-intensive manufacturing and related service activities. Here the aim should be to boost the earnings of rural households particularly during the off-peak seasons.

Light manufacturing

In 2000, manufacturing accounted for only 3.5% of GDP, most of which was in small-scale activities. The enterprises that employed the most people were those involved in weaving traditional cloth (tais) and furniture. 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.

The aim should be to promote growth with equity

Expanding tourism will require close community involvement

The best options appear to be via foreign investment in textiles and footwear.

Tourism

During the Indonesian period tourists were discouraged by the violence and political uncertainty. Many more could arrive in the future since the country has many attractions. But even in a more peaceful environment there are still many obstacles to a strong tourist industry, including the shortage of suitable accommodation, the lack of skilled people to operate tourist facilities, and also the general weakness in infrastructure, including international air links. 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. One option would be to capitalise on East Timor's unspoilt character by focusing on ecotourism. Expanding the tourist industry will, however, require close community involvement to ensure that the people of East Timor are partners and beneficiaries of the process.

Oil and gas

One of the major determinants of the country's economic future will be the way it uses revenues from oil and gas. When East Timor voted for independence, UNTAET and East Timorese leaders renegotiated with Australia the treaty on the exploitation of reserves in the Timor Sea. This agreement is far more favourable than the earlier one, since East Timor will now get 90% of the production within the Joint Petroleum Development Area. Over the two decades after 2004, oil and gas revenues are expected to bring in around \$7 billion. 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 the oil earnings in a trust fund to store up some of the value for the next generation.

Attracting foreign investment

Given the low rate of savings and the limited amount of entrepreneurial experience, much of the stimulus for economic and human development through the formal sector will have to be based on foreign direct investment (FDI). FDI can not only boost productivity but also widen human development choices by allowing the East

Timorese to gain training and experience by working in foreign enterprises. However, it is crucial that East Timor develops policies on FDI through democratic consent.

Foreign direct investment could focus on a number of key sectors. One is agriculture which would benefit from foreign participation in the processing of coffee and vanilla. Another is fisheries, particularly if the government issued fishing licenses on the condition that the licensees train East Timorese or create joint ventures with local companies.

Tourism too will rely on foreign investment but again this should be conditional on the transfer of expertise to local staff. For manufacturing the best starting points are probably garments, textiles and footwear. East Timor will, however, face stiff competition for FDI from other countries in the region. And to improve its prospects it will have to address a number of issues. These include:

- *Land tenure* –At present there is no mechanism for registering titles to land. And investors know that if they lease land they risk conflict and illegal occupations.
- *Use of the US dollar* –Dollarization has the disadvantage that the country loses the option to devalue the currency to achieve competitive advantage.
- *High costs*—Wage costs in East Timor are far higher than in Indonesia.
- *Labour issues*—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. This applies in many crucial areas, including insurance, bankruptcy, town planning, labour and land use, as well as in company law and building codes.

Fiscal policy

There will be three main sources of finance: domestic taxation, donor funding and Timor Sea revenue. On the domestic front, the government will have to tax agriculture, though it is important not to do this too heavily since this could stifle economic growth in the long term. The government could also explore new sources of revenue, including taxes on gambling as well as various local fees and charges. At the same time

it will be important to step up compliance—particularly by reducing smuggling across the border with Indonesia.

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. Even when these are on concessionary terms they can steadily accumulate into an international debt burden.

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 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.

4. *Guard oil and gas revenues*—Using them sparingly since they are an opportunity that will only last around 20 years.

The task for East Timor is to ensure investment in human development and stimulate enterprise, while not using oil and gas revenues on current consumption.

The way ahead

East Timor now has many policies to make and decisions to take. The final test of all these decisions, whether on agriculture, or industry, or tourism, or the oil industry is whether or not they bring real benefits to poor families. This underlines the importance of investing in people—ensuring that they have the health, knowledge and capacity to take full advantage of these new opportunities.

Human development in East Timor

East Timor faces life as a new nation in very difficult circumstances—with the lowest human development ranking in Asia. But full independence also brings the opportunity to make a fresh start—empowering the people of East Timor to set a new course grounded firmly on the principles of human development.

By any standards, East Timor is one of the world's least developed countries. Incomes are low: per capita GDP is estimated at only \$478. Very few people have received an adequate education: more than half the population is illiterate. Nutrition levels are poor: more than half of infants are underweight. And the country is still suffering from the destruction and trauma that followed the national vote for independence on August 30, 1999.

Economic potential too is limited. In a few years' time there is the prospect of 20 years of oil and gas income from offshore deposits in the Timor Sea. But that revenue will need to be used sparingly and for the present most people will continue to rely primarily on agriculture where productivity and incomes are very low. Farmers in East Timor use the most basic forms of cultivation, trying to make the best of rugged terrain and a difficult climate.

In many respects, therefore, East Timor is building from the ground up. This first national human development report traces some of the country's history and explores its current economic and social conditions, and it assesses the difficulties frankly. But the purpose of a human development report is to look ahead: to seek new directions and above all to demonstrate how a commitment to human development can help set the country on a new course.

From this perspective there is cause for optimism. The immediate economic outlook may be difficult but the human potential is strong. Through the long years of colonization and occupation, the people of East Timor retained an unquenchable desire for freedom. That kind of courage and determination to choose their own destiny should serve them well in the years ahead.

Human development, in East Timor as everywhere else, is defined as 'the process of expanding people's choices'—by empowering them to lead long and healthy lives, to have access to knowledge and to a decent standard of living and to play an active role in the life of their communities. The conventional alternative is to concentrate purely on expanding the economy, pursuing economic development in the hope that the fruits of growth will eventually trickle down to the mass of the population. The human development philosophy does also aim for a flourishing economy and strong growth, but it requires this to be the right kind of growth—growth that satisfies human needs and aspirations and that is built on an expansion of human capacities. Human development is development of, by and for the people'.

Human development places a strong emphasis on the development of capacity. Capacity is 'the ability to perform functions, solve problems and set and achieve objectives'. The people of East Timor already have many valuable and tested capacities, both within individuals and in the society. They have complex webs of social and cultural relationships, and through a process of cooperative and cumulative learning they have worked out how to survive in harsh and difficult conditions, passing on this learning, mostly orally, from one generation to the next.

In an independent East Timor, however, they will need many additional capacities. To administer a modern nation state and build a more diverse and developed economy they will have to acquire new knowledge and develop new skills—many of which require long years of education and training.

The immediate economic outlook may be difficult but the human potential is strong

The most basic choice is the freedom to make a choice

But the challenge for East Timor is not simply to improve the skills and potential of individuals. National capacity is not just the sum total of individual capacities. It is a much richer and more complex concept that weaves individual strengths into a stronger and more resilient national fabric. So East Timor will not just have to expand individual capacities. It will also have to create the opportunities and the incentives for people to use and extend those skills. Capacity development takes place not just within individuals but also between them—in their communities and in the institutions and the networks they create—through what has been termed the ‘social capital’ that holds societies together. Human development for East Timor is not just about ‘having’—as measured say by a rise in per capita income, it is also about ‘being’.

Now the challenge is to design and build the institutions within the government and elsewhere that can expand national capacity—and increase the range of choices available to all its people. The country has already taken a major step in achieving its independence. As Mahbub ul Haq, the original architect in 1990 of the series of global human development reports expressed it: ‘the most basic choice is the freedom to make a choice’.

The state of human development

Any assessment of the state of human development in East Timor has to present a very broad picture, looking not just at individual capacities, reflected in standards of health and education, but also at many other aspects of people’s lives—gender equality, for example, popular participation in decision making, cultural identity and the achievement of human rights. Then it needs to take into account the opportunities for

using those capacities for building sustainable livelihoods. This report will attempt to follow progress along some of these dimensions. But it is important to bear in mind that ultimately they all have to knit together—that human development cannot be reduced to one factor alone; like humanity itself it is complex and multi-dimensional.

Population movements

One starting point is to estimate the overall population size. To some degree this has been curtailed by warfare. The Indonesian occupation from 1975 resulted in terrible loss of life. During the early years, around 60,000 people died, and throughout the period to 1999 the total number of deaths caused by the occupation is thought to have been at least 200,000. Many people were killed by the Indonesian Army; others fled to the mountains where they died from starvation or from a lack of basic sanitation or health care. A brief history of this period is given in Appendix I of this report.

The years of violence also caused significant population movements. The Indonesian administration, through its transmigration programme, moved thousands of Indonesians into East Timor, and also forcibly relocated East Timorese communities from their traditional lands. But the most dramatic disruption was to take place in 1999. In the period leading up to and immediately following the referendum, between 1,000 and 2,000 people were killed and more than half the population were forced to leave their homes—around 300,000 persons moved elsewhere in the country and some 200,000 went to West Timor.

The majority have since returned. By March 2002, the UN agencies and the International Organization for Migration had between them helped approximately 147,000 refugees to return to East Timor. A further 49,000 had returned by themselves, bringing the total number of returnees to 196,000. About 60,000 refugees remain in West Timor and a significant proportion of these, many of whom had links with the Indonesian administration, are likely to remain there.

These movements have had a lasting impact on the size and distribution of the population. Although there has not yet been

Box 1.1

Administrative units in East Timor

The current administrative system of East Timor is the legacy of interactions between the traditional system and the ones imposed by Portugal and Indonesia. East Timor in mid-2002 is divided administratively as follows:

13 districts—The Indonesian 2,336 aldeias—This can be translated from Portuguese to English as ‘sub-village’, or *dusun* in Indonesian.

Source: Suco Survey

a complete census since the end of the Indonesian occupation, one of the best recent estimates is available from the 'Survey of Sucos in Timor Lorosae (SSTL)'—see box 1.2—which this report will refer to as the 'Suco Survey'. This quoted figures from the Civil Registry carried out in 2001 and concluded that the total population in the first half of 2001 was 794,298.

Table 1.1 combines this with population estimates for earlier years. The different bases for these estimates, combined with the general social disruption, to some extent disguise underlying population trends. Nevertheless it seems that the 'natural growth rate' continues to be quite high. The total fertility rate, the number of children that a woman on average bears in her lifetime, was over five in 1990 and 1995—higher than in any province of Indonesia. As a result the population continued to grow rapidly—on average by 3.5% annually between 1985 and 1990, and by 2.4% annually between 1990 and 1995. The fertility rate had been falling during the 1990s, and the upheavals of 1999 and the different sources used for an independent East Timor have caused a break in the data series. Nevertheless it is clear that underlying population growth remains high.

The other prominent demographic feature of East Timor is that this is a largely rural society—some 76% of the population live in the in the country's 2,300 aldeias.

Table 1.1

Estimates of total population

	1990	1995	1999	2001
Population	747,557	839,719	779,567	794,298
Under 15	42%	44%	41%	44%
Aged 15-64	57%	55%	57%	54%
Over 65	2.0	1.7	1.9	2%
Fertility rate	5.7	5.1	3.8	..

Source: See annex table 1

Of the urban dwellers, most are to be found either in the capital, Dili, or in the second-largest urban area Baucau. Most developing countries have experienced a steady growth in their urban populations. This has proceeded more slowly in East Timor but the recent upheavals will have made the population more mobile and this, combined with evident urban-rural income gaps, is likely to result in an increase in the urban population.

Health

The people of East Timor have poor standards of health, certainly lower than those in Indonesia. Both infant mortality (80 deaths per 1,000 live births) and under-five mortality (144 deaths per 100,000 live births) are far higher than the rates in Indonesia and overall life expectancy is 57 years, compared with 65 years in Indonesia. The major causes of death include preventable dis-

Table 1.2

Population by district

	District	Population
1.	Aileu	31,827
2.	Ainaro	45,093
3.	Baucau	101,517
4.	Bobonaro	69,932
5.	Covalima	49,234
6.	Dili	120,474
7.	Ermera	88,415
8.	Liquica	45,575
9.	Lautem	53,467
10.	Manufahi	38,616
11.	Manatuto	35,446
12.	Oecussi	45,042
13.	Viqueque	62,704
	Total	787,342

Note: These data do not include some returning refugees.

Source: Suco Survey, 2001.

Box 1.2

Surveys of East Timor

One of the first tasks for East Timor is to establish a firm database for future planning. The largest undertaking at present is a Poverty Assessment which has been a joint exercise of the East Timor Transitional Administration, the Asian Development Bank, the World Bank, the United Nations Development Programme and the Japan International Cooperation Agency. This has three elements:

The Survey of Sucos in Timor Lorosae (SSTL)—This was designed to provide a consistent data source on the characteristics of each suco in East Timor. The main output of the SSTL is an inventory of existing social and physical infrastructure, of the economic characteristics of each suco, and of the coverage of public services. The principal sources of information from each

suco were the suco chief, supplemented by teachers, health professionals and others. Most respondents were male. This is referred to as the 'Suco Survey' in this report.

The Timor Lorosae Household Survey (TLHS)—This is a sample survey, of 9,100 people in 300 aldeias, designed to identify the key characteristics of poor households—to assess the constraints on poorer households and to evaluate the impact of public programmes on the poor.

The Timor Lorosae Participatory Potentials Assessment (TLPPA)—This community-level research was conducted in 48 communities to investigate in detail the nature of poverty, the causes of poverty and how best to promote well being.

Only 20% of aldeias have electricity

eases such as malaria, respiratory tract infections and diarrhoea.

Low health standards are partly the result of a lack of basic services. During the Indonesian period less than 50% of households had access to clean water and only 38% to sanitation. And although there is no recent comparable data, the Suco Survey suggests that the violence of 1999 did not appreciably alter the situation. Only 20% of aldeias have access to electricity; only 7% have piped water to the household and another 30% of aldeias have access to piped or pumped water in a public place. Most people who want to reach health facilities will walk: on average it takes them 20 minutes to reach a road, 30 minutes to reach a paved road and 70 minutes to reach a health centre.

Health provision is weak. Although prior to 1999 East Timor had many of the buildings for its health services the facilities were usually understaffed and short of medical supplies. During September 1999 around three-quarters of the health facilities were damaged and the majority of doctors who, along with many other health staff, were primarily Indonesian, left. Now there is an acute shortage of doctors, though the situation is better for nurses since most of these were East Timorese. According to the Suco Survey there were over 200 health facilities in 2001 of which around half were community health centres and most of the rest were health posts or mobile clinics. Around half the health facilities are provided by the state (figure 1.1).

The Indonesian state health service was very much a top-down delivery system, staffed largely by Indonesians, and permit-

ted the East Timorese little or no say in how their services were run. This, combined with the linguistic barriers, also reduced the opportunities for people to improve their own health standards and many communities have only a limited understanding of basic health and nutrition. HIV/AIDS is also an increasingly important issue (box 1.3).

One of the main concerns is reproductive health. East Timor has few facilities for pre-natal and post-natal care and women in the rural areas in particular are at risk when there are complications in pregnancy. Only 30% of births have any skilled birth attendance. This has contributed to a very high level of maternal mortality: some 420 women die for every 100,000 live births.

At present contraceptive use is low and confined to a narrow range of options. In 1997 25% of women were using contraceptives. Their main method was the three-monthly injection, though a small number were using oral pills Norplant and IUDs. Few men use condoms. Clearly one of the main priorities will be to ensure that couples have access to the range of methods appropriate to their family planning choices.

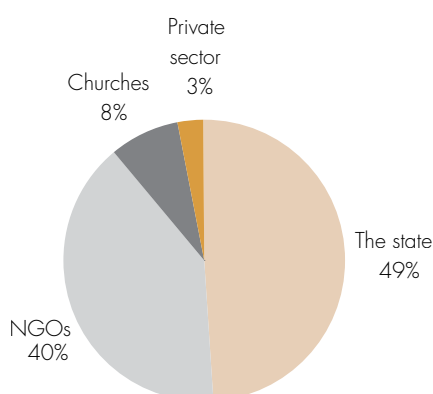
Education

In education too, East Timor lagged behind other provinces of Indonesia. Again there were plenty of buildings, but schools often lacked teachers, funds and supplies. Many parents did not enrol their children at all—the net enrolment ratio for children of primary school age was around 70%, compared with 97% in Indonesia. This has partly been a reflection of poverty: many poor parents could not afford the costs of fees and uniforms. But some parents also had reservations about their children becoming involved in a repressive system and being taught by foreign teachers. The low rate of enrolment, combined with high rates of dropout, meant that in 1995 even in the younger, 15-19 age group less than half of either males or females had completed primary education. As a result, today more than half the population are illiterate (49% male and 64% female).

The events of September 1999, exacerbated the situation. Around 80% of primary schools were partially or completely destroyed, along with buildings, furniture and teaching materials. At that point many teachers left, including the majority of those

Figure 1.1

Providers of health facilities



Source: Suco Survey (2001)

in secondary schools. Since then most schools have been rebuilt. Education is considered in greater detail in chapter 4.

Food security and nutrition

Around 76% of people live in the rural areas where the majority of households are engaged in subsistence agriculture. The main food crops are maize, rice and cassava. Although maize remains the main staple food crop, rice is becoming steadily more important and by 1997 total output was around half that of maize. Food production for 2001, as reported in the Suco Survey, is shown in table 1.3. Output for earlier years is shown in annex table 9. The main cash crop is coffee which is grown both on smallholdings and on small and large estates. Livestock has also been an important source of household income, though this declined markedly during the Indonesian years.

Much of the land is difficult to farm, given the rugged topography and the threat of deforestation and erosion. Farming families use a variety of fairly basic cultivation methods. These include slash-and-burn cultivation of maize and the cultivation of rice on rain-fed or irrigated terraces on the hills or on the perimeters on the lowlands.

Most households have been less concerned with maximizing their yield than with

reducing their vulnerability to the vagaries of the climate—including the El Niño-related phenomena that bring the potential for drought and floods. Only about 2% of households use fertilizers or pesticides and only about 5% use tractors. This is partly because the East Timorese have traditionally not used these inputs but also because they have been unavailable

Box 1.3

The opportunity to prevent HIV/AIDS in East Timor

Twenty years after the first clinical evidence of acquired immuno-deficiency syndrome (AIDS) this has become the most devastating disease humanity has ever faced.

Nearly 58 million people have been infected by the HIV virus globally, of which 22 million have subsequently died of AIDS. HIV/AIDS is now the world's fourth biggest killer and strikes particularly at young adults. Around one-third of those currently living with HIV/AIDS are aged 15-24. Young women are especially vulnerable. But millions of those who are at risk know nothing about HIV and do little to protect themselves. Even many of those carrying the virus are unaware that they have acquired it.

The Asia Pacific region has the fastest growth rates of new HIV infections in the world. In the past four years, there has been a 100% increase in the incidence of HIV infection. HIV/AIDS continues to spread dramatically in Cambodia, China, Myanmar, Papua New Guinea, Thailand and Vietnam. Indonesia is still a low-prevalence country but, just as in other countries, HIV/AIDS is spreading among specific groups, such as sex workers and their clients, as well as among the mobile populations, such as seafarers and truck drivers who have high levels of unprotected sex with multiple partners.

East Timor can expect to be affected by the underlying regional trends. Indeed the danger may be greater here since the risk of HIV/AIDS is particularly high in countries that have been affected by conflict, population displacement and widespread destruction. East Timor has officially had only one reported HIV/AIDS death so far. But the UN Theme Group on HIV/AIDS has concluded that East Timor has no systematic or reliable surveillance of HIV/AIDS or sexually transmitted infections (STI) so there would be insufficient information to assess the extent of a HIV/AIDS epidemic.

The Group also identified some key risk factors:

- High levels of STI;
- Low levels of HIV/AIDS/STI awareness;
- The absence of programmes of awareness, prevention and care;
- An increase in sex work;
- Domestic violence and incest;
- The start of injecting drug use;
- Cultural constraints to talking openly about sexual behaviour;
- The lack of education, vocational training, employment options and leisure activities for young people;

If it follows the same pattern as in other countries HIV/AIDS could have a major impact in East Timor. Some of the effects will be economic: those who contract the virus are generally from the most productive age groups and the combination of loss of income and the need to pay health expenses is devastating for poor families. There can also be a major impact on education: if teachers become infected and die they will be difficult to replace. If a family member is infected, children are likely to be kept at home to care for the sick.

There is also a huge burden on health services. The United Nations has estimated that in 1996 the average annual health care cost for a person living with HIV/AIDS in the Pacific Islands was about \$5,000, while Pacific Island governments were on average spending only between \$20 and \$30 per person on health. Even a moderate HIV/AIDS epidemic in East Timor would put a huge strain on the government budget. Then there are the immense personal and social costs. Who will care for the sick or the orphans?

East Timor has a unique opportunity to avoid this. Determined efforts now can ensure a healthier and more secure future.

Table 1.3

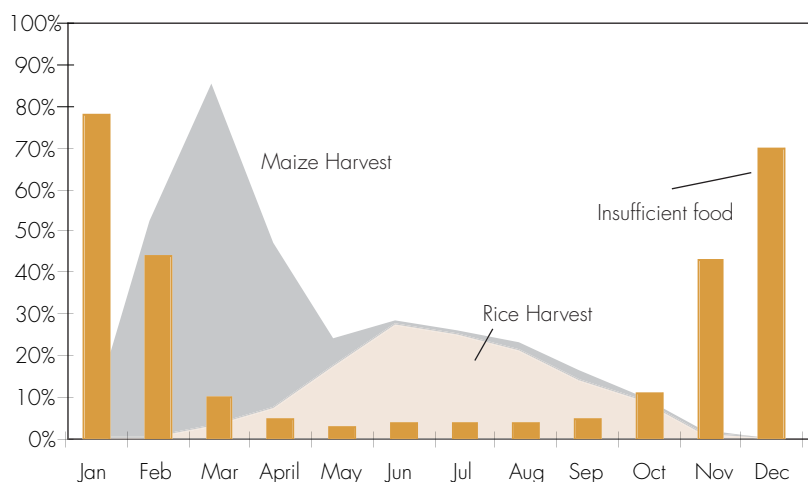
Food production, 2001

	Hectares	Tons
Gogo Rice	3,417	3,552
Rice	35,318	54,302
Maize	121,335	68,959
Cassava	91,067	55,349
Coffee cherries	88,823	26,944
Coffee dry bean	28,981	14,984
Kidney bean	8,177	3,722
Sweet potato	67,137	31,663
Potato	1,687	968
Taro	28,912	13,500
Squash	13,639	9,442
Mungbean	4,145	1,786
Soy bean	2,080	821
Coconuts	2,120	2,137
Peanuts	3,262	1,677
Vegetables	7,123	1,888
Bananas	17,892	19,371
Other fruit	2,978	3,086

Source: Surco Survey (2001)

Figure 1.2

Harvests and patterns of food insecurity



Note: The bars indicate the percentage of sucos reporting insufficient food in that month. The areas indicate the percentage of sucos reporting a maize or rice harvest in that month.

Source: Suco Survey (2001)

Food insecurity peaks just before the harvest

As a result of low productivity and general neglect of agriculture, compounded by the effects of decades of conflict, and difficulties in land tenure, food output has been low. Only around half of the land suitable for agriculture is currently being used, and for decades East Timor has not been self-sufficient in its staple crops.

This low production has undermined basic food security. Families can achieve food security either by growing food for themselves or by gaining income from other sources to buy what they need. The majority of people rely on growing their own food. The Suco Survey shows that up to 80% of maize production and 85% of cassava production is for own-consumption. Rice is a more traded food though even about two-thirds of rice production is for own-consumption. Surveys by SUSENAS, the Indonesian Socio-Economic Survey, suggest that around two-thirds of total household expenditure goes on food with rice as the largest single item. However, there is clearly insufficient production and there are typically shortages in December and January. This is illustrated in figure 1.2 which shows how food insecurity typically peaks just before the maize harvest.

When times get tough, farm families eat less food and adopt other coping strategies. The Poverty Assessment Survey found that for two-thirds of people the first option would be to substitute corn for rice,

while others would sell livestock or other assets or borrow from friends or relatives.

Even when food is available in the household, however, it may not be well used. This is evident from the extent of child malnutrition: around 45% of children under five are underweight. WHO nutritional surveys conducted in selected districts suggest that 3% to 4% of children aged 6 months to five years are acutely malnourished, while one in five are chronically malnourished. Although some of this is due to a lack of food, some families do not give their children the right kinds of food and children's ability to absorb nutrients is also being compromised by regular infections.

Income poverty

That East Timor is a poor country is not in doubt. But the proportion judged to be living in income poverty will depend on where the poverty line is set. The international standard, which is useful for cross-country comparisons, is \$1 per day. But it is usually better to have a national poverty line that better reflects local conditions. The East Timor Household Survey selected a poverty line in September 2001 that was the equivalent of \$0.55 per person per day. Of this, around two-thirds was allocated to food, sufficient to provide 2,100 kilocalories per day, and the rest for non-food items including education, health, clothing and housing. On this basis, 41% of the popula-

tion fell below the poverty line, with the incidence higher in the rural areas (46%) than in the urban centres (26%). The lowest poverty rate is in Dili and Baucau where it is 14%.

The vast majority of the poor are in the rural areas. Of these the poorest groups are in households that have small landholdings and few or no livestock, and those who live in areas that are prone to flooding and soil erosion. Also most likely to be poor are households with many children or those with elderly or other dependent relatives.

More surprising perhaps, poverty appears to be lower in the 10% of households that are female-headed. This is probably because a widowed woman is likely to be so poor that she cannot survive alone and, following East Timorese custom, is likely to have moved in with the family of her husband's brother. Only in a better off household could she manage on her own.

Poverty in East Timor is also related to inequality. The conventional measure of inequality is the Gini coefficient which varies between 0 (absolute equality) and 1 (one person owns everything). In East Timor in 1995, the Gini coefficient, at 0.363, was higher than in some of the other poor provinces of Indonesia (table 1.4). This can be explained in part by the low productivity in agriculture which has reduced rural incomes. Although in that year 73% of workers were employed in agriculture they generated only around 30% of GDP and agricultural output per worker was less than half that in other provinces.

Those working in the urban areas, where the majority of people were either working for the government or in other parts of the service sector, probably had earnings similar to those elsewhere in urban Indonesia. Thus in the mid-1990s the per capita income in Dili was 73% higher than that for East Timor as a whole while that for the poorest district, Lautem, was 42% lower.

The departure of many Indonesian officials will certainly have reduced average urban incomes. However, the expansion in government services through UNTAET and the large number of international organizations in Dili contributed to a marginal increase in the Gini coefficient to 0.37 (2001).

Sustainable livelihoods

Table 1.4

Inequality and agricultural productivity, 1995

	Gini coefficient	Output/worker (Rp. Millions)
East Timor	0.363	0.847
W. Nusa Tenggara	0.286	1.706
E. Nusa Tenggara	0.296	0.961
Maluku	0.269	2.026
Irian Jaya	0.386	2.007

Source: Booth, A (2001)

To achieve sustainable human development people should be able to pursue to 'sustainable livelihoods'. This term includes not just employment but also the ways in which they can use other assets, activities and entitlements in order to earn a living.

One of the priorities for East Timor must be to create sufficient employment opportunities for both current and future generations. Currently the labour force amounts to around 310,000. With the population growing at around 2.5% annually, around 20,000 young people will join the labour force each year. Almost all current sources of livelihood are linked with agriculture, both for own consumption and cash income. A rapid assessment survey of households by the Asian Development Bank in 2000 found rice to be the main source of household cash income (table 1.5).

As this table indicates, most cash income is derived from the 'informal economy'. For the foreseeable future, the alternative to informal employment will be very limited. A study for ILO/UNDP estimates that at most the formal economy will probably

Around 20,000 young people join the labour force each year

Table 1.5

Main occupation for household cash income

Occupation	Rural	Urban	Total
Rice grower	32%	15%	23%
Coffee grower	13%	9%	11%
Fruit/Veg grower	26%	19%	22%
Animal husbandry	6%	5%	6%
Shop operator	3%	11%	7%
Contractor	1%	2%	1%
Labourer	5%	12%	8%
Public servant	1%	7%	4%
Cleaner	1%	2%	2%
Transport	1%	3%	2%
Restaurant operator	0%	1%	1%
Other	11%	15%	13%

Source: ADB (2000)

A culture of violence and intolerance against women

amount only to around 22,000 people, most of whom are employed by the government NGOs and a few foreign companies. Everyone else—including the self-employed or own-account workers, employers, employees and unpaid family workers—could be said to be engaged in the informal economy. The gender breakdown of this workforce is unknown but is thought to be 60% male and 40% female.

The 'industrial' or manufacturing sector remains very small and consists mostly of craft operations. An assessment in 1997 estimated that there were around 4,500 enterprises, with weaving and furniture-making as the largest categories, and the average number of workers per enterprise was only three (House, 1999).

As the economy develops, however, off-farm work will become increasingly important. Much of that will be in the service sector in Dili and Baucau. But sustained economic development will also require support and encouragement for small-scale enterprises in both rural and urban areas.

Gender

As in other developing countries, poverty particularly affects women. In addition to their other responsibilities, both in the household and on the farm, they bear the brunt of the impact of polluted water and poor sanitation which forces them to spend a lot of time looking after sick children. Rural women in particular who live far from health facilities also run the risk of complications in pregnancy—which contribute to maternal mortality.

Women, at least in the past, have been less likely than men to have been enrolled in school, and two-thirds are illiterate. Moreover they have less power in the household. This is partly because they may not have a cash income of their own: the labour force participation rate for women is only 40% compared with 60% for men. Women also have little voice in community meetings, where they are often silenced. In addition, they are under-represented in such occupations as teacher or public administrator.

Many women are also the victims of violence. Indeed one of the worst aspects of the events of September 1999 was the level of violence against women. The UN High Commission on Human Rights

reported on cases of rape and sexual harassment in Dili and during the forced movement to the camps in West Timor, as well as in the camps themselves.

The East Timorese women's NGO, FOKUPERS, also reported on 182 documented cases of gender-based violation of human rights and considers that these documented incidents were just the tip of the iceberg. All this violence has had a traumatic effect on the lives of hundreds of people who will need counselling and support in the years ahead.

Nevertheless most of the violence experienced by women nowadays takes place within their own homes. 'Gender-based violence' can be defined as violence involving men and women in which the woman is usually the victim, and which is derived from an unequal power relationship. Participants at the First Congress of Women of Timor Lorosae in June 2000 reported that a culture of violence and intolerance against women has become deeply embedded in East Timorese society. The Congress adopted a platform of action that drew specific attention to gender-based violence, including domestic violence.

The full extent of this violence is unknown. Inevitably much of it goes unreported. Some women may be unaware of their legal rights, or feel they cannot rely on the authorities to take appropriate action. Others may fear further retribution from the assailant or disapproval from other members of the community. But it is not unusual in many societies emerging from a long period of armed conflict for the echoes to resonate in households for years afterwards.

A number of NGOs in East Timor already have programmes that aim to prevent and respond to gender-based violence. The East Timorese Women's Network (REDE) has asked for adequate laws to protect women victims of domestic violence and for the establishment of services to support them. UNIFEM is currently supporting the setting up of a permanent secretariat for REDE and capacity building for REDE's staff and members.

At the request of the East Timorese authorities and communities, a series of workshops on domestic violence was launched in selected pilot areas of Baucau

and Manatuto districts in October 2001, aimed at developing an understanding of the extent of the problem and seeking solutions in the local community.

Women have a vital role to play in the reconstruction of East Timor. Already some efforts have been made to enhance their participation. There have, for example, been special activities to promote women's voting and measures to ensure that at least 30% of public service workers are women. In November 2001 the transitional administration appointed an East Timorese Adviser on Equality, reporting directly to the Chief Minister, to support the formulation and implementation of government policies on equality and the promotion of these issues within central and local governments.

Environment

A key requirement of human development is that it should be sustainable—'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. East Timor is not well endowed with natural resources. Much of the terrain is steep—studies show that around 44% of the country has a slope of around 40%, with only a thin covering of unproductive soil. Rainfall is low but when it arrives it is often so heavy that it is likely to wash the soil away in flash floods. Some farming communities have developed indigenous forms of soil conservation, but elsewhere slash-and-burn agriculture and poor land management have contributed to erosion and a steady loss of soil cover.

This has been exacerbated by deforestation. Even before the arrival of the Portuguese East Timor was losing its forests. One of the most valuable resources was sandalwood, but overexploitation has now reduced this to just a few stands. Many rural families also rely on selling wood for fuel. As a result of these and other activities, forest cover is thought to have fallen by almost 30% in the period 1972-99. Although there are few reliable estimates of land use, probably 80% of the country now consists of various types of shrubland (Pedersen, 1999).

The other main natural resource is minerals. These include some deposits of gold, copper and iron. But much of the mineral

wealth lies in the Timor Sea between East Timor and Australia. Here there are oil and natural gas deposits. Estimates of the value vary but one suggests that over a 20-year life the field could yield around \$7 billion in total.

For East Timorese in urban areas the main environmental issue is pollution. At present there are no effective systems for waste management. Dili has a basic sewerage system and limited collection and disposal of solid waste. But large piles of rubbish accumulate as a result of illegal dumping. All of this is further polluting the groundwater on which many people rely for drinking water.

Sustainability is a critical issue for human development in East Timor. Unless the country can address such issues as deforestation, water pollution, and unsustainable harvesting of resources, agricultural and rural incomes will drop, roads and infrastructure will continue to break down, and people's health will suffer. Environmental degradation also compromises the health and livelihood systems of future generations.

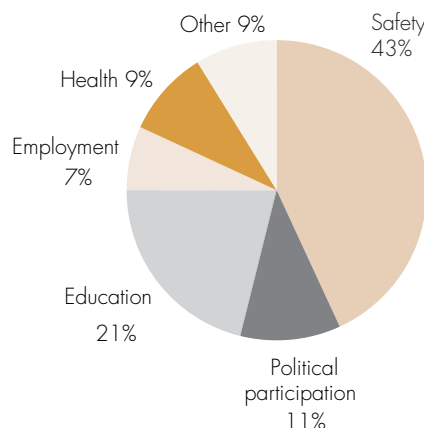
Human security

Another critical component of human development is security. People need to be free of threats to their rights, their safety, or their lives. Compared with the years of Indonesian administration and the traumatic period following the referendum, most people now feel safer. And the reported crime rate is low. This was clear from the Household Survey in which 43% of respondents reported greater safety as the sin-

Environmental degradation compromises the livelihoods of future generations

Figure 13.

Improvements after 1999



Source: Household Survey

gle most important improvement from before the violence (figure 1.3).

The UNTAET administration was established in October 1999 by the UN Security Council to ‘exercise all legislative and executive authority, including the administration of justice’. This involved the establishment of a civilian police force to maintain law and order as well as help with the creation of the East Timor Police Service. This effort has included more than 2,000 personnel from 40 countries. Governance and justice issues are considered in greater detail in chapter 2.

Freedom and participation

The people of East Timor have already established independence as a nation. On August 30, 2001 a remarkable 91% of the electorate voted to elect the members of a Constituent Assembly of whom 27% were

women. The Assembly received reports from 13 Constitutional Commissions that summarized the views of over 36,000 East Timorese people in preparing the Constitution that it agreed in March 2002 and that paved the way to independence. The presidential election of April 2002 also had a striking turnout—86% of voters cast their ballots, compared for example, with 51% in the last US presidential election.

These formal steps are the prerequisites for a nation state. But freedom involves more than establishing formal institutions and holding regular elections. The kind of freedom that is central to human development requires a constant process of participation and feedback that allows everyone, men, women and children, the widest possible opportunity to control the processes that affect their daily lives.

This kind of freedom is also a human right. As the global Human Development Report 2000 puts it, human rights and human development share a common vision and a common purpose—to secure freedom, well-being and dignity of all people everywhere. To secure:

- *freedom from discrimination*—by gender, race, ethnicity, national origin or religion;
- *freedom from want*—to enjoy a decent standard of living;
- *freedom to develop*—to realize one’s human potential;
- *freedom from fear*—from threats to personal security, from torture, arbitrary arrest and other violent acts;
- *freedom from injustice*—and violations of the rule of law;
- *freedom of thought and speech*—and to participate in decision-making and form associations;
- *freedom for decent work*—without exploitation.

This list of freedoms is a challenging and demanding agenda. For East Timor, the first priority has been to establish the constitutional arrangements to build a strong and participative democracy along with the appropriate institutions and a strong legal framework.

But just as important is to establish a ‘culture’ of respect for human rights on the part of both the state and civil society. This cannot be achieved by legislation alone. Each

Box 1.4

A primer on the human development index

The human development index was first presented in the 1990 global *Human Development Report*, and since then has been refined.

Why do we need a human development index?—Because national progress tends otherwise to be measured by GNP alone, many people have looked for a better, more comprehensive socio-economic measure. The human development index is a contribution to this search.

What does the HDI include?—The HDI is a composite of three basic components of human development: longevity, knowledge and standard of living. Longevity is measured by life expectancy. Knowledge is measured by a combination of adult literacy (two-thirds weight) and mean years of schooling (one-third weight). Standard of living is measured by purchasing power, based on real GDP per capita adjusted for the local cost of living (purchasing power parity, or PPP).

Why only three components?—The ideal would be to reflect all aspects of human experience. The lack of data imposes some limits on this, and more indicators could perhaps be added as the information becomes available. But more indicators would not necessarily be better. Some might overlap with existing indicators: infant mortality, for example, is already reflected

in life expectancy. And adding more variables could confuse the picture and detract from the main trends.

How is it possible to combine indicators measured in different units?—The measure for GNP is money. The breakthrough for the HDI, however, was to find a common measuring rod for the socio-economic distance travelled. The HDI sets a minimum and a maximum for each dimension and shows where each country stands in relation to these scales—expressed as a value between 0 and 1.

Is it misleading to use a single HDI for a country with great inequality?—National averages can conceal a great deal. The best solution would be to create separate HDIs for the most significant groups: by gender, for example, or by income group, geographical region, race or ethnic group. Separate HDIs would reveal a more detailed profile of human deprivation and these have been produced in several countries.

How can the HDI be used?—The HDI offers an alternative to GNP for measuring the relative socio-economic progress of nations. It enables people and their governments to evaluate progress over time—and to determine priorities for policy intervention. It also permits instructive comparisons of the experiences in different countries.

individual and group has to respect the ‘other’—accepting that one person’s freedoms end where someone else’s begin. And East Timor also has to look beyond the aggression of the recent past, ensuring that conflicts are resolved not through violence but through dialogue.

The human development indices

This brief overview of the state of human development in East Timor gives some impression of the range of issues that comprise genuine human development—from good health, to sustainable livelihoods and employment, to political freedom. For most of these issues it is possible to collect the appropriate data—on infant mortality rates, for example, levels of employment and income, and the extent of women’s participation in electoral systems. But efforts have also been made internationally to achieve an overall composite measure—a human development index (HDI) that draws together as many factors as possible into a single measure.

It should be emphasized, however, that the HDI does not—indeed cannot—reflect all aspects of human development since it is impossible meaningfully to combine information on income, say, or crime, or human rights, or maternal mortality into one single indicator. Instead the HDI has been developed to combine a subset of these data, using indicators on life expectancy, knowledge, and standard of living (box 1.4).

This results in a HDI value for each country in the range 0 to 1. This in principle makes it possible to rank every country in the world according to its human development achievement. In practice, this is not possible for every country since some do not collect the necessary data. In 2001 the global human development report calculated the HDI for 162 countries. Of these, Norway occupied first place with a HDI of 0.939 while Sierra Leone, a country in West Africa, occupied the bottom position with an HDI of 0.258.

Where does East Timor fit into this picture? Table 1.6 shows estimates for East Timor as a province of Indonesia until 1999, and an estimate for 2001 which indicates an HDI of 0.421. There has also been general rise in HDI (figure 1.4). This trend needs to be considered with caution, since the figure for 2001 uses different sources (see

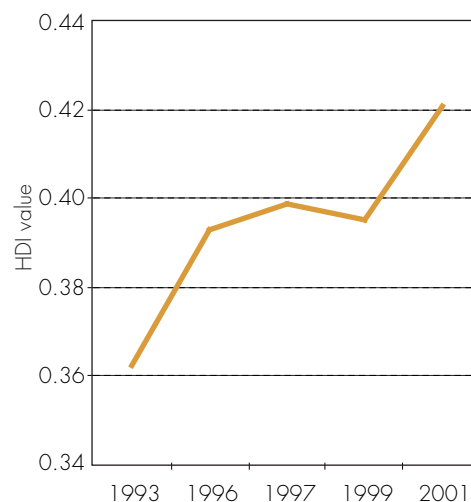
Note on the calculation of indicators, page 87). However it suggests a steady increase in both the life expectancy index and the education index. The income element of the HDI, which is the GDP per capita adjusted for purchasing power parity, showed a sharp dip for 1999 which probably corresponded to the economic crisis in Indonesia and the disruption in 1999, and then a rise for 2001 which corresponded to the boost to the service sector caused by the presence of many expatriates.

To fit East Timor into the rest of the world, however, means reverting to the data for 1999 since this is the year for which the latest global HDIs have been calculated. On this basis the HDI for East Timor was 0.395 which is identical to that of the Central African state of Rwanda which for that year was ranked 152 of the 162 countries for which HDIs were calculated (table 1.7). It is interesting in this case to compare the components of East Timor’s HDI with those of Rwanda. Although the HDIs are identical, the components that make up the HDI are very different. Thus East Timor’s GDP per capita is less than half that of Rwanda (\$337 compared with \$885). And East Timor also has a lower education index mainly because in 1999 the literacy rate was only 40%, compared with 66% in Rwanda. However, this is offset by far higher life expectancy (56 years in East Timor, compared with 40 in Rwanda).

Of the component parts of the HDI, East Timor performs moderately on life

East Timor’s HDI was the same as that of the African country of Rwanda

Figure 1.4
HDI trend, 1993-2001



Source: As for table 1.6

Table 1.6

Human development index

	1993	1996	1997	1999	2001
Life expectancy at birth (years) ¹	52.2	53.9	54.4	56.0	56.7
Adult literacy rate (% age 15 and over)	35.6	40.4	40.6	40.4	43.0
Gross enrolment ² (%)	52.6	55.5	56.6	59.1	56.1
GDP per capita (\$PPP) ³	374	429	442	337	478
Life expectancy index	0.453	0.482	0.490	0.517	0.528
Education index	0.413	0.454	0.459	0.466	0.474
GDP index	0.220	0.243	0.248	0.203	0.261
Human development index value	0.362	0.393	0.399	0.395	0.421

Notes: 1. For further details on how life expectancy and other data were estimated, see Note on the calculation of indicators, page 87. 2. Combined primary, secondary and tertiary. 3. Using 1996 as the base year. The figure for '1993' refers to 1995.

Sources: The 1990 population census, the 1995 intercensal survey (SUPAS), Socio-economic household surveys—SUSENAS (1993, 1996 and 1999), East Timor Household Survey 2001, IMF Survey (August 28, 2000), IMF Statement at Donor's Meeting on East Timor (Oslo, December, 2001).

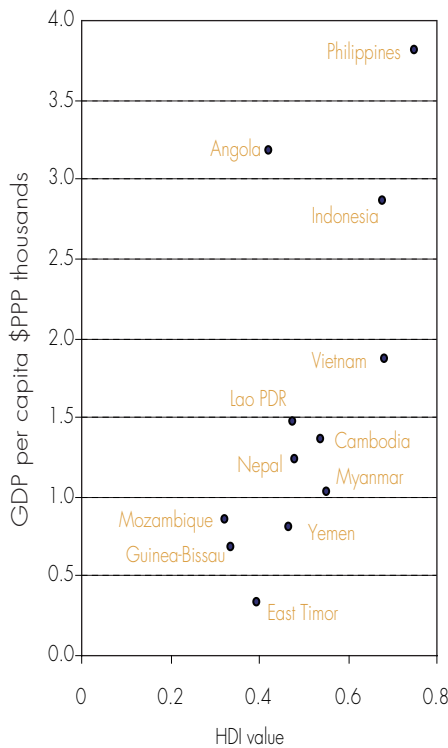
Table 1.7

East Timor's human development index in the world rankings, for 1999

HDI rank		HDI value	GDP per capita (\$PPP)	Life expectancy at birth (years)	Adult literacy Age 15+ (%)	Gross educational enrollment (%)
ASEAN Countries						
56	Malaysia	0.774	8,209	72.2	87.0	66
66	Thailand	0.757	6,132	69.9	95.3	60
70	Philippines	0.749	3,805	69.0	95.1	82
101	Vietnam	0.682	1,860	67.8	93.1	67
102	Indonesia	0.677	2,857	65.8	86.3	65
118	Myanmar	0.551	1,027	56.0	84.4	55
121	Cambodia	0.541	1,361	56.4	68.2	62
131	Lao PDR.	0.476	1,471	53.1	47.3	58
	East Timor	0.395	337	56.0	40.4	59
Other Asian countries with low human development						
129	Nepal	0.480	1,237	58.1	40.4	60
130	Bhutan	0.477	1,341	61.5	42.0	33
132	Bangladesh	0.470	1,483	58.9	40.8	37
133	Yemen	0.468	806	60.1	45.2	51
Portuguese-speaking developing countries						
69	Brazil	0.750	7,037	67.5	84.9	80
91	Cape Verde	0.708	4,490	69.4	73.6	77
146	Angola	0.422	3,179	45.0	42.0	23
156	Guinea-Bissau	0.339	678	44.5	37.7	37
157	Mozambique	0.323	861	39.8	43.2	23
Other low-ranked HDI countries						
149	Rwanda	0.395	885	39.9	65.8	40
161	Niger	0.274	753	44.8	15.3	16
162	Sierra Leone	0.258	448	38.3	32.0	27

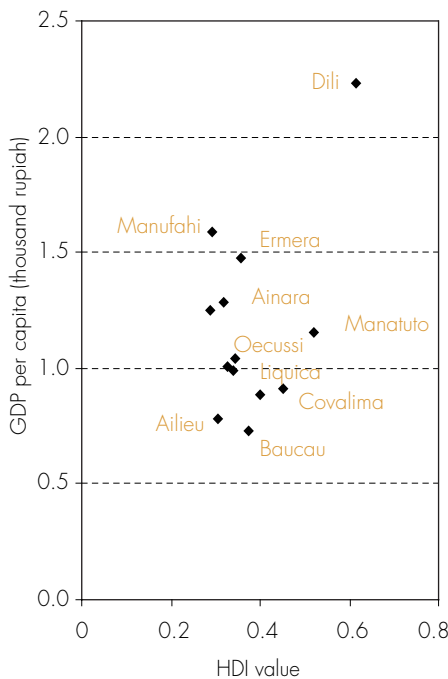
Sources: For other countries, Human Development Report 2001 (UNDP)

Figure 1.5
HDI compared with per capita GDP



Source: As for table 1.7

Figure 1.6
Regional HDIs, 1999



Note: the HDI values here are not comparable with the ones presented in table 1.6, as the income indicator uses Indonesian rupiah, and one of the educational indicators uses mean years of schooling instead of the combined gross enrolment ratio.

Source: Calculated from SUSENAS core data 1999.

expectancy. An average life expectancy of 56 years is comparable with Cambodia and Myanmar, but much lower than that in a number of other ASEAN countries, such as Indonesia (65) and Vietnam (68). However, East Timor's life expectancy was still much higher than that in other Portuguese-speaking, low-income countries in Africa, such as Angola and Guinea-Bissau (45) and Mozambique (40).

Of the components of the education index, East Timor does better on enrolment than on literacy. The combined gross enrolment ratio for East Timor was 59% in 1999, comparable with Myanmar (55%), the Lao PDR (58%) and Cambodia (62%). On the other hand the adult literacy rate for East Timor at around 40%, was much lower than in any ASEAN member country, comparable only with the poorest Asian countries, such as Bhutan, Bangladesh, Nepal and Yemen, as well as with the poorest African countries, including Guinea-Bissau, Niger, Mozambique and Sierra Leone.

However, East Timor's worst performance is on per capita income—which to some extent is the result of the disruption in 1999. In fact East Timor's estimated per capita income of \$337 for 1999 would put it in last place in a GDP ranking of these 162 countries—some way behind Sierra Leone, which occupied last place at \$448. This is indicated in figure 1.5 which shows East Timor at the bottom of the chart in terms of income but doing slightly better on HDI. The trend line in this figure shows that HDI tends to rise as per capita income rises—in part of course because income is itself a component of the HDI. But this figure illustrates an important point: some countries do better than others at translating higher incomes into better standards of human development, so in these terms East Timor performs better than its per capita income would suggest—underlining the importance of focusing on the HDI as a measure of development rather than on GDP alone.

One of the weaknesses of the HDI calculated at the national level, however, is that it does not take into account inequalities within countries. A country might have a high overall HDI but have significant inequalities between regions, or between social groups. This will certainly be the case in East Timor, given the contrast between ur-

The worst HDI performance is on income

Table 1.8

Gender-related development index

	1999	2001
Life expectancy at birth (years)		
Female	57.5	59.2
Male	54.2	55.6
Adult literacy rate, aged 15+ (%)		
Female	33.9	42.8
Male	46.9	43.1
Combined primary, secondary and tertiary gross enrollment ratio (%)		
Female	59.7	55.1
Male	62.1	58.4
Gender-related development index (GDI)	0.361	0.347

Note: For issues on comparability between pre-and post-1999 data, see 'Note on the calculation of indicators', page 87.

Sources: As for table 1.6.

Table 1.9

East Timor in the global GDI rankings

HDI rank	Gender-related development index		Life expectancy at birth (years)		Adult literacy 15+ (years)		Gross educational enrollment ratio (%)		Earned income (\$PPP)		
	Rank	Value	Female	Male	Female	Male	Female	Male	Female	Male	
ASEAN countries											
56	Malaysia	55	0.768	74.8	69.9	82.8	91.1	67	64	5,153	11,183
66	Thailand	58	0.755	72.9	67.0	93.5	97.0	61	60	4,634	7,660
70	Philippines	62	0.746	71.1	67.0	94.9	95.3	84	80	2,684	4,910
101	Vietnam	89	0.680	70.2	65.5	91.0	95.4	64	69	1,552	2,170
102	Indonesia	92	0.671	67.7	63.9	81.3	91.5	61	68	1,929	3,780
118	Myanmar	107	0.547	58.4	53.6	80.1	88.8	55	55	746	1,311
121	Cambodia	109	0.534	58.6	54.1	57.7	80.1	54	71	1,190	1,541
131	Lao PDR	119	0.463	54.4	51.9	31.7	63.0	52	65	1,169	1,774
	East Timor	0.351	57.7	54.2	33.9	46.9	57.9	62.1	146	522	
Other Asian countries with low human development											
129	Nepal	120	0.461	57.8	58.3	22.8	58.0	52	67	849	1,607
130	Bhutan	..	..	62.8	60.3	..	..	..	..	..	..
132	Bangladesh	121	0.459	59.0	58.9	29.3	51.7	33	41	1,076	1,866
133	Yemen	131	0.410	61.2	59.0	23.9	66.6	29	72	345	1,272
Portuguese-speaking developing countries											
69	Brazil	64	0.743	71.8	63.9	84.9	84.8	80	79	4,067	10,077
91	Cape Verde	84	0.696	71.8	66.0	65.1	84.5	76	79	2,687	6,560
146	Angola	..	..	46.3	43.6	..	..	21	25	..	..
156	Guinea-Bissau	143	0.308	45.9	43.1	18.3	58.3	27	47	442	921
157	Mozambique	141	0.309	40.8	38.8	27.9	59.3	19	26	713	1,013
Other low-ranking HDI countries											
161	Niger	146	0.260	45.1	44.5	7.9	23.0	12	20	561	941
162	Sierra Leone	..	..	39.6	37.0	..	..	21	32	..	..

Sources: For other countries, Human Development Report 2001 (UNDP)

ban and rural areas and the neglect of more remote districts. One way of addressing this is to calculate different HDIs for different regions. At present it is not possible to do this for East Timor's 13 districts since there is insufficient data. Nevertheless, it is possible to glimpse the picture using data collected by Indonesia in 1999. The result is illustrated in figure 1.6 which shows the highest HDI to be in Dili and lowest in Manufahi, even though this district has a higher per capita GDP than all other districts other than Dili.

Gender-related development index

One of the most important differences in human development achievement is the difference between men and women. In this case the global human development reports have taken a slightly different approach—not by calculating separate HDIs for men and women but by reducing or discounting the HDI by a factor that represents the extent of gender inequality. This produces a Gender-related development index (GDI). The greater the degree of inequality, the more the GDI lags behind the HDI. The results are shown in table 1.8, which for 2001 gives East Timor a GDI of 0.347 which compares with a HDI of 0.395—that is, 12% lower. This is largely because women's earned income is estimated at only one-eighth that of men.

Table 1.8 also shows that the GDI has deteriorated since 1999. This is not because overall gender inequality has increased—indeed in 1999 the GDI, at 0.361, was 34% lower than the HDI for that year—but because the HDI itself dropped between 1999 and 2001.

There is also a further indicator of women's status: the gender empowerment measure (GEM). This takes into account the percentage of women in legislatures and among managers and professional workers, as well as the disparities in earned income between men and women. At present, however, there is insufficient data to calculate the GEM for East Timor.

Human poverty index

Another useful measure developed for the global human development reports is the human poverty index (HPI). The conventional approach to poverty measurement discussed earlier refers only to income or

consumption poverty. But poverty, like human development, is a multidimensional concept. People can be impoverished in many ways beyond just a shortage of income. They can be in poor health, for example, or lack access to education, or to opportunities for employment. The human poverty index attempts to take this into account. In fact there are two indices, one for developing countries and one for OECD countries to take into account their different circumstance. The HPI for developing countries (HPI-1) combines measures of longevity, knowledge, and overall economic provisioning. In this case the values are represented as percentages, where a lower percentage indicates a lower level of poverty. The current HPI for East Timor is 49.0 (table 1.10).

It should be noted however that the HPI is not a headcount index. A human poverty level of 49.0 cannot be said to mean that 49% of people live in human poverty. This arises because the HPI, like the HDI, is a composite index. Thus while the proportion of people not using improved water sources is 46.9%, and the proportion of adults that are illiterate is 59.6%, these are not necessarily the same people—some illiterate people, for example, will have good water supplies. This lack of information on overlap means that the HPI cannot be considered a 'headcount' index. However it does have the value of showing the larger picture and of helping trace poverty trends over time and between countries.

One of the difficulties of making international comparisons is that not all countries produce sufficient data to calculate a human poverty index. The 2001 global human development report has HPIs and the corresponding rankings for 90 developing countries in 1999. If East Timor were inserted into this global list, increasing the total number of countries to 91, and with a value of 46.0, it would occupy rank number 81, coming between Senegal (45.0) and the Central African Republic (45.8).

Table 1.11 shows East Timor in the global context. Rwanda, the country with the same HDI rating as East Timor in that year, has a lower level of human poverty—ranking 76 with a HPI of 44.2. Table 1.11 also allows comparisons with other countries in the region. Of the other Asian countries for which a HPI can be calculated, East

East Timor has one of the highest rates of human poverty in Asia

Table 1.10
East Timor's human poverty index

	1996	1999	2001
Probability at birth of not surviving to age 40 (% of cohort)	41.1	35.6	32.2
Adult literacy rate, aged 15+ (%)	59.6	59.6	57.0
Unweighted average of deprivation in a decent standard of living	49.0	45.7	..
<i>Population not using improved water sources (%)</i>	47.4	46.9	45.4
<i>Underweight children under 5 (%)</i>	50.6	44.5	..
Human poverty index (HPI-1) value ¹	51.0	49.0	..
Population below the national poverty line (%) ²	41.5	42.4	41.1

Notes: 1. For an explanation of how the HPI was calculated, see Note on the calculation of indicators, page 87. 2. Using consumption-based poverty lines: 32,742 rupiah/capita/month in 1996, 78,396 rupiah/capita/month in 1999 - both applying for SUSENAS core data in 1996 and 1999, and 158,480 rupiah/capita/month in 2001 - applying for East Timor household survey 2001.

Source: The 1990 population census, the 1995 intercensal survey (SUPAS), Socio-economic household surveys - SUSENAS (1993, 94, 96, 97, 98, 99), East Timor household survey 2001.

Table 1.11
East Timor in the global HPI-1 rankings

HDI rank	Rank	Human poverty index value (%)	Probability not surviving to 40 % of cohort	Adult illiteracy rate 15+ (%)	Population not using improved water sources(%)	Underweight children under-5 (%)	Population below national poverty line(%)	
			1995-2000	1999	1999	1995-2000	1984-99	
<i>ASEAN countries</i>								
56	Malaysia	13	10.9	5.0	13.0	5	18	15.5
66	Thailand	21	14.0	9.0	4.7	20	19	13.1
70	Philippines	23	14.7	8.9	4.9	13	28	36.8
101	Vietnam	45	29.1	12.8	6.9	44	39	50.9
102	Indonesia	38	21.3	12.8	13.7	24	34	27.1
118	Myanmar	43	28.0	26.0	15.6	32	39	..
121	Cambodia	78	45.0	24.4	31.8	70	52	36.1
131	Lao PDR	66	39.9	30.5	52.7	10	40	46.1
	East Timor		49.0	35.6	59.6	46.9	44.5	42.4
<i>Other Asian countries with low human development</i>								
129	Nepal	77	44.2	22.5	59.6	19	47	42.0
130	Bhutan	..	..	20.2	..	38	38	..
132	Bangladesh	73	43.3	21.4	59.2	3	56	35.6
133	Yemen	70	42.5	20.0	54.8	31	46	19.1
<i>Other Portuguese-speaking developing countries</i>								
69	Brazil	18	12.9	11.3	15.1	17	6	22.0
91	Cape Verde	36	20.9	10.4	26.4	26	14	..
146	Angola	..	..	41.6	..	62	42	..
156	Guinea-Bissau	86	49.6	42.2	62.3	51	23	..
157	Mozambique	84	48.3	49.2	56.8	40	26	..
<i>How HDI-ranked countries</i>								
161	Niger	90	63.6	41.4	84.7	41	50	63.0
162	Sierra Leone	..	..	51.6	..	72	29	68.0

Sources: For other countries, Human Development Report 2001 (UNDP)

Timor has the highest rate of human poverty.

Table 1.11 also includes the national poverty rates. This, however, refers to 'income poverty'. In contrast to the HPI this is a headcount index. These data are also based on nationally set poverty lines so are not strictly comparable, but they offer overall indications.

They show, for example, that some of the poorest African countries have very high levels of income poverty, much higher than that of East Timor. They also indicate that both the Lao PDR and Vietnam have a higher proportion of their people living in income poverty than in East Timor. Both, however, appear to do much better on human poverty.

Goals for the future of East Timor

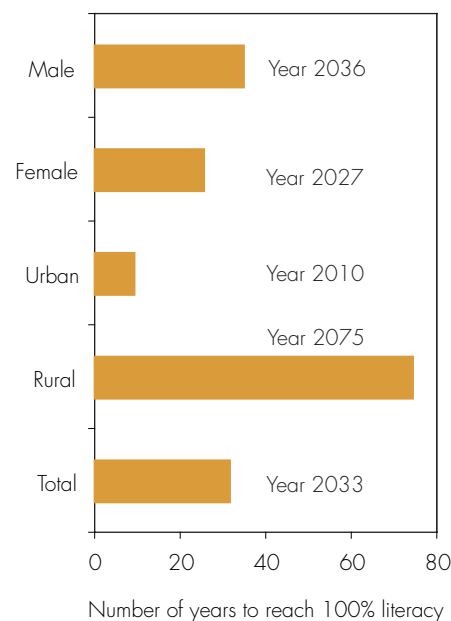
These measures of human development and poverty help fill out the picture. And they also indicate just how far East Timor has to go along many dimensions of human development. But how quickly should East Timor make these improvements?

There is already some guidance from the UN General Assembly which in September 2000 passed the Millennium Declaration, setting development goals to be achieved by the year 2015. These encompass most aspects of human development.

- *Poverty*—By 2015, the proportion of people living in extreme poverty (on less than \$1 per day) should be reduced from its 1990 level by at least 50%.
- *Education*—By 2015, enrolment in primary education should have reached 100%.
- *Infant mortality*—By 2015, the infant mortality rate should be brought down below two-thirds of its 1990 level.
- *Maternal mortality*—By 2015, maternal mortality should be reduced to below three-quarters of its 1990 level.
- *Primary health care*—By 2015, there should be universal access to primary health care, including access to safe and reliable methods of family planning
- *Infectious disease*—To halt the spread of AIDS, malaria and all the other plagues that afflict mankind
- *Gender disparities*—To promote gender equality throughout the county at every level and in every way.

Figure 1.7

100% literacy achievement



Source: Aneex table 7

All these development targets serve as standards to be achieved throughout the world. What do they mean specifically for East Timor?

Education and health targets

One way of estimating how long it would take for East Timor to reach these kind of targets is to assume the same rate of progress as in recent years. Figure 1.7 shows, for example, how long it might take to reach 100% adult literacy by extrapolating from progress over the period 1993-99.

This is of course a very simple estimate. And by definition 100% literacy cannot be achieved until all adults are literate, including those in the rural areas. But it does give an indication of the distance yet to travel.

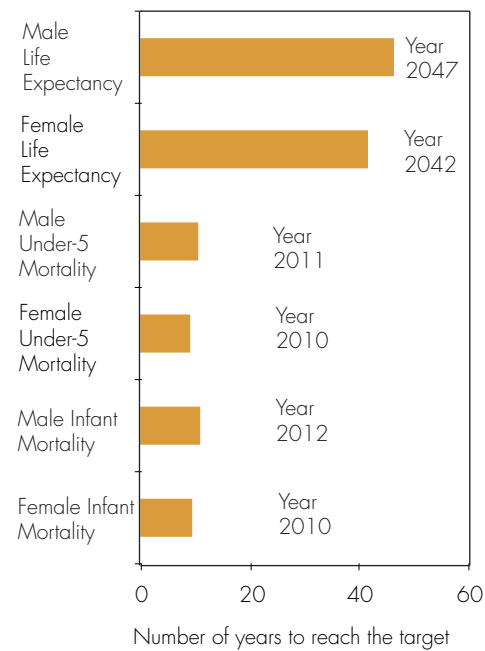
Figure 1.8 shows the results of a similar exercise for health indicators—under-five mortality and infant mortality. On this basis East Timor should be able to reach the goals before the target date.

Monitoring progress

While East Timor is trying to reach these goals one important task will be to build a statistical system that can monitor data concerned with social, economic and political interventions. At present the system seems better able to cope with economic than social data. But while it is important to

East Timor should be able to reach the infant mortality target

Figure 1.8
Achievement of health targets



Source: As for annex table 5

maintain up-to-date figures on national accounts and trade it is equally vital to collect and publish data on child nutrition, for example, on education, or on crime.

Moreover this information also needs to be collected not just at the national level but also at the regional level. Even in this small country there are often striking dif-

ferences between regions, between urban areas and the countryside, between the plains and the mountainous areas, between arid regions and fertile agricultural regions. It is important therefore to gather information at sub-national levels—between regions, for example, and administrative units. This type of information not only stimulates a healthy debate on the need for a more equitable distribution of wealth but also helps to reduce tension between different groups and to avoid serious conflicts.

The scale of the task

When East Timor takes its place in the 2002 global human development report, it will find itself close to the bottom of the HDI table. The human development index does not of course measure all aspects of progress—it takes no account, for example, of the historic achievement of independence. And for East Timor freedom is one aspect of human development that has dramatically improved over the past three years. Most people also feel safer and more secure.

But for other aspects of life, particularly on education and health, they have a long road to travel. Much of the responsibility for progress will depend on having a strong and capable public administration. This is the subject of the next chapter.

East Timor in the third millennium

A special contribution by His Excellency Dom Carlos Filipe Ximenes Belo, SDB

It is my intention to map out where East Timor should stand to locate the context and its implications of development in the third millennium. The vast continent of Asia extends from West Asia and the Gulf countries to the East Asian countries. The Southern portion includes South Asia, Southeast Asia, and East Asia. The Pacific countries within Oceania include Australia, New Zealand, Papua New Guinea, and the Pacific islands. In the North, there are the Central Asian Republics and in the North East, Siberia and Mongolia. In this large area, East Timor is found which will become soon the newest country of the third millennium.

Asia and the Pacific present us a contrasting difference among peoples, cultures and details of life. The reality of economic globalization in Asia-Pacific with the economic rise of the so called "economic dragons" like Australia, Japan, South Korea, Taiwan and Singapore have made considerable progress to reshape the global economy. Although in the previous years such as in 1999, some of them suffered an economic collapse, Asia-Pacific is now the area of the world economy's most dramatic growth. And yet we ask, why are millions of people still left in poverty, hunger and homeless? This is the same question that shakes the ethos of the East Timorese people: the question of the many poor. However, let me define first the East Timorese poor so as to guide us when we speak about development of East Timor now and in the future.

Who are the East Timorese poor?

A people of deep faith, simple and honest, and yet are victims of involuntary economic poverty that results in an impoverished way of life. I have said in my Pastoral Letters, "Poverty is identified with the East Timorese: inadequate food and clothing, and other basic necessities like the lack of clean water, electricity, transportation, hospital and school infrastructures and facilities". Twenty-four 24% of the urban population are living in poverty and 60% of those in the village are living under sub-human conditions.

They are the people who suffered and risked their lives for the sake of asserting their selfhood and human freedom. The vio-

lence committed in East Timor since its invasion in 1975 till it reached its climax on that tragic 11th of September 1999 has left an indelible, deep trauma on everyone involved. The trauma continues despite the complete withdrawal of Indonesia, and even with the presence of international staff of UNTAET. This particular experience of pain leaves us a legacy of psychological violence. Yes, the poor, whose conflicts individually and communally have become a hidden experience of pain and suffering for survivors and perpetrators of violence alike. Personally, the legacy of such acute violence pains me to see people crying out for healing and forgiveness. Indeed, such painful memory which has threatened the safety and selfhood of every East Timorese survivor at the crossroads, is something I share with the rest of my people.

The challenge

Poverty and the painful memories of violence are main issues that have threatened the development of safety and selfhood of every East Timorese. It calls forth material, social, political and spiritual development if we ever think of working for the common good of every East Timorese and for East Timor as a nation. It means new structures, new vision and new processes whereby a fractured society can be reconstructed as truthful and just. It is then a challenge to search for that sense of security, of dignity, of being part of a larger whole, and of sharing both in the life of past generations, and in the expectancy of society for its own future. We can't simply repeat the formulae that have served us in the past.

We need to grow, we must rise by our own feet and see, judge and act on them in a way that allows us to draw forth what will help us most in this situation. In these cases, how does development need to be worked out in context? What are its dimensions of rebuilding shattered lives? Is the call for healing, justice and forgiveness and reconciliation, just political and social? What will be required for East Timor to live a "developed" society that is both human and humane, to live a life of faith, somewhere between what is desirable and what is possible?

The response: full development

Of great importance to address these challenges is that of the development of our country as a people and nation. However, development must not only be sustainable but full or integral. Development in East Timor according to Emilia Pires, Head of the National Planning and Development Agency, ETTA, must include the following: community consultation and local planning, data collection and analysis, East Timorese involvement and National Development Prioritization. These are a good plan of activities for a start as a matter of priority to improve the sustainability of development. This reminds me of a Native American proverb that expresses the vision and values necessary for sustainable development: "We do not inherit the earth from our parents; we borrow it from our grandchildren." Thus firstly, sustainable development means economic development that meets the needs of the present generation in a way that does not compromise the needs of future generations. Secondly, the details of life in any country are interconnected and interdependent, and this is clearly true for East Timor if it wants to officially join among independent nations in the world. This is a political truth. Thus, interdependence of nations and of the whole earth community must be promoted. And lastly, is that while the government has a "duty of all towards all". John Paul II reiterates, "every nation or people has a right to its own full development, which has its purely economic and social aspects," but "should also include individual cultural identity, and openness to the transcendent." Thus, four concrete responses if East Timor advances as a new nation:

- *Political stability*—Political leaders and those who are duly elected by the people must be united to carry out the demands of the newly drafted Constitution. They work not for their personal interest and self-aggrandizement but for the common good of their nation. All agencies of the government, be it defense, social services, communications, etc. must promote and work out the vision of service for the civil society. This is one way to make our political institutions stable and sustainable. Some would say, "political stability means economic prosperity." What East Timor needs in this regard is to attract investors to help pump up the economy. It may or may not result in economic growth, along with a more equal dis-

tribution of goods, but, political stability is thought essential for overcoming poverty. In this case, the government must seriously address the situation of massive poverty in East Timor if it wants to be a useful tool for the civil society. Alleviating the plight of the poor must be frequently thought of increasing economic equity to improve the living conditions of East Timor's poor.

- *Human rights and democracy*—The path of democracy and human rights in East Timor may be new, but the principles on which it is based are not. Human rights and democracy are an integral part of full development. They are essential to the human dignity of every East Timorese. From the Christian point of view, respecting the rights of every individual is a Christian act. The basis is all human beings are equal because we are the children of God, and created in His own image. In this regard, development also implies gender equity. I therefore support the human rights initiatives by the local non-governmental organizations such as the People's Tribunal, and the International Tribunal as well, to track down those who committed crimes against humanity. We need to continue what we have gained so far. I have repeated quite often that, "democracy is the means of putting human rights into action." We have chosen independence that repudiated the 25 years of Indonesian occupation. A new history opens. The famous ballot on 30th August 1999 is an indication that we can carry on the ideals of democracy. We have shown to the world that we can get well on track to fundamental democracy by voting honestly and calmly. The new Constitution, far from perfect, is already adopted. We elected the new President on the 14th of April, and most importantly, we shall celebrate full independence come 20th of May 2002. Indeed, human rights and democracy while keys to our future, are also essential to development of every human being in East Timor.

- *Dialogue and in solidarity with East Timorese culture*:—Full development in the context of East Timor calls forth a dialogue of life among people and nations crying out for healing of their past. Everyone has to dialogue with the oral and living traditions of the people. It is true that we have not come up yet with a holistic view of what constitutes the identity of an East Timorese. A daunting task, but a rewarding one. This

is not only the work of experts like anthropologists, sociologists and maybe theologians, but it is everybody's task to discover the essence of what makes an East Timorese, timorese! We echo the *Willowbank Report* of 1978, which affirms the fact that to be in dialogue and in solidarity with culture gives a person, a "sense of identity, dignity, security and continuity." It implies that such an acknowledgement and participation in the formation of every culture and society plays a vital role in the journey towards development of every person. We must not forget though, that the root cause of poverty and violence is also the refusal to recognize the existence of the social and cultural realities that exists in one's identity and selfhood.

As I look forward to celebrating the independence of East Timor come 20th of May 2002, may these responses to both sustainable and full development be considered

in any governmental programs and activities. On my part, as a Churchman, I have high hopes of wholeness and feelings of integrity that this local church can also contribute significantly in the making of East Timor as a new nation in the spirit of civil participation. I look forward to listening to the stories of East Timorese people, painful as the case may be, and sharing with them my own journey towards the desire and intention of having East Timor become a developed nation, now and in the future.

Dom Carlos Filipe Ximenes Belo, SDB
Bishop of Dili
East Timor



Building a capable public administration

In the early years of independence the people of East Timor will rely heavily on the competence and capacity of government services. Any weakness or failure of these services will be a serious obstacle to progress in human development.

Human development is a national endeavour—one that relies on the combined efforts of government institutions, the private sector and all the elements of civil society. But since the private sector is limited and the many nascent community groups and NGOs in civil society are struggling to adjust to the complex new circumstances of independence, in practice much of the responsibility in the early years will fall on the government and the public sector.

Can the institutions of government meet this challenge? Much will depend on decisions taken over the next couple of years—which will set the tone and quality for future public administration. No matter how good the official policy on the many strands of human development, these efforts will be thwarted if the public institutions are incapable of implementing them.

There are many crucial issues to address: the structure and character of institutions; the capacity and motivation of civil servants; the strength and independence of the judiciary, and the best ways to eradicate corruption. Unless these are tackled quickly East Timor's human development will be compromised.

The colonial legacy

Though in many respects East Timor is building a new administration from the ground up, it will also inherit, directly or indirectly, some of the structures and ethos of its colonial past—both Portuguese and Indonesian (see Annex).

The Portuguese had an indirect approach to governance. The Governor in Dili acted through district administrators who then coordinated sub-district administrators. But

they did not exert direct control over the villages which they left largely in the hands of the *liurais* or the *chefes de suco*. The Indonesian government, on the other hand, was determined to exert much stronger discipline throughout the country. The New Order government wanted to exert centralized control across Indonesia, including East Timor. But it also wanted to 'pacify' East Timor in particular where it faced stubborn resistance to its rule.

Indonesia introduced a series of interlocking systems of control. First, there was the governor who, with government bureaucrats, administered each a layer of government via the district administrator, the *bupati*, the sub-district administrator, the *camat*, and then the village chief. In addition, however, there were local army commanders, who apart from their military duties also held strategic positions in government and were appointed as members of parliament at both provincial and district levels.

Yet another channel of control was through the police force. The governor coordinated important decisions with the military and police commanders through a special forum for the provincial, district, and sub-district political leadership. Meanwhile the central government also controlled the legal system and the press which it kept weak and powerless.

This autocratic structure may have helped deliver services—and East Timor was heavily subsidized by the central government—but from the perspective of human development it created a civil service with serious flaws. The risk for an independent East Timor is that although it may have

achieved political independence it may yet inherit some of the institutional failures and ethos of the previous administration. These flaws included:

- *Overstaffing*—In an effort to ‘buy’ the passivity of the East Timorese, and make the province more dependent, the central government employed large numbers of staff, many from Indonesia. East Timor had more civil servants per head of population than any other province.
- *A culture of dependence*—Almost all initiatives came from the centre and from the top down. Few civil servants had the incentive or confidence to do anything other than ‘wait for orders’ from above.
- *Complex administration*—There were too many layers of bureaucracy for such a small territory and they involved much duplication of functions.
- *Pervasive corruption*—Many officials were poorly paid and were tempted to supplement their income by taking other jobs and various bribes (box 2.1).
- *Lack of public participation*—Indonesia’s system of administration was essentially paternalistic. It discouraged popular participation and marginalized traditional forms of decision making.

The transition to independence

The events of September 1999 were devastating, not just for the population, but also for the system of administration. Some of the losses were physical. The army-backed militias destroyed, completely or partially, three-quarters of the administrative buildings and other forms of infrastructure. They also removed or burned essential government archives.

Just as debilitating was the loss of personnel. Although around 75% of the civil service had been East Timorese these were weighted towards the lower grades. In the highest grades the majority of staff were Indonesian. During the crisis that followed the referendum some 8,000 civil servants fled to Indonesia—including most of the key people. As a result, East Timor was left with virtually no senior managers, or people capable of operating basic facilities, and found itself with no judges and only one senior policeman.

To help fill these gaps, to maintain the peace and to rebuild the structure of governance the UN Security Council in October 1999 established the United Nations Transitional Administration in East Timor. This was to be one of the United Nations’ most ambitious operations—a mix of peacekeeping, national rehabilitation and nation-building (box 2.2).

One of the first tasks was to lay the foundations for a new government administration. Initially UNTAET filled almost all the positions in public administration with UN international staff. Then in July 2000 UNTAET established the East Timor Transitional Administration (ETTA) to form the nucleus of a new government. This had a cabinet with five East Timorese and four international staff. UNTAET and ETTA set about recruiting civil servants. They also established a National Planning and Development Agency (NPDA).

In August 2001, elections were held for an 88-member Constituent Assembly, which had the task of producing a new Constitution. Following these elections, UNTAET established a new governing structure. This consisted of ten ministries and 4 secretariats, all headed by East Timorese. The 26-member ETTA Cabinet, which consisted of ministers, vice-ministers, and secretaries, was selected through consultations between the UNTAET Administrator, who remained the head of government, and the newly elected Constituent Assembly, and its membership reflected the Assembly’s political make-up.

Box 2.1

Corruption and nepotism in ‘Tim-Tim’

Indonesia’s exploitation of East Timor, known in Indonesian as ‘Timor-Timur’ (Tim-Tim), transferred many of the benefits to Jakarta, and particularly into the hands of the Soehartos and those in the military structure loyal to Soeharto. Corruption was rampant among civil servants dealing with construction projects—and even more pervasive among those dealing with projects for poverty alleviation.

The government tendered projects worth 20 million rupiah (in 1995, equivalent to \$9,000) or below to local small-scale businesses whose owners, around 80% Timorese, were either civil servants or linked to them by family ties. Meanwhile, it entrusted projects worth between 20 and 300

million rupiah to the medium-scale businesses more than half of whose owners were Indonesian. All projects worth 300 million rupiah and above, however, went automatically to large-scale construction companies all of whose owners were Indonesians with strong links to the central government clique.

The companies were ‘obliged’ to pay a certain amount of money to the civil servants in charge of planning and monitoring of projects.

As a result of these arrangements only around 50% to 60% of the funds allocated for construction projects went to the projects themselves. The remainder finished up in the pockets of those working at different administrative strata as well as in Jakarta.

In March 2002 the Assembly approved the new Constitution. This established a unitary democratic state, based on the rule of law and the principle of separation of powers. Representative organs would be elected through direct and universal suffrage. The Constitution establishes the roles of the president who is also commander-in-chief of the Armed Forces, of the prime minister who will head a council of ministers, and of the parliament. This prepared the way for presidential elections in April and full independence on May 20, 2002.

System of government

East Timor has chosen a semi-presidential system of government—with a balance of power between the president and the par-

liament. Although the president has the ultimate power to dismiss the parliament, in practice most of the executive power will lie in the hands of the prime minister, who will take decisions collectively with the council of ministers. Inevitably these will mean compromises between the priorities of different ministries and departments, all of whom will be competing for limited resources.

Any parliamentary system also demands a great deal of commitment from members of parliament (MPs) who play a crucial part in nurturing a healthy democracy. On the one hand they have to support and provide legitimacy to their party and the government. On the other hand they have to serve the interests of their constituents. The government also has to leave adequate space for opposition voices, particularly if the governing party, even when elected through a system of proportional representation, gains a large majority.

During the first months of independence MPs will have a very heavy workload, coping with the large volume of new legislation. They will rapidly need to become familiar with such tasks as analysing budgets and legislation, and understanding how government departments work. Just as important they will need to discover the best ways of keeping lines of communication open with the rest of civil society, not just with their constituents but also with NGOs, other public institutions and with the private sector.

Unless the members of parliament can achieve this kind of competence quickly there is a danger that the government will be tempted to take short cuts and by-pass the parliament. In order to pass legislation quickly, it could, for example, simply pass very broad framework legislation that delegates the interpretation and refinement of policy to ministers and public servants. This was largely the approach taken by the Indonesian government and should be avoided.

The public service

But no matter how decisive the government or effective the legislators their policies and decisions will be compromised if they cannot be put into effect by an efficient system of public administration. This demands not just that the institutions of government are

Box 2.2

Achievements of the UN Transitional Administration (UNTAET)

In the face of immense difficulties UNTAET has achieved a great deal. There have certainly been many shortcomings, especially in relation to district administration, and the justice system. But these need to be considered against the realities of the UN's role in such situations. Missions have to be assembled quickly, risking mistakes in personnel. And it is very difficult suddenly to achieve a unified approach among a disparate group of officials for a short-term assignment. A further problem is selecting which decisions to take immediately and which to postpone for the incoming administration. UNTAET's activities included:

- The establishment of peace and security.
- The establishment of a functioning civil service
- The addressing of humanitarian needs by UNHCR, IOM, WFP and UNICEF, which were all instrumental, together with UNTAET, in ensuring that needs were met quickly after the violence of 1999. Over 190,000 refugees, one-quarter of the population, have since returned.
- The establishment of the East Timor Transitional Administration (ETTA) in July 2000 with a Cabinet of five East Timorese and four UNTAET representatives.
- The holding of free, fair and peaceful elections on August 30, 2001 which resulted in an 88-member Constituent Assembly that wrote East Timor's first Constitution.
- The reconstruction of 32 major public buildings by the East Timor Transitional Administration.
- The creation of the Second Transitional Government and the appointment of a Timorese Council of Ministers to run the day-to-day activities of government.
- The organization of successful presidential elections on April 14, 2002.
- The creation of the East Timor Defence Force. Some 600 soldiers underwent basic training. And the establishment of the East Timor Police Service, with more than 1,300 East Timorese Police Officers deployed in all 13 districts.
- The establishment of a basic judicial and legal system, including an East Timorese prosecutor general's office and a defender service.
- The basic rehabilitation of schools throughout the country. More than 700 primary schools, 100 lower secondary schools, 40 pre-schools and 10 technical colleges are now teaching approximately 240,000 children and older students.
- The initialization of an agreement with Australia on oil and gas reserves—the Timor Sea Arrangement. This has the potential to provide East Timor with billions of dollars in revenue.
- The establishment of basic public services in a wide range of areas, including health, education and infrastructure. Electricity has been re-established and drinking water is being provided in urban areas.

well designed but also that they are staffed by officials who have the competence, the aptitude and the will to serve the people of East Timor .

UNTAET and ETTA (the East Timor Transitional Administration) have already been working on the construction of a strong civil service—the East Timorese Public Administration (ETPA). By April 2002, they had recruited almost 11,000 civil servants against some 15,000 approved posts, including posts in the East Timor Police Service and the East Timor Defence Force. However they made most of these appointments at the lower levels; at the higher levels they filled fewer than 50% of management positions, largely because of the lack of suitable candidates. The largest public service employers are the education and health sectors, representing almost two-thirds of approved civil service staffing.

An important part of this process was to ensure strong representation for women. The target was to achieve 30% female staffing. By the end of July 2001 the proportion actually fell slightly short of this, at 25% overall. The better ministries in this regard were Foreign Affairs (39%), Health (32%) and Education (29%).

The development of the public service in East Timor will face a number of crucial issues—including staffing levels, salaries, training, language skill, and the continuing need for international support.

Staffing levels

The provisional administration was determined to confine recruitment and staffing to a level that any future administration could afford. But the new government is likely to face steady pressure to increase the number of civil servants, especially at the lower levels. Some of this pressure will come from families whose better educated members lack alternative sources of employment—a problem that will be exacerbated as the United Nations winds down its operations.

But there will also be pressure from other citizens, particularly those in the rural areas who find themselves lacking effective services—for agricultural extension workers, for example. All ministries will be stretched to meet their responsibilities with existing levels of staff and will be tempted to hire more.

These problems could be eased if economic growth were to create more employment outside the public sector. But it will also be important to ensure that existing civil servants work efficiently, cutting down on absenteeism, establishing better systems of coordination between government departments, development agencies and NGOs—and ensuring that services are delivered in a cost-efficient manner.

Salaries and promotion

UNTAET and ETTA assembled the new civil service on a fairly ad hoc basis in order to ensure continuity of services. As a result, many of the underlying issues remained undecided. This includes the career structure and whether this is to be based on a closed system where people choose the civil service as a lifetime career or a more open system in which people move back and forth between public and private sectors. The most likely outcome is a pragmatic combination of the two.

In either case, however, the government will need to pay adequate salaries. At present the annual salary of a level-four civil servant is around \$1,900. This is five or six times the per capita GDP and is reasonable for a country whose budget depends almost entirely on donor support. Whether it is sustainable in the long term is open to doubt.

The immediate priority, however, must be to attract as many as possible of East Timor's best trained people into government service. Data from the pre-independence period indicate that some 1,233 East Timor citizens had been trained or granted a diploma—a Masters, a BA or a high school diploma. However, the government will face stiff competition for such people from NGOs, the UN Agencies and international development projects.

NGOs do already have guidelines for the wages and conditions of staff they employ in East Timor. But they tend to respect these more at the lower level. For professional and managerial staff, they appear to pay higher rates than indicated in the guidelines—diverting many people who could otherwise be working for the government.

Work ethic and competence

The pay and working conditions during the Indonesian administration did not encour-

The government will face pressure to increase the number of civil servants

The Indonesian system undermined people's self-esteem

age a strong work ethic. Staff worked short hours and were not given much responsibility. The new civil service will need to achieve and enforce at least 37.5 to 40 hours of realistic work per week. A better salary should enable people to value their jobs more and ensure that they devote their full energies to it. But they can also be helped through coaching and mentoring.

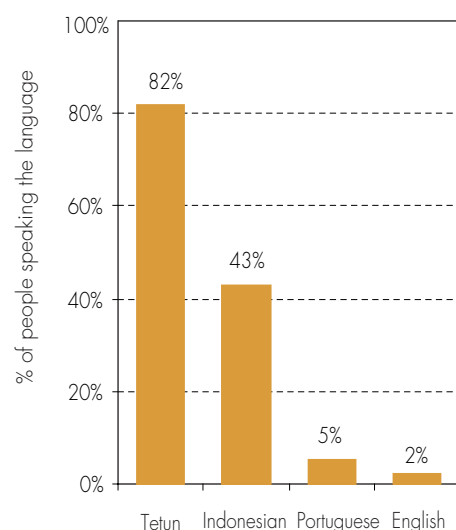
Related to the issue of competence is the ability to act promptly and decisively. The hierarchical system inculcated during the Indonesian period tended to undermine people's self-esteem and their capacity to take initiatives. Rather than work on the basis of general guidelines they typically needed very specific instructions to undertake a given task. This is another issue to be addressed through capacity development.

Social status is important in East Timor and also has to be taken into account in the civil service. Different groups have their own ranking orders—both within and between each other. These include the diaspora returnees, the freedom fighters, the previous civil service employees, and the Church. Local people too have their own systems of social status and ranking. A person with a lower social status may have greater capacity and skills than someone of a higher status but they would be uncomfortable supervising them.

Language

The East Timorese between them speak about 30 languages or dialects. The most

Figure 2.1
Official and working languages



Source: Household survey (2001)

common spoken 'native' languages are Mambae and Macassae but the national lingua franca is the Dili variant of Tetun (Tetun 'praça') which incorporates many words taken from Portuguese along with a few from Indonesian. The 2001 Household Survey concluded that 82% of the population spoke Tetun, while 43% could speak Indonesian. Only a small proportion, mainly older people and the exiled community, spoke Portuguese, while an even smaller proportion spoke English (figure 2.1).

The East Timor Constitution declares that the official languages should be Tetun and Portuguese while in the meantime additional working languages within the civil service should be Indonesian and English—side-by-side with the official languages 'as long as is deemed necessary'.

The two official languages have complementary strengths and drawbacks. Tetun has the advantage of being very widely spoken. But until very recently, when the Catholic Church started writing it out for liturgical purposes, it was primarily an oral language. Even now it has little of the technical and managerial vocabulary needed for official documents. Portuguese has all the strengths of centuries of elaboration and use as a written language, but very few East Timorese speak it—typically the older generation educated prior to the Indonesian occupation, and those who were exiled to Portugal.

The 'working languages' also have different characteristics. After 25 years of occupation and enforced tuition through the education system, Indonesian is the most widely understood written language—which makes it practical but unpopular. English is the language least understood nationally, but has the advantage of being a lingua franca in the UN community and throughout the ASEAN region.

This four-language environment presents a huge, and very expensive, challenge for the new government. The first is to develop adequate speaking and writing skills in Portuguese. All senior civil servants will need to be able to work in Portuguese, while in the interim some returning from overseas will also need to learn some Indonesian and Tetun.

The former National Planning and Development Agency, now the Planning Commission, estimates that around 2,000 core

civil servants will need training in Portuguese, 400 in Tetun, and up to 150 in Indonesian.. Beyond this, the government will need a smaller group of English speakers, particularly for those dealing with ASEAN and other countries, as well as with the international oil industry. Many public employees will also need language training.

The second, and even more expensive, issue is translation. The only option here is to use professional services, which could be prohibitively expensive. One urgent task will be to translate the UNTAET documentation, most of which is in English and will need to be translated to Portuguese and to Tetun, and perhaps also to Indonesian.

Finally, the Constitution also states that ‘Tetun and the other national languages should be valued and developed by the State’. This could involve creating an institute of research and development to formalize Tetun’s grammar, syntax, structure, spelling and alphabet.

The process of capacity building

Language training and many other issues imply a large-scale process of capacity building. This will be a long and complex task but the immediate priority for the civil service must be to deliver services to the people. So for the first two or three years the emphasis must be on ensuring that civil servants have the basic management capabilities to run the essential institutions of government. Unless the government is seen to be delivering services efficiently it will lose legitimacy in the eyes of the people. Acquiring some of the more complex skills will have to wait for later.

International staff

Though the main priority is to find and nurture Timorese talent, for the next few years East Timor is going to need international support in critical areas where there are insufficient qualified East Timorese. These will include jobs that demand sound and efficient management of funds. East Timor cannot afford to lose money through wastage or other mismanagement. These and other positions could initially be filled by international advisors working closely with local personnel—coaching and mentoring so as to transfer knowledge and skills. In March 2002, ETTA identified approximately 300 positions as necessary for

the performance of basic government functions. Of these, it categorized 100 as ‘stability positions’ and anticipated that these could be funded through UN ‘assessed contributions’. For the remaining 200 ‘development posts’, the government would seek funding from the donor community.

Local government

A fundamental principle of the Constitution of East Timor is decentralization. East Timor already has a history of local government that reflects both Portuguese and Indonesian occupations. The colonial government’s primary motive was to collect tax. For this purpose they divided the country into districts, sub-districts and sucos (villages). It had little interest in exerting power at the local level and left the traditional power structure as it was. The Indonesians largely accepted the same administrative divisions but they also exerted greater control at the local level. In practice however, the traditional structures largely survived, though these were also influenced by the resistance struggle and local relationships were, and remain, quite complex.

UNTAET too maintained the previous regional demarcation—with 13 districts and 65 sub-districts—though changed many of the functions of local personnel. In addition in early 2000, in order to increase community participation in planning and decision-making, UNTAET established the Community Empowerment Project which included elected Village Development Councils.

One strong argument in favour of decentralization is that it results in more efficient service delivery and decision-making, since the work is being done by people who understand local circumstances and priorities. But just as important is the function of fostering democracy and of bringing people together to shape national development. This maximizes the impact of rural development efforts, whether of government agencies, donors, NGOs, or community-based organizations. Decentralization can take one of three forms:

- *Deconcentration*—This is the weakest form and involves the central government transferring responsibility for the execution of central policy to administrators at the local level.

The Constitution establishes the principle of decentralization

- *Delegation*—This involves transferring some decision-making and administrative functions to semi-autonomous local organizations.
- *Devolution*—This is the strongest form and involves transferring some authority for decision-making, finance, and management to locally elected governments who can also raise revenue.

For the first few years at least, given its shortage of resources and skilled personnel, East Timor is unlikely to proceed much further than deconcentration, with core departments—education, health, agriculture, housing and water and sanitation—establishing regional offices to provide basic services to local communities.

A suggestion for the most appropriate regions was produced in 2001 by the Local Government Think Tank. This proposed three regional groupings: one on the eastern side of the country; one in the southern area, and one in the western area. However, two parts of the country would have special status: Dili would be treated as a single Capital City Municipality and the enclave of Oecussi would have a special status.

A study conducted by UNDP for a post-UNTAET mission endorsed this proposal and also suggested one adviser for each region. A part of this decentralization would be an element of financial redistri-

bution. Under this system each would have its own Director General who would assume responsibility for the region as a whole. He or she could also work with a regional special coordinating body to bring together representatives of all the groups that have local responsibilities—the local members of the national parliament, elected leaders of local authorities, senior regional public servants, and leaders of women’s organizations, NGOs and community groups. All this activity would need to be supported by legislation to ensure accountability, transparency and democratic participation.

Preventing corruption

The legacy of the Indonesian years, and the likelihood of wage disparities between the public and private sectors, raises the perennial issue of corruption. Corruption will also be a problem if the government fails to work equitably and accountably. To a large extent preventing corruption is a matter of building strong administrative structures that have simple procedures and clear lines of responsibility and accountability. The more complex the system, the greater the chance that it will be manipulated by bureaucrats for their own purposes and as a source of illicit income. These sound structures should also be matched with an ethical code to guide managers and leaders (box 2.3).

Nevertheless the political system will also need readily available mechanisms for dismissing both politicians and civil servants who condone or participate in rent-seeking and other forms of corrupt practice. The experience of other countries suggests that the best approach is to establish an independent anti-corruption agency.

The Constitution provides for two watchdog institutions: an Ombudsman’s office and a High Administrative, Tax and Audit Court. These watchdog institutions will only function properly if they have leadership of the highest integrity and if they are given sufficient powers to acquire documentation and question witnesses. Most of all, they need strong support from political leaders who are determined to root out corruption and who are prepared to back these organizations in politically sensitive cases.

The judiciary

One of the basic requirements for rooting out corruption, as well as for delivering jus-

Box 2.3

Principles of public life

The international non-governmental organization, Transparency International, has put forward seven principles of public life:

1. *Selflessness*—holders of public office should take decisions solely in terms of the public interest. They should not do so to gain financial or other benefits for themselves, their family or their friends.
2. *Integrity*—holders of public office should not place themselves under any financial obligation to outside individuals or organizations that might influence them in the performance of official duties.
3. *Objectivity*—in carrying out public business, including making public appointments, awarding contracts, or recommending individuals for rewards and benefits, holders of public office should make choices on merit.
4. *Accountability*—holders of public office are accountable for their decisions and actions to the public and must submit themselves to whatever scrutiny is appropriate to their office.
5. *Openness*—holders of public office should be as open as possible about all the decisions and actions that they take. They should give reasons for their decisions and restrict information only when the wider public interest clearly demands this.
6. *Honesty*—holders of public office have a duty to declare any private interests relating to their public duties and to take steps to resolve any conflicts arising in a way that protects the public interest.
7. *Leadership*—holders of public office should promote and support these principles by leadership and example.

tice and laying the foundations for a market economy, is an effective judicial system.

The Indonesian government suborned the legal system to its own ends and corrupted both courts and the judiciary in East Timor—effectively turning the legal system into a servile extension of the executive. As a result many East Timorese had little faith in legal institutions. Then in 1999 the courts were destroyed along with much of the legal infrastructure and archives.

During the transition period, UNTAET decided to use relevant Indonesian laws where these were not in violation of international norms. One of the most immediate problems was a shortage of legal personnel, and in particular of lawyers. There are still few experienced and trained East Timorese judges, public defenders and prosecutors. The Court of Appeal has had no quorum since October 2001, following the departure of two international judges.

The courts also have to operate with scant resources and the investigators are hampered by the difficulty in obtaining records, as well as translations between English, Portuguese and local languages. At present, under a mentoring system, the newly appointed judiciary is being supported by international judges and lawyers, thus receiving training and capacity building on-the-job. But for the longer term, developing the judiciary in East Timor will require attention to three key areas:

- *Clear legal procedures*—Currently the country has an overlapping system of common law and civil law that puts excessive em-

phasis on procedures. East Timor will need to simplify its legal procedures for both civil and criminal law to ensure fairness and accessibility as well as to underpin commercial contracts and business transactions.

- *An independent and skilled judiciary*—The Constitution has provided for the creation of a judicial council to supervise judges and help continue their judicial education. This could be supplemented by participation in international exchanges and conferences.

- *Increased resources*—The greatest immediate constraint on judicial development is the shortage of resources, including legal material, legal records, and research tools and qualified staff. Some efforts have been made to address this, including the introduction of East Timorese professionals into the legal system. However, most of these are recent graduates and they will require extensive ongoing training. An organization for lawyers, in the form of a bar association, could help certify lawyers, establish admission criteria, regulate professional conduct and offer continuing education.

East Timor's new government faces a daunting task of building a new system of governance that has both the form and the spirit of democracy. This involves new attitudes not just from the political elites, and the public service, but also from all the people of East Timor who are now citizens of a self-governing nation. Their culture and actions will shape their country's future. Many people will do this through the different organizations of civil society, which are the subject of the next chapter.

East Timor needs a system of governance with both the form and spirit of democracy

New roles for civil society

East Timor's independence is the culmination of a long struggle against colonialism by many groups in civil society—community organizations, religious groups, students and others. These groups will also be driving human development in a new East Timor, but to do so effectively they need to adjust to different circumstances, establishing new relationships with government agencies, with local communities, and with each other.

Civil society groups were engaged in the struggle against colonialism

For the first few years of independence much of the impetus for human development in East Timor is likely to come from the government and the public services. But the government can only do so much. Ultimately East Timor's progress as a new nation will depend on the commitment and energy of civil society.

To some extent this will mean retaining the momentum of the fight for independence. This relied on the combined efforts of informal community organizations, religious groups, student groups and many others who, along with the political organizations, engaged in the long struggle against colonialism. Now all these groups face the fresh challenge of nation building. And they are being joined by new groups—particularly by a wide range of non-governmental organizations (NGOs), community-based organizations (CBOs), and by new publications and radio stations.

Taken together these form a fairly heterogeneous collection—usually referred to as 'civil society'. There is no official definition of this term though it can be taken to include all groups or associations, freely organized, that are clearly distinct, autonomous, and independent from the state. Some will be voluntary groups that have no profit motivation, but others such as media organizations, do usually have a commercial basis alongside wider social interests and purposes.

The Indonesian era

The Indonesian government was reluctant to allow the growth of independent organizations of civil society—in East Timor or anywhere else. Instead it preferred to cre-

ate government-funded 'functional groups' through which it could extend its influence and control over the population, and which it could use to carry out its own agenda. In East Timor, these included the youth organization, the workers' organization, a students' organization, and a civil servants' organization.

Nevertheless there were other groups that managed to retain their independence. Some of the most prominent and effective were linked to the Catholic Church. These included Delegado Social, which evolved into Caritas and which, along with the Justice and Peace Commission, was an important focus of national and international resistance during the Indonesian occupation. Another long-established NGO is the East Timor Agriculture and Development Project Foundation (ETADEP) which expanded rapidly in the 1980s into a large multi-service group for farmers.

The 1990s saw the formation of some new NGOs. These included the human rights group Yayasan Hak (Foundation for law), Yayasan Bia Hula, which focuses on water and sanitation, Fokupers (Women's Communications Forum) and ETWAVE (East Timor Women Against Violence).

Some of the most direct confrontations with colonialism came from youth and student movements. These originated in a number of different places. Some young people were part of the main political grouping, Fretilin. Others were students in the Externato São José—one of the last Portuguese-speaking schools in East Timor. Others were seminarians of the Catholic church who initiated youth movements in parishes and schools, mainly in Dili.

These youth groups organized demonstrations during the visit of Pope John Paul II in 1989. They also in 1991 led the demonstration that resulted in the cancellation of a planned visit by the UN and Portuguese parliamentarians. The Indonesian army responded brutally. First, they killed one of the student demonstrators, Sebastião Gomes, who had taken sanctuary in a church. Then later, at his funeral, they opened fire on the large numbers of people who had gathered at the cemetery, killing 271 people and wounding hundreds of others, in what came to be known as the ‘Santa Cruz Massacre’.

Continuing to defy the authorities, the student groups grew in strength and in organizational capacity. In 1998 they founded the East Timor Student Solidarity Council (ETSCC) which was based at the University of Dili. And in July of that year they organized a demonstration of almost 10,000 people to coincide with the visit of a high-level delegation of ambassadors. In 1999, in the run-up to the referendum ballot, they played a major role in raising awareness—often at great personal risk.

Another important development in 1998 was the creation of the East Timor NGO Forum. This was originally formed to coordinate emergency assistance to communities affected by the 1997/98 drought and had the support of international organizations including AusAID, the Australian Council for Overseas Aid (ACFOA) and Oxfam. Then in June 1999, in the period before the referendum, a group of 14 NGOs decided to reactivate the NGO Forum—formalizing its vision and mission, appointing a board of management, and agreeing to seek funds to employ an executive officer and staff.

Meanwhile all these groups were facing increasingly violent opposition from pro-Indonesia militia groups—including BMP, Aitarak, Ablai, MAHIDI and others—who unleashed a campaign of intimidation and terror. The militias also posed as groups within civil society, though in practice they were essentially agents of the State since they operated under the direction and control of the Indonesian army.

NGOs in a democratic era

When the people of East Timor voted for independence, the militias took their re-

venge. In addition to terrorizing the population at large they specifically targeted the NGOs—persecuting their staff and members and stealing or destroying their resources. It was only towards the end of 1999 that the NGO Forum could re-establish itself—again with the support of ACFOA and also with the help of the UN’s Office for the Coordination of Humanitarian Affairs (OCHA).

Now the NGOs face the challenge of nation building. Not only have they had to physically rebuild their organizations and participate in humanitarian relief operations, they have also had to deal with a series of new administrations, first UNTAET and ETTA, and now the new government. They have also been closely involved in the series of donor conferences that have taken place since 1999.

By April 2002, the NGO Forum had 77 national and 33 international members, though over 400 groups were formally registered. The Forum represents a large cross-section—focusing on everything from culture, to education to human rights, to forestry. Among the most prominent have been the women’s organizations. In addition to Fokupers and ETWAVE, these include REDE (Rede Feto Timor Lorosae—Network East Timor), OMT (Organização Mulher Timor—‘Organization of Timor Women’), and GFFTL (Grupo Feto Fon Sae Timor Lorosae—‘Young women’s student group of East Timor’).

The NGO Forum itself now has a staff of over 30 and is active in a range of areas, including advocacy, capacity development, information provision, research, and information technology. The Forum and its members continue to receive the support of numerous international NGOs.

In addition to the groups formally registered with the NGO Forum there are also many smaller community-based organizations, women’s groups, and farmers’ groups. These mostly operate at the local level, sometimes with the support of larger, better-resourced NGOs, sometimes with the support of local administration, and sometimes with little support of any sort.

The flourishing media

The democratic opening since 1999 has also created space for many new media outlets. The Constitution guarantees the freedom

NGOs now face the challenges of nation building

Many people formerly in civil society groups have now moved into government

of the press and other mass media. East Timor now has two daily newspapers, *Suara Timor Lorosae* and the *Timor Post*, as well as a number of weekly or monthly magazines, including *Talitakum* news magazine, *Lalenok*, and *Liam Maubere*. Although these are in principle 'national', they may not be available throughout the country. In addition a number of places now have community-based publications, including some in Same, Bobonaro and Oecussi.

Just as important for a country where half the adult population is illiterate, has been the expansion in the number of radio stations. The transitional administration provided its own service, Radio UNTAET, along with some limited TV coverage through TVTL. But there are also a number of others. A station affiliated to the Catholic Church, *Radio Timor Kmanek*, broadcasts throughout the country, while *Radio Falintil* and *Radio Rakambia* broadcast to Dili only. Encouragingly, a number of community radio stations have also begun to emerge. *Radio Comunidade Los Palos*, for example, has been covering the Los Palos area and Lautem district since May 2000—broadcasting eight hours per day in Tetun, Indonesian, Fataluku and Portuguese, with news bulletins, local announcements, election information and 'vox pop' segments. Another station, which operates at the other end of the country close to the border with West Timor, is *Radio Comunidade Maliana*.

Following the August 2001 elections, Radio UNTAET and TVTL supported the democratic process by broadcasting several hours daily of live debate from the Constituent Assembly, with reports and interviews in Tetun, Portuguese, English and Indonesian. In October, a special refugee radio programme of Fondation Hirondelle (Switzerland) began daily Indonesian broadcasts on Radio UNTAET to provide accurate information to refugees in West Timor on conditions in East Timor.

All these media outlets will play an important part in stimulating and protecting East Timor's embryonic democracy—filling an information void that otherwise could be filled with rumour and misinformation and fuel discontent.

Building new relationships

In the democratic era all the organizations of civil society are going to have to adjust

to different circumstances, and build new relationships—with the state, with each other, and with international organizations.

Civil society and the state

Civil society organizations have to deal not just with the political state—in terms of the president, ministers and members of parliament—but also with the administrative state, in the form of the civil service. And groups that are monitoring human rights in particular will have to understand the mechanisms and processes of the judiciary.

This can be a complex business. Some of the issues will be personal since some civil society representatives may now find themselves dealing with former colleagues reincarnated as government representatives or civil servants. Others will be involved in multiple roles and overlaps between political and community groups. The people who are involved with NGOs or community groups may also be members of political parties so the boundaries are likely to be blurred.

For many community groups, even more important will be their relationships with local officials. The institutions of local government have yet to take final shape. But even this uncertainty creates an opportunity. NGOs and community groups should be able to participate in the design of local government—on how it will operate, on its functions, and on the way in which it can work best with civil society.

In this interim period it is difficult to say just how civil society will respond generally to the state. At the rhetorical level at least, there appears to be a strong interest in co-operation and positive engagement. But the actual practice will demand some changes of emphasis and attitude. In the case of civil society organizations, they will have to shift their perspective—from the politics and tactics of opposition to those of constructive partnership. But the Government too will need to work at this potentially complex relationship. It has to recognise that civil society organizations played a vital role in the struggle for independence. Now it has to find ways of maintaining their energy and commitment in the struggle to build a new nation.

In most countries, the government requires NGOs to be registered in some way and to be covered by appropriate regula-

tions. In September 2001, the NGO Forum, anticipating this, organized a workshop on this issue. While not necessarily opposed to regulation, the NGOs felt that any such proposals should arise out of broader discussions of the NGO-government relationships.

The people of East Timor will not be able to pursue human development in its fullest sense unless they have a strong civil society. The Constitution lays a strong basis for this. It establishes the rights of personal freedom and integrity and the freedom to demonstrate along with trade union and consumer rights. But East Timor will also need the institutions through which people can exercise those rights, and the Government should do everything it can to encourage the formation of such organizations which ultimately help maintain a resilient democracy.

Relationships within civil society

Beyond establishing a productive relationship with the state, the organizations of civil society will also need to work closely with each other. This will not be easy. Once the common enemy has disappeared individual differences inevitably surface. Some of these may arise from simple differences in objectives—some NGOs, for example, will focus on health, say, or education, or gender issues. Others may just work over a broad range of issues but in a particular location. And while some will want to concentrate solely on service delivery, others will want to combine this with popular education and mobilization. There are also likely to be great differences in scale of operation—between groups that consist of little more than one or two people and others that have dozens of professional staff handling millions of dollars. This diversity is for the most part a source of strength, but it also fosters a degree of competition and rivalry. East Timor is fortunate already to have established a strong NGO Forum, but if anything the task of the Forum will get more difficult in the years ahead.

Many of the potential obstacles and pitfalls can be avoided by ensuring strong and open channels of communication within and between organizations. But civil society organizations also need to communicate closely with the communities they exist to help. This is a difficult task for groups based

in Dili given the problems of infrastructure and communications, but unless they can ensure this they will lose some of their democratic legitimacy.

Creating fully representative organizations is a long and complex task. Some countries have NGOs that operate in an autocratic way and are little more than a vehicle for the opinions or ambitions of their leadership. Civil society organizations need therefore deliberately to adopt the structures and disciplines that will keep them truly democratic and representative.

Although each group has to arrive at its own solutions there are also lessons to be learned from other countries—in the region and beyond. Civil society organizations in East Timor have much to gain generally by establishing close links with such groups. Many have already done so and have participated in exchanges and study visits that have helped develop their skills. These experiences have also been complemented by visits by civil society training experts from other countries, including Australia, Indonesia and the Philippines.

Civil society groups in East Timor can work with counterpart national organizations in other developing countries. But NGOs in particular also have long experience of dealing with international NGOs. Many of these have a long record of commitment to East Timor, offering both solidarity and financial support during the struggle for independence. A number now have their own representatives in East Timor and have used these to develop a variety of partnerships with NGOs and community based organizations.

International organizations

In the past NGOs in developing countries gained most of their funds from international NGOs. But nowadays the situation is more complex. Many bilateral and multilateral donors now prefer to channel at least some of their funds either directly or indirectly to NGOs and CBOs—believing that these can in some cases deliver services more efficiently and effectively than government agencies.

Many donors are already supporting civil society organizations in East Timor and will continue to do so. This means that NGOs in particular will find themselves dealing with a large number of different agencies and

NGOs can benefit from links with their counterparts in other countries

potential donors whose objectives, funding mechanisms and reporting systems can be confusing and demanding. At present, however, few local organizations have a full understanding of the range of international agencies in their midst and they may find it difficult to distinguish between the different mandates and activities of international NGOs, UN agencies, bilateral donors and international financial institutions. If they are to work effectively, however, they will have to familiarise themselves with these complexities.

This kind of understanding is also vital if local NGOs are to be well-informed and effective partners of international organizations. A number of agencies, including those of the United Nations and the international financial institutions—the World Bank, the Asian Development Bank and the International Monetary Fund—could have a significant policy influence in East Timor, either through advice or through the projects and activities they support. A number of NGOs are already understandably concerned about this, and about the record of some of these agencies elsewhere, particularly in the debt-ridden countries of Africa and Latin America where some have often given a higher priority to economic restructuring than to human development. If NGOs in East Timor are to offer an effective critique of such policies they will need to acquire, locally or internationally, the knowledge and expertise that will enable them to express their views effectively.

Civil society organizations thus find themselves in a complex situation: multiple relationships to be managed; organizational and national cultures and values to be learned; differing priorities to be judged;

personalities to be understood—and power relationships to be managed and challenged.

Multiple roles

As well as dealing with many different national and international institutions, civil society organizations in East Timor will also find themselves operating on many different fronts—as opinion leaders and advocates, as monitors of both government and the private sector, and as service providers. Some will specialise in one activity or another but most are likely to have a combination of roles which at times may be in conflict.

Architects of development

Many NGOs and CBOs feel that their primary role is to work in a constructive partnership with the government, for nation building and the betterment of the country. But they do not merely want to do so as builders working to someone else's design. Rather they want to be involved in the development of plans and the creation of policy—ensuring that these confront inequality, promote human rights, and protect the environment. This will depend on their capacity to innovate and present alternative viewpoints. Some governments resist this kind of participation. But East Timor has made a good start through the participation of the NGO Forum in the National Planning Commission (box 3.1).

Advocacy

Many groups see their primary task as being to influence the policies and actions of others—whether those of the government, of the private sector, or of international organizations. The forms of advocacy and lobbying that they can undertake will, however, vary according to the aims and capacities of the groups involved. Some will simply voice their concerns to the appropriate civil servants or politicians, without necessarily proposing solutions. Others however, such as Yayasan Hak, will invest considerable time and skills in the development of well worked-out policy positions and will pursue the acceptance of these through a variety of channels. Many groups may also be able to gain additional facilities by working with the universities.

Given the different capacities of these groups, and the fact that they have many

Box 3.1

Civil society in the National Planning Commission

In 2001, the East Timor Transitional Administration instituted the National Planning Commission. This offered an opportunity for the government and civil society to work together to develop a national plan. This participation took place through the Consultative Commission on Civil Society, which was led by Xanana Gusmão and included representatives of the Church, the NGO Forum, and youth and women's organizations. The Consultative Commission's overall task was to maximize the par-

ticipation of the people of East Timor in the planning process, and one of the ways of achieving this was by engaging with institutional elements of civil society, both traditional and modern, taking advantage of their existing networks.

However, some NGOs believe that the time allocated for this consultation—six months—was too short, given that half the population is illiterate and that it is difficult to communicate with remoter areas.

common interests it also makes sense for them to pool their resources and act collectively. This already takes place, for example, through the various working groups of the NGO Forum on such issues as the Constitution, NGO-government relations, civic education, and a variety of sectoral issues such as health and the environment.

Though much of the advocacy will take place through individual contacts and sophisticated lobbying, it can also take place through protests and demonstrations. The Constitution of East Timor guarantees the right of assembly without prior organization and recognizes the right to demonstrate.

Monitoring

Good governance everywhere relies on a system of checks and balances. Although these are traditionally thought of in terms of ensuring a clear separation of powers between the executive, the legislature and the judiciary, nowadays it is assumed that this will be supplemented by the monitoring activities of civil society. In an independent East Timor the groups of civil society will thus play an important part in ensuring that the government, the private sector and international organizations maintain high standards. But they can only do so if they maintain such standards themselves—operating transparently with clear financial and democratic accountability. To help them do so the NGO Forum is considering an NGO code of conduct.

Service provision

For many NGOs their main task is to provide services—in health, say, housing or education. To some extent they will be filling gaps left by weaknesses in government services. Bia Hula and Probem, for example, work with local communities to develop water and sanitation services. But NGOs and CBOs can also supplement government activities. So while the government takes responsibility for formal education for children, many NGOs arrange for non-formal education, including literacy classes for adults.

Information

Given East Timor's weak communications infrastructure, civil society organizations play an important part in developing and disseminating information on a whole range

of issues, including electoral processes, disaster management, the role of women and human rights.

These activities will become even more important when the UNTAET-supported TV and radio systems are closed down. Since more than half the adult population cannot read, one of the most important forms of public communication is by radio. The emergence of community radio stations is an encouraging sign. Such stations will need more financial support, though it should be clear that such stations are there to meet the needs of the community rather than to propagate the ideas or interests of funders.

In addition to providing information, CSOs will also need to stimulate debate and discussion on options for the future of East Timor and its place in the world. When communities have the necessary information and have developed greater capacity to analyse their own circumstances they are in a much stronger position to direct the country's human development course.

In this and other respects, civil society organizations occupy a middle ground between the government and local communities. On the one hand they should be pressing the government to take action on the issues they feel passionately about, but at the same time they should be aiming to enthuse the people of East Timor on these same issues, and maximizing public participation in the workings of democracy.

At the heart of democracy

All the CSOs in East Timor will need to re-examine their roles and responsibilities in the democratic era. For this they will have to be better informed and more professional. Already there is a growing trend for NGO workers to be paid, either part-time or full-time, rather than serving as volun-

Box 3.2

Advocacy in action

In 2001 many people became concerned about issues related to the production of coffee which directly involves many small farmers. This led to a demonstration by 2,000 farmers in Ermera district.

The farmers wanted to put pressure on the local administration and local leaders and to have a fair say in the decision-making processes

governing coffee production, pricing and marketing. The organization of this protest resulted in the building of alliances between local farmers, and some local and national NGOs including KSI (Kadalak Sulimutuk Institute), Sahe Liberation Institute, the Students Solidarity Council, and the Centro Do Desenvolvimento da Economica Popular (CDEP).

teers. But whether they are run by paid or voluntary staff NGOs should always rely on moral and intellectual power rather than trying to become commercial organizations or quasi-political parties. Many of the organizations formerly involved in resistance activities had clear philosophies and one central goal and vision—the liberation of their country. Now in independent East Timor they may have to look again at the visions and philosophies from which they draw their strength to ensure that they operate with high principles and have something unique to offer.

The education horizon

Education is one of the most critical components of human development. Unless people have at least a basic education many of the other choices remain closed to them. East Timor has a lot of ground to make up—not just dealing with illiteracy but also coping with a multiplicity of languages.

East Timor's standards of education are among the lowest in the world. The literacy rate is only 43% and there is a striking gap between urban areas where the rate is 82%, and the rural areas where it is only 37% (figure 4.1). Illiteracy deprives the people of East Timor of the opportunities to expand their human capacities—to achieve better standards of health, for example, and to participate fully in social and political life. But it also hampers the development of the nation as a whole since basic literacy and numeracy are the keys to more productive employment, in both national and international enterprises.

East Timor certainly compares unfavourably with other countries in the region. For neighbouring Indonesia as a whole, the literacy rate in 1999 was 88% and even for the province of East Nusa Tenggara on the border with East Timor it was 81%. East Timor also lags behind many other countries in Asia and the Pacific—Malaysia (87%), the Philippines (95%) and Papua New Guinea (64%).

Most of the older generation will never learn to read: of today's household heads more than half have had no schooling at all. But the situation should be better for the next generation since a higher proportion of children do at least start in primary school. In 2001, the net primary enrolment ratio was 76%. This represents progress, though it still falls far short of global standards.

East Timor's education system today is the legacy of colonial rule, but by two colonial powers that had very different priorities. For most of their period of rule the Portuguese showed little interest in mass education. They sent only a small proportion of the population to school, mostly to those run by the Catholic Church. By 1975

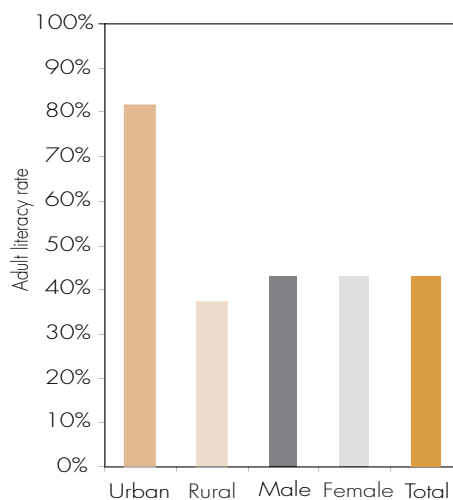
when the Portuguese left, the literacy rate was only around 5%.

Even so the relatively small numbers of people educated during this period are now playing an important part in building the new nation. These include people who continued their education in Portugal and some of whom were instrumental in setting up the National Council of Timorese Resistance (CNRT) whose Education Division during the transitional period helped to shape the country's system of education.

Another significant group educated during the Portuguese period are those who became primary school teachers. They had completed four years of primary education and also received a few months of teacher training that certified them to teach primary grades 1 and 2. Some of these teachers had their qualifications upgraded during the Indonesian period and many now work as teachers of Portuguese.

Figure 4.1

Adult literacy, 2001



Source: See annex table 4

In the Indonesian era educational quantity was not matched by quality

The Indonesian approach to education was rather different. The Indonesian government was determined to achieve universal primary education and in many provinces went a long way towards reaching this. It made slower progress in East Timor than elsewhere. Nevertheless by around 1985 almost every village had a primary school. This expansion certainly enrolled many more children in school but it had two main flaws.

The first flaw was that the quantitative increases were not matched by increases in quality. In most provinces of Indonesia the standard of teaching was poor: schools lacked funds, textbooks, and basic equipment. And in East Timor the situation was worst of all—though the effects of this were not always evident since assessments generally tested the students in reduced areas of the curriculum and inflated the marks in order to improve the statistics.

The second flaw was that the government in Jakarta saw education as an important part of the process of ‘Indonesianizing’ the people of East Timor. As a result, the government forbade the use of Portuguese in schools and required East Timorese who wanted to deal with the administration to do so only in Indonesian. To further this, the government drafted in large numbers of teachers from Indonesia. They did not succeed as rapidly as they had hoped; it took several years to achieve widespread use of Indonesian in the schools—fifteen years according to some observers. But eventually they did ensure that East Timorese children were often being educated in a language different from the one they spoke at home—which further hampered their progress.

Over time, the number of Timorese teachers increased. By 1998/99, of the 6,672 primary school teachers 78% were East

Timorese. But the quality of instruction was low. Most teachers had not progressed far beyond fourth grade. And because they earned very little they had to take extra jobs to survive and were frequently absent from the classrooms.

This in turn discouraged both parents and children. Around 30% of children were not enrolled at all. This was partly for cultural reasons, since many parents did not appreciate the value of education, especially for girls. But many poor parents could not afford the fees or the costs of textbooks or uniforms. And a number of parents were also unwilling to have their children indoctrinated by a foreign curriculum.

The weakness at the primary level carried through to secondary school. In 1998/99, of 1,963 lower secondary school teachers, only 3% were East Timorese. In the final year of Indonesian administration net enrolment had still only reached 36% at the lower secondary level (12 to 15 years) and 20% at the upper secondary level (16 to 18 years). Data for 2001 suggest that the current figures are slightly lower at the primary level, 62%, and much lower at the lower secondary level, 27%.

Finally at the tertiary level, education is even more restricted, with an enrolment ratio of 3.8% in 1999 and 2.8% in 2001. The University of East Timor was established in 1986 with three faculties: social politics, teacher training and agriculture. Here too standards were often very low. The university had few resources and used outdated teaching methods, and both staff and students were frequently absent. The other tertiary institutions included a Health Academy to train nurses and a polytechnic with a two-year course in engineering and accountancy. The Catholic Church Pastoral Institute educated teachers of religion. And in 1997 a private School of Economics was established with courses in accountancy and management.

The impact of the 1999 emergency

The violence of September 1999 is thought to have destroyed, either partially or completely, 80% to 90% of school buildings and related infrastructure. In most cases the teaching materials, school records and furniture were stolen or burned. As a result, when schools reopened students lacked even pens and pencils and exercise books

Table 4.1

Colonial education legacies		
	1978	1999
Primary	47 schools 10,500 students	788 schools 167,181 students
Lower secondary	2 schools 315 students	114 schools 32,197 students
Upper secondary	none	54 schools 18,973

Source: United Nations (2000)

which were either unavailable or being sold at prices beyond the reach of poor parents. Just as damaging was the loss of personnel. Although the primary schools were mostly staffed by East Timorese, the secondary schools had largely been staffed by Indonesians, most of whom eventually decided to leave. The same was true of school administrators, almost all of whom were Indonesian.

A further problem is that some of the schools built during the Indonesian period are now redundant. This is because the Indonesian government forcibly moved many communities to new locations and built the schools there. Now, however, many of these families have moved back to their ancestral grounds. Other schools are also unavailable because the Indonesians built them on land that they did not own and some of these sites are now subject to title disputes.

Rebuilding the education system

When the situation had settled down somewhat by the end of 1999 and people started to come back to the urban centres East Timorese administrators set to work on a voluntary basis within the CNRT Education Division. They were hampered, however, by their inexperience and also by the type of top-down management culture imposed by Indonesia and that has left people with little confidence to take decisions.

Meanwhile many of the remaining primary school teachers also started work on a voluntary basis, receiving small incentive payments from UNICEF and also some food from the World Food Programme. Although most had taught during the Indonesian period some people had no experience at all. UNICEF also provided start-up kits of educational materials and re-roofed a number of primary and secondary schools.

In May 2000, UNTAET and CNRT organized a proficiency test for teachers. This was taken by Timorese teachers in Indonesian since this was the language the teachers had used as a medium of instruction. Of those who took the test, 5,000 were capable of teaching in the primary schools, although not all were hired immediately.

The situation in secondary schools was even more difficult. Because almost no secondary teachers were available, the administration encouraged university students to

sign up for these jobs. These recruits, who were hired for the first ‘normal’ school year from October 2000, usually had sufficient basic knowledge but they had no training in teaching or in classroom management.

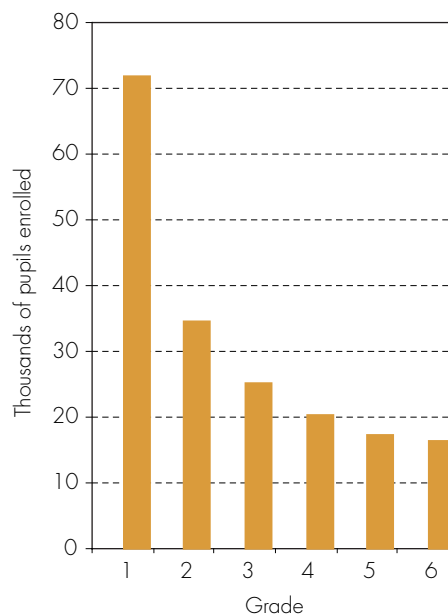
Meanwhile international donors were preparing a School System Revitalization Programme that combined the efforts of UNTAET, CNRT, UNICEF, national and international NGOs, bilateral donors and the World Bank. The first phase of this, which was agreed in June 2000, was the \$13.9 million Emergency School Readiness Programme to repair some buildings and also build new prototype schools. By February 2002, the programme had rehabilitated 535 schools, representing 2,780 classrooms, built three junior secondary school prototypes, and assembled 54,000 sets of student furniture in classrooms. In October 2001 the donors agreed another \$13.9 million ‘Fundamental School Quality Project’ to upgrade 65 primary schools.

For the school year 2000/01, 185,180 children were enrolled in 707 primary schools across East Timor (table 4.2). In most countries enrolment is usually highest in grade 1 and then tails off to grade 6 as children gradually drop out. As figure 4.2 indicates, the gradient is especially steep in East Timor. The lower classes are also swollen by the numbers of students who are either repeating years or have started late and had to enrol at grades lower than the

Donors have been helping to rebuild the schools

Figure 4.2

Enrolment by grade, 2000/01



Source: Ministry of Education

Table 4.2

Student-teacher ratios in primary schools, 2000/01

District	Schools	Students	Students/school	Teachers	Ratio	Ratio range
Aileu	40	13,190	330	149	89	36-147
Ainaro	38	9,398	247	157	60	40-106
Baucau	93	20,365	219	345	59	24-175
Bobonaro	89	18,294	206	289	63	27-104
Covalima	52	8,998	173	227	40	28-147
Dili	61	28,333	464	475	60	17-119
Ermera	62	19,076	308	376	51	27-124
Liquica	38	11,989	316	195	61	30-99
Lospalos	55	10,541	192	172	61	27-142
Manufahi	50	10,443	209	153	68	28-243
Manatuto	35	9,169	262	118	78	36-235
Oecussi	43	9,932	231	146	68	37-100
Viqueque	51	15,452	303	189	82	46-224
TOTAL	707	185,180	262	2,991	62	24-243

Note: The ratio range shows the highest and lowest of the average of the sub-districts of that region.

Source: Ministry of Education (2001)

ones they normally would study at for their age. This means that the 'gross enrolment ratio,' which represents the number of children studying at a particular level compared with the number of children of the appropriate age group, can be quite high—112% at the primary level in 2001.

It is also interesting to note that the primary enrolment ratio was the same for boys and girls. Interviews carried out in May 2001 in a survey for UNICEF and Oxfam also concluded that in primary education there was gender equality (UNICEF, 2001). Indeed in some cases girls may have the advantage since boys are more at risk of being kept out of school once they are old enough to work on the family farm.

Nevertheless, enrolment is only part of the picture. Many children who register to go to school do not actually attend. The same study found that, according to the teachers, many children were 'not active': up to 20% in some schools had shown up for some classes and rarely attended subsequently. In 1997/98 East Timor's repetition rate for primary education—14%—was one of the highest in Indonesia.

Table 4.2 also indicates the pupil/teacher ratio. The average of 62 students per teacher at the primary level is high, which reduces the quality of education for individual pupils. However this average conceals wide

variations across districts, sub-districts, and schools. As this table shows, the number ranged from 17 (for a school in Dili) to a high of 243 (for a school in Turiscai sub-district of Manufahi).

This information applies to government schools. However, in addition to more than 700 government schools, there are also some 173 schools run by the Catholic Church, which charged on average, Rp 5,954 (\$0.60) per month, and 26 private schools which charged Rp. 9,327 (\$1) per month.

Obstacles to school attendance

Now that East Timor has gained its independence, some of the previous obstacles to school attendance have been removed. But many remain. The most basic issue is poverty. Although there are no enrolment fees for government schools, there are still costs to sending children to school. Closely linked with poverty is the need for children to spend at least part of their time working on the family farm or on household chores. Around 10% of children aged 10 and 11 are employed, mostly in agriculture, though around half of these also go to school.

Another problem is that since many parents did not go to school themselves they may have little interest in education and do not encourage their children to attend school. Parents may also conclude that the quality

As many girls as boys now go to primary school

of education is so low that their children achieve little by going to school and might just as well stay at home.

These problems are of course compounded if the school is far from home. For most children this does not seem to be too much of a problem. According to the Suco Survey around half of children do not need to walk more than ten minutes to get to school. Only seven out of 498 sucos reported that the average time needed for children to walk to school was more than half an hour. Nevertheless, during the rainy season it is generally more difficult.

The problems will be greatest in areas where schools are still occupied by squatters or are unavailable because the school was built on land that is now subject to legal disputes.

Future issues for education

The East Timor education system is currently being rebuilt but it faces a number of major challenges.

Language

One of the most difficult tasks for schools in the years ahead will be to work in a different language. The Constitution establishes Tetun and Portuguese as the official languages. As far as the education system is concerned, the policy has been to introduce Portuguese progressively as the language of instruction, starting in the 2000/01 school year with students in grades 1 and 2, while teaching Portuguese as a second language

in higher grades, and then gradually extending instruction in Portuguese throughout the school system.

This has created a number of problems since only 5% of the population, and consequently few teachers, speak Portuguese. In order to identify those teachers who could speak the language some 3,000 teachers sat for a test facilitated by the Portuguese Mission in Dili. Of these, only 158 (5%) achieved the pass mark—the majority of whom lived in Dili or Baucau (table 4.3). As this table indicates, Manufahi district had no primary school teachers qualified to teach Portuguese and so instruction in grades 1 and 2 is being given either in Indonesian or in a local language. This is depriving students of the foundation they need in Portuguese to be promoted to higher grades in the school.

Both teachers and school administrators will need a strong grounding in Portuguese. This will need more careful planning both of the content of the courses—and to allow for the time that teachers will spend out of the classroom on language learning. Many courses have been offered on an ad hoc basis and some teachers report that they have not received enough benefit. To assist with Portuguese, the Government of Portugal is financing 141 Portuguese nationals who are teaching Portuguese as a second language in secondary schools and upgrading the Portuguese-language skills of Timorese teachers.

At the same time East Timor needs to look again at the value of mother-tongue teaching—whether in Tetun or any of the other main languages. The experience in other countries that have faced similar problems suggests that children learn more quickly if they first become literate in their mother tongue and then acquire a ‘national’ language, in this case Portuguese or Tetun, as a second language. The confidence of being able to read and write in their mother tongue lays a strong cognitive and emotional foundation, equipping them with the capacities needed to learn a second language. And when children are learning about their legends and culture in their mother tongue they will also get greater support and reinforcement from their parents. This then encourages the children to attend school regularly. International research has shown that one of the main causes of school failure is poor

When children learn in their mother tongue they get more parental support

Table 4.3
Teachers approved for teaching Portuguese

District	Primary	Secondary
Aileu	0	1
Ainaro	7	0
Baucau	24	1
Bobonaro	5	0
Covalima	3	2
Dili	45	5
Ermera	2	1
Lautem	3	4
Liquica	18	2
Manatuto	7	0
Manufahi	0	4
Oecussi	1	9
Viqueque	11	3

Source: Ministry of Education

There are on average more than 60 pupils per primary school teacher

adaptation of national education programmes to the cultural and linguistic characteristics of pupils.

Producing materials in all the main vernacular languages would be very costly—both for printing materials and for training teachers in their use—especially when there are only small numbers of children to be taught in certain languages. Nevertheless international experience shows that the benefits more than justify the expense. East Timor might gain from the experience of Papua New Guinea which has recently introduced over 800 vernacular languages into its schools. Instead of printing materials in all the languages, however, here the approach was to develop materials without text that could be used nationally, but also to provide teachers with detailed guidelines as to how they might use them in their own language.

The current programme to ‘stabilize’ the grammar and vocabulary of Tetun is useful. But as yet there are few educational materials available—and little or nothing in the other languages.

Teachers

The Ministry of Education currently employs about 6,400 teachers, at all levels of whom 70% are men, and all of whom were hired after the referendum in 1999. Most of these are primary school teachers who, during the Indonesian period, completed lower-secondary education and then continued to upper-secondary schools that specialised in education. They studied for two years at the SPG (Sekolah Pendidikan Guru) level following which some studied for three years at the higher, KPG (Kejuwan Pendidikan Guru) level. At the primary level, the student/teacher ratio is over 60, which is clearly too high.

At the secondary level, the majority of teachers are still university students who have had no teacher training. For the 2000/01 school year, of the 2,091 secondary school teachers, only 106 have formal secondary training—69 male and 37 female.

For the future there are two main issues for the teaching profession. The first is to raise the overall numbers, so as to reduce the pupil/teacher ratio. In the past the low salaries and poor working conditions have dissuaded more motivated students from entering the profession. The situation may

even be worse now since teachers are no longer provided with free housing. All this contributes to low morale. Regrettably, in many instances teachers are often seen sending students home after an unacceptably short school day. Since teachers have an important role, particularly in the rural areas, not only in schools but as development facilitators, the government will need to reassess their pay and working conditions.

The second priority is to upgrade the skills of teachers. Those studying to become teachers need to be properly prepared. Not only will they need to become familiar with a new curriculum, and a new language, they will also have to encourage more active learning.

At present students spend much of the day copying information from the blackboard. This is partly the result of a shortage of textbooks and other teaching aids, but it is also because teachers still use traditional methods that rely on rote-learning rather than encouraging children to acquire information for themselves.

For the coming generation of teachers the East Timor National University (UN-TIL) will have an important part to play. For the next ten years or so, its main priority should be to produce more schoolteachers. This would mean reassessing the value of existing faculties so as to make best use of its scarce financial and human resources. For those teachers already working, this will involve more in-service training through intensive workshops and regular meetings at the school level, along with district-level teacher resource centres.

Community involvement

One of the best ways of raising standards in schools is by wider community involvement. If teachers, parents and other community leaders jointly take responsibility for running schools they are likely to invest more time and energy in the schools and take a greater pride in what they and their children can achieve.

A useful stimulus in this direction could come from the UNICEF ‘100 schools project’. This will choose 100 schools nationwide in order to model good practices in all areas of education—involving parents and communities, upgrading teaching methods, keeping better records, improving attendance and raising morale. The schools

chosen to be models will be those that have already committed to good practices.

This is another area where East Timor can make progress. The Indonesian system was highly centralized, with little scope for local initiative by either teachers or parents. This may have served the interests of the government but it wasted valuable potential resources of commitment and energy.

Curriculum

So far there have been few efforts at curriculum development—a result partly of the uncertainties of the transition period. Teachers still use most of the Indonesian curriculum for all grades. For grades 1 and 2, however, they also have Portuguese books that cover a standard early primary programme. These are of good quality, colourful and appealing, though they are quite expensive. The remaining grades follow a dramatically reduced curriculum which in grades 4 and 5 is limited to maths and science, with Portuguese as a second language. Grades 3 and 6 have maths, science and social science. There is also some instruction in music and sports but with very few support materials.

At the secondary level the curriculum is much broader, consisting of 14 subjects in lower secondary and 17 in upper secondary. Given the shortage of both teachers and materials it would seem wise to cut back on the range and concentrate on quality rather than quantity, with maths and science as priorities.

The basic subjects and contents of the curriculum will need to be arrived at through extensive consultations between teachers, parents and children. But this is also an area where international experience and resources can make an important contribution—helping those charged with developing a new curriculum for East Timor to learn from teaching practices elsewhere and attain internationally accepted standards.

Technical and vocational training

The Indonesian technical and vocational training system in the upper secondary schools was quite elaborate. But the training on offer bore little relation to the real needs of the workplace—in many respects it was just ‘education for education’s sake’. East Timor cannot afford this and, in conjunction with local employers, will have to refashion it so as to train young people in

competences that are in real demand. In any case most of the people who ran the previous vocational training system before have now left so East Timor has little choice but to start again.

A survey by the Australian financed Capacity Building Project for East Timor recommends that schools avoid specializing in certain subjects too early and that they include some subjects such as agriculture in general science courses.

There are already a number of vocational training projects, including those for the construction industry, which are financed by Brazil and Portugal. But clearly East Timor has urgent need of people with basic skills such as electricians and mechanics. Given the possible importance of tourism, those working in this industry will need to be proficient in English. Some of this training should also go to those who are already at work since it is clear that many people are now doing jobs for which their skills are inadequate.

Tertiary education

East Timor National University reopened in 2000. At the time the priority was to offer courses to those who had already been studying either in East Timor or in Indonesia. Though a large number of students failed the qualifying test they still put pressure on the Education Division to find them places. This resulted in a compromise: a new ‘bridging course’ that after another examination would offer students access to the different university courses.

This examination did indeed give most of the students sufficient marks to go to the university for the academic year 2001/02. But this large number of students then put the university under strain. The Faculty of Economics, for example, instead of its usual complement of 150 students found itself with 389.

The University of East Timor could find itself with many poorly qualified students crowded into courses that offer few prospects for employment. It might therefore re-examine its priorities, aiming for a smaller institution that emphasizes quality. And for the next ten years or so it could concentrate most resources on the faculty of education in order to train the next generation of secondary school teachers. Another issue is the quality of university teachers, most of

East Timor urgently needs more people with basic skills

whom do not hold advanced university degrees.

The university will want re-examine its priorities and reshape its courses according to the country's needs. The bulk of the resources and the students could be focussed on the Faculty of Education—to train the next generation of secondary school teachers. Other courses may also have to change their focus—particularly those that have strongly reflected the Indonesian heritage. The Faculty of Political Science, for example, could concentrate on preparing people to work for the civil service.

East Timor does need university graduates. But it will want to avoid falling into the same trap as other developing countries that have promoted university education for status or in order to respond to the demands of richer families. Instead it should probably aim for a smaller institution, with the emphasis on quality—educating people to international standards and capable of administering a modern state.

Adult literacy

Although the immediate priority will be to ensure education for the current generation of children, East Timor cannot ignore adult education. This is not just to meet the rights to education for the half of the adult population that has had little or no schooling, but also to help with the process of nation building, and more broadly to support hu-

man development by allowing people greater control over their own lives.

Given the importance that Portuguese will have in the nation's future it is not surprising that most adult literacy efforts now focus on this language. One is the Brazilian campaign implemented by Alfabetização Solidária, whose literacy programme started in all districts in June 2001 and will teach 3,500 illiterate adults. Another Brazilian project teaches Portuguese using TV. 'Telessalas' aims to upgrade the Portuguese skills and general knowledge of another 3,500 people. The target group in this case is 45-50 year-olds who have some Portuguese language skills. The pilot project runs in 20 classrooms in Dili district, serving 600 people. The next phase will involve 70 classrooms across all districts.

Civic education

In addition there is the question of what knowledge the population as a whole will need to sustain the new state of East Timor. So far civic education has understandably concentrated on the mechanisms of voting and elections. But human development takes a much broader and more inclusive view of democracy, not just as an objective but as a continuing process—as a way of life. Civic education can also promote:

- *Civic knowledge*—the fundamental ideas and information that people need to be effective and responsible citizens;
- *Civic skills*—the ability to understand and compare principles and practices of governance. These include participatory skills that enable citizens to monitor and influence public policies.
- *Civic virtues*—the character traits needed to sustain and enhance democratic governance and citizenship. These include respect for the worth and dignity of each person, tolerance, and equality.

With these skills citizens are in a stronger position to sustain and deepen the democracy they fought for—taking part in decision making on national and local policies. This may mean combining modern and traditional forms of decision making (box 4.1)

The same abilities are also the building blocks of a peaceful society—gradually achieving a consensus on the kind of be-

Box 4.1

East Timor's democratic tradition

It is inaccurate to characterize East Timor as a country without democratic roots and principles. The traditional power structures which remained intact over the period of colonization and occupation reflect highly intricate economic, social, political and cultural systems which are both participatory and inclusive.

The brief period of Fretilin rule in the mid-1970s also integrated devolution of power and authority to regional decision-making mechanisms. More significantly, the clandestine movement itself operated in highly consultative and participatory ways, involving local leadership and power structures to transmit messages from communities and to undertake collective decision-making. Civic education strategies should therefore involve local lead-

ers and incorporate traditional community processes to address differing social hierarchies and reflect the realities of local decision-making.

Traditional East Timorese society is highly hierarchical. This poses challenges for introducing some democratic concepts, such as the notion of equality. Within traditional systems, there is no identity for the state, other than those traditional elements that were co-opted by colonial state structures. Timorese kinship systems do not account for individualism, which is in contrast to the foundations of a multi-party system. Moreover, there is little trust for leaders who are not connected to sacred items and ancestral legitimacy. Any civic education initiatives need to take account of these traditional paradigms.

haviour that most people would like to see in their new country. Of these the most important is to achieve peaceful co-existence. This means not just the absence of violence within and between communities but also within the household, where much of it is directed against women. But there are also many other issues that can also benefit from civic education. One would be the risks of HIV/AIDS of which most people know very little.

To some extent civic education will have to start with teachers, relying on them to communicate ideas not just in the schools but also to the community at large, especially in the rural areas. Other state institutions, such as the police, might also help.

The education horizon

Education is one of the main focuses of this human development report because

establishing the education system on the right track is so critical to the country's future. Better standards of education will resonate through the whole society. Better educated people are in a position to innovate and to improve not just their own lives but those of others. Better educated women are in a stronger position to look after their own health and that of their children. And better educated people are in the best position to make choices about human development, for themselves as well as for their country.

Planning for education in East Timor will be difficult—complicated by a severe shortage of resources and of trained people, and the complexities of a multilingual society. But the choices have to be made as soon as possible if the next generation is to take full advantage of East Timor's new horizon as a democratic country.

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

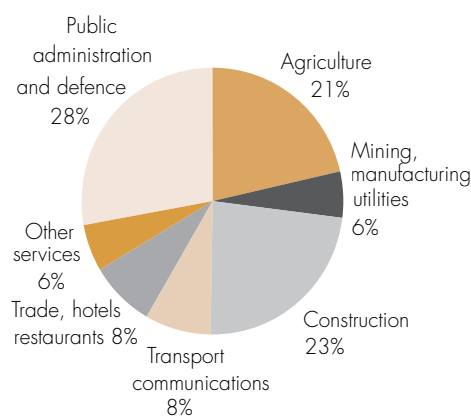
result of the Asian crisis, growth slowed to 4% and finally in 1998 the economy shrank by 2%. Much of this growth was stimulated by direct grants from Jakarta, which in the mid-1990s were worth around \$150 million per year. The Indonesian government was spending much more than it gained locally in revenue—the 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 this is only a temporary boost and will shift into reverse as UN personnel withdraw during 2002. By the end of UNTAET's mandate, some 75% of the international staff should have withdrawn. Dili will suffer the brunt of this reversal, particularly in hotels, restaurants and domestic service, as well as in housing rental income. Hopefully, however, this inevitable contraction will be offset by improvements in other areas such as agriculture. For 2002/03 it seems likely that growth will shrink to zero. Thereafter a more balanced and sustainable form of development could set the country on a stable upward path.

The transition period has also seen a slump in domestic savings. Over the period 1995-97, these had amounted to around 20% of GDP, but they turned negative from 1999 onwards. In the next few years savings should return to their normal level.

The balance of payments too has been seriously affected. Since few of the goods and services needed during the construction period were available locally, most had to be imported. As a result, the external accounts had large deficits in fiscal years 2000/01 with a similar deficit for 2001/02, all of which will need to be financed by grants from abroad or by foreign investment.

The early years of the new administration will also involve significant budget deficits. This is indicated in table 5.1, which was prepared for the donor conference in Oslo

Donors pledged \$523 million over three years to rebuild East Timor

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.

Fisheries

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.

Market-based growth can widen inequalities

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-

*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.

A brief history of East Timor

Anthropological investigations indicate that the first people to arrive in Timor, approximately 40,000 to 20,000 years BC, were of the Vedo-Australoide type, similar to the Vedas of Ceylon. A second wave, which arrived around 3000 years BC, consisted of Melanesians, similar to those living today in Papua New Guinea and some Pacific Islands; East Timorese languages like Macassae, Bunac and other seem to have this origin. Probably due to the mountainous nature of the country, these new arrivals did not mix with the former inhabitants, who withdrew to the interior mountainous regions. This may be one reason why East Timor has so many different languages.

A third wave of people, which arrived around 2500 BC, consisted of ‘proto-malays’—people coming from South China and North Indochina. Even today the Chinese in East Timor are one of the more important trading communities.

The Portuguese colonize Timor

The Portuguese reached the coast of Timor on what is now the enclave of Oecussi around 1515. But it was not until the 1700s after the Governor was installed in Dili that they began more efficient commercial exploitation of resources. They made huge profits from exports of sandalwood but eventually overexploited this resource. As sandalwood became almost extinct the Portuguese in 1815 introduced coffee, along with sugar cane and cotton.

Portuguese colonialism ensured that the native population, particularly the coffee growers, never managed to accumulate much capital. Instead the revenues from coffee exports went largely to the Portuguese and Chinese traders. Discontent at this was probably one cause of a series of Timorese rebellions – including the revolt in Manufahi led by Dom Boaventura. After twelve years of resisting and fighting the Portuguese, Boaventura’s forces were finally crushed by Portuguese troops in 1912.

East Timor remained largely underdeveloped with an economy based on barter. Prior to World War II, the capital, Dili, had

no electricity or water supply and there were few roads. Even so, before the Second World War the Japanese Empire considered East Timor to be of strategic importance—for three reasons. First, Timor’s geo-political position would facilitate Japan’s southward expansion by helping to split the British colonies in Southeast Asia and Australia. Second, Portugal which was one of the weakest colonial powers and had also declared its neutrality between the ‘Axis’ and the ‘Allies’, was considered easy prey for Japan’s political and military interests. Third, the oil and gas reserves in the Timor Sea could help meet Japan’s fuel needs.

When World War II started, the Australians and the Dutch, aware of Timor’s importance as a buffer zone, landed in Dili despite Portuguese protests. The Japanese then used the presence of the Australians as a pretext for an invasion in February 1942 and stayed until September 1945.

By the end of the war East Timor was in ruins. Approximately 60,000 East Timorese had lost their lives as a result of the Japanese occupation and the efforts of the Timorese to resist the invaders and protect Australia. People were also forced to give food to the Japanese, so when the Japanese finally surrendered the scene in Timor was one of human misery and devastation. The population was close to starvation and most of the plantations of coffee, cocoa and rubber had been abandoned.

1960s—a new era of colonialism.

The Timorese and the Portuguese tried to help the country recover. But development was slow. The average annual growth rate between 1953 and 1962 was just 2%. Meanwhile the United Nations, through Resolution 1514 (XV) of December 14, 1960 declared East Timor a non-self governing territory under Portuguese administration. Portugal tried seriously and systematically to develop East Timor through three successive five-year plans. Money started to arrive and there was a sudden spurt in economic growth which averaged more than 6% annually. Nevertheless this was not sufficient

to overcome decades of underdevelopment and by 1974 per capita income was still only \$98 per year.

Agriculture absorbed at least 80% of the labour force but remained largely at subsistence level and accounted for just 33% of GDP in 1962. The main exports were coffee, with 73% of the total, followed by copra, rubber, wax, and candlenuts. There was very little private-sector activity outside trade, and the swings in international commodity prices led to numerous balance-of-payments deficits. Meanwhile the population was growing by more than 2% per year.

Portugal governed East Timor with a combination of direct and indirect rule, managing the population as a whole through the traditional power structures rather than by using colonial civil servants. This left traditional East Timorese society almost untouched.

In 1974, however, the 'transition to democracy' in Portugal had a sudden impact on all its colonies. The political climate in Portugal shifted to the left and for the first time the East Timorese were given freedom to form their own political parties. After a series of changing political alliances, the two main political parties, the Timorese Democratic Union (UDT) and the Frente Revolucionaria do Timor Leste Independente (Fretilin) formed a coalition, in early 1974 in preparation for eventual independence, guided by the local Portuguese administration

On August 11, 1975, the UDT, covertly supported by the Indonesian government, launched a coup, in an attempt to seize power from the Portuguese and halt the ascendancy of Fretilin, which by then had become the party with the largest popular support. During the UDT coup attempt, more than 2,000 died. Most of the UDT members and many of its supporters fled across the border into West (Indonesian) Timor. Indonesia allowed them to enter only if they signed documents agreeing to the incorporation of East Timor into the Indonesian Republic. In the early days of the attempted coup, the Portuguese administration left Dili for Atauro island, leaving Fretilin in *de facto* control of East Timor. Fretilin then administered the territory until the Indonesian invasion.

On November 28, 1975, in an attempt to take its case to the UN, and to publicise

Indonesian armed incursions into its territory, Fretilin declared East Timor as the República Democrática de Timor Leste (RDTL). RDTL was recognized by a small number of countries, mainly the former Portuguese colonies, and was short-lived. Ten days later, on December 7 1975, Indonesian troops launched a full-scale invasion

The Indonesian occupation

Indonesian President Soeharto's 'New Order' administration was determined to thwart the emergence of a new state within the Indonesian archipelago—fearing this could set a precedent for other islands, particularly in Eastern Indonesia

The result was the Indonesian invasion of December 7th, 1975. Some 60,000 people lost their lives in the early years of annexation—contributing to a total of about 200,000 deaths for the whole period of Indonesian administration.

In an effort to stamp greater control over its dissident new province—whose seizure was condemned by the United Nations—Indonesia invested considerable sums in East Timor to bolster its military rule, particularly in infrastructure, and in the development of cash crops for export. The Indonesian government also employed large numbers of people in the civil service..

Following the invasion most of the population fled to the mountainous areas, where they survived for three years, living outside Indonesian control. Following a fierce aerial bombardment of these areas and their crops in 1978, however, most of the population were forced down into lowland areas where they were met by Indonesian troops, and many were killed. The Indonesian military then began to relocate the remaining population into newly established resettlement villages. Restricting the time villagers spent on producing their own food, the Indonesian military forced them into road construction, logging, and the cultivation of cash crops for export.

Unlike the Portuguese the Indonesians favoured strong, direct rule. But the East Timorese people never accepted this and were determined to preserve their culture and national identity, in which religion and the Catholic Church played a crucial role. In 1991, the Indonesian military gave permission for a parliamentary delegation from Portugal. The mission was supposed to pre-

pare the ground for more serious UN involvement. However, the visit was cancelled at the last minute. Immediately, the Indonesian military went on the attack. A young student, Sebastião Gomes, was killed and many others were arrested.

On November 12, 1991 thousands of East Timorese marched towards the Santa Cruz cemetery to mourn for Sebastião Gomes. The Indonesian Army opened fire and killed more than 200 people. The 'Santa Cruz Massacre' marked a turning point in the brutal occupation of East Timor as the shocking images were beamed around the world. Individuals and organizations started to put increasing pressure on their governments and on international organizations on behalf of East Timor.

The capture and imprisonment of resistance leader Xanana Gusmão in 1992 also put the spotlight on the human rights situation. Indonesia was subjected increasingly to international criticism by governments, agencies and NGOs, culminating in October 1996 with the awarding of the Nobel Peace Prize to two Timorese leaders, Bishop Carlos Ximenes Belo and José Ramos Horta, on behalf of the people of East Timor. This assisted the growing assertiveness of the independence movement, fuelled since the late 1980s by the increasing involvement of youth in the urban areas of Dili and Baucau.

In 1997 and 1998, the Soeharto government's New Order (*Orde Baru*) was shaken by a severe economic crisis, which ignited social protests in Jakarta, leading to widespread demands for political change. As the situation continued to deteriorate, Soeharto was forced to resign and was replaced by his vice-president, Dr. Habibie.

In a bid to distinguish himself from the Soeharto period, and to improve Indonesia's image internationally, President Habibie stated that he was no longer willing to maintain the 'burden' of East Timor, and in January 1999 offered its people a 'wide-ranging autonomy' within the Indonesian Republic. Should the Timorese reject this, Habibie declared that the Indonesian Government would be prepared to 'let East Timor go'. An agreement between the Portuguese and Indonesian Governments to hold a referendum, (or 'popular consultation', as it was then termed) on autonomy was finally

reached in May 1999, under the auspices of UN Secretary-General Kofi Annan.

The UN started to prepare for the referendum by establishing the United Nations Assistance Mission for East Timor, UNAMET. On June 3, 1999 the UN raised its flag on the soil of East Timor. On August 30th, 1999 the people of East Timor voted overwhelmingly—78%—against autonomy, and in favour of independence from Indonesia. Pro-integration militia gangs and the Indonesian armed forces responded with extraordinary brutality—rampaging and plundering across the country. As a result of their actions, one-third of the population were forced to resettle in refugee camps in West Timor and neighbouring islands. Another one-third looked for refuge in the mountains of East Timor. Between 1,000 and 2,000 people are reported to have died in the violence. Departing Indonesian soldiers and the army-backed militias torched homes and other buildings, including UN and NGO offices and equipment.

Following widespread international protest at the paramilitary rampage, and governmental pressure—particularly from the United States, Australia and Portugal, the UN Security Council authorized a multinational force (INTERFET) under the unified command structure of a member state, Australia, to restore peace and security. The UN also launched a large-scale humanitarian operation including food supplies and other basic services.

On October 19, 1999, the Indonesian People's Consultative Assembly formally recognized the outcome of the referendum. Then on October 25, the UN Security Council, through Resolution 1272 (1999), established the United Nations Transitional Administration in East Timor (UNTAET) as an integrated, multi-dimensional peace-keeping operation responsible for the administration of East Timor during its transition to independence.

On August 30, 2001, on the anniversary of the referendum, East Timor held elections for political representatives, whose task was to draw up a new Constitution. This was agreed on March 24, 2002. On April 14, the first presidential election was held, and won by Xanana Gusmão. Independence was set for May 20, 2002.

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ANNEX TABLE 1

Demographic indicators

	1985	1990	1995	1999	2001 ¹
Total population (persons)	630,676	747,557	839,719	779,567	794,298
Annual population growth rate (%)		↔ 3.46	↔ 2.35	↔ -1.5	↔ 0.90
Urban population (as % of total)	..	7.8	9.5	9.8	23.5 ³
Population age 0-4 (as % of total)	19.2	18.0	16.6	16.2	17.1
Population age 5-9 (as % of total)	14.0	14.3	15.6	15.1	14.9
Population under age 15 (as % of total)	40.6	41.5	43.5	41.1	43.9
Population aged 15-64 (as % of total)	57.6	56.5	54.8	57.0	53.7
Population aged 65 and above (as % of total)	1.8	2.0	1.7	1.9	2.4
Dependency ratio (%)	79.8	78.5	81.6	78.6	82.2
Urban	77.3	71.0	73.8	69.2	74.3
Rural	83.5	79.7	82.4	80.8	84.4
Sex ratio (men/women)		1.07	1.03	1.03	1.01
Total fertility rate (per woman)	..	5.7	5.1	3.8	
..					
Averaged household size, total (persons)	5.1	5.0	4.9	4.7	5.1
Urban	..	5.8	6.0	4.7	4.9
Rural	..	5.0	4.8	4.7	5.2
Female-headed household, total (%)	..	9.4	8.9	8.9	10.0
Urban		10.2	11.7	9.8	12.1
Rural		9.3	8.6	8.7	9.2
Population density (persons/square kilometre) ²	37	50	56	57.3	55.7

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see Note on the calculation of indicators on page 87. 1) Total population at mid-year for 2001 was based on the May 2001 Initial Registration (793,000 people) published by UNTAET (Civil Registry in East Timor, 2 July 2001) and adding the number of returned refugees for June 2001 (1,298 people) published by UNHCR (Summary of Voluntary Repatriation, 20 March 2002). Statistics on population structure by age group and dependency ratio were based on the Civil Registry in East Timor. Other indicators (urban population, averaged household size and female-headed households) were based on the results of the East Timor Household Survey 2001. 2) The total area is estimated at 14,874 square kilometers. 3) The percentage of the population living in urban areas in 2001 is not comparable with figures from previous years, as it is based on data from the East Timor Household Survey 2001, which had a sample of only 1,800 households (9,113 individuals) while the previous figures were based on data from the results of surveys or censuses during the Indonesian era which had samples of around 5,314 households (24,698 individuals). The two sources also used different definition of urban areas.

Sources: Population census (1980, 1990), Intercensal survey (1985, 1995), Household socio-economic survey of Susenas Core 1999, Common Country Assessment for East Timor (UN), Social and Economic Conditions in East Timor (Pedersen, J. and Marie Arneberg, 1999), East Timor Household Survey 2001.

Life expectancy and mortality indicators

	1993	1996	1997	1999	2001
Life expectancy at birth, total (year)	52.2	53.9	54.4	56.0	57.4
Male	50.7	52.3	52.6	54.2	55.6
Female	53.7	55.5	56.1	57.7	59.2
Infant mortality rate, total (per 1000 live births)	108.6	99.7	92.8	86.0	80.1
Male	118.1	108.9	101.9	94.7	88.4
Female	99.6	91.1	84.2	77.8	72.3
Child mortality rate, total (per 1000 live births)	75.6	66.8	64.3	56.6	50.3
Male	75.9	67.6	65.7	58.0	51.8
Female	75.2	66.0	63.0	55.2	48.8
Under 5 mortality rate, total (per 1000 live births)	204.6	183.5	177.6	158.8	143.5
Male	217.7	196.3	191.3	171.6	155.5
Female	192.3	171.5	164.6	146.7	132.1
Maternal mortality rate (per 100,000 live births)	..	..	..	420	..
Probability at birth of not surviving to age 40, total (%)	45.9	41.1	39.8	35.6	32.2
Male	48.5	43.8	42.7	38.3	34.8
Female	43.4	38.7	37.1	33.1	29.8
Probability at birth of not surviving to age 60 (%)	103.0	93.8	91.2	83.2	76.6
Male	115.3	105.6	103.3	94.5	87.2
Female	91.3	82.7	79.9	72.6	66.6
Underweight children under 5 (%)	..	50.6	..	44.5	..

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87. 1) Life expectancy at birth in 1997 is calculated from raw data of East Timor Household Survey 2001, using Coale-Demeny Models (Trussel equations) for the West model, whereas the estimates for other years were based on an extrapolation (best-fitted curved) model of several estimates from various data sources (including the 1997 estimate), applying the same methodology (see 'Note on the calculation of indicators').

Sources: Indonesia 1990 Population Census, 1995 Indonesia Intercensal Survey (SUPAS), Indonesia Socio-economic household surveys (SUSENAS, 1993, 94, 96, 97, 98, 99), East Timor Household Survey 2001.

ANNEX TABLE 3

Health, fertility and family planning indicators

	1993	1996	1997	1999	2001
Monthly morbidity rate, total (%)	20.0	20.9	22.5	18.0	13.0
Urban	24.4	20.4	19.8	17.2	..
Rural	19.6	20.9	23.3	19.0	..
Under 5 child (age 0-4) monthly morbidity rate (%)	28.0	30.4	28.2	23.5	25.2
Urban	39.6	38.2	27.0	22.6	..
Rural	27.0	29.6	29.4	24.4	..
Births attended by skilled health staff , total (%)	16.2	23.4	27.3	30.0	..
Urban	44.9	53.9	52.9	62.2	..
Rural	13.5	20.0	24.3	25.4	..
Under 5 child (age 0-4) immunized, total (%)	57.7	73.6	78.5	75.1	51.8
Urban	65.9	87.1	80.5	86.0	..
Rural	56.9	72.1	78.2	73.5	..
Visit rate to modern health facilities/personnel, total (%)	11.4	12.7	14.5	13.8	53.9
Urban	17.0	13.5	15.7	14.9	..
Rural	10.9	12.6	13.1	11.7	..
Under 5 child (age 0-4) visit rate to modern health facilities/personnel, total (%)	18.0	21.1	20.5	17.9	60.6
Urban	29.9	30.7	22.7	19.0	..
Rural	16.9	20.0	18.2	15.2	..
Average number of children ever born to ever married women age 35 and over, total	4.7	4.5	4.4	4.2	4.2
Urban	4.8	4.7	4.2	4.5	..
Rural	4.7	4.5	4.4	4.2	..
Child-woman ratio, total	70.5	65.9	63.4	54.2	77.7
Urban	66.3	62.1	65.0	56.0	..
Rural	70.9	66.3	63.2	54.0	..
Contraceptive use rate for modern methods, total (%)	16.7	18.7	21.9	19.9	5.6
Urban	19.7	30.0	26.3	27.1	..
Rural	16.4	17.4	21.5	19.1	..

Note: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87

Source: SUSENAS core data for 1993, 1996, 1997, 1999; East Timor Household Survey 2001.

ANNEX TABLE 4

Education indicators

	1993	1996	1999	2001
Adult literacy rate, total (as % of age 15 and over)	35.6	40.4	40.6	43.0
Urban	69.3	79.6	80.4	81.5
Rural	32.5	36.2	36.6	37.2
Male	45.3	48.6	46.9	43.1
Female	25.8	32.0	33.9	42.8
Gross enrolment ratio, total (%)	52.6	55.5	59.1	56.1
Urban	55.1	57.2	63.2	60.3
Rural	48.6	51.1	54.3	50.1
Male	56.8	58.1	62.1	58.4
Female	50.1	54.2	57.9	55.1
Primary education	83.1	90.6	94.4	111.6
Lower secondary education	62.7	60.5	63.9	62.4
Upper secondary education	32.2	36.1	37.2	27.0
Tertiary education	2.8	3.3	5.1	3.9
Net enrolment ratio, total (%)	38.4	41.6	45.6	41.2
Urban	40.8	43.7	49.1	47.5
Rural	35.2	37.4	40.2	38.1
Male	41.1	43.2	48.5	44.9
Female	36.3	37.6	42.7	38.4
Primary education	65.3	71.0	74.2	76.2
Lower secondary education	25.0	27.0	36.3	33.1
Upper secondary education	13.5	17.9	20.4	17.6
Tertiary education	1.6	2.0	3.8	2.8
Repetition rate (%)	..	..	..	14
Male	..	..	..	13
Female	..	..	..	15
Mean years of schooling - prime working age of 20-54, total (years)	3.0	3.7	3.8	3.5
Male	3.8	4.5	4.5	4.3
Female	2.1	2.9	3.2	3.0
Urban	6.2	8.0	7.8	7.5
Rural	2.7	3.2	3.3	3.1

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87. 1) The school-age population in 2001 was calculated from data on the number of people by age (birthday) cohort from unofficial tabulation of the result of civil registration in East Timor in 2001 (Civil Registry Centre).

Sources : SUSENAS core data for 1993, 1996, 1997, 1999; East Timor Household Survey 2001.

ANNEX TABLE 5

Housing and living conditions indicators

	1993	1996	1998	1999	2001
Households with less than 10 square metres of floor area per capita, as % of total	67.8	59.6	53.5	51.6	56.9
Urban	60.7	49.6	45.0	49.1	56.3
Rural	68.4	60.5	54.2	51.9	57.4
Households with main floor of earth/bamboo, as % of total	73.8	69.9	63.7	64.5	64.0
Urban	35.5	25.0	21.9	20.4	62.7
Rural	76.8	73.7	67.6	69.8	64.8
Households with main wall of bamboo, as % of total	38.2	41.9	37.4	40.7	37.4
Urban	19.3	21.4	12.5	21.8	23.1
Rural	39.7	43.7	39.7	43.0	55.3
Households with main roof of wood/grass/leaves, as % of total	51.4	49.4	42.6	43.4	37.4
Urban	22.1	11.5	9.0	8.2	16.6
Rural	53.8	52.6	45.7	47.7	50.9
Households with main lighting of electricity, as % of total	16.9	22.7	27.2	30.1	35.9
Urban	53.7	72.6	80.8	83.0	75.2
Rural	13.9	18.2	22.3	23.7	11.1
Households with own drinking water facilities, as % of total	..	14.0	16.7	20.4	18.6
Urban	..	46.5	45.5	40.6	35.9
Rural	..	11.3	14.1	18.0	7.6
Households with pipe/pump drinking water, as % of total	29.1	23.9	26.0	27.6	46.3
Urban	68.1	83.6	78.4	78.2	64.9
Rural	26.0	18.9	21.2	21.6	34.3
Households with own sanitation facilities, as % of total	32.4	45.8	50.8	53.6	..
Urban	49.2	69.2	72.1	77.7	..
Rural	31.0	43.8	48.9	50.7	..
Households with toilet facilities, as % of total	..	11.0	14.4	14.2	13.8
Urban	..	39.9	53.6	54.0	51.2
Rural	..	8.6	10.8	9.5	8.5
Households with sewerage or septic tanks, as % of total	..	12.6	15.0	12.7	14.8
Urban	..	53.1	55.1	40.7	53.2
Rural	..	9.2	11.3	9.3	12.0

For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87.

Sources: SUSENAS core data for 1993, 1996, 1998 and 1999; Insan Hitawasanya Sejahtera 2000, Provincial Poverty and Social Indicators, Susenas 1993-1999; East Timor Household Survey 2001.

Poverty and consumption indicators

	1993	1996	1999	2001
Number of poor, total (in 000 people)	292.9	267.6	270.3	341.0
Urban	14.8	11.5	19.6	50.0
Rural	278.1	256.1	250.7	291.0
Head-count ratio, total (as % poor of total population)	37.0	31.7	29.9	41.0
Urban	22.0	14.2	20.1	26.0
Rural	38.4	33.6	31.1	46.0
Poverty gap index, P1 (%)	2.5	2.3	2.3	2.8
Poverty severity index, P2 (%)	9.2	7.2	8.0	9.7
Gini coefficient, total (%)	34.8	34.1	30.5	35.4
Urban	39.0	38.4	35.7	37.1
Rural	33.5	31.8	28.1	32.3
Mean (average) consumption, total (rupiah/capita/month) ¹	28,360	38,090	78,269	346,639
1st Quintile	17,693	23,763	50,007	95,906
2nd Quintile	29,705	39,897	82,929	158,202
3rd Quintile	38,634	51,889	106,742	226,439
4th Quintile	51,285	68,880	142,104	336,085
5th Quintile	97,794	131,346	259,127	916,061
Median consumption, total (rupiah/capita/month) ¹	21,540	29,134	64,280	225,308
1st Quintile	17,414	23,554	50,622	96,231
2nd Quintile	27,447	37,123	82,297	157,304
3rd Quintile	35,908	48,567	106,203	225,308
4th Quintile	48,139	65,111	140,726	334,304
5th Quintile	80,425	108,779	219,645	620,295
Food share in consumption (as % of total consumption)	69.6	70.7	73.0	65.9
Urban	62.6	62.8	67.3	..
Rural	70.3	71.5	73.7	..

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87. 1) In nominal terms.

Sources: SUSENAS, 1993, 1996, 1999; Insan Hitawasanya Sejahtera 2000, Provincial Poverty and Social Indicators 1993-1999; East Timor Household Survey 2001.

ANNEX TABLE 7

Labour indicators

	1985	1990	1995	1999	2001
Labour force participation rate of population 15 years and over, total (%)	65.6	67.0	71.8	67.3	56.0
Male	83.0	84.0	89.6	87.6	76.2
Female	47.5	49.1	53.4	52.4	35.6
Urban	..	54.5	64.2	63.4	52.1
Rural	65.6	68.1	72.6	70.4	61.2
Labour force looking for work (%)	0.6	1.7	5.3	5.8	7.8
Male	0.6	1.4	3.6	3.9	6.6
Female	0.6	2.4	8.2	8.3	10.2
Urban	..	7.3	14.6	13.8	15.3
Rural	0.6	1.3	4.6	4.7	7.0
Children 10-14 years in labour force, total (%)	23.1	22.2	19.9	20.5	9.2
Boys	22.7	23.4	21.1	22.7	9.4
Girls	23.7	20.9	18.3	18.9	8.9
Urban	6.0	5.8	5.7	3.2	..
Rural	23.1	23.6	22.3	23.1	14.5
Employment structure by sector 1) (as % of total workers)					
Sector A	84.1	73.6	73.2	71.5	73.2
Sector M	4.7	6.2	6.2	6.8	4.8
Sector S	11.2	20.2	20.6	21.7	22.0
Status in employment (as % of total workers)					
Self-employed	45.1	43.7	52.0	51.2	59.3
Contributing family worker	43.1	36.4	30.2	30.0	21.2
Employer	0.3	0.9	0.4	0.8	1.7
Paid employee	11.5	18.9	17.4	18.0	17.4
Intensity of worked hours (as % of total workers)					
Less than 25 hours/week	30.2	27.9	26.5	26.1	14.9
25 - 44 hours/week	45.9	53.6	54.2	54.9	44.1
45 hours and over/week	23.9	18.5	19.3	19.0	41.1
Number of civil servants..	..	27,439	34,270	9,035	..
Male	..	..	..	25,720	..
Female	..	..	..	8,550	..
In educational sector	..	..	..	..	5,125
In health sector	..	..	..	..	1,087
In other sectors	..	..	..	..	2,823

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87. 1) The industrial sector here is grouped into three major categories: sector A (agriculture), sector M (including mining & quarrying, manufacturing industry, electricity, gas and water, and construction), and sector S (including trade, restaurant and hotel, transportation, storage and communication, financing and business services, and public, personal and other services).

Sources: Indonesia Population Census (1990), Indonesia Intercensal survey (1985, 1995), SUSENAS 1999, Common Country Assessment for East Timor (UN).

Economic indicators

	1995	1996	1997	1998	1999 Estimate	2000 Projection	2001 Projection
GDP, total (in million US\$) 1)	315	368	383	390	263	312	380
GDP per capita (US\$)	374	429	442	424	337 2)	396 3)	478 4)
Change in real GDP growth (%)	9	11	4	-2	-38	15	18
Inflation rate (CPI Dili: rupiah prices)	8	5	10	80	140	20	..
Real GDP by sector (as % of total GDP)	100.0	100.0	100.0	100.0	100.0	100.0	..
Agriculture	27.5	24.0	24.2	24.9	25.5	21.3	..
Mining and quarrying	0.9	1.0	1.0	1.2	1.0	1.4	..
Manufacturing industry	3.0	3.3	3.3	3.5	3.4	3.5	..
Electricity, gas & water	0.6	0.7	0.8	0.8	0.9	0.7	..
Construction	21.8	23.2	22.1	21.7	15.7	23.2	..
Trade, hotel & restaurant	11.0	10.4	10.3	10.3	10.9	8.1	..
Transportation & communication	8.7	10.0	10.3	10.3	11.0	8.1	..
Finance & business services	3.9	3.9	4.5	4.0	5.2	4.6	..
Public administration & defence	21.4	22.3	22.4	22.1	25.4	27.8	..
Personal, community services	1.2	1.2	1.1	1.2	1.1	1.2	..
Regional GDP shares at current price (as % of total GDP)							
Covalima	4.7	4.6	4.1	4.9	..	..	..
Ainaro	4.5	5.8	5.5	4.7	..	..	..
Manufahi	6.1	6.0	4.6	5.1	..	..	..
Viqueque	5.5	5.6	5.8	6.2	..	..	..
Lautem	3.8	3.9	3.9	3.9	..	..	..
Baucau	8.0	7.9	6.9	6.0	..	..	..
Manatuto	4.5	4.3	3.9	3.4	..	..	..
Dili	30.7	30.0	33.6	34.6	..	..	..
Aileu	3.5	3.5	2.9	2.1	..	..	..
Liquica	5.6	5.8	5.3	5.7	..	..	..
Ermera	9.9	10.5	10.8	11.0	..	..	..
Bobonaro	6.7	6.9	6.3	7.7	..	..	..
Oecussi	5.4	5.3	5.5	4.9	..	..	..

Notes: For a discussion on comparability between the pre- and post-1999 data sources, see 'Note on the calculation of indicators' on page 87. 1) Calculated on the basis of a constant purchasing power parity exchange rate (base year, 1996); 2) Calculated by dividing the total GDP by the estimated population in 1999 (779,567 people); 3) As note 1) with the estimated population in mid-year 2000 (786,932 people), 3) As note 1) with the estimated population in mid-year 2001 (794,298 people).

Source: GDP data in 1998-2001 from the IMF Statement at the Donor's Meeting on East Timor (Oslo, December 2001); GDP data in 1995-1997 from BPS (1999), Regional Income at District Level 1993-1998; Common Country Assessment for East Timor (UN).

ANNEX TABLE 9

Agriculture indicators

	1996	1997	1998	2000
Suitable land for agriculture (hectare)	..	..	..	600,000
Suitable land under cultivation (as % of total land area)	..	..	..	40
Harvested area of paddy - wetland (hectare)	17,418	12,400	12,054	..
Harvested area of paddy - dryland (hectare)	2,266	1,798	1,772	..
Average yield of paddy - wetland (quintal/hectare)	28.04	28.18	28.18	..
Average yield of paddy - dryland (quintal/hectare)	16.65	16.85	16.25	..
Paddy production - wetland (ton)	48,835	34,938	33,968	..
Paddy production - dryland (ton)	3,772	3,030	2,880	..
Maize production (ton)	106,616	99,204	58,931	..
Cassava production (ton)	53,781	41,379	32,092	..
Sweet potatoes production (ton)	15,681	14,997	11,989	..
Peanuts production (ton)	3,335	3,302	4,669	..
Soybeans production (ton)	1,244	783	690	..
Rural population working as labour in agriculture as % of total rural labour)	79	..	..	75
Rural population with agriculture as major source of income (as % of total rural population)	76	..	..	70

Source: Statistical yearbook of Indonesia, 1996 and 1999. Common Country Assessment for East Timor (UN)

Note on the calculation of indicators

The indicators presented in this report are based on the best available data from a wide range of sources, as well as from direct and indirect estimates. However, it should be emphasized that data on human development in East Timor are limited and of questionable reliability. Different sources frequently produce different estimates for the same indicators. This notably happens for statistics and indicators relating to 2001. So it is important to use the data with caution, particularly when comparing 2001 with earlier years.

The indicators in Chapter 1—the human development index (HDI), the human poverty index (HPI-1), and the gender-related development index (GDI) were produced by applying the standard methods. And although the indicators can be used as benchmark for assessing progress in human development, further improvement in the data and in the systems of monitoring should provide more reliable human development indicators in future.

Life expectancy at birth

The data on life expectancy at birth are based on various surveys of the population in East Timor. These data include the 1990 Indonesia population census, the 1995 intercensal survey (SUPAS), a series of household socio-economic surveys for core information (SUSENAS 1993, 1996, 1999), and the results of East Timor's household living condition survey in 2001. Data on the average number of live births and the number of surviving children of women aged between 15 and 50 years old were entered into the software program, Mortpak, which was then used to produce the following indices: the probability of dying before age 40, the infant mortality rate, the probability of dying between ages 1 and 5, and life expectancy at birth. The program output also provides two models with their possible variants, but for East Timor—as for other developing countries—the estimations of these indicators use Coale-Demeny Models (Trussel equations) with a variant of the West model. Each estimate of life expectancy at birth and the other corresponding mortality indices refers to four years backward from the reference time of

the respective survey. Since the resulting estimates of these indices produce an erratic trend, because of different sample sizes covered in those surveys, the final estimates presented in this report were based on an extrapolation, applying a best-fitted curve of logarithmic regression. A more detailed explanation on this extrapolation model is provided at the end of this note.

Adult literacy

The adult literacy rates in this report use estimates from a series of SUSENAS surveys (for 1993, 1996, 1997 and 1999) and the East Timor Household Survey 2001 (for 2001). These data sources may not be exactly comparable due to different sample coverage (see the later explanation for demographic data). The East Timor survey for 2001 is the only readily available source of adult literacy data.

Combined gross enrolment ratios

The combined gross enrolment ratios in this report also use the estimates from SUSENAS (for 1993, 1996, 1997 and 1999) and the East Timor household survey 2001 (for 2001). Attempts have been made to calculate the gross enrolment ratio in 2001 from the official record of the Educational Department and the University of East Timor on the number of students enrolled at each level of education and the school-age population based on the unofficial birth date data from the preliminary result of the civil registration in the mid-2001. The combined gross enrolment ratio resulting from this calculation gives a very high estimate—around 80—which is assumed to be unlikely for East Timor, since past estimates have ranged between 52 and 59.

Gross enrolment ratios are defined as the number of students enrolled at each level of schooling as a percentage of the population who are in the age group that corresponds to that level (primary school: 7-12 years, lower secondary school: 13-15 years, upper secondary school: 16-18 years, and tertiary: 19-24 years). The ratios are thus affected by the age- and sex-specific population estimates. They may also hide important differences among countries because of differences in the age range correspond-

ing to a level of education and in the duration of education programmes. The incidence of grade repetition may also produce distortion in the ratios. Net enrolment ratios are better indicators of access to education or knowledge, as they measure enrolments only for a particular age group. However, this report uses the combined gross enrolment ratio as a component of the human development index (HDI) in order to maintain international comparisons, as presented in the global human development reports.

GDP per capita (\$PPP)

The GDP per capita (\$PPP) data used in this report are based on the International Monetary Fund (IMF) statement at the Donors' Meeting on East Timor in Oslo in December 2001. It is, however, difficult to come up with GDP per capita estimate, given the lack of reliable statistics, not just for the GDP itself but also for population.

Other statistics on associated indicators

This report also presents other human development indicators. These are derived from various data sources, including a series of Indonesian SUSENAS surveys and the East Timor household survey 2001 (for indicators of education, health, fertility, family planning, housing and living conditions, poverty and consumption), the 1990 Indonesian population census and the 1985 and 1995 intercensal surveys SUPAS (for demographic and labour force statistics), the Statistical Yearbook of Indonesia 1996 and 1999 (for agricultural statistics), the IMF Statement at the Donor's Meeting on East Timor in Oslo (December 2001) and the BPS-Statistics Indonesia report on 'Regional Income at District Level, 1993-1998' (for economic indicators). When making comparisons across time, it is important to bear in mind this variety of data sources.

It is also worth noting that the East Timor household survey for 2001 covers only 1,800 households or 9,113 individuals—a much smaller sample than that used

for earlier surveys of East Timor during the Indonesian administration. The 1999 SUSENAS survey, for example, covered 5,314 household or 24,698 individuals—a sample almost three times larger than that of the East Timor household survey for 2001. This discrepancy in sample size will obviously affect the comparability between the two sources.

Methodology for life expectancy and mortality

Indicators for life expectancy at birth and mortality were calculated using an indirect method. This applies to the infant mortality rate (IMR), the child mortality rate (CMR), the under-five child mortality rate (U5MR), and the probability at birth of not surviving to age 40 and 60,

The first step was to enter data on the number of live births and the number of surviving children according to the age groups of mothers into the Mortpak program, which is produced by the East West Population Institute, Honolulu, Hawaii. The data came from the 1990 Indonesia population census, the 1995 Indonesia intercensal survey, the 1993 and 1999 SUSENAS core data, and the East Timor household survey 2001.

Outputs from this procedure produced indicators of IMR, the probability of dying between ages 1 and 5, and the life expectancy at birth by age groups of women. These indicators are provided in two models: the United Nations Models (Palloni-Heligman Equations) and the Coale-Demeny Models (Trussel Equations). The first model has five variants: Latin American, Chilean, South Asian, Far East and General. The second model has four variants: West, North, East and South. As for most other Asian countries, the chosen model and variant for East Timor is the Coale-Demeny (Trussel) for West model.

Since the life expectancy and mortality indicators resulting from these different data sources produce an erratic trend, the predicted estimate is based on a best-fitted curve using a regression equation.

Definitions of statistical terms

Births attended by skilled health staff: The percentage of deliveries attended by a doctor (a specialist, a non-specialist or a person with midwifery skills who can diagnose and manage obstetrical complications as well normal deliveries), nurse or midwife (a person who has successfully completed the prescribed course of midwifery and is able to give the necessary supervision, care and advice to women during pregnancy, labour and postpartum period and to care for newborns and infants), or trained traditional birth attendant (a person who initially acquired his or her ability by delivering babies or through apprenticeship to other traditional birth attendants and who has undergone subsequent extensive training and is now integrated in the formal health care system).

Child-woman ratio: Refers to the number of population aged 0-4 years, as a percentage of the number of female population aged 15-45 years.

Children ever born to ever married women aged 35 years and over, average number: Refers to the number of children ever born to ever married women aged 35 years and over, as a percentage of total population of ever married women aged 35 years and over.

Consumer price index (CPI): Refers to changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or change at specified time periods.

Consumption, food share in: Refers to the average percentage of monthly food expenditure to the total monthly household expenditure.

Consumption, mean (average): Refers to the average nominal value of the total monthly expenditure of the observed households.

Consumption, median: Refers to the middle nominal value of the total monthly expenditure of observed households.

Contraceptive use rate for modern methods, total: The percentage of currently married women aged 15-49 years using modern methods of contraception as a percentage of all currently married women aged 15-49.

Contributing family workers: Defined according to the International Classification by Status in Employment (ICSE) as a person who works without pay in an economic enterprise operated by a related person living in the same household.

Dependency ratio: Refers to the number of population aged < 15 years and ³ 65 years old as a percentage of working-aged population of 15-64 years old.

Earned income (PPP US\$), estimated (female and male): Roughly derived on the basis of the ratio of female non-agricultural wage to the male non-agricultural wage, the female and male shares of the economically active population, total female and male population and GDP per capita (PPP US\$). For details on this estimation see technical note 1.

Earned income, ratio of estimated female to male: The ratio of estimated female earned income to estimated male earned income.

Education index: One of the three indices on which the human development index is built. It is

based on the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio.

For details how the index is calculated see technical note 1.

Educational level: Categorized as primary, secondary or tertiary in accordance with the International Classification of Education (ISCED). *Primary education* (ISCED level 1) provides the basic elements of education at primary and elementary schools. *Secondary education* (ISCED level 2 and 3) is based on at least four years of previous instructions at the first level and provides general or specialized instruction, or both, at middle school, secondary school, high school, teacher training school at this level and vocational or technical school. *Tertiary education* (ISCED level 5-7) refers to education at such institutions as universities, teacher colleges and higher-level professional schools – requiring as a minimum condition of admission for the successful completion of education at the second level or evidence of the attainment of an equivalent level of knowledge.

Employment structure by major sector: Employment in industry, agriculture or services as defined according to the International Standard Industrial Classification (ISIC) system (revision 2 and 3). *Industry* refers to mining and quarrying, manufacturing, construction and public utilities (gas, water and electricity). *Agriculture* refers to agriculture, hunting, forestry and fishing. *Services* refers to wholesale and retail trade; restaurants and hotels; transport, storage and communications; finance, insurance, real estate and business services; and community, social and personal services.

Enrolment ratio, gross: The number of students enrolled in a level of education, regardless of age, as a percentage of the population of official school age for that level. See *educational levels*.

Enrolment ratio, net: The number of students enrolled in a level of education who are of official school age for that level, as a percentage of the population of official school age for that level. See *educational level*.

Fertility rate, total: The average number of children a woman would bear if age-specific fertility rates remained unchanged during her lifetime.

GDP (gross domestic product): The total output of goods and services for final use produced by an economy, by both residents and non-residents, regardless of the allocation to domestic and foreign claims. It does not include deductions for depreciation of physical capital or depletion and degradation of natural resources.

GDP index: One of the three indices on which the human development index is built. It is based on GDP per capita (PPP US\$).

GDP per capita (PPP US\$): See *GDP (gross domestic product)* and *PPP (purchasing power parity)*.

GDP per capita annual growth rates: Least squares annual growth rate, calculated from constant price GDP per capita in local currency units.

Gender-related development index (GDI): A composite index measuring average achievement in the three basic dimensions captured in the human development index – a long and healthy life, knowledge and a decent standard of living – adjusted to account for inequalities between men and women. For details on how the index is calculated see technical note 1.

Gini coefficient: Measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within a country or region deviates from a perfectly equal distribution. A value of 0 represents perfect equality, a value of 100 refers to perfect inequality.

GNP (gross national product): Comprises GDP plus net factor income from abroad, which is the income residents receive from abroad for factor services (labour and capital), less similar to payment made to non-residents who contribute to the domestic economy.

Headcount index: Refers to the proportion of the population living below the poverty line. See *income poverty line, population below*. Headcount index is one of three measures indicating shift in the degree of poverty among the poor, or called the poverty gap index as proposed in a class of additively decomposable measures by Foster, Greer and Thorbecke (1984; hereafter called FGT indices). FGT indices include P_0 (headcount index), P_1 (poverty gap index) and P_2 (poverty severity index).

Household with less than 10 square meters of floor area per capita: Refers to the number of households with less than 10 square meters of floor area per capita as a percentage of total number of households.

Household with main floor of earth/bamboo: Refers to the number of households living in houses with main floor of earth/bamboo as a percentage of total number of households.

Household with main lighting of electricity: Refers to the number of households living in houses with main lighting of electricity as a percentage of total number of households.

Household with main roof of wood/grass/leaves: Refers to the number of households living in houses with main roof of wood/grass/leaves as a percentage of total number of households.

Household with main wall of bamboo: Refers to the number of households living in houses with main wall of bamboo as a percentage of total number of households.

Household with own drinking water facilities: Refers to the number of households living in houses with own drinking water facilities as a percentage of total number of households.

Household with own sanitation facilities: Refers to the number of households living in houses with own sanitation facilities as a percentage of total number of households.

Household with pipe/pump source of drinking water: Refers to the number of households living in houses with pipe/pump source of drinking water as a percentage of total number of households.

Household with sewerage or septic tanks: Refers to the number of households living in houses with sewerage or septic tanks as a percentage of total number of households.

Household with toilet facilities: Refers to the number of households living in houses with toilet facilities as a percentage of total number of households.

Human development index (HDI): A composite index measuring average achievement in three basic dimensions of human development – a long and healthy life, knowledge and a decent standard of living. For details on how the index is calculated see technical note 1.

Human poverty index (HPI-1) for developing countries: A composite index measuring deprivations in the three basic dimensions captured in the human development index – longevity, knowledge and standard of living. For details on how the index is calculated see technical note 1.

Illiteracy rate, adult: Calculated as 100 minus the adult literacy rate. See *literacy rate, adult*.

Immunized, under 5 child (age 0-4), total: Refers to the number of population aged 0-4 who had received any immunization, as a percentage of total population aged 0-4.

Income poverty line, population below: Refers to the percentage of population living below the predetermined poverty line deemed for East Timor. The poverty line is defined as a minimum standard required by an individual to meet his/her basic need, including food and non-food items. This minimum standard is calculated by using expenditure data from the results of National Socio-economic Surveys (Susenas) for consumption module in 1993, 1996 and 1999; and from the result of East Timor household survey in 2001. The resulted poverty lines from this calculation are 23,206 rupiah/capita/month in 1993, 32,742 rupiah/capita/month in 1996, 78,396 rupiah/capita/month in 1999, and 161,264 rupiah/capita/month in 2001.

Infant mortality rate: The probability of dying between birth and exactly one year of age expressed per 1,000 live births.

Labour force: All those employed in (including people above a specified age (this report uses 15 years and above) who, during the reference period (this report uses a week before the survey), were in paid employment, at work, with a job but not at work, or self-employed) and unemployed (including people above a specified age who, during the reference period, were without work, currently available for work and seeking work).

Labour force looking for work: Refers to the percentage of population aged 15 years and above who are currently looking for work during a week before the survey to total labour force aged 15 years and above.

Labour force participation rate, total: Refers to the percentage of total labour force aged 15 years and above who are currently working/employed and looking for work/unemployed during a week before the survey to total working-age population 15 years and above.

Labour force, children aged 10-14 years: Refers to the incidence of child labour, defined as the number of children aged 10-14 who are currently in labour force (working and looking for work), as a percentage of total number of population aged 10-14 years.

Life expectancy at birth: The number of years a newborn infant would live if prevailing patterns of age-specific mortality rates at the time of birth remain unchanged throughout the child's life.

Life expectancy index: One of the three indices on which the human development index is built. For details on how the index is calculated see technical note 1.

Literacy rate, adult: The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

Maternal mortality ratio reported: Reported annual number of deaths of women from pregnancy-related causes per 100,000 live births, not adjusted for the well-documented problems of underreporting and misclassification.

Morbidity rate, total, monthly: Refers to the number of population experiencing illness that disrupted daily activities of working/schooling in the month before the survey, as a percentage of total population.

Morbidity rate, under 5 child (age 0-4), monthly: Refers to the number of population aged 0-4 years old experiencing illness in the month before the survey, as a percentage of total population in the same age group.

Poor, number of: Refers to the absolute number of population living below the poverty line. See *income poverty line, population below*.

Population growth rate, annual: Refers to the annual exponential growth rate of population for the period indicated. See *population, total*.

Population, total: Refers to the de facto population, which include all people actually present in a given area at a given time.

Poverty gap index: Refers to the averaged poverty gap in the population (P_1), expressed as a proportion of the poverty line. Poverty gap index is one of three FGT indices. See *headcount index*. For instance, $P_1 = 0.028$ means that the aggregate deficit of the poor relative to the poverty line, when averaged over all households (poor or not), represents 2.8% of the poverty line. P_1/P_0 is the mean poverty gap of the poor as a proportion of the poverty line.

Poverty severity index: Refers to a measure of distributionally sensitive index which is sensitive to changes in income (or expenditure as a proxy of income) distribution among the poor. Poverty severity index is one of three FGT indices. See *headcount index*. This measure satisfies most welfare axioms, namely "monotonicity axiom" (given other things, a decline in the income of the poor households must increase the poverty measure) and "transfer axiom" (given other things, a pure transfer of income from a poor to a less poor household must increase the poverty measure).

PPP (purchasing power parity): A rate of exchange that accounts for price differences across countries, allowing international comparisons of real output and incomes. PPP US\$ rate has the same purchasing power in the domestic economy as \$1 has in the United States.

Probability at birth of not surviving to a specified age: Calculated as 1 minus the probability of surviving to a specified age for a given co-

hort. See probability at birth of surviving to a specific age.

Probability at birth of surviving to a specified age: The probability of a newborn infant surviving to a specified age, if subject to prevailing patterns of age-specific mortality rates.

Professional and technical workers, female: Women's share of positions defined according to the International Standard Classification of Occupations (ISCO-88) to include physical, mathematical and engineering science professionals (and associate professionals), life science and health professionals (and associate professionals), teaching professionals (and associate professionals) and other professionals and associate professionals.

Repetition rate: Refers to the number of students (at primary and secondary levels) who repeated the same grade as was the last year's grade, as percentage of total students enrolled during the time survey.

Sex ratio: Refers to the ratio between the number of female population as compared to the number of male population.

Schooling, mean years of: Refers to average years of completed schooling among population aged 20-54 years old.

Under-five mortality rate: The probability of dying between birth and exactly five years of age expressed per 1,000 live births.

Underweight for age, children under age five: Includes moderate and severe underweight, which is defined as below two standard deviations from the median weight for age of the reference population.

Urban population: The midyear population of areas defined as urban.

Visit rate to modern health facilities/personnel, total: Refers to the number of population visiting modern medical facilities (hospital, health centre, clinic) or personnel (doctor or other trained personnel) during the month before the survey, as a percentage of total population.

Visit rate to modern health facilities/personnel, under 5 child (age 0-4): Refers to the number of population aged 0-4 years visiting modern medical facilities (hospital, health center, clinic) or personnel (doctor or other trained personnel) during the month before the survey, as a percentage of total population aged 0-4.

Water sources, population not using improved: Calculated as 100 minus the percentage of the population using improved water sources. See *water sources, population using improved*.

Water sources, population using improved: The percentage of the population with reasonable access to an adequate amount of drinking water from improved sources. Reasonable access is defined as the availability of at least 20 litres per person per day from a source within one kilometre of the user's dwelling. Improved sources include household connections, public standpipes, boreholes with handpumps, protected dug wells, protected springs and rainwater collection (not included are vendors, tanker trucks and unprotected wells and springs).