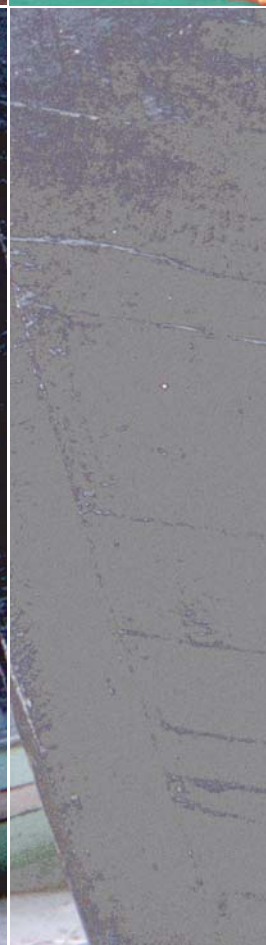


# ACEH PUBLIC EXPENDITURE ANALYSIS

## SPENDING FOR RECONSTRUCTION AND POVERTY REDUCTION



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## Acronyms, Abbreviations, and Non-English Terms

Adat	Social custom or tradition
ADB	Asian Development Bank
AMDAL	<i>(Analisis Mengenai Dampak Lingkungan)</i> Environment Impact Permit
AMM	Aceh Monitoring Mission
APBD	<i>(Anggaran Pendapatan dan Belanja Daerah)</i> Regional Government Budget
APBN	<i>(Anggaran Pendapatan dan Belanja Negara)</i> State Budget
APEA	Aceh Public Expenditure Analysis
ARI	Acute Respiratory Infection
AusAid	Australian Agency for International Development
Bappeda	<i>(Badan Perencanaan Pembangunan Daerah)</i> Regional Development Planning Agency
Bappenas	<i>(Badan Perencanaan Pembangunan Nasional)</i> National Development Planning Agency
BAKORNAS	<i>(Badan Koordinasi Nasional)</i> National Disaster Management Board
BCG	<i>Bacillus of Calmette and Guerin</i>
BKN	<i>(Badan Kepegawaian Negara)</i> National Personnel Agency
BOS	<i>(Biaya Operasional Sekolah)</i> Block grant from central government to schools to cover primary and junior school operational costs
BPD	<i>(Bank Pembangunan Daerah)</i> regional Development Bank
BPHTB	<i>(Bea Perolehan Hak atas Tanah dan Bangunan)</i> Land and Building Transfer Fee
BPK	<i>(Badan Pemeriksa Keuangan)</i> National Auditing Agency
BPN	<i>(Badan Pertanahan Nasional)</i> National Land Agency
BPR	<i>(Bank Perkreditan Rakyat)</i> Rural Credit Bank
BPS-SK	<i>(Statistik Keuangan)</i> Financial statistics from Indonesian National Statistics Office
BQ	<i>(Baitul Qiradh)</i> Syariah Financial Cooperative
BRA	<i>(Badan Reintegrasi Aceh)</i> Reintegration Agency for Aceh
BRR	<i>(Badan Rehabilitasi dan Rekonstruksi)</i> Rehabilitation and Reconstruction Agency
Bupati	Head of District
Camat	Head of Subdistrict
CDA	Community-driven adjudication
CDD	Community-driven development
CFAN	Coordination Forum for Aceh and Nias
CoHA	Cessation of Hostilities Framework Agreement
CoSA	Committee on Security Arrangements
CPI	Consumer price index
CSO	Civil society organization
Dana otsus	<i>(Dana Otonomi Khusus)</i> special autonomy fund
DAK	<i>(Dana Alokasi Khusus)</i> earmarked grant
D&L	Damage and Loss
DAU	<i>(Dana Alokasi Umum)</i> general allocation grants
DBH	Revenue-Sharing
DBHDR	Revenue-Sharing Reforestation Fund
DDR	Disarmament Demobilization and Reintegration

Decon	Deconcentration funds
Desa	Village
Dinas	Regional Sector Office
DIPA	<i>(Daftar Isian Proyek Anggaran)</i> issuance of spending authority
DOM	<i>(Daerah Operasi Militer)</i> military operational area
DPRD	<i>(Dewan Perwakilan Rakyat Daerah)</i> Provincial House of Representatives (regional parliaments)
DPT3	Combined vaccination against diphtheria: pertussis-whooping cough-tetanus
DSCR	Debt Service Coverage Ratio
EEZ	Exclusive Economic Zone
ERTR	Emergency Response and Transitional Recovery
ETESP	Earthquake and Tsunami Emergency Support Project
FGD	Focus Group Discussions
FIRM	Financial Intermediation and Mobilization
FM	Financial Management
GAM	<i>(Gerakan Aceh Merdeka)</i> Free Aceh Movement
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GDS	Governance and Decentralization Survey
GER	Gross Enrollment Rate
GeRAK	<i>(Gerakan Rakyat Anti Korupsi)</i> People's Movement for Anti Corruption
GOI	Government of Indonesia
GRDP	Gross Regional Domestic Product
ha	Hectare(s)
HDI	Human Development Index
HH	Households
IAIN	<i>(Institut Agama Islam Negeri)</i> Public Islamic Institute
IDHS	Indonesian Demographic and Health Survey
IDP	Internally displaced person
ILO	International Labour Organisation
IMR	Infant Mortality Rate
INPRES	<i>(Instruksi Presiden)</i> Presidential Instruction
IOM	International Organization for Migration
IPTEK	<i>(Ilmu Pengetahuan dan Teknologi)</i> Science and Technology
IRD	International Relief and Development
JPK-Gakin	<i>(Jaminan Pemeliharaan Kesehatan-Keluarga Miskin)</i> government health insurance for poor households
JPK-MM	<i>(Jaminan Pemeliharaan Kesehatan-Masyarakat Miskin)</i> government health insurance for the poor
Kabupaten	District (regency)
KDK	<i>(Komite Darurat Kemiskinan)</i> emergency humanitarian committee
Kecamatan	Subdistrict
Kelurahan	Urban Village
Kepmen	<i>(Keputusan Menteri)</i> Ministerial Decree



Keppres	<i>(Keputusan Presiden)</i> Presidential Decision
KERAP	Elected local committee that is in charge of and monitors reconstruction
Kesbanglimas	<i>(Kesatuan Kebangsaan dan Perlindungan Masyarakat)</i> regional agency in charge of social and political life in the community
Km	Kilometer
Kota	City (urban district)
LG	Local Government
LGSP	Local Government Support Program
LOGA	Law on Government in Aceh
M&E	Monitoring and Evaluation
MCFD	Million Cubic Feet per Day
MDF	Multi-Donor Fund
Mesjid	Mosque
MoE	Ministry of Environment
MoF	Ministry of Finance
MoNE	Ministry of National Education
MoRA	Ministry of Religious Affairs
MoU	Memorandum of Understanding
MPW	Ministry of Public Works
NAD	<i>(Nangroe Aceh Darussalam)</i> Province of Aceh (formal name)
NBFI	Nonbank financial institution
NGO	Nongovernmental Organization
O&M	operations and maintenance
OCHA	Office for the Coordinator of Humanitarian Affairs
PAD	<i>(Pendapatan Asli Daerah)</i> Own-source revenue
PBB	<i>(Pajak Bumi dan Bangunan)</i> Land and Building Tax
PDAM	<i>(Perusahaan Daerah Air Minum)</i> Local water supply enterprise
PEACH	Public Expenditure Analysis Capacity Harmonization
Perpu	<i>(Peraturan Pemerintah Pengganti Undang-undang)</i> regulation in lieu of law
Perda	<i>(Peraturan Daerah)</i> Regional Regulation
Pesantren	Islamic school
PFM	Public Financial Management
PLN	<i>(Perusahaan Listrik Negara)</i> the national electricity company
PMU	Program Management Unit
PODES	<i>(Potensi Desa)</i> BPS village potential statistics
Polindes	<i>(Pos Persalinan Desa)</i> village maternity post
Posko	<i>(Pos Kordinasi)</i> coordination post
PPS	Proportional to Size
Puskesmas	<i>(Pusat Kesehatan Masyarakat)</i> community health center at subdistrict level
Posyandu	<i>(Pusat Pelayanan Terpadu)</i> integrated health services unit
Pustu	<i>(Puskesmas Pembantu)</i> Subcommunity Health Center
Qanun	Islamic Regional Regulation (term used only in Aceh)



RALAS	Reconstruction for Aceh Land Administration Project
Renja KL	<i>(Rencana Kerja Kementrian/Lembaga)</i> ministry work plan
Renstra	<i>(Rencana Strategis)</i> strategic plan
Renstra KL	<i>(Rencana Strategi Kementrian/Lembaga)</i> ministry strategic plan
Renstra SKPD	<i>(Rencana strategis Satuan Kerja Perangkat Daerah)</i> dinas work plan budget
RGPD	Regional GDP
RKP	<i>(Rencana Kerja Pemerintah)</i> government annual work plan
RKP-D	<i>(Rencana Kerja Pemerintah Daerah)</i> regional government annual work plan
SD	<i>(Sekolah Dasar)</i> primary school
SDI	Surface Distress Index
SDO	<i>(Subsidi untuk Daerah Otonom)</i> Subsidy for Autonomous Region
SE	Small Enterprise
SIKD	<i>(Sistem Informasi Keuangan Daerah)</i> Regional Finance Information System
SME	Small/medium enterprise
SMP	Junior high school
SPADA	Support for Poor and Disadvantage Area
STR	Student teacher ratio
Susenas	<i>(Survei Sosial Ekonomi Nasional)</i> BPS national socioeconomic survey
Syariah	Islamic law ( <i>Shari'a</i> )
TA	Technical Assistance
UGM	Universitas Gajah Mada
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WBOJ	World Bank Office Jakarta
WUA	Water Users Association

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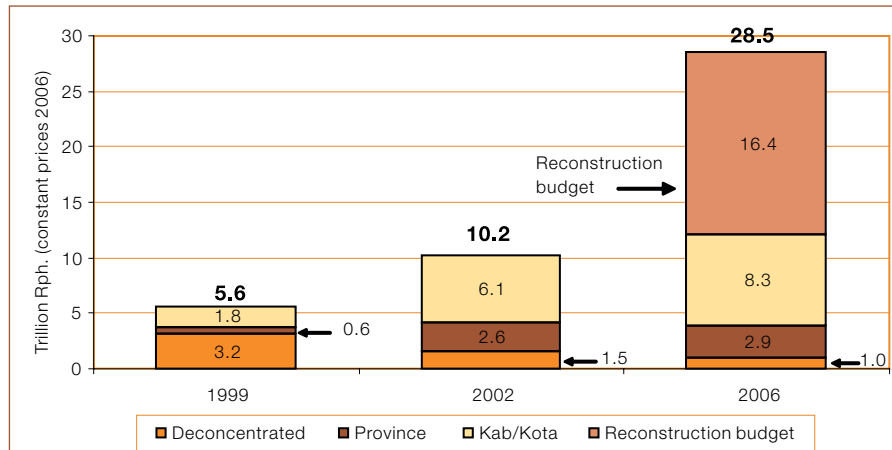
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## Executive Summary

**Since 1999, Aceh's fiscal resources have increased dramatically.** After decentralization and the Special Autonomy Status, the amount managed directly by the Acehnese province and local governments increased several-fold. In addition, following the December 2004 tsunami, Aceh received an unprecedented amount of assistance from the Indonesian government and the international community. In 2006 total funds flowing into Aceh are estimated at Rp. 28.5 trillion (US\$3.1 billion). Most of these resources come from the reconstruction program (Rp. 16.4 trillion). Regular financing also is increasing rapidly and is expected to reach Rp. 12.2 trillion in 2006 (figure 1).

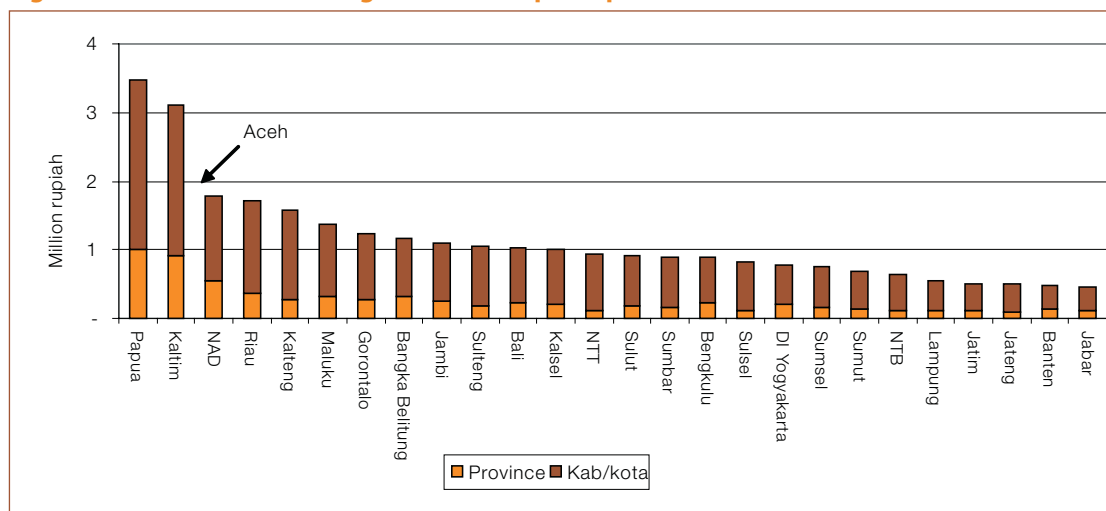
**Figure 1. Aceh's fiscal resources have increased substantially, 1999–2006**



Source: World Bank staff estimates (2006 constant prices) based on data from SIKD/MoF and BRR.

**With this wealth, Aceh has the opportunity to reduce its high levels of poverty and improve public services.** Aceh is the third-richest province in per capita revenues after Papua and East Kalimantan (figure 2). Aceh's revenues are double the national average and its relative ranking compared to other provinces will only get stronger with the implementation of the new Law on Governing Aceh (LOGA) (Law 11/2006) in 2008.

**Figure 2. Aceh has the third highest revenue per capita**

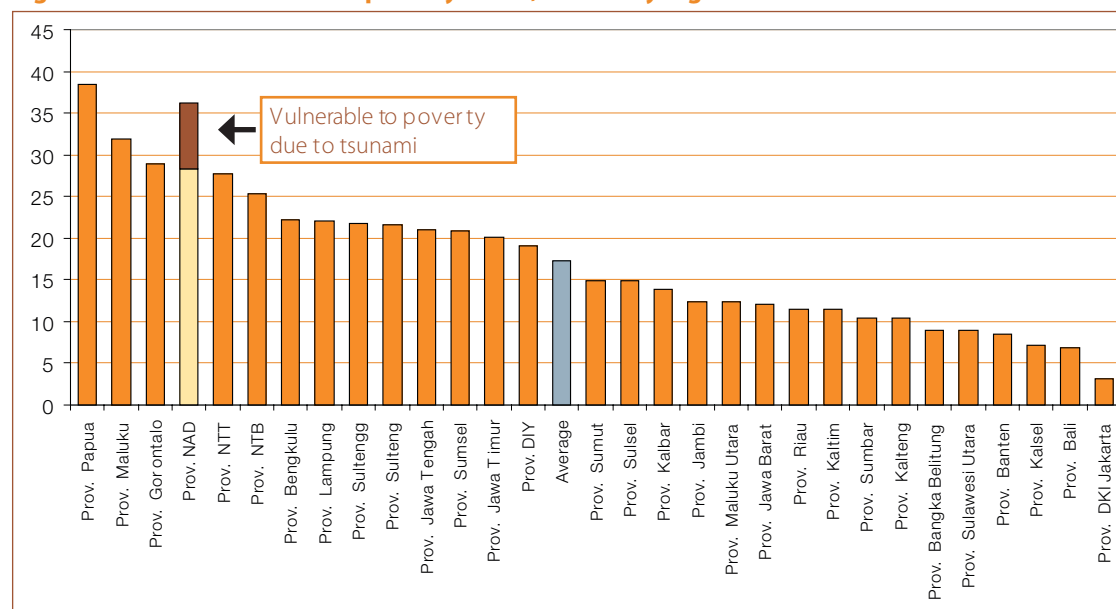


Sources: SIKD/MoF, World Bank staff estimates based on 2004 APBD.



**At the same time, Aceh remains the fourth poorest province in Indonesia** (figure 3). In 2004 an estimated 1.2 million people in Aceh (28.5 percent of the total population) were living below the poverty line (Rp. 130,000, or approximately US\$14, per capita per month). Thus, Aceh's poverty rate is almost twice as high as Indonesia's average poverty rate (16.7 percent). An additional 13 percent of the Acehnese became vulnerable to poverty after the tsunami.

**Figure 3. Aceh ranks fourth in poverty levels, and likely higher after the tsunami**



Source: World Bank staff estimates based on BPS, 2004.

**The implementation of the Memorandum of Understanding between the Government of Indonesia and Free Aceh Movement, signed on August 15, 2005, in Helsinki, provides another opportunity to build a better Aceh and to deliver services to conflict affected-areas.** The 30-year conflict between the Government of Indonesia and the Free Aceh Movement (GAM) claimed some 15,000 lives, dislocated several thousand families and caused massive destruction to public and private properties. The conflict also prevented the delivery of minimum public services in the areas worst affected by the conflict. The implementation of the Helsinki Agreement has been broadly on track and gives Aceh a chance to rebuild a peaceful society and regain economic prosperity.

## Revenues and expenditures

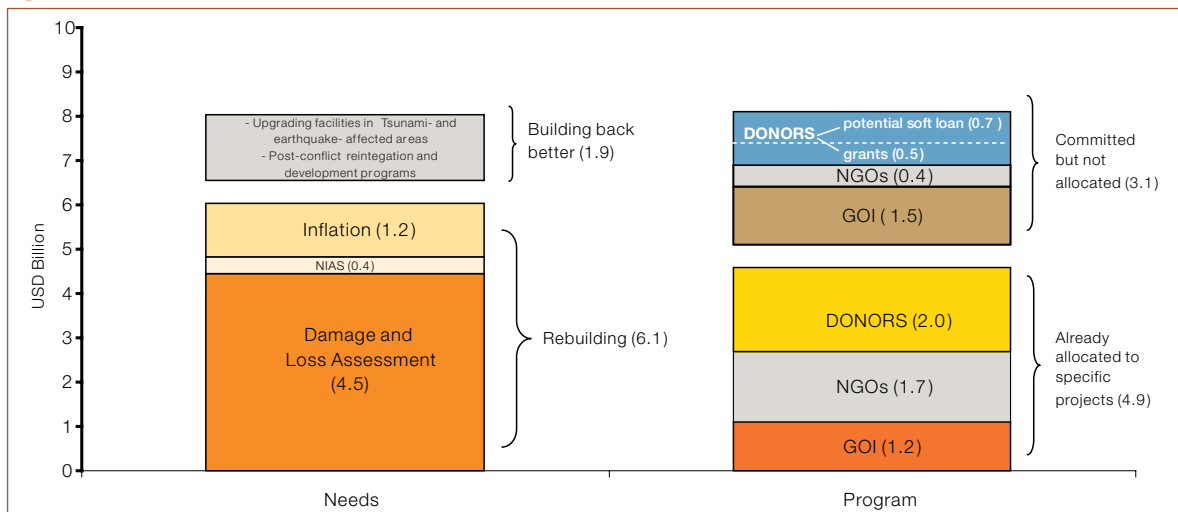
**In the past 6 years, Aceh has experienced an unprecedented inflow of regular fiscal revenues, on top of which came the largest reconstruction program in the developing world.** Aceh's high level of financial resources will remain unchanged in the years to come and, if anything, increase. Three factors explain the increase:

1. **Aceh has been among the main beneficiaries of decentralization.** Since 1999, Aceh's regular revenues, managed by the province and local governments, increased from Rp. 2.4 trillion in 1999 to 11.2 trillion in 2006. Several factors contributed to this enormous increase, including the transfer of responsibilities in 2001, Aceh's special autonomy status in 2002, and another stark increase in the General Allocation Fund (Dana Alokasi Umum, or DAU) in 2006.
2. From 2005–09, **spending on reconstruction** will almost double Aceh's regular expenditure level. The total reconstruction portfolio stands at approximately Rp 45 trillion, representing approximately 1500 projects being implemented by more than 250 institutions. Total spending on the reconstruction effort is expected to exceed Rp. 70 trillion by 2009.
3. Beginning in 2008, **the new Law on Governing Aceh** (Law 11/2006) will allocate an additional Rp. 4 trillion

through a “special autonomy fund” (*dana otsus*), which will total Rp. 5 trillion by 2011. With declining oil and gas revenues, the *dana otsus* is likely to become the second most important source of Aceh’s revenues, similar to the importance of special autonomy funds in Papua.

**The rehabilitation and reconstruction funds provide Aceh with the opportunity to rebuild a better province.** The physical damages and losses caused by the tsunami and the earthquake in Nias (March 28, 2005) are estimated at US\$4.9 billion, on top of which at least US\$1.2 billion needs to be added for inflation. By June 2006, US\$4.9 billion worth of projects and programs had been allocated to the reconstruction effort. An additional US\$3.1 billion have been pledged which will bring the total reconstruction program to US\$8 billion. With these additional funds, Aceh and Nias will have an opportunity to “build back better” and invest in projects and programs that will have a long-lasting impact on their economies and social fabric (figure 4).

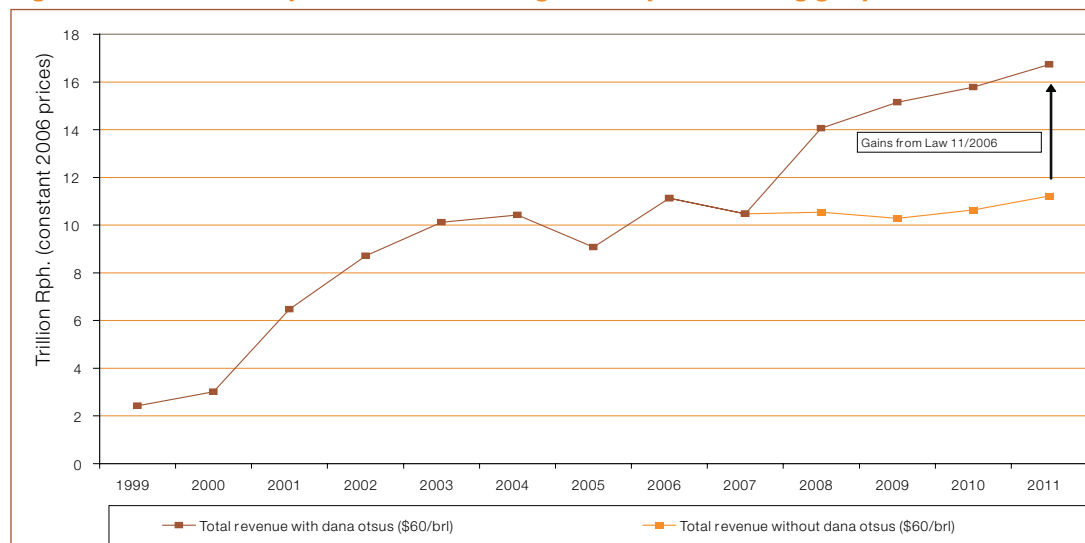
**Figure 4. Reconstruction needs and commitments (US\$ billion, end-June 2006)**



Sources: BRR/World Bank staff estimates.

**Aceh’s fiscal revenues will increase further.** The new Aceh law re-endorses the provision of the special autonomy fund. With it, Aceh’s revenues are expected to increase from the current Rp. 11.2 trillion to almost Rp. 16.7 trillion in 2011 (figure 5). The new special autonomy fund and a higher DAU-allocation until 2028 will more than compensate the partial decline of funds from natural resources due to depleting oil and gas reserves. The large allocation of resources for the next 20 years should translate into better provision of services as well as create a stronger productive sector.

**Figure 5. New Aceh law provides substantial gains despite declining gas production**



Source: World Bank staff estimates based on data from SIKD/MoF.

**Due to the large inflow of resources after decentralization, total regional expenditure has risen sharply for both provincial and local governments.** On average, regional governments in Aceh have been managing more than two-thirds of total public spending. Before decentralization, almost 60 percent of spending was carried out by the central government, leaving a limited role for regional governments to provide service delivery and regional development. Administrative costs of a growing number of local governments in Aceh are claiming a disproportionate share of these additional regional resources. Routine expenditures are now accounting for 60 percent of local governments' budgets.

## Service Delivery

**Aceh has the resources to fight poverty, but it has not yet made much progress.** Paradoxically, once Aceh's revenues started to increase disproportionately in 2001, its poverty levels remained unchanged at 30 percent although the rest of Indonesia experienced a massive decline of poverty to below 20 percent. The conflict, which intensified in 2001 and 2002, contributed to these high poverty levels. Within Aceh, regions with high revenues are not exempt from poverty. Aceh Utara, both an oil and gas producing region and severely conflict affected, is the most extreme case. This district has both the largest fiscal resources and one of the highest poverty rates.

**Aceh has not only a very high poverty rate but also very poor public services.** In health and education, striking long-term structural problems outweigh the short-term challenges after the tsunami. Reconstruction has progressed well in these sectors. Most school facilities have been rehabilitated or are under reconstruction. However, fewer than half of elementary school facilities are well maintained, and the majority of teachers do not have the legally mandated qualification. Many of the midwives and teachers left the more insecure rural areas for urban centers, so one of the main challenges is to provide incentives for them to return to more remote areas.

## Health

**Local government spending on health has barely increased since 2002.** The share of health expenditures spent on salaries continues to rise. Aceh has one of the highest rates of doctors and nurses in Indonesia and a large number of health care facilities. However, often staff is absent, electricity supply unreliable, running water rare, and necessary medication not available. Budgets for nonsalaried operational costs are very low, worsening poor health services. The government's focus is to improve or build facilities, due partly to the increasing number of districts that want to build new facilities, although for some facilities, use is too low to be sustainable.

## Education

**Aceh has sufficient teachers, but the gaps in coverage remain huge.** Teachers favor urban over rural regions, creating serious gaps in rural regions. Rather than increasing the number of teachers, local governments should develop an appropriate system of incentives and sanctions that will place quality education within reach of all Acehnese. Although regional spending on education quadrupled in 2002, it has been falling since then. Most of it was consumed by routine expenditures (primarily teacher’s salaries), which account for 63 percent of total education expenditure. The poor state of education facilities and lack of materials in schools are the main problems. Aceh has the highest per capita education expenditures in Indonesia (Rp. 457,000 vs. national average of Rp. 196,000), making the focus on quality even more urgent.

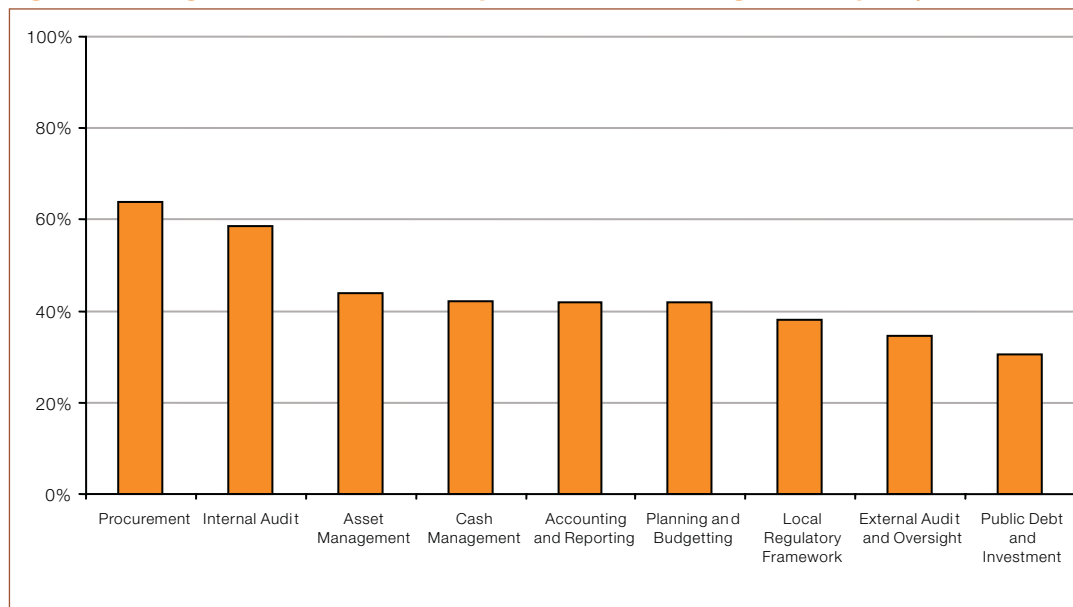
**In infrastructure, the 2005 tsunami compounded the difficulties that had existed for a long time. However, in some subsectors, Aceh is almost on par with the national average.** The household electrification rate and road density are higher than the national average, but household water connections, private sanitation, and irrigation infrastructure are well below national levels. Two-thirds of Acehnese households are connected to electricity, but blackouts are frequent in many areas in the province.

**Infrastructure spending rose significantly after decentralization but has been declining since 2002.** Salaries account for a large share of routine expenditure in the infrastructure budget, while operational and maintenance expenses represent only a marginal share. After the tsunami, many local governments further lowered their infrastructure investments in the expectation that reconstruction projects from central government, donors, and NGOs would take the lead.

## Local Government Capacity to manage budget funds

**In recent years, the role, responsibilities, and workload of local governments have increased dramatically.** However, the skill mix and incentives for local officials to carry out their tasks has not kept pace with their increased responsibilities. A 2006 Public Financial Management (PFM) Survey in nine districts indicates that the average capacity in local governments is not sufficient to take on these new roles (figure 6). In some districts, particularly Nagan Raya and Aceh Jaya, PFM capacity is extremely weak.

**Figure 6. Local governments have weak public financial management capacity**



Source: Public Financial Management Survey, average score for 9 surveyed kab/kota (district/city), 2006.

**Most local governments have difficulty managing the increasing flow of funds.** Since decentralization, personnel spending has crowded out capital investment in public services. Development expenditures are concentrated on government apparatus, to the detriment of other areas for which it is more urgently needed. Contrary to the needs identified, local governments spend little on training, while a major share of their capital investment goes to buildings, vehicles, and equipment. The allocation of funds for general public administration needs to be scrutinized. A reorientation of expenditure toward building the capacity of existing staff is urgently needed.

## Agenda for Implementation

Aceh's policy-makers can make many changes to better manage its vast resources. The three most important reforms relate to a (a) better allocation of resources, (b) better management of resources, and (c) better data analysis to inform allocation and management of resources.

### 1. Better Allocation of Resources

**Development spending needs to be increased—not reduced.** Provincial and local governments' abundant resources are the key to improve the lives of the Acehnese. Aceh's local and provincial governments have been among the main beneficiaries of decentralization and special autonomy. However, these governments have yet to fully participate in building a better future for Acehnese people. In 2005 most local governments cut the share of their development expenditures in response to additional funds from the Rehabilitation and Reconstruction Agency (BRR) and donors.

**Spending on the government apparatus is too high.** Local governments are devoting an increasing amount of their resources to bureaucracy, at the expense of development spending. Spending on government apparatus continued to increase even after the number of districts stabilized. This trend must be scrutinized. There is no indication that increased spending on government bureaucracy has resulted in better management of fiscal resources. Public spending should be devoted to development-related activities that improve service delivery and social welfare, and yield long-term economic and social benefits rather than bureaucracy.

**Future spending by the central government on largely decentralized functions should be minimized.** Even excluding reconstruction financing, the central government still contributes more than 30 percent to Aceh's investments. Most of these investments are on largely decentralized functions. Central government spending can be well targeted through earmarked grants (DAK). The focus can be lagging regions and activities related to national priorities and having large economies of scale.

**Strategic (re-) allocation decisions with respect to the reconstruction funds should be made now.** By June 2006, US\$4.9 billion reconstruction funds were allocated. At this still rather early stage of the reconstruction, the main sources of large-scale programmable funds are limited. The remaining financing gaps need to be urgently addressed. BRR will have the largest amount of flexible funds to address these gaps. The gaps are most significant in transport as well in the regions south of Moelaboh (Aceh Barat Daya, Aceh Selatan), around Lhoksumawe (Aceh Timur, Aceh Tamiang) and Nias.

### 2. Better Management of Resources

**The capacity of local governments to manage their finances needs to be enhanced.** According to the PFM survey, the capacity of local governments to manage fiscal resources is lowest in the areas of planning and budgeting, accounting and reporting, external audit, public debt management, and investments. Moreover, there are significant gaps in local government capacity across districts. For several indicators, some districts are shown to have an extremely low level of capacity. If the Acehnese are to benefit from increased financial resources in the region, the issue of capacity must be urgently addressed.



**Local government planning and budgeting processes require significant improvement.** Most local governments approve their budgets very late, often up to six months into the fiscal year. This delay in turn delays project implementation. To start implementing their projects at the beginning of each fiscal year, local governments must accelerate their budget approval processes. In addition, actual budgets often do not correspond to actual needs, particularly in the education and health sectors.

### 3. Better data Quality

**There is an urgent need to improve data collection and processing.** The lack of data and its low quality makes any programming and budgeting very difficult. Accurate data also is required for evidence-based policy-making, monitoring, and evaluation. Data collection and processing should be combined with identifying appropriate indicators, which can in turn inform policy-making and programming.

**For reconstruction monitoring, labor intensive monitoring systems have proven superior to high-technology, self-entry-based information systems.** The Recovery Aceh-Nias (RAN) Database system has not yet delivered any significant results, even on its key promise to track the money. The main reasons have been a lack of methodology to categorize funds, limited quality control and data analysis, and a too-sophisticated IT system that made it difficult to enter and to find core data. The only workable tracking system has a much more “low-tech” approach, based on a systematic follow-up with key institutions coupled with a strong emphasis on data analysis.







# 1 Economic and Social Conditions in Aceh

## Historical Context

**The Province of Aceh, known formally as Nanggroe Aceh Darussalam (NAD), is on the northern tip of Sumatera.** Aceh is surrounded by a crucial trade route, the Malacca Strait, to the north and east, the Province of North Sumatera in the south, and Indian Ocean in the west. The province covers an area of 57,365 km<sup>2</sup> and has a population of approximately 4 million. At present, Aceh consists of 17 municipalities (*kabupatens*) and 4 cities (*kotas*). Banda Aceh is the capital.

**Islam came to Aceh as early as the ninth century and has remained the dominant religion. The population is 98.7 percent Muslim** (BPS 2002). Indonesia's first Islamic kingdoms were powerful Acehnese trading states. By the 1300s, the great kingdom of Samudra, located near present-day Lhokseumawe, was renowned as a center for trade and Islamic study. Aceh's stature as a center of Islamic learning led to its nickname, the Veranda of Mecca. Syariah has been used as the basis of law for kingdoms in Aceh and is implemented in Aceh's administration system.

**The Kingdom of Aceh was founded in the early sixteenth century and rose to prominence after the 1511 conquest of Malacca by the Portuguese.** The kingdom's golden age came in the early seventeenth century under Sultan Iskandar Muda, who made Aceh one of the most important military and trading powers in the region. By 1820, Aceh supplied half the world's pepper. A powerful and wealthy kingdom, it maintained relations with foreign powers including the Ottoman Empire, France, Great Britain, and the United States. When the Dutch appended Aceh in 1874, the Acehnese started a guerilla war that continued until 1912.

**Left unoccupied after World War II, Aceh played a pivotal role supplying funds to the republican government of Indonesia during the struggle for independence.** In recognition of its contributions to the Indonesian independence struggle, Aceh was made an autonomous region in 1949. Turbulence followed for the remainder of the Soekarno regime. In 1950 the newly autonomous region was incorporated in the province of North Sumatera leading to the first Acehnese rebellion. Led by Daud Beureueh, the rebellion resulted in Aceh's reinstatement as a province (1957) and autonomous region status in 1959. Greater autonomy, however, did not protect Aceh from the severe economic privation of the last years of Soekarno's reign.

**Under the New Order, conditions in Aceh did not improve.**<sup>1</sup> The obvious richness of the province's natural resources on the one hand and persistent poverty on the other hand exacerbated the population's feelings of unequal treatment by the central government. The government did not address the prolonged social and economic imbalances, and another rebellion/separatist movement known as the Free Aceh Movement (GAM) started in 1976 under the leadership of Hasan Tiro. This struggle between GOI and GAM continued until 2005.

**Partially in response to these developments, in addition to nationwide decentralization, Aceh was granted Special Autonomy status under Law 18/2001.** This law seeks to address crucial issues relating to inequality and the poor economic situation in Aceh and to offer Aceh greater autonomy in managing its resources and governance functions. The three key features of Aceh's special autonomy are:

1. Large share of retained revenue from oil and gas
2. Direct election of governor and head of local government (*bupati/walikota*)<sup>2</sup>
3. Implementation of Syari'ah/(Sharia)Islamic law.

**The 2005 Helsinki memorandum of understanding (MoU) was the latest attempt to end this 30-year conflict. It offers great opportunity for Acehnese to improve their communities' economic performance, attain better living standards, and move toward a good governance system.** The main point of the agreement is that Aceh is allowed to establish local political parties that are in line with national regulations. The central government also agreed to provide Aceh with a larger share of revenue from natural resources and special allocation from DAU (Box 1). Law 11/2006 implementing these provisions was passed in August 2006. Fiscal arrangements under the previous and the new law are presented in table 1.1.

<sup>1</sup> The New Order was a governmental period under the leadership of President Soeharto from 1966–98.

<sup>2</sup> This was envisioned to be the first direct election at the local level in Indonesia before Law 32/2004 concerning local governance was passed. The law specifies that the direct election of head of local government is to be implemented nationally.

### Box 1. Key features of Law on Government of Aceh, Law 11/2006

- **Administrative/Politics**
  - Right to use regional symbols including a flag, a crest, and a hymn
  - Right to establish local political parties
  - Protection of local culture and establishment of traditional culture body (*Wali Nanggroe*)
- **Fiscal/Economy**
  - Right to set interest rates different from those set by the Central Bank of Indonesia
  - Right to retain 70 percent of revenue from oil and gas, hydrocarbon, and other natural resources
  - Joint management of oil and gas resources between the province and central government, and transparency in revenue-sharing allocation, audited by independent auditors
  - Additional revenue from 2 percent of national DAU allocation for 15 years and 1 percent for 5 more years.

**Table 1.1. Evolution of intergovernmental fiscal arrangements for Aceh**

Revenue-sharing	Law 33/2004 (national allocation)		Law 18/2001 (Special Autonomy)		Law 11/2006 on Government of Aceh	
		Province	Central	Province	Central	Province
Tax-sharing						
Land and Building Tax (PBB)	10	90	10	90	10	90
Land and Building Transfer Fee (BPHTB)	20	80	20	80	20	80
Personal Income Tax (PPh)	80	20	80	20	80	20
Nontax Sharing						
Forestry	20	80	20	80	20	80
Mining	20	80	20	80	20	80
Fishery	20	80	20	80	20	80
Geothermal	20	80	20	80	20	80
<b>Oil (nontax) net revenue</b>	<b>85</b>	<b>15</b>	<b>30</b>	<b>70</b>	<b>30</b>	<b>70</b>
<b>LNG (nontax)</b>	<b>70</b>	<b>30</b>	<b>30</b>	<b>70</b>	<b>30</b>	<b>70</b>
<b>Special autonomy fund</b> (additional revenue from total DAU allocation, 2% for 15 years and 1% for 5 years)						<b>2</b>

Sources: Law 18/2001, Law 33/2004, and Law 11/2006.

## Conflict and Its Impact on Development

### Impact and cost of the conflict

**The conflict between GAM and GOI had different stages.** The first stage had no significant impact in Aceh, and GAM held little political or military clout. The resurgence of conflict in 1989 saw a better trained and armed GAM. In response, the government transformed Aceh into a military zone (Daerah Operasi Militer, or DOM). This change resulted in the deployment of a sizable contingent of military and police forces. These forces remained in the province until their pull-out in late 2005 as a result of the MoU. The last phase was the most destructive of all. Discontent with the central government in Jakarta spread even to urban centers. From 1999 until the signing of the 2005 peace accord, armed encounters between GAM and the military became frequent (table 1.2). A World Bank study based on newspapers' monitoring of conflicts indicates that, while the encounters between GAM and

the military decreased after the tsunami, the war continued<sup>3</sup>. Many experts and observers of Aceh agree that the conflict was driven mainly by two issues: difficult center-periphery relations between Jakarta and Aceh; and a sense of exclusion or exploitation in Aceh in the enjoyment of benefits of its natural resources.

**Table 1.2. Stages of the conflict and casualties**

Phase	I: 1976–1979	II: 1989–1991	III: 1999–2005			
Key events	Founding of GAM	DOM/Military Zone	Humanitarian pause: 2000–01	COHA: Dec 2002–May 2003	Martial law / state of emergency May 2003–May 2005	MoU Aug. 2005
Casualties	100	2,000–10,000	5,000			
GAM Strength	25–200	200–750	15,000–27,000			

Source: World Bank staff estimates.

Note: COHA = Cessation of Hostilities Framework Agreement.

**Conflict undoubtedly had a pronounced effect on Aceh. However, an accurate measure of the cost and impact of the Aceh conflict is difficult to assemble.** In most cases, data have not been kept systematically, and many were lost due to the tsunami. For available information, accuracy can be an issue. However, press articles and interviews done in previous studies illustrate the impacts and cost of the conflict. They can be put in five categories: (1) loss of lives, (2) social impact, (3) absence of functioning government, (4) economic impact, and (5) fiscal impact of the military operation.

- 1. Loss of lives.** The greatest impact of the conflict is the lives lost. Estimates place this number at approximately 15,000 over 30 years. Human rights organizations and the newspapers regularly reported conflict casualties even during the period of the Cessation of Hostilities Framework Agreement (COHA).
- 2. Social impact.** The lasting conflict exacerbated the negative impact of the 1997 financial crisis on poverty levels in Aceh. While the rest of Indonesia slowly recovered from that crisis, the situation in Aceh worsened. The poverty level almost doubled from 14.8 percent in 1999 to 29.8 percent in 2002. The education system was a special and purposeful target. In many cases, schools were used as temporary military encampments in their pursuit of GAM, and the military claims that GAM also used schools as temporary bases. By some accounts, between 1998 and 2002, 60 teachers were killed and 200 assaulted. During the DOM and martial law years, 527 schools and 122 official residences of teachers were burned or destroyed. In the first half of 2003, some 880 schools were reported as destroyed or damaged.<sup>4</sup> As a result, the school system in many parts of Aceh closed down.
- 3. Absence of functioning government.** At the height of GAM's strength, a large portion of Aceh was under GAM influence or control. GAM's strategy was to disable local governments and to replace these institutions by GAM/Acehnese institutions. GAM is said to have been performing functions of government in many areas: tax collection, performing and registering marriages, and issuance of licenses. Statements from both government and GAM indicate that, at the height of the third phase of GAM, local government was paralyzed in parts of Aceh. At least in GAM's stronghold in parts of Pidie, North Aceh, and East Aceh, local government was hardly operating. Government employees failed to appear for work for fear of being attacked. In 2001 the Governor of Aceh was quoted to have said that only one-sixth of Aceh's budget for 2001 had been spent by the middle of the year because of the conflict—and most of it for law enforcement.<sup>5</sup>

3 Barron and Daud 2005.

4 Schulze 2004.

5 Aspinall 2003, 2005.

4. **Economic impact.** The impact on the provincial economy was immense: the economy overall was stagnant. During the last phase of the conflict, economic hardship heightened with the worsening of security. Investors withdrew; and businesses, especially around gas fields, closed down or reduced production. In East and North Aceh, palm oil plantations stopped operations in 2003.<sup>6</sup> Fishers were not allowed to go to sea without a government permit. In 1990 Aceh contributed 3.6 percent to Indonesia's GDP. This contribution fell to 2.2 percent in 2001 at the height of the conflict, due mainly to the drop in contribution from the oil and gas fields.
5. **Fiscal impact of the military operation** Several accounts of the conflict point to substantial government fiscal outlays, especially during the martial law years. Weeks before the talks between GOI and GAM broke down, from only 6,000 troops in the early 1990s, the army's strength in Aceh had been increased to approximately 30,000 and the police to 12,000. The ratio of military personnel to population increased from 1:570 in the early 1990s to 1:80, or 12.5 for every 1,000 population at the height of the conflict. The national ratio is 1:1,000. Data on the number of troops withdrawn after the MoU suggest there were over 50,000 troops and police in Aceh at the time of the peace agreement.

**Government financed the operations largely from Central government funds.** Provincial funds were used to augment national government resources and to fund the social welfare requirements (temporary shelter, food, for evacuated populations). Between 2002 and 2005, some 55,000 persons were assisted by the government in the form of social payments (*diyat*) as victims of the conflict. The government spent close to US\$12 million to cover these expenses. In February 2006, the Governor of Aceh established the *Badan Reintegrasi Aceh* (BRA). BRA is expected to become the main body to coordinate government and donor post-conflict programs. The agency has begun processing proposals from GAM and conflict affected persons.

## Impact of the December 26, 2004 Tsunami

**On December 26, 2004, an earthquake struck 150 km off the coast of Aceh.<sup>7</sup> Shortly afterward, a tsunami hit,** and within minutes it had swept clean an 800-km coastal strip of Aceh. Some 170,000 people perished, and approximately 500,000 were displaced from their homes.

**The natural disaster caused immense social, economic, and environmental devastation to areas that were already poor.** The calamity also unleashed an unprecedented national and international response for emergency needs, with NGOs and donors making record reconstruction funding contributions. Even before the tsunami, approximately one-third of the population of Aceh lived in poverty. After the disaster, hundreds of thousands more became vulnerable to poverty and dependent on food aid.

**The physical damage and losses have been estimated at US\$4.9 billion. Productive sectors alone suffered losses estimated at US\$1.2 billion.** More than half of the latter was in the fisheries sector; the rest was divided between farming and manufacturing. Cash-for-work, financed by many donors and NGOs, has played a vital role in providing safety nets and revitalizing the economy. As more housing construction projects and other regular employment activities are being launched, these programs are being phased out. Due to the pressure exerted on prices by the reconstruction effort, post-tsunami, prices have increased more sharply in the province than nationwide. The price hike was particularly noticeable in Banda Aceh, where year-on-year inflation in December 2005 reached 41 percent.

**After a slow start, since September 2005, the pace of reconstruction has picked up markedly.** Faster than expected progress has been achieved in getting children back to school, restoring the health care network, replacing fishing boats, and restoring farmland and fishing ponds. Progress also is visible in the crucial housing sector. Approximately 47,500 houses are reported to have been completed or nearing completion by end-April

<sup>6</sup> R. Sukma 2004.

<sup>7</sup> This section is based on the report, "Aceh and Nias One Year after the Tsunami: The Recovery Effort and Way Forward" (BRR and international partners), December 2005.



(table 1.3). Each month, approximately 3,500–5,000 houses are built. BRR has set an ambitious target of building 78,000 new houses in 2006. This target is achievable only if the pace of construction accelerates.

**Table 1.3. Reconstruction progress indicators (as of April 2006)**

Indicators	Damage/need	Recovery	Source
Housing	120,000	47,489	UN habitat
Schools	2,006	260	BRR Survey
Teachers	2,500	2,400	BRR
Health facilities	127	113	BRR
Roads	3,000	490	BRR
Bridges	120	41	BRR
Sea ports	14	2 (complete)	BRR
Airports	11	5	BRR
Fishing boats	7,000	6,160	BRR
Fish ponds	20,000	7,111	BRR Survey
Rice fields and plantations	60,000	37,926	BRR

Source: BRR data, 2006

**Many needs still are not met.** Transitional shelter, in particular, remains a severe problem. Approximately 15,000 to 20,000 families remain in tents, and another 25,000 to 30,000 families remain in barracks. The lack of adequate transport facilities along Aceh’s west coast exacerbates the difficulties in delivering reconstruction material to underserved areas. Livelihoods also remain a severe concern. Particularly, women face a 21 percent unemployment rate—50 percent higher than the national average for women. The unemployment rate for men is much lower but still significant at 7 percent, and risks increasing again once construction subsides.

**Despite the scale of destruction, Aceh now has the opportunity to transform itself** from an isolated and conflict-affected region of Indonesia to a well-developed province and an important economic hub for the country. The challenge is to “build back better,” not only in physical infrastructure but also in using the available resources for the well-being of the province’s people. To do so, Aceh and Nias need to overcome long-term structural problems to continue growing and alleviate poverty.

**Local governments are not yet full participants in the reconstruction and should play more important roles.**

Aceh’s local and provincial governments have been among the main beneficiaries of decentralization. With increased transfers from the central government, coupled with higher revenues from oil and gas, Aceh’s regions will be able to spend more than US\$1 billion in 2006 in regular programs, in addition to the existing reconstruction projects. In 2005, anticipating substitution from BRR and donors, local governments *cut* the share of their capital expenditures in response to the tsunami (from approximately 50 percent before the tsunami to 42 percent after the tsunami). In general, local governments did not have the necessary capacity to respond to such a crisis. The larger share and absolute volume of spending on a growing local government apparatus at the expense of development spending is worrisome. Another critical issue is a widely perceived lack of capacity on part of local governments to effectively utilize the growing public resources.

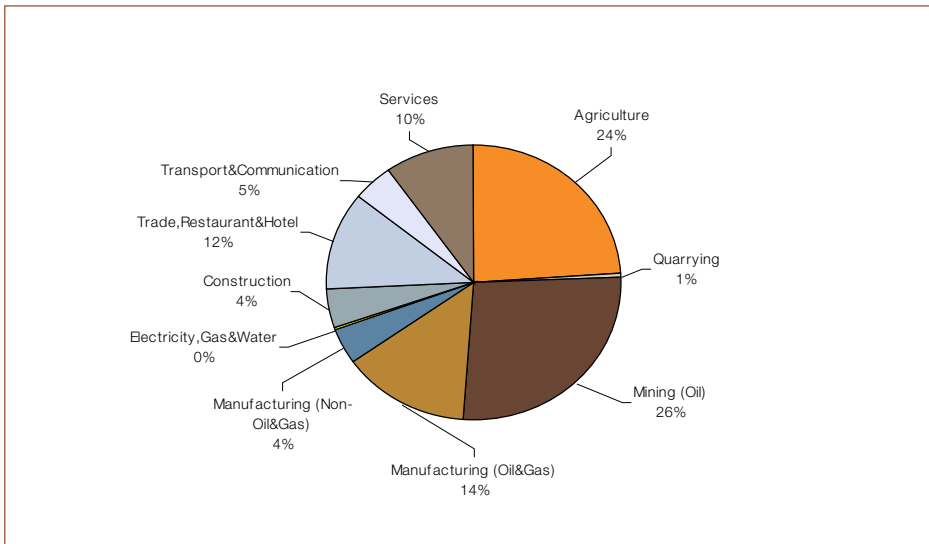
**It is critical to increase local governments’ financial contributions to reconstruction.** Local governments have a large amount of untapped resources: more than US\$5 billion dollars in total revenues over 2006–09 if the oil price stays at current levels. Most importantly, provincial and local governments will also be in charge of all reconstruction infrastructures once the BRR-mandate expires in 2009. It is critical to engage local governments *now* in any new large-scale infrastructure projects. The use of a matching funds scheme—such as the new MDF Infrastructure Financing Facility—will be a good opportunity to increase engagement of local governments in infrastructure projects. The 2007 budget process will provide an important signal of the province’s and local governments’ readiness to play a stronger role in the reconstruction process. Monitoring and evaluating local government spending will be important to ensure that public funds are properly spent.

## Aceh's Economy

### Structure of Aceh's Economy

Aceh's economy relies heavily on the production of oil and natural gas, which accounts for approximately 40 percent of the province's GDP. However, this production employs less than 10 percent of the workforce. The oil/gas producing kabupatens are Aceh Timur, Aceh Utara, and Aceh Tamiang. Aceh Utara contributes 80 percent of the overall oil and gas production. Agriculture, in contrast, accounts for 24 percent of the province's GDP (figure 1.1) but employs more than half of the workforce.

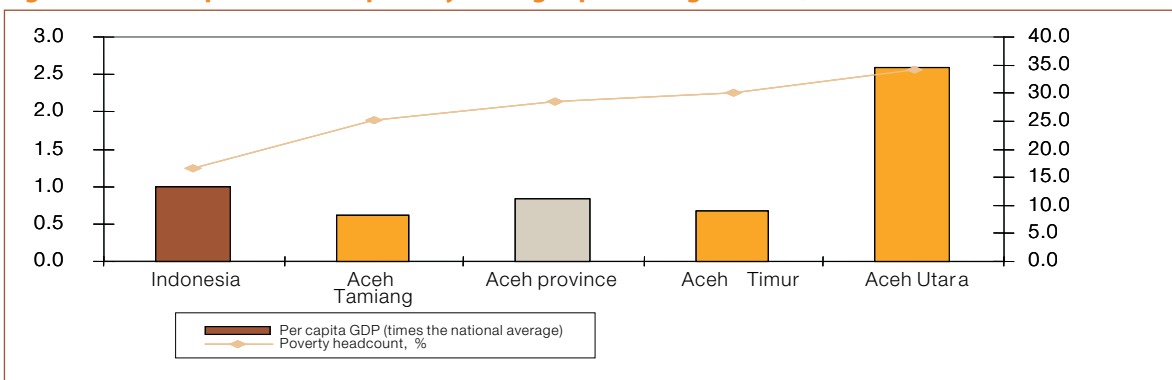
Figure 1.1. Structure of Aceh's economy, 2004



Source: BPS 2004.

Historically, the oil/gas sector had little positive impact on the economic well-being of ordinary Acehnese. In the past, the majority of proceeds from natural resources revenue-sharing were retained by the central government. Available resources were allocated far from optimally. For example, oil-rich Aceh Utara, with a per capita GDP 2.6 times the national average, had a poverty headcount of 34.2 percent, twice the national average (figure 1.2).

Figure 1.2. Per capita GDP and poverty in oil/gas producing districts, 2004



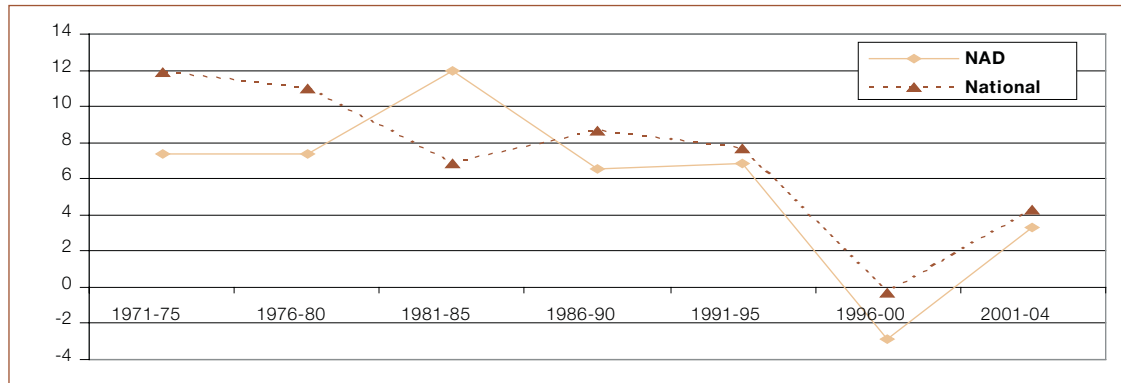
Source: BPS, World Bank Staff calculations.



## Aceh's economic growth and per capita GDP

Since the 1970s Aceh's growth rate has been lagging behind national average growth rates except for a short period in the early 1980s. As was the rest of Indonesia, Aceh was hit hard by the 1997–98 financial crisis, which resulted in negative growth rates for four consecutive years. Since 2001, Aceh's economy has started to recover (figure 1.3). Compared to the rest of Indonesia, Aceh is economically stagnant. One reason could be the longstanding conflict that has robbed the region's economy of its vitality. However, there also are many structural reasons, such as insufficient diversification of the economy, lack of modernization, and remoteness of many areas from markets.

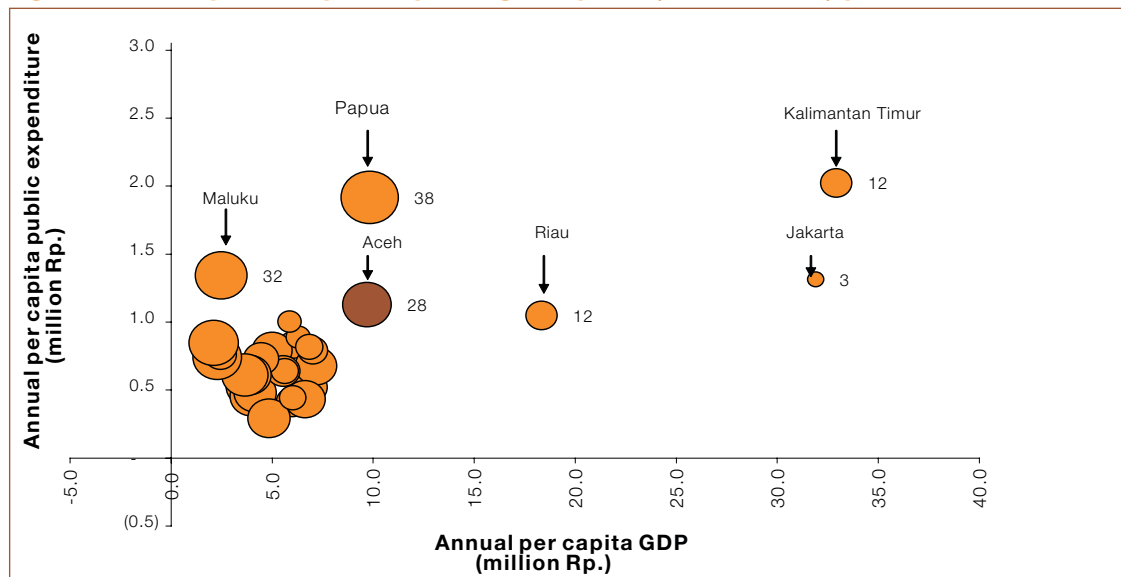
**Figure 1.3. Aceh's economic growth vs. national average**



Source: BPS and World Bank staff calculations.

Nevertheless, Aceh is among the richest provinces in Indonesia in per capita GDP. As of 2004, Aceh's annual per capita GDP was Rp. 9.8 million, or approximately US\$1,090. Aceh ranks as the fifth richest province, but with the fourth highest poverty headcount rate (figure 1.4). The fact that two of the richest provinces in per capita GDP (Aceh and Papua) have two of the highest poverty head counts should be cause for concern. High per capita GDP as a result of natural resources exploitation in both Aceh and Papua has not benefited the poor in the regions.

**Figure 1.4. Per capita GDP, public spending, and poverty headcount by province, 2004**

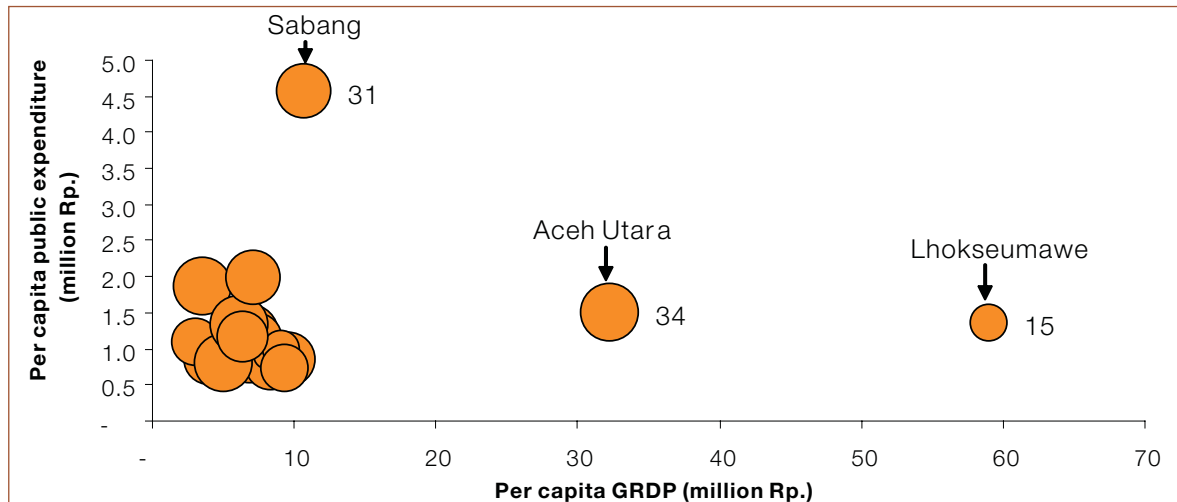


Source: BPS.

Note: The size of the bubbles represents poverty headcount rates.

**Per capita GDP varies substantially among Aceh's districts** (kabupatens/kota). For instance, in Aceh Tenggara and Simeulue, annual per capita GDPs are Rp. 3.1 and 3.3 million, respectively. In contrast, Aceh Utara and Lhokseumawe have per capita GDPs more than 10 times that size (figure 1.5). However, Aceh Utara, with the second highest per capita GDP level in Aceh, has one of the highest poverty head counts.

**Figure 1.5. Per capita GDP, public expenditure and poverty in Aceh's districts, 2004**



Sources: MoF, BPS, and World Bank staff calculations.  
Note: The size of the bubbles represents poverty headcount rates.

**The estimated impact of the December 2004 earthquake and tsunami suggests an economic decline of approximately 5 percent in 2005.** This aggregate impact on Aceh's economy conceals substantial estimated variation across kabupaten—from approximately 0.5 percent decline in Aceh Utara and Aceh Tamiang to more than 50 percent decline in Simeuleu and Aceh Jaya (figures B1 and B2).<sup>8</sup>

### Aceh's economy: Challenges and opportunities

The short-term economic prospects will be determined largely by activities related to the reconstruction phase, such as the construction boom. The longer term economic potential of the region will depend on addressing the following issues:

#### Modernizing the economy

**Traditional sectors, such as fisheries and agriculture, have good potential if developed and modernized.** For instance, Acehese fishers still rely on small boats with limited catching capacity. Aceh's Exclusive Economic Zone (EEZ) covers 238,807 sq km of sea area. The EEZ has fishstock estimated at 1,000 times larger than the stock available in the territorial area but only large boats are able to fish in these waters. Providing larger vessels, rather than replacing the small boats destroyed, would substantially boost output. The agriculture sector also has a good potential if developed beyond subsistence farming. (Although large-scale plantations do exist, they are not the core of agricultural production.) Large areas of suitable land are not yet used. The total is estimated at 293,000 hectares (ha). Cultivating them would enable the expansion of modern farming.

**In Aceh, 98 percent of export value is derived from liquefied natural gas and condensate. Only 2 percent is derived from agricultural and industrial products.** Coffee is the prime agricultural export commodity: 98 percent of the total agricultural export. Diversification of exports presents a good opportunity to boost growth but is not an easy task. The existing diversification potential for cocoa, vanilla, and patchouli, is constrained by small-scale production and volatile output.

<sup>8</sup> On the methodology of estimating the impact of tsunami on GDP at the local government level, see "Aceh and Nias One Year after the Tsunami: The Recovery Effort and Way Forward," December 2005.

**An estimated 318,000 people in Aceh are seeking or available for work.** Large-scale construction projects are gathering steam, requiring an estimated 200,000 workers during the peak of reconstruction efforts in mid-2006. To maximize the employment gains for Aceh's population, several policies are needed. According to the International Labour Organisation (ILO), these include<sup>9</sup>:

1. Organize the labor market (brokering demand and supply for employment)
2. Enhance people's employability by providing skills and vocational training
3. Employ people through labor-intensive infrastructure investments. This policy should be complemented by strategies to promote self-employment and enterprise development.

**Small farmers in Aceh usually sell raw products, because local processing facilities do not yet exist.** Thus, small farmers do not benefit from sharing the substantial value added that usually results from processing. Local producers also are poorly organized and are not informed about the full market potential of their products. The development of the local processing businesses would benefit local producers.

**Economic development must include sound environmental policies.** Forestry areas in Aceh comprise 74.6 percent of total territory size. These tropical rainforests, rich with wood and wildlife, are severely endangered. Twenty companies have been granted licenses to exploit approximately 1.6 million ha of what has been classified as production forest. The increased demand for wood, driven by tsunami reconstruction needs, already has exacerbated illegal exploitation of forests.

**A transparent and stable business climate could increase investor interest in the numerous investment opportunities in the region.** Potential sectors include the free port zone Sabang, fishing and fisheries, tourism, hotels and restaurants, molding, animal husbandry industry, plantation development, and recreational forests.

## Poverty and Social Conditions

**Poverty was widespread in the Aceh Province even before the December 26, 2004 earthquake and tsunami.**

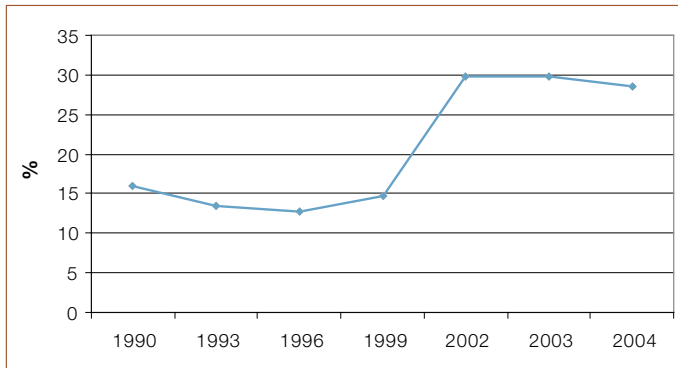
In 2004 an estimated 1.2 million people (28.5 percent of total population) in Aceh were living below the poverty line: Rp. 129,615, or approximately US\$14, per capita per month.<sup>10</sup> In fact, the share of people living in absolute poverty in the region has been almost twice as high as that in Indonesia overall (16.7 percent), making Aceh one of the poorest provinces (figure 1.6). The December 26, 2004 tsunami exacerbated poverty in the region. An estimated additional 325,000 people in Aceh now are vulnerable to poverty. However, it is important to bear in mind that the estimated increase in poverty does not take into account the mitigating impact of food aid, cash-for-work programs, and other mechanisms of lifting people's welfare.<sup>11</sup> There has been a significant spatial variation in poverty rates across districts in Aceh. This variation has become even more pronounced due to the impact of the tsunami. In the most affected districts, more than 50 percent of the population is likely to be living in poverty (figure B3).

9 International Labour Organization, 2005.

10 The poverty line represents the monetary value of the typical food basket that provides 2100 calories per capita per day plus the necessary nonfood expenditures.

11 On the methodology of estimating the poverty impact of tsunami, see "Aceh and Nias One Year after the Tsunami: The Recovery Effort and Way Forward" 2005.

Figure 1.6. Poverty trend in Aceh province, 1990–2004 (%)

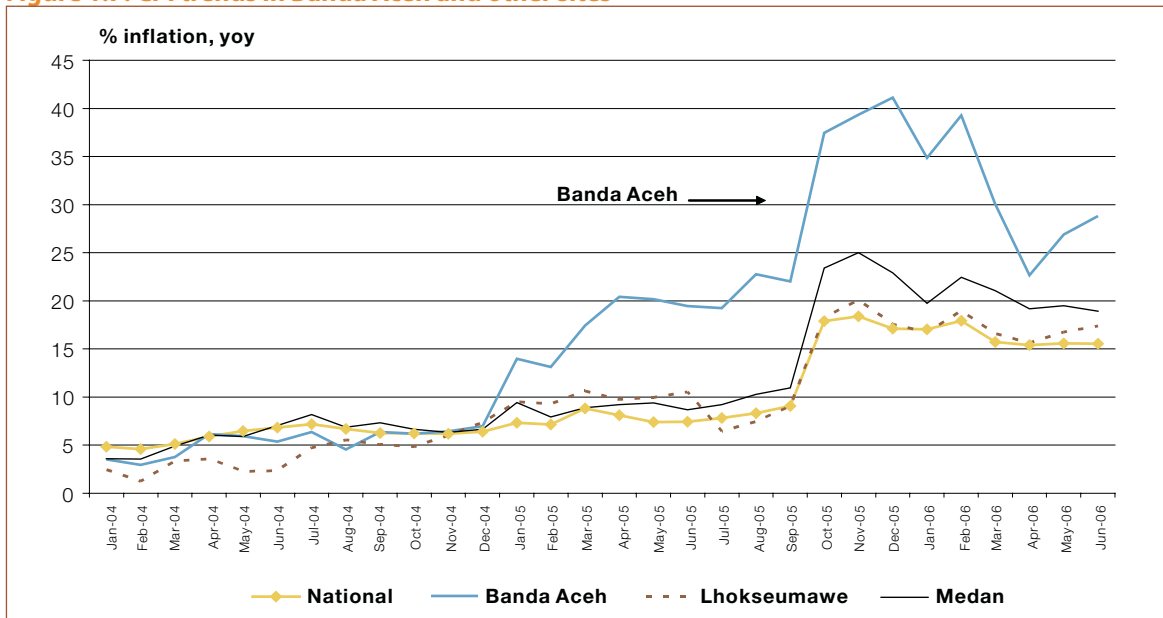


Source: BPS

## Inflation

**Substantially increased costs of living will affect the purchasing power of Aceh’s population.** Since the tsunami, prices in the affected regions have increased more sharply than the national average due to the influx of aid money and cash-for-work programs to the area. Limited transport possibilities means that an increase in demand for goods and materials (related to the reconstruction effort) have translated into higher transport costs and therefore higher prices generally. The most dramatic increase has been in Banda Aceh. Year-on-year inflation in December 2005 reached 41 percent in Banda Aceh, 23 percent in Medan, and 18 percent in Lokseumawe, compared to 17 percent nationwide (figure 1.7).

Figure 1.7. CPI trends in Banda Aceh and other sites



Sources: BPS, World Bank staff calculations.

**Many Acehnese households are and will benefit from the fact that the reconstruction phase is pushing up the wages of construction workers. However, the rising inflation neutralizes these benefits.** In 2005 wages increased by at least 40 percent–50 percent across all categories of construction workers. However, the net effect is not clear since the prices of consumer goods also increased. After the construction boom, excessive wage inflation will dent Aceh’s competitiveness locally and abroad. Inflation cannot easily be changed, but monitoring prices and consumption patterns is necessary to understand the impact on living standards.

## Livelihoods

**Fisheries, agriculture, and small enterprises traditionally have been the key pillars supporting the livelihoods of the Achenese.** However, these sectors are facing a number of challenges related to the impact of natural disasters and the changing structure of the economy. Importantly, restoring livelihoods is more than rebuilding physical assets. While the replacement of assets is of high importance, the priority challenge is to provide comprehensive livelihood support for sustainable recovery of the affected communities. The restoration and development of livelihoods should take place with an understanding of the current and future needs and resource base. During the years prior to the tsunami, as urban and service-based industries declined, the Acehnese workforce had made a significant shift back to the agriculture and fisheries sectors. If the underlying factors that caused the sectoral composition of the economy to change are not addressed, household incomes will drop significantly once resources allocated to reconstruction start to decline.

**Pressure to quickly restore the asset base resulted in inadequate attention to quality.** As an example, in the fisheries sector, aid providers have aimed to deliver as many boats as soon as possible, resulting in the delivery of many low-cost, smaller boats. Lack of consultation and coordination with local fishers and poor quality construction, has resulted in many of the delivered boats' being abandoned due to their unsuitability to local conditions.

**Agriculture and fisheries urgently need to be modernized.** Even before the disaster, both sectors were characterized by a large number of small farmers and fishers producing mainly for their own consumption or for the immediate local markets. Processing and packaging was done primarily outside the region. There is a need to modernize both sectors through new technologies, finance, and business development services; and increasing the scale of production.

## Creating Jobs

**The impact of the tsunami on employment has been less severe than initially expected, but it has led to major changes in the composition and structure of the workforce.** While unemployment rose in the immediate aftermath of the disaster, labor force participation has recovered rapidly. The participation of adult males in the labor force has returned to pre-tsunami levels, and the participation of women and youths (aged 15–24) has grown substantially. These previously untapped labor sources could contribute to faster economic growth and recovery. The increasing number of adolescents seeking work instead of enrolling in schools decreases their opportunities for training and education, which would enable them to get better paid jobs in the long term.

**Reconstruction needs have resulted in a construction boom.** Construction work in Aceh will be valued in the range of US\$100–\$150 million per month for the next 2 years, compared to less than US\$10 million per month in 2003. To meet this demand, ILO estimates that approximately 200,000 skilled workers (carpenters, bricklayers) will be required, as well as a significant number of unskilled workers. In addition, the construction boom will create a large secondary demand for goods and services. Nonetheless, the construction boom will not provide sufficient jobs for all unemployed. The latest post-disaster census shows that nearly 20 percent of the labor force (more than 300,000 people) is actively seeking work or are available for work. The highest rates are in the 15–24 age group, in which nearly 25 percent is searching for work. *Upgrading the employability of the local people through skills training is a key priority.* Skills training must be demand-driven and linked to jobs in the market, with a focus on short-cycle training for workers certain to be engaged.





# 2 Fund Flows and Budget Processes

**As do other regions in Indonesia, Aceh receives funds from local own-source revenue (PAD), intergovernmental transfers, and deconcentration funds from the central and provincial governments.**

Local own-source revenue is generated by the region itself, mostly from local taxes and levies. Intergovernmental transfers are public funds that provide a vertical and horizontal dimension of transfers. Vertical transfers redistribute revenue between central and regional governments, whereas horizontal transfers redistribute among district governments.

**After the decentralized system was introduced in 2001, the DAU (Dana Alokasi Umum) became the main source of revenue in Aceh.** Along with revenue-sharing and DAK, DAU replaced the previous intergovernmental transfers of SDO (Subsidy for Autonomous Region) and INPRES (Presidential Instruction). The transfers consist of revenue-sharing, general allocation fund (DAU), and specific allocation fund (DAK). The flow of transfers from central government to regional governments is laid out in figure 2.1.

## Revenue-Sharing

**Revenue-sharing is tax and nontax revenue (natural resources) shared between the central and regional governments.** The goal of revenue-sharing is to reduce vertical imbalances between the central and regional governments.<sup>12</sup> Law 33/2004 is the primary document governing central/regional fiscal balance. It stipulates the percentage of revenue to be divided between the center and the regions as well as the distribution process: funds are transferred directly to regional governments' accounts.

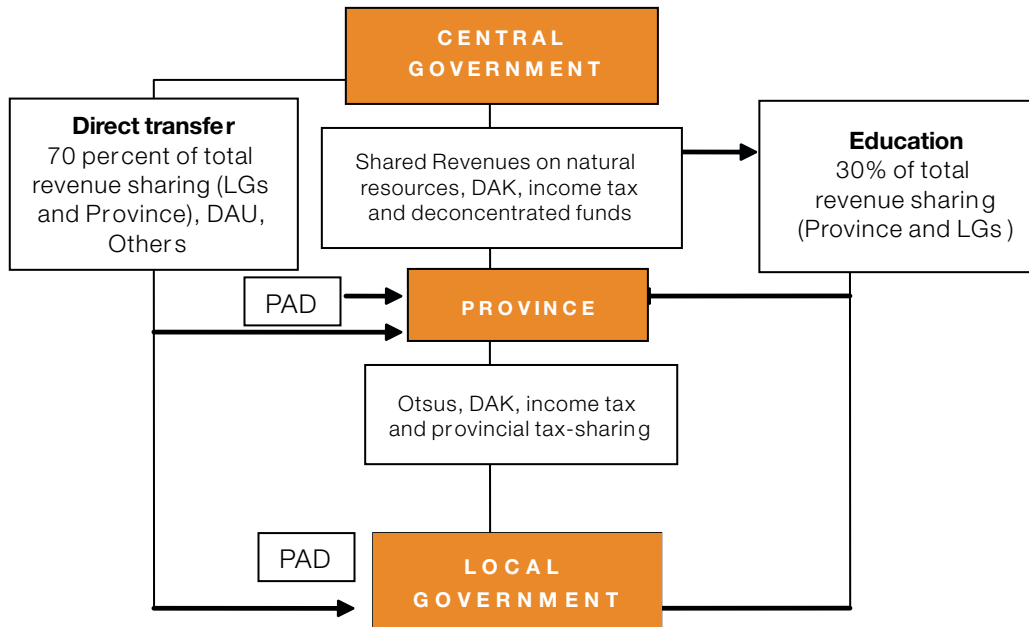
**Under Law 18/2001, as a special autonomy region,** along with the standard national allocation of sharing from tax and nontax revenues, Aceh is granted additional shares from its oil and gas revenues. The new Aceh Government Law 11/2006, which will replace Law 18/2001, will provide a similar arrangement. Additional legislation governing this revenue distribution arrangement comes in the form of Aceh regional regulation *Qanun* 4/2002. The *Qanun* describes the transfer process of revenue-sharing including land and building taxes (PBB) and land and building transfer fees (BPHTB). These funds are transferred directly to provincial and local governments. Revenue-sharing of personal income tax and the special autonomy fund are transferred by the center to the province, and the province is responsible for transferring it to local government.

**The new Law on Government of Aceh, Law 11/2006, provides Aceh with a new special autonomy fund: 2 percent additional DAU allocation starting in 2008.** The special autonomy fund will be allocated for development programs administered by the province. In addition, Aceh is still eligible for receiving additional revenue-sharing from oil and gas. Law 11/2006 also stipulates that a minimum of 30 percent of this additional revenue-sharing go toward education. The remaining 70 percent is allocated for development programs at the provincial and local government levels.

<sup>12</sup> Ministerial Decree KMK No. 344/2001 also is key in implementing revenue sharing.



**Figure 2.1. Flow of funds in Aceh**



Sources: Law 18/2001 and Qanun 4/2002.

## Tax-sharing

**The tax-revenue share between the central and regional governments varies per tax.** The corresponding share between the center and regions is 10 percent–81 percent for land and building tax (PBB), 20 percent–80 percent for land and building transfer fee (BPHTB), and 80 percent–20 percent for personal income tax (table 2.1).

**The general allocation arrangement between provincial and local government is 20 percent for the province and 80 percent for local government, with the exception of income tax.** Personal income tax-sharing is 40 percent for province and 60 percent for local government. A Gubernatorial Decree regulates distribution of personal income tax revenue shares to local governments based on such factors as population and area. Prior to decentralization, personal income tax was entirely administered and collected by the central government. Now the regional government receives a 20 percent share of this tax. The expansion of the personal income tax base has the potential to boost regional government revenue from personal income tax. Although the land and building tax (PBB) and real estate transfer tax (BPHTB) are still administered by the central government, the revenue from these two taxes are now transferred entirely to regional governments.<sup>13</sup>

**Local governments are now entitled to receive additional tax-sharing from the province.** Under revised tax-sharing agreements, local governments now receive 30 percent of 2 provincial taxes: vehicle tax and vehicle transfer tax. Prior to decentralization, local government was entitled to receive only a percentage of provincial fuel taxes, an amount now reduced from 90 percent to 70 percent. The administration of ground and surface water use tax has been shifted to the province, with a 70 percent sharing arrangement to local government.

<sup>13</sup> Law 34/2004 specifies that 90 percent of PBB goes to regional government: 16.2 percent to province, 64.8 percent to local government, and 9 percent to administration. The 10 percent controlled by central government is transferred to regional government: 6.5 percent distributed equally among local governments and 3.5 percent distributed to best performing local governments. For BPHTB, 16 percent goes to the province and 64 percent to local governments. The remaining 20 percent is distributed equally among local governments.

## Nontax (natural resources) sharing

**Law 33/2004 provides for more types of natural resources revenue-sharing between the national and regional governments.** Previously, natural resources revenue-sharing included only forestry and mining. Under Law 33/2004, fisheries, oil, and gas also are included under the revenue-sharing arrangement. The general allocation of the central and regional government for nontax revenue is 20 percent-80 percent. Oil and gas revenues are two important exceptions. Regions receive different percentages of oil, gas and reforestation revenues. Most significant for Aceh are oil and gas allocation, which are 85-15 and 70-30, respectively. The special autonomy legislation gives Aceh an additional 55 percent for oil and 40 percent for gas. Thus, Aceh receives 70 percent of oil and gas revenues generated in Aceh.<sup>14</sup>

**Table 2.1. Revenue-sharing arrangements and the Aced special autonomy fund**

Revenue-sharing	Central government	Subnational	Province	All kabupaten /kota	Producing kabupaten/kota	Nonproducing local government
<b>Tax-sharing</b>						
Land and Building Tax (PBB)	10	81	16.2	64.8		
Land and Building Transfer Fee (BPHTB)	20	80	16	64		
Personal Income Tax (PPH)	80	20	8	12		
<i>(provide the list of m ajor taxes)</i>						
<b>Nontax-sharing</b>						
Forestry: Land-rent (IHPH)	20	80	16	64		
Forestry: Resource-rent (PSDH)	20	80	16	64	32	32
Reforestation	60	40			40	
Mining: Land-rent	20	80	16	64		
Mining: Royalty	20	80	16	64	32	32
Fishery	20	80		80		
Oil (nontax) net revenue**	30	15	3	12	6	6
Special autonomy fund		55	22	33	13.75	19.25
LNG (nontax)	30	30	6	24	12	12
Special autonomy fund		40	16	24	10	14
Geothermal	20	80	16	64	32	32
<b>Other tax-sharing (province's tax revenue)</b>						
Motor vehicle tax, water vehicle tax, motor/water vehicle ownership charges		100	70	30		
Motor vehicle fuel tax, water (ground and surface) use tax		100	30	70		

Sources: Law 18/2001, Law 33/2004, and Qanun 4/2002 compiled by World Bank staff.

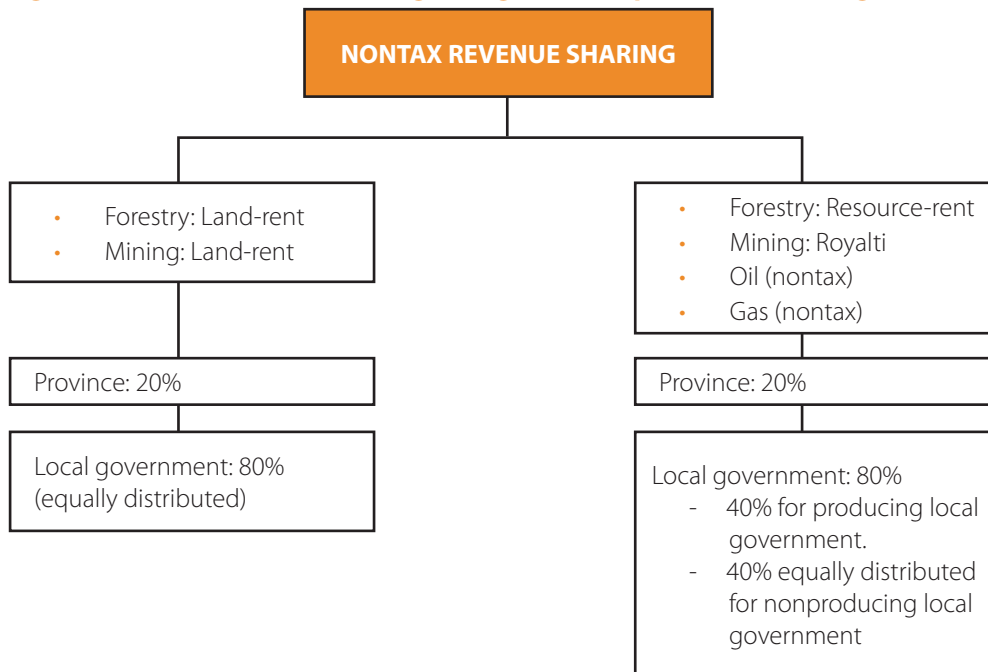
Notes: \*\* = Distribution between provincial and local governments is stipulated by Qanun.

**The allocation of the natural resources sharing between province and local government also follows the 20-80 formula.** For revenue generated from the forestry-resource rent, mining, oil, and gas, another 50-50 allocation from the 80 percent allocation for local government is provided for producing and nonproducing districts (local government), in which the nonproducing local governments have to equally distribute the 50 percent share among them. As for revenues that do not follow the 50-50 allocation from the 80 percent allocation, resources must be

<sup>14</sup> Law 33/2004 stipulates that, until 2009, oil and gas revenue shares between the center and regions are 85-15 and 70-30 for oil and gas, respectively. Starting in 2009, the shares of oil and gas retained by the center will be 84.5 and 69.5 percent, and for regions 15.5 and 30.5 percent (in which 0.5 percent will be allocated to the education sector).

equally distributed among local governments (figure 2.2). How the allocation formula works according to 18/2001: Using oil revenue-sharing as an example, regions share 15 percent of oil revenue. Thirty percent of the regions' share is allocated for education. The remaining 55 percent can be freely allocated by provincial and local governments. The province receives 20 percent of the remaining 55 percent; 40 percent goes to producing local governments; and 40 percent goes to nonproducing local governments.

**Figure 2.2. Nontax revenue-sharing arrangement for province and local government**

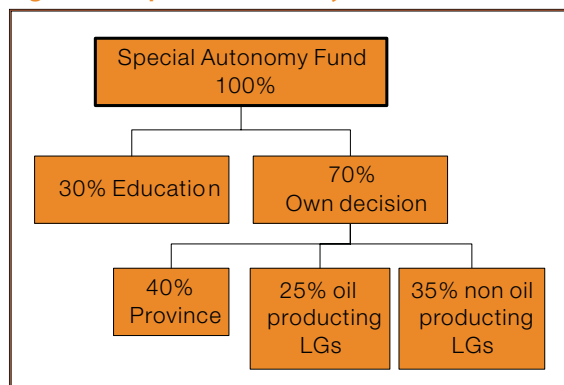


Sources: Law 11/2006, Law 18/2001, Qanun 4/2002.

### Aceh Special Autonomy Fund (Dana Otsus)

According to Law 18/2001, the special autonomy fund (*dana otsus*) for Aceh consists of additional revenue-sharing: 55 percent from oil and 40 percent from gas, on top of nationwide sharing (15 percent and 30 percent for oil and gas, respectively). The fund is transferred quarterly to the province and administered by it. The shares are calculated based on lifting (shipping or exporting) revenue, not on the overall production from exploration. Thirty percent of the funds are allocated for education. The remainder is allocated by the regional government: 40 percent for the province, 25 percent for oil producing local governments, and 35 percent for non-oil-producing governments. Half of the transfer to nonproducing regions is distributed equally while the rest is allocated using a formula. This fund provides wider allocation and spending flexibility for local governments (figure 2.3).

**Figure 2.3. Special Autonomy Allocation**



Source: Qanun 4/2002.

**Law 11/2006 gives Aceh an additional 2 percent from the national general allocation fund (DAU) for 15 years, beginning in 2008.** In 2023 the allocation will be reduced to 1 percent of the national DAU until 2028. According to the law, these funds are intended to finance the development and maintenance of infrastructure; empower the people; alleviate poverty; and finance the education, health, and social sectors. The special autonomy fund will be managed by the provincial government of Aceh. The new law has changed the definition of special autonomy fund. The special autonomy fund is now referred to only for funds received from the 2 percent allocation of the national DAU funds. The name of the former “special autonomy fund” from additional revenue-sharing oil and gas has changed to “additional revenue-sharing oil and gas”

### Other tax revenue-sharing

**Local governments are entitled to a share of provincial tax revenue.** Local government receives 30 percent from the province’s motor vehicle and water vehicle tax and the transfer of motor and water vehicle ownership charges; and 70 percent from the motor vehicle fuel tax and water (ground and surface) use tax.

### General Allocation Fund (DAU)

**The DAU (*Dana Alokasi Umum*) is a discretionary block grant designed to equalize the fiscal capacities of regional governments.** The DAU is transferred monthly and directly from the center to regional governments. It is allocated based on a national formula that consists of fiscal gap and basic allocation. Fiscal gap is obtained from the difference between the fiscal needs and fiscal capacity of each region. Fiscal needs take into account variables such as population, regional area, regional gross domestic product (RGDP) per capita, and human development index. Fiscal capacity is measured by own-source revenue and regional percent of revenue-sharing. Basic allocation is calculated based on the budget spending on civil servants’ salary in the related region.

**DAU is distributed to the regions in the proportion of 10 percent for province and 90 percent for local government.**<sup>15</sup> The DAU allocation among local governments is obtained by multiplying each local government’s weight by the total amount of DAU for all local government. The weight itself is determined by the proportion of fiscal gap of the related local government to the total fiscal gap of all local government.

### Specific Allocation Fund (DAK)

DAK (*Dana Alokasi Khusus, or earmarked grant*) is a conditional grant reflecting national priorities provided to finance regions’ specific needs not covered by the DAU’s formula. DAK cannot be used for research, training, administration, and official travel. The source of DAK is the national budget (APBN). Except for regions with limited financial capacity, a region is required to provide from the regional government budget (APDB) a matching grant of a minimum of 10 percent of the project budget. DAK is transferred quarterly based on project progress. Based on a Ministry of Finance

<sup>15</sup> Based on Government Regulation PP 55/2005.

(MoF) decree, DAK is transferred directly to provincial and local government. In Aceh, *Qanun* 4/2002 stipulates that DAK is transferred by the central government to the province, which then is responsible for distributing it to local governments. Starting in 2003, DAK covers several sectors such as education, health, infrastructure, and government facilities (for new local governments). Deconcentrated and Emergency Funds

**Besides the three types of transfer mentioned above, regions also receive the deconcentration fund (Decon) from central government.**<sup>16</sup> Decon can be considered revenue for the province and local government since the actual implementation is in the region.<sup>17</sup> The fund is transferred to the province based on central government priorities in the form of development expenditures that do not cover routine/recurrent spending of vertical agencies in the region for nonphysical projects. Law 33/2004 specifies that provinces can request emergency funds from the central government to finance extraordinary and urgent needs, such as natural disasters, that cannot be covered by regional government budget (APBD). Although the program is implemented by the province and local government, decon is not recorded in the provincial and local government budget (APBD). Instead, decon is recorded in the national budget (APBN). The province and local government report their spending, and are accountable directly, to central government.

### Own-Source Revenue (PAD)

**The revised decentralization law has given local governments the opportunity to expand their revenue base, particularly from taxes.** Law 33/2004 allows for local taxes, local levies, revenues from local state-owned enterprises, and other eligible local revenues. In Aceh, Law 18/2001 adds another component, *zakat* or alms, as one of the revenue sources.<sup>18</sup> By and large, arrangements on local taxes are based on Law 34/2000 and government regulations (PP 65/2001 and 66/2001) on regional tax and levies.

## Budget Process

**Five pieces of legislation govern budget processes and accountability:** Law 17/2003, Law 15/2004, Law 32/2004, Law 33/2004, and Ministerial Decree 29/2002. The budget process starts in January of the preceding year with the formulation of a regional work plan (RKPD) by the regional government to serve as the basis for the general policy of the regional budget (APBD). Mid-June, the regional government presents the APBD's general policy to Regional Parliament (DPRD). In the first week of October, the regional government submits a draft of the APBD to the DPRD in the form of a local government regulation, or *Perda*. The DPRD together with regional government should agree on the proposed APBD at least one month before the start of the fiscal year (figure B4).

**Budget evaluation begins with the presentation of the first semester budget realization and estimates of the second semester to the DPRD at the end of July of the fiscal year concerned.** As the fiscal year ends, the realization of APBD is audited by BPK (National Auditing Agency) and the audit report should be submitted to DPRD within two months after the APBD is received. Finally, the head of the region submits a draft *Perda* and an accountability report to the DPRD for approval, at the latest six months after the end of the fiscal year concerned (figure B5).

**In practice, the budget process often does not follow the timeline set by the laws and regulations.** A 2005 study on district governments' capacity in 10 tsunami-affected districts shows that to receive budget approval by local parliament takes an average of 4 months. According to regulations, the budget should be submitted to the regional parliament in October and approved by the parliament before the new fiscal year begins. In a few districts, the budget was submitted after the new fiscal year had begun and was approved as late as June. Simeulue and

<sup>16</sup> The detailed arrangement of the deconcentration fund is stipulated in Law 33/2004.

<sup>17</sup> The deconcentration fund is central government development spending in the region carried out by the province or local government as a part of line ministries' responsibilities. The main objective is to finance central government functions and activities related to national priorities by financing nonphysical assets (dekonsentrasi) and physical assets (tugas pembantuan).

<sup>18</sup> *Zakat* is the amount of money that every adult, mentally stable, free, and financially able Muslim, male and female, must pay to support specific categories of people (poor and needy). The amount of money that needs to be paid is 2.5 percent of the person's income, which can be done monthly or annually.

Banda Aceh reported in August 2005. Delays in budget submission and approval were commonplace in Aceh prior to the tsunami, indicating a need for increased coordination between the executive and legislative branches to meet the budget process timeline.

**Bottom-up budget planning and timely budget processes are needed to achieve the targets and objectives of regional development.** Some key issues on budget preparation and implementation that need to be addressed are:

- Inequity between allocated funds and development outcomes across regions.
- Lack of correlation between short-term and long-term development plans, regional development programs, and strategic plans.
- Sectoral and geographic gaps: The allocation of public funds, both intersectoral and inter-regional, should meet the needs of a community.

## New Budget Format

**Ministerial Decree No. 29/2002 (Kepmen 29) changed the local government budget format.** The new budget format has particularly changed the structure of expenditure, while revenue's structure remained largely the same. The new format of revenue excludes carry over and borrowing accounts, and follows the unified budget structure that classified expenditure into government apparatus and public expenditure. In addition, the new budget format has a separate financing account, which includes all borrowing transactions, reserves, and other financing flows such as transfers from/into reserve funds and sale/acquisition of financial assets (figure 2.4).<sup>19</sup> Among the revenue items that are now considered as financing inflows are loans and carry-over from the previous year. Among expenditures that are considered as financing outflows are the carry-over into a following year and payment of loan principal.

**Figure 2.4. Old vs. new budget format**

Old Format		New Format
<b>1. Revenue</b>		<b>1. Revenue</b>
- Carry Over From Previous Year	→	
- Regional Own-Source Revenue	→	- Regional Own-Source Revenue
- Balancing Fund	→	- Balancing Fund
- Regional Borrowing	→	
- Other Revenue	→	- Other Revenue
	→	<b>2. Financing</b>
<b>2. Expenditure</b>		<b>3. Expenditure</b>
<b>2.1 Routine Expenditure</b>	→	<b>3.1 Apparatus Expenditure</b>
	→	- General Administration
	→	- Operational and Maintenance
	→	- Capital
<b>2.2 Development Expenditure</b>	→	<b>3.2 Public Expenditure</b>
	→	- General Administration
	→	- Operational and Maintenance
	→	- Capital

Sources: Papua Public Expenditure Analysis, Pemerintah Daerah Papua, and World Bank 2005.

<sup>19</sup> The new budget format was adopted by the provincial and local governments in Aceh in 2003. Nationally, the budget format was adopted by 197 of 334 local governments that submitted a budget to the MoF in 2003.

**The new format of expenditure affects the structure of local budgets significantly because it increases focus on beneficiaries rather than programs/projects.** Under the new structure, spending on activities/programs that benefit the general public will be reported under public expenditure, while spending on programs earmarked for the government apparatus will be reported under apparatus expenditure. It is expected that, with the new format, duplication of the activities' or projects' budgets can be avoided and better analysis can be carried out. Nevertheless, if no clear guidance is given to local governments on how to classify items under the new budget format, an analysis of public finances and expenditures may become problematic, and optimal results may not be reached.







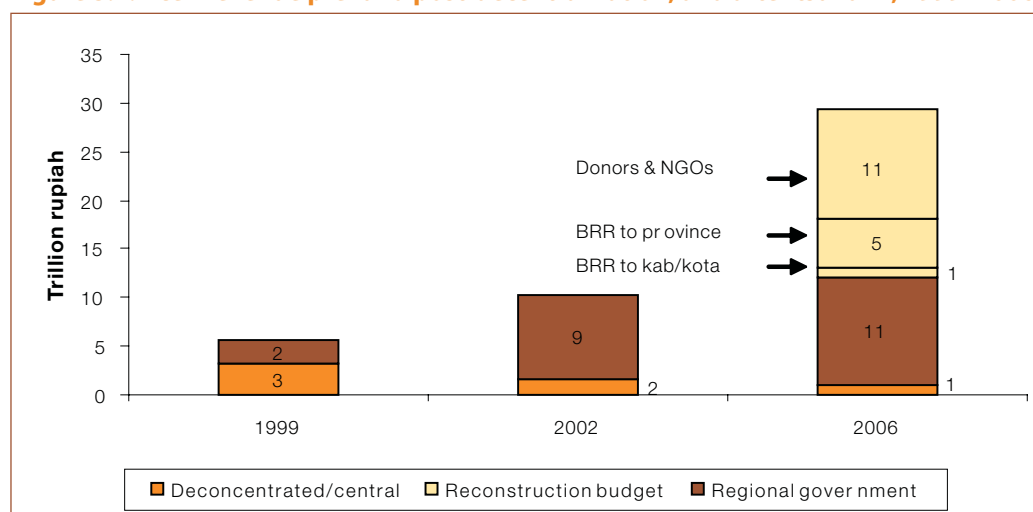
# 3 Revenue and Financing

## Revenue

### Aceh's overall revenue picture

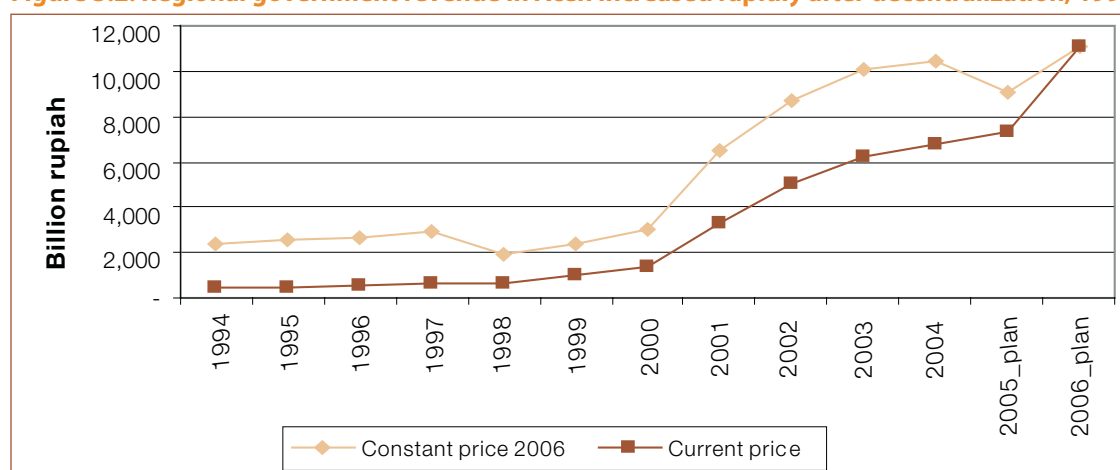
**Aceh has been among the main beneficiaries of decentralization and regional funds; from 1999 to 2006, total regional revenues increased by more than five times.** As in other parts in Indonesia, the Acehese regional government's revenue increased significantly after the 1999 decentralization legislation. Additional increases to regional revenue came when Aceh was granted Special Autonomy status in 2001. Following the December 2004 tsunami, Aceh received a large amount of reconstruction and rehabilitation funds from communities and donors both inside and outside the country. In 2006, the allocation of funds for reconstruction and rehabilitation are estimated to reach approximately US\$1.8 billion (Rp. 16 trillion). The revenue of Aceh pre- and post-decentralization, and after the tsunami; and the trend of regional government revenue in Aceh are illustrated in figures 3.1 and 3.2.

**Figure 3.1. Aceh revenue pre- and post-decentralization, and after tsunami, 1999–2006**



Source: World Bank staff estimates based on data from SIKD/MoF, BPS-SK, and BRR. Data are in real terms (constant 2006 prices).

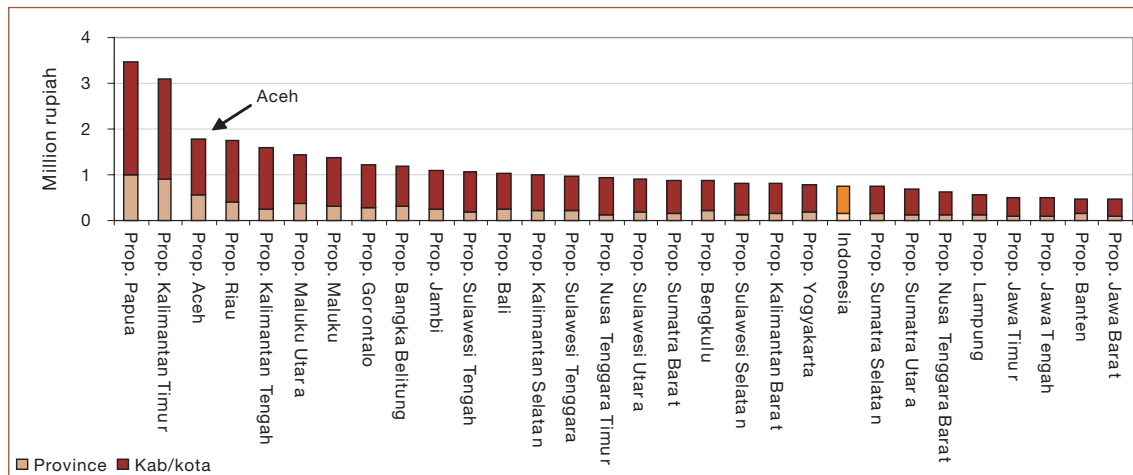
**Figure 3.2. Regional government revenue in Aceh increased rapidly after decentralization, 1994-2006**



Source: World Bank staff estimates based on data from SIKD/MoF and BPS-SK.

**In terms of regional budget (APBD), Aceh is among the richest provinces in Indonesia, and even more so in per capita terms.** Although Aceh has only 4.1 million people, it received Rp. 8.4 trillion in revenues in 2004. In contrast, East Java, with more than 37 million people, received Rp. 18 trillion. In per capita terms Aceh was among the top three regions in Indonesia, following only Papua and East Kalimantan (figure 3.3).

**Figure 3.3. Aceh's per capita revenue is among the highest in Indonesia**



Source: World Bank staff estimates based on data from SIKD/MoF, 2004.

The increase in Aceh's local revenue comes largely from transfers, which increased more than 3 times in real terms from 1999 to 2006, from Rp. 2.2 trillion to 10.4 trillion, respectively (table 3.1). The role of intergovernmental transfers has been significant in the regional government budget both before and after decentralization. From 1997 to 2000, transfers made up on average 91 percent of total revenue in Aceh, a figure that remained high after decentralization—an average of 87 percent. Aceh Province receives a relatively larger amount of nontax revenue-sharing compared to the local governments, particularly since 2002. Implementation of Special Autonomy in 2002 meant that nontax revenue-sharing funds specified in the legislation are transferred into the provincial account. However, the overall revenue composition shows that local governments have more resources both before and after the decentralization was implemented.

**Table 3.1. Composition of provincial and local government revenue in Aceh, 1999–2006 (Rp. billion)**

	1999			2002			2006 (projection)		
	Prov.	Kab/Kota	Total	Prov.	Kab/Kota	Total	Prov.	Kab/Kota	Total
PAD	78	107	185	160	146	306	148	133	281
Tax revenue-sharing	49	203	252	72	260	333	108	473	582
Nontax revenue-sh.	18	8	26	2,078	1,335	3,413	2,006	2,156	4,161
SDO	98	779	877						
INPRES	353	732	1,085						
DAU				260	3,583	3,842	461	4,560	5,021
DAK				0.34	122	12	0	593	593
Others				44	653	697	147	341	488
<b>Total</b>	<b>596</b>	<b>1,829</b>	<b>2,425</b>	<b>2,615</b>	<b>6,098</b>	<b>8,713</b>	<b>2,870</b>	<b>8,255</b>	<b>11,125</b>

Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK. Data are in real terms (constant 2006 prices).

**Aceh's most important sources of revenue are the DAU and revenue-sharing.** Since 2001, these sources of funding have accounted on average for 44 percent and 41 percent of the total revenue, respectively (Table 3.2). The increased revenue from other sources after decentralization is possibly due to the new tax-sharing arrangement among the central, provincial, and local governments. Own-source revenue is the smallest source of funds and accounts for only 4 percent of the total revenue. The small share of own-source revenue to total revenue indicates

that local government still needs to improve effectiveness and efficiency of the collecting system. Nevertheless, although still the smallest contributor, own-source revenue also has experienced quite a significant increase from 1999 to 2006.

**Table 3.2. Share of various revenue sources of total regional revenue in Aceh, 1997–2005**

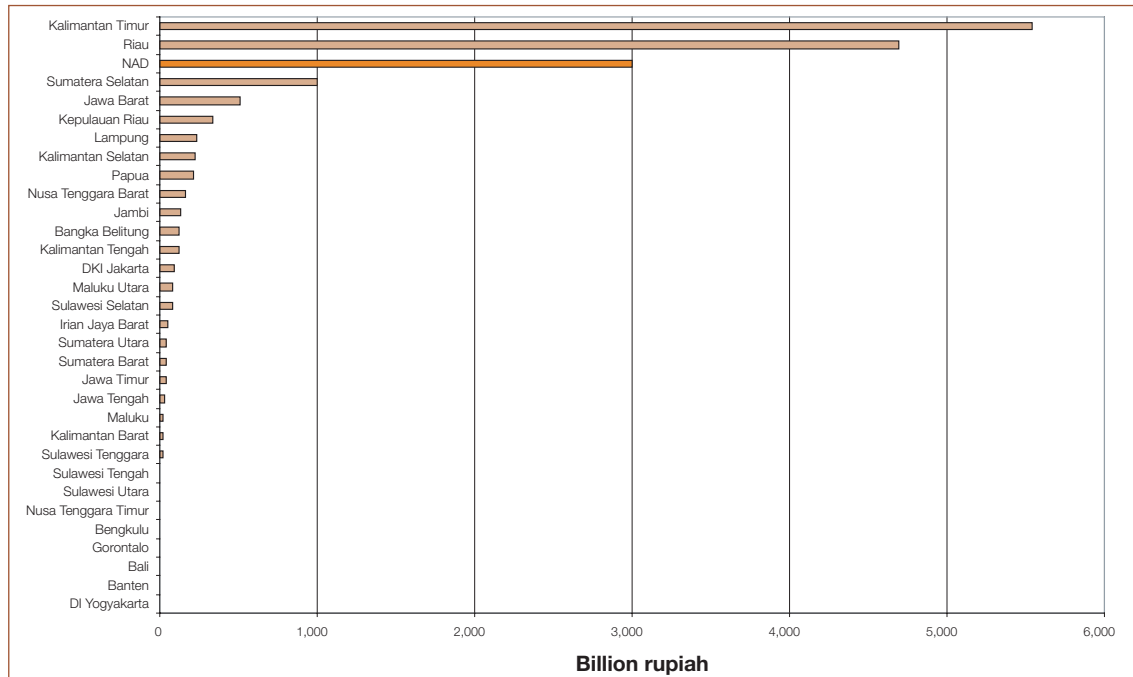
	1997	1998	1999	2000	% av. pre decentr.	2001	2002	2003	2004	2005	% av. post decentr.
Own source revenue	10	10	8	6	8	3	4	3	5	4	4
Revenue Sharing	18	17	11	8	14	29	43	45	44	45	41
SDO	39	39	36	31	36						
INPRES	33	33	45	55	42						
DAU						63	44	33	37	42	44
DAK						1	1	3	3	3	2
Others	0.15	0.02	0.02	0.10	0.07	4	8	16	11	6	9
<b>Total transfer</b>	<b>90</b>	<b>90</b>	<b>92</b>	<b>94</b>	<b>91</b>	<b>93</b>	<b>88</b>	<b>81</b>	<b>84</b>	<b>90</b>	<b>87</b>
<b>Total revenue</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: World Bank staff estimates based on data from SIKD/MoF and BPS-SK.

Note: \* = in 2003, the amount of "other revenue" is very high. It is likely that some of the amount belongs to the revenue-sharing. Thus, it is assumed that 15 percent of the shares from "other revenue" is allocated to revenue-sharing.

**In natural resources revenue-sharing, Aceh received the third largest allocation.** Only three provinces receive substantial amounts in natural resources revenue-sharing. The other two are Kalimantan Timur and Riau (figure 3.4). Of the total Rp. 4.6 trillion of revenue-sharing in 2004, approximately Rp. 4 trillion was contributed from the natural resources shares. Only Rp. 561 billion came from the tax-sharing. After the implementation of special autonomy, the volume of natural resources revenue-sharing in Aceh increased from Rp. 26 billion in 1999 to Rp. 3.4 trillion in 2002, and more than Rp. 4 trillion in 2004, thus increasing overall by more 100 times.

**Figure 3.4. Aceh has the third largest allocation from natural resources sharing, 2004**

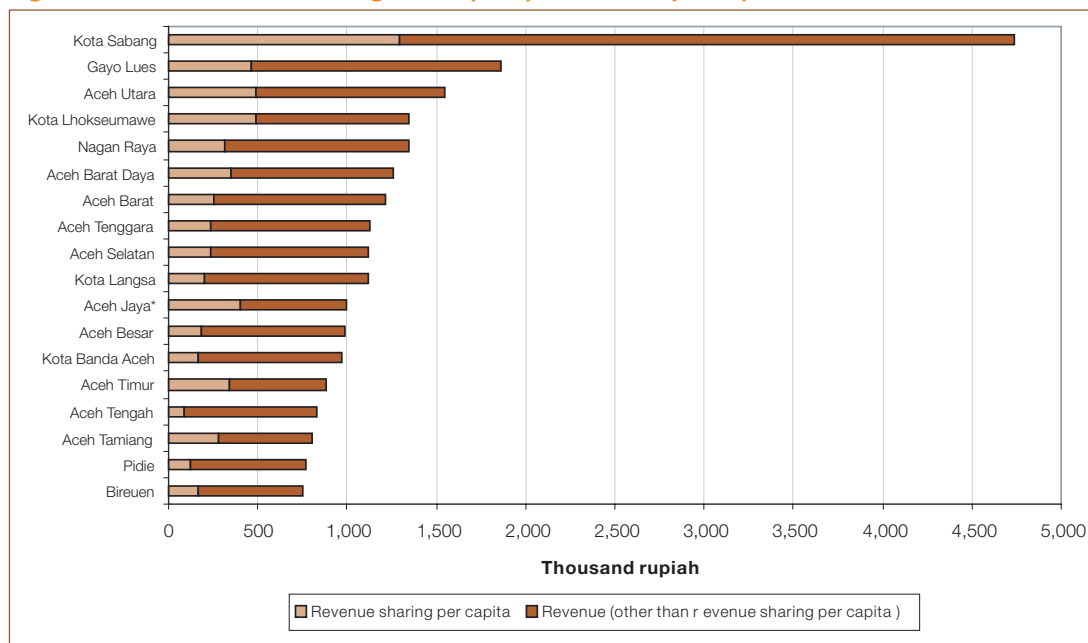


Sources: MoF; World Bank staff estimates, current prices.

### Fiscal disparity and inequality

Although Aceh is among the regions with the highest revenue per capita, the disparity in the distribution of revenue per capita among local governments is significant. In 2004 one of the richest districts (Kota Sabang) had nearly 6 times the revenue (per capita) of the poorest district (Kab. Bireuen) (Figure 3.5).

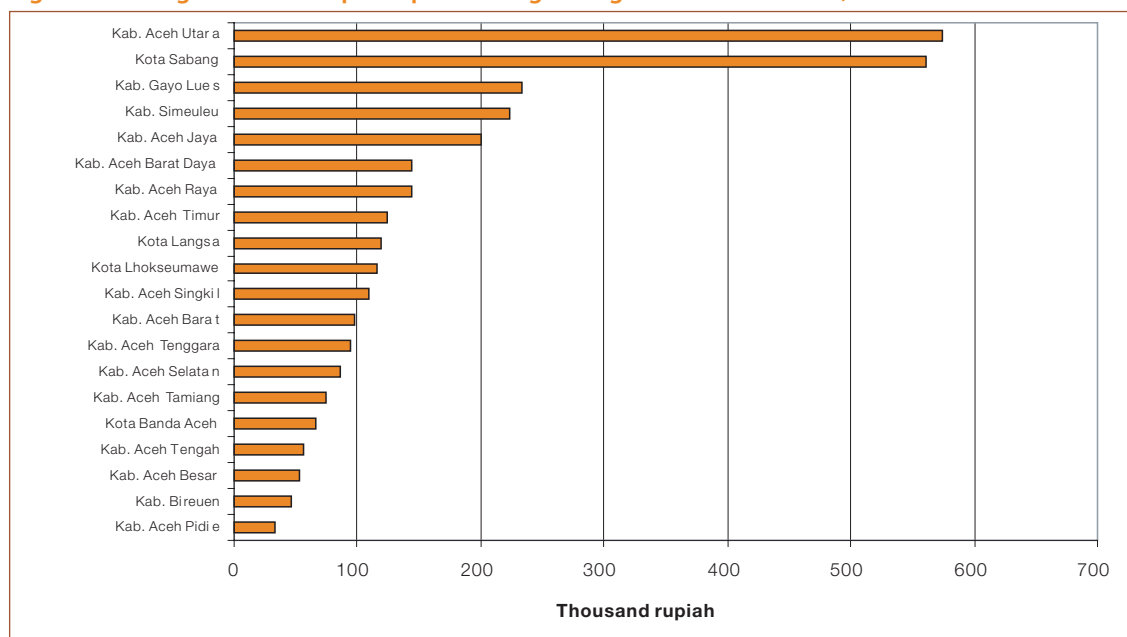
**Figure 3.5. Aceh's districts have great disparity in revenue per capita, 2004**



Source: World Bank staff estimates based on data from SIKD/MoF.  
Note: Data was available for 18 of 21 local governments. \* = 2003 data.

**As with other parts of Indonesia, Aceh's districts experience significant inequalities in the allocation of revenues from oil and gas.** The allocation of oil and gas revenue in 2004 shows that, as a producing district, Kab. Aceh Utara received over 15 times the allocation of oil and gas revenue as Aceh Pidie, a nonproducing district (figure 3.6). However, other nonproducing regions, such as Kota Sabang, received large per capita allocations of oil and gas revenues.

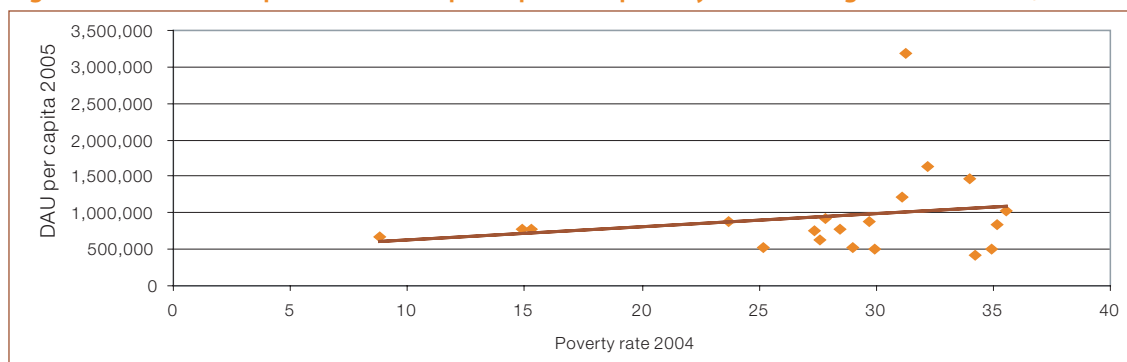
**Figure 3.6. Oil/gas allocation per capita among local government in Aceh, 2004**



Sources: MoF, World Bank staff estimates.

**The allocation of DAU among local governments should reduce inequality arising from the revenue-sharing. In reality, as a block grant, the DAU does not address the imbalances in revenues across kabupaten.** To correct imbalances, regions with higher poverty rates should receive higher transfers. Currently, there is effectively no correlation between the poverty rate and the amount of DAU received by kabupaten. Regions with higher poverty rates did not receive considerably higher transfers than regions with lower poverty rates (Figure 3.7).

**Figure 3.7. Relationship between DAU per capita and poverty rates among Aceh's districts, 2004–05**

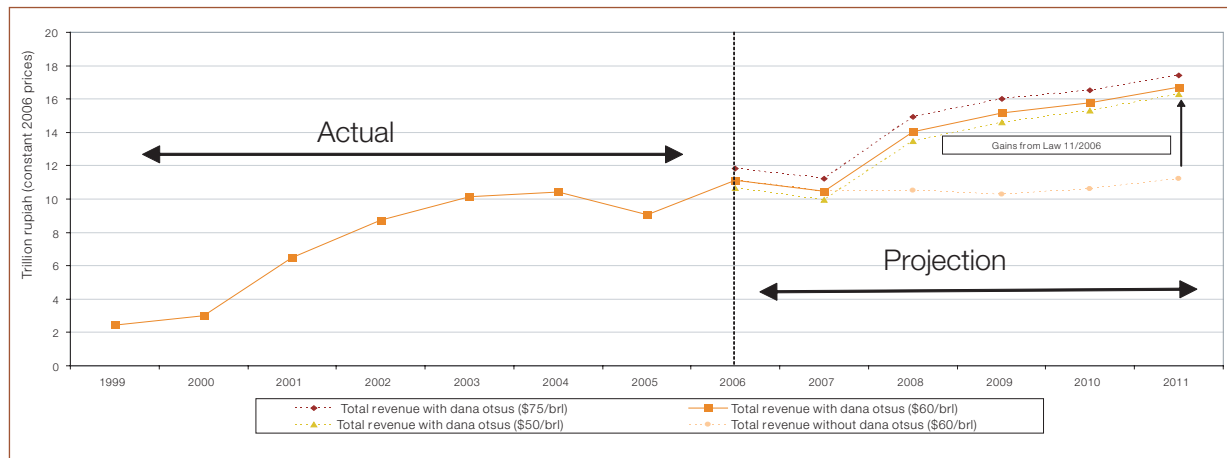


Source: World Bank staff estimates based on MoF data and BPS.

## Revenue Projection

**According to the Law on Governance in Aceh, approved in August 2006, in 2008 Aceh will begin receiving additional revenue.** The new source of revenue will be 2 percent of national DAU allocation for 15 years followed by 1 percent of national DAU allocation for the following 5 years (until 2028). The additional funds are intended to finance the development and maintenance of infrastructure, as well as the economic empowerment, education, social, and health sectors. The new law also revises oil and gas revenue-sharing between central and regional government. Aceh will continue to receive 70 percent from oil and gas revenue. However, funds from natural resources revenue are likely to fall, due to the decline in oil and gas production. Taking the additional funds into account, Aceh's revenues are projected to increase starting in 2008. Revenue is set to increase to more than Rp. 14 trillion in 2009. The 2 percent additional funds from the DAU allocation will somewhat compensate for the declining revenue from oil and gas production (Figure 3.8).

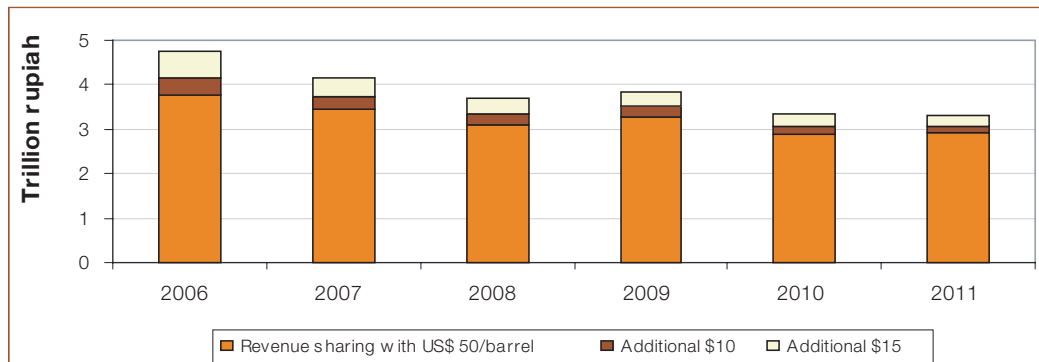
**Figure 3.8. Aceh's projected revenue in 2008 with and without new 2% DAU allocation**



Source: World Bank staff calculations based on data from SIKD/MoF and PT, Arun LNG.

Since oil and gas are Aceh's principal natural resources, the shared revenues will decrease to almost Rp. 4 trillion in 2007 and will fall rapidly to Rp. 3.5 trillion or less after 2009 (figure 3.9). This drop will be mitigated by a continuing increase in DAU as well as other revenues.

**Figure 3.9. Sensitivity of oil price to natural resources revenue-sharing (Rp. trillion)**



Source: World Bank staff calculations based on data from SIKD/MoF and PT, Arun LNG.



## Own-Source Revenue (PAD)

**Similar to other regions in Indonesia, Aceh has not experienced improved local government PAD due to fiscal decentralization.** Major taxes remain the purview of the central government. For example, land and property taxes (PBB), which have been largely decentralized in other countries, still are collected by the Indonesian government and then transferred to the provinces. Prior to decentralization, PAD contributed less than 6 percent of total local government revenue and 19 percent of total provincial revenue.

**The provincial PAD increased after decentralization but experienced a sharp decrease in 2005.** The shrinking of PAD in 2005 was the consequence of the tsunami, which affected many potential tax bases and hampered tax collection. The increase in PAD after decentralization was driven mainly by the expansion of the tax base by the motor vehicle tax and the addition of the surface and ground water use tax. Among provincial PAD, provincial taxes have steadily been the major contributor, equaling more than two-thirds of the total PAD. The category “other eligible PAD” (*giro* services and third-party contributions)—the second largest contributor—has increased substantially since decentralization (table 3.3).<sup>20</sup>

**Table 3.3. Composition of provincial PAD in Aceh**

Own source revenue	1999		2002		2003		2004		2005	
	Rp mio	%	Rp mio	%	Rp mio	%	Rp mio	%	Rp mio	%
Provincial Taxes	70,216	90	125,400	78	141,322	84	212,663	70	132,673	81
Repayments	4,017	5	5,615	4	5,349	3	5,929	2	3,249	2
Profit from Reg. Owned Enterp.	171	0	2,388	1	2,545	2	2,818	1	2,610	2
Other Own Source Revenues	3,563	5	26,585	17	19,155	11	83,807	27	24,527	15
<b>Total</b>	<b>77,967</b>	<b>100</b>	<b>159,988</b>	<b>100</b>	<b>168,371</b>	<b>100</b>	<b>305,207</b>	<b>100</b>	<b>163,060</b>	<b>100</b>

Source: World Bank Staff calculations based on data from SIKD/MoF and World Bank Decentralization database.

Note: Data are in real terms (constant 2006 prices).

**The motor vehicle ownership transfer tax is the main contributor to provincial taxes.** In 2004 the motor vehicle ownership transfer tax contributed 46 percent to total provincial taxes. It was followed by the motor vehicle tax (31 percent) and motor vehicle fuel tax (20 percent). The street lighting tax played the major role in local government tax in Aceh. The street lighting tax contributed over 70 percent of local taxes. It was followed by the hotel and restaurant tax, and the extracting and processing of mining resources type C tax.

**Local government PAD increased after decentralization, but declined in 2004 and 2005 as the result of conflict and the tsunami.** The composition of local government PAD also changed after decentralization. Before decentralization, local taxes contributed more than 70 percent of total local government PAD. The role of local taxes in the total tax collection decreased after decentralization as “other eligible PAD” gained importance (table 3.4).

<sup>20</sup> Third-party donations may come in the form of grants from donors, NGOs, or private individual(s) that are donated directly to local government; and contributions from the contractors in the amount of 5 percent of the project. Giro service may include tax on bank transactions and bank interest from local government deposits.



**Table 3.4. Composition of local government PAD in Aceh**

Own source revenue	1999		2002		2003		2004		2005	
	Rp mio	%	Rp mio	%	Rp mio	%	Rp mio	%	Rp mio	%
Local Taxes	76,879	72	42,319	29	37,207	21	45,587	23	44,273	26
Rebutions	29,846	28	42,841	29	32,393	18	41,093	21	39,588	24
Profit from Reg. Owned Enterp.	212	0.20	3,824	3	2,862	2	5,118	3	6,433	4
Other Own Source Revenues	0	0	56,535	39	108,022	60	104,503	53	77,976	46
Total	106,938	100	145,519	100	180,484	100	196,302	100	168,269	100

Source: World Bank Staff calculations based on data from SIKD/MoF and World Bank Decentralization database.

Note: Data are in real terms (constant 2006 prices).

**The small contribution of local taxes to PAD is potentially due to the low tariff rate.** Some kabupatens and kota have started to adjust tariff rates by revising obsolete regional regulations. This tariff adjustment has been applied in several local governments, such as Kab. Aceh Tamiang, Kab. Aceh Timur, Kota Langsa, Kab. Bener Meriah, and Kab. Aceh Tengah. Tax collection has increased with improved security and investment climate since the signing of the peace agreement.

**Law 18/2001 officially specified zakat as a source of PAD for the provincial and local governments.** However, in practice, zakat has not been included as PAD in their budgets for four reasons:

1. Many local governments have not established zakat-managing institutions (*Baitul Maals*).
2. Communities are not sure whether the zakat they pay was properly delivered to the 8 *asnaf* (zakat receivers according to Islamic rule).
3. Zakat-managing institutions lack human resources, information, and technology.
4. Whether zakat is supposed to be recorded by local governments as part of government revenue is not clear. According to the Shari'a, zakat is not supposed to be government revenue. However, the LOGA recognizes zakat as government revenue.

Thus far, the management and administration of zakat has been conducted by individual Islamic organizations, regional government offices, local state-owned companies, and private companies. Local governments have collected zakat mainly as 2.5 percent of the monthly salaries of government employees.

**There is high degree of disparity in PAD per capita among local governments.** Kota Sabang has more than 15 times higher PAD per capita than Kab. Pidie. Local governments with higher per capita PAD seem to be predominantly urban agglomerations (kota). This finding could imply that the current structure of local taxes and charges benefits urban areas (figure 3.10). The conflict between GAM and the Government of Indonesia has been the major impediment to PAD growth in the region. The conflict severely limited all economic activity, thus negatively impacting overall PAD. The conflict also prevented government officials from collecting taxes.



Although the regional government had enjoyed higher revenue from tax-sharing after decentralization, tax-sharing's contribution to total revenue has declined over the years. Prior to decentralization, tax-sharing contributed more than 8 percent to total provincial revenue; in 2005 the former was recorded below 2 percent. Similarly, the contribution of tax-sharing to local government revenue declined from 11 percent in 1999 to 6 percent in 2005. This decline can be explained by the remarkable increase of central government transfer (DAU) to local governments after decentralization (table 3.5)

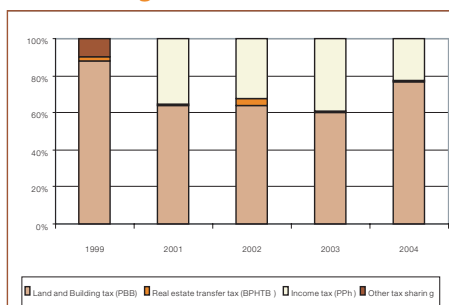
**Table 3.5. Tax-sharing of province and local governments in Aceh (Rp. billion)**

Year	Province			Local government		
	Tax-sharing	Total revenue	Tax-sharing to total revenue (%)	Tax-sharing	Total revenue	Tax-sharing to total revenue (%)
1999	49	596	8.2	203	1,829	11.1
2001	77	961	8.0	327	5,515	5.9
2002	72	2,615	2.8	260	6,098	4.3
2003	81	3,103	2.6	318	7,019	4.5
2004	77	3,473	2.2	484	6,956	7.0
2005	56	3,376	1.7	343	5,705	6.0

Sources: World Bank staff calculations based on MoF data/SIKD (constant 2006 prices).

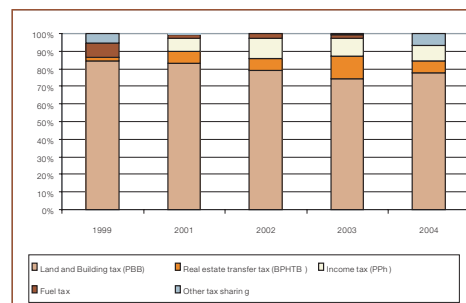
Historically, PBB has been the most important source of tax-sharing revenue for the province. Before decentralization, PBB represented almost 90 percent of total provincial tax-sharing. Since decentralization, contributions from personal income tax have increased to approximately one-third of total tax-sharing revenue, which also increased the province's revenue and balanced the importance of PPB (figure 3.12). PBB also has been the most important source of tax-sharing revenue for local government in Aceh. In 1999 PBB made up almost 90 percent of total tax-sharing. Its role has declined since decentralization, but PBB still contributes more than two-thirds of total tax-sharing.

**Figure 3.12. Composition of province's tax-sharing, 1999–2004**



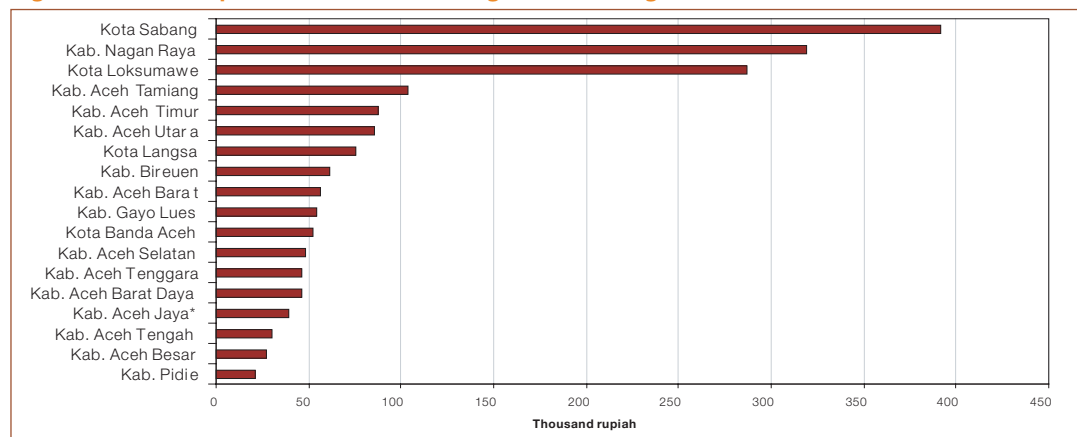
Source: World Bank staff estimates based on data from SIKD/MoF.

**Figure 3.13. Composition of local government's tax-sharing, 1999–2004**



There is a wide disparity of per capita tax revenue-sharing among kabupaten/kota in Aceh. Pidie has the smallest per capita tax revenue-sharing—15 times less than Sabang (figure 3.14). Regional regulation (Qanun 4/2002) does not specify a clear distribution mechanism of tax revenues sharing among kab/kota in Aceh. The only guidance on distribution is provided for income tax revenue-sharing. The distribution of tax revenue-sharing from land and building tax and ownership right of land and building fee is not specified. The distribution seems to favor urban areas and oil- and gas-producing districts.

Figure 3.14. Per capita tax revenue-sharing across local government in Aceh, 2004

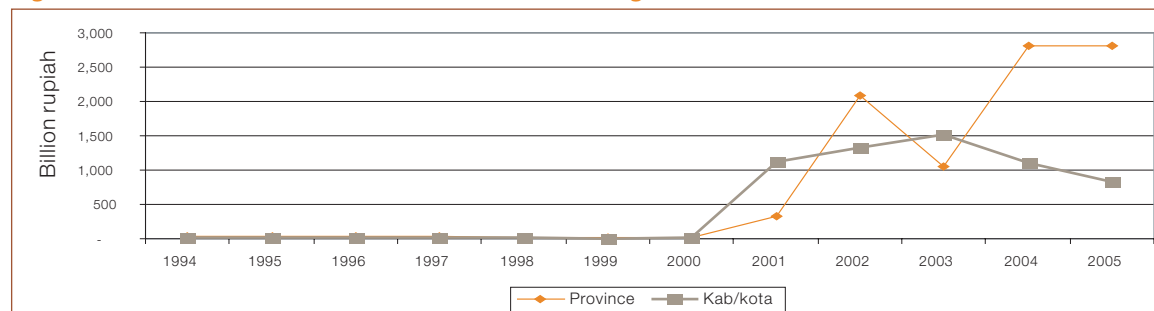


Source: World Bank staff estimates based on data from SIKD/MoF and BPS.  
Note: \* = 2003 data.

### Natural resources (nontax) revenue-sharing

Prior to fiscal decentralization, natural resources revenue-sharing received by provincial and local governments was very limited, both in the amount and types of revenues. On average, before decentralization, revenue-sharing from natural resources accounted for only 1.1 percent of total revenue. The amount increased significantly after decentralization and the expansion of types of natural resources covered, reaching Rp. 4 trillion, or 39 percent of total revenue in 2004 (figure 3.15).

Figure 3.15. Trend of natural resources revenue-sharing in Aceh, 1994–2005



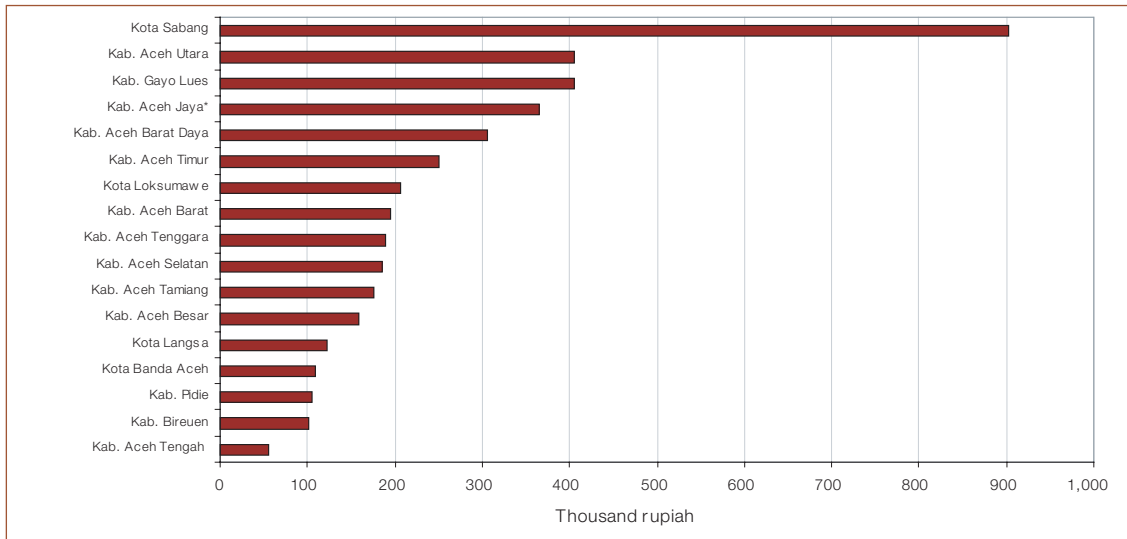
Source: World Bank staff calculations based on data from SIKD/MoF. Data are in real terms (constant 2006 prices).

The expansion in types of revenue-sharing has changed the composition of natural resources revenue-sharing and beneficiaries within Aceh. Forestry resource rent, which used to be the main contributor of natural resources revenue-sharing, has been replaced by oil and gas as the main contributors. The shares of forestry resource rents have declined significantly from an average of 64 percent before 2001 to 0.2 percent after decentralization. Instead, oil and gas have become the main sources of revenue-sharing from natural resources with an average share of 26 percent for oil and 50 percent for gas (figure B6).

#### All local governments in Aceh received higher revenue-sharing from natural resources after decentralization.

The weighted annual average for local government shows an increase from Rp. 1.1 billion to Rp. 69 billion. As the producing region, Aceh Utara became the major recipient from natural resource revenue-sharing after decentralization, while before Aceh Barat was the largest beneficiary (table B1). Sabang has the highest per capita natural resources revenue-sharing among local governments in Aceh, followed by Aceh Utara and Gayo Lues. Similar to tax revenue-sharing and own-source revenue, natural resource revenue-sharing per capita shows wide disparities among local governments (figure 3.16).

Figure 3.16. Per capita natural resources across kab/kota in Aceh, 2004



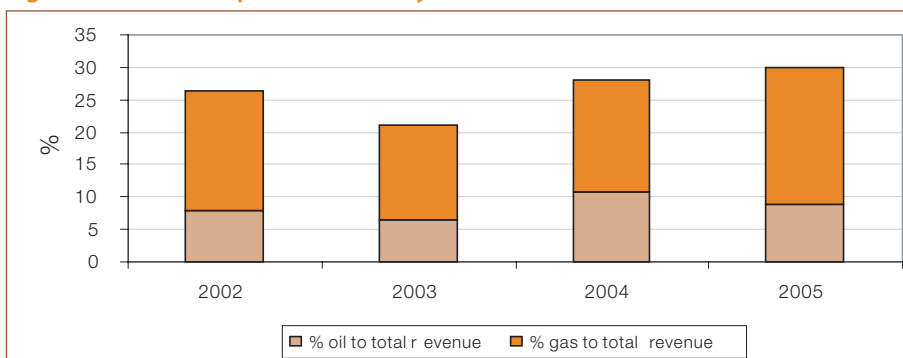
Source: World Bank staff calculations based on MoF data, and BPS.  
Note: \*=2003 data.

### Special Autonomy Fund (Dana Otsus)

**Aceh has greatly benefited from special autonomy status with regard to higher revenue-sharing from oil and gas.** In total, Aceh receives 70 percent of revenue-sharing from oil and gas, which is far above the national sharing arrangement. This specific scheme has been viewed as an attempt to resolve the long-standing conflict in the region. Although the former autonomy law was passed in 2001, Aceh started to enjoy its large revenue from oil and gas in 2002. On average, approximately 70 percent of these revenues comes from gas revenue sharing; the other 30 percent comes from oil revenue-sharing.

**The special autonomy fund, one of Aceh's main sources of revenue, has increased steadily since 2003.** The accumulation of special autonomy funds allocated to Aceh from 2002–05 reached Rp. 6.7 trillion in nominal terms.<sup>22</sup> In the first year, the allocation reached Rp. 1.3 trillion, significantly boosting the regional government's revenue. The allocation declined in 2003, but increased again afterwards, reaching Rp. 2.2 trillion in 2005. As a result, its share in total regional government revenue also increased from 27 percent in 2002 to 30 percent in 2005 (figure 3.17).

Figure 3.17. Aceh's Special autonomy fund as % of total revenue



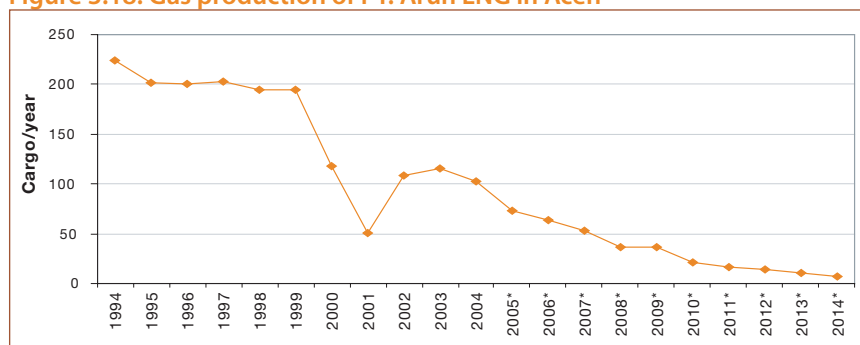
Sources: Various MoF Decrees (KMK 241/2002, KMK 237/2003, KMK 275/2004, Aceh Governor Decree 2005).

22 This amount refers only to the special autonomy fund and is in addition to the funds that Aceh receives through the "normal" sharing of natural resources revenue between the central and regional governments.

**Declining oil and gas production in the future means that the revenue from this source will likely decrease.**<sup>23</sup>

It is estimated that the volume of production of gas in Kab. Aceh Utara will decline to only 7 cargoes/year by 2014 (figure 3.18). Aceh will continue benefiting from other revenue sources. Nevertheless, it is essential that the provincial and local governments in Aceh make a strategic allocation of public spending in anticipation of the decline in revenue from special autonomy funds.

**Figure 3.18. Gas production of PT. Arun LNG in Aceh**



Source: PT. Arun LNG, 2004.

Notes: Figures from 2005 onward are estimated. Figures are measured in cargo. 1 cargo = 9.82 MCFD (million cubic feet per day).

**The 1999 national decentralization system was designed to empower local governments. In contrast, the special autonomy legislation gives almost 40 percent of fiscal resources to the provincial government.**

The province, therefore, should be made more accountable for its resource allocation as well as be more responsive to public service needs. The special autonomy fund is boosting revenues in producing regions. Kab. Aceh Utara, as the main producing kabupaten of oil and gas, has received significant additional revenue from the special autonomy fund. After the implementation of the special autonomy law, these funds represented on average 41 percent of Kab. Aceh Utara's total revenue and 61 percent of total transfers (table 3.6). Nevertheless, current declining trends mean that Kab. Aceh Utara must use its funds in a strategic and efficient manner while finding alternative sources to finance its future expenditures.

**Table 3.6. Share of special autonomy fund to total revenue and total transfers in Aceh Utara, 2003–05 (Rp billion)**

	2003	2004	2005
Oil	160	135	120
Gas	370	209	332
Total	530	343	452
% of total transfer	72	50	62
% of total revenue	35	30	58

Sources: Dinas Pendapatan Daerah Kabupaten Aceh Utara, MoF, and World Bank staff calculations.

Note: Special autonomy fund in 2002 was recorded in 2003 due to the transfer delay from central government to province.

**Five years into special autonomy, some challenges remain relating to the transfer and allocation of special autonomy funds.**

The central government has not provided reliable data on either oil and gas production or exploration costs. Without these data, regional governments cannot accurately calculate revenue-sharing. The central government's lack of transparency on other costs such as management fees and taxes also limits accuracy in calculating shared revenue. Local governments frequently experienced delays in the transfer of special autonomy

<sup>23</sup> The production of natural gas started in 1978 with a level of production of 250 MCFD. The highest production was reached in 1994, amounting to 2,200 MCFD, equivalent to 224 cargoes. The lowest production was in 2001 at only 51 cargoes. After 27 years, an estimated 90+ percent of natural gas resources have been exploited. In the beginning of 2005, production was 900 MCFD. The projection done by PT. Arun NGL indicates a declining trend, reaching 100 MCFD in 2018.

funds. The delays disturbed their cash flows and disrupted the implementation of development programs. Shared revenue is to be transferred every quarter, starting with the first quarter sometime between December to February of the following year. However, delays are very common. For example, Kab. Aceh Utara's March 2006 transfer was not received until June. Future transfers and allocations of the special autonomy fund should be improved, especially with regard to the urgent reconstruction needs and the implementation of the Helsinki MoU (Box 2).

### Box 2. Management and allocation of the Special Autonomy Fund from Law 18/2001

The current distribution scheme benefits mainly the producing regions and widens existing fiscal disparities among local governments. Two variables used in the formula, population and area, do not address inequity or represent real needs in the region. Relevant indicators to identify fiscal needs such as poverty rate, Human Development Index (HDI), gross domestic regional product (GRDP), and fiscal capacity were excluded.

Transparency and accountability also represent challenges in the management of the *dana otsus*. Delays in transferring oil and gas revenues are frequent. The delays constrain planning, financial management, and cash flow at the local level and interrupt development programs. The regional government does not have access to detailed information on oil and gas production and costs. At the local level, the budget reporting system does not separate *dana otsus* from other sources of revenue, creating difficulty in measuring the effective use and evaluation of the impact of the funds. Many Acehnese argue that the *dana otsus* has not been well managed and spent. For example, lack of clarity in the regulations regarding education spending enabled the diversion of funds from public services.

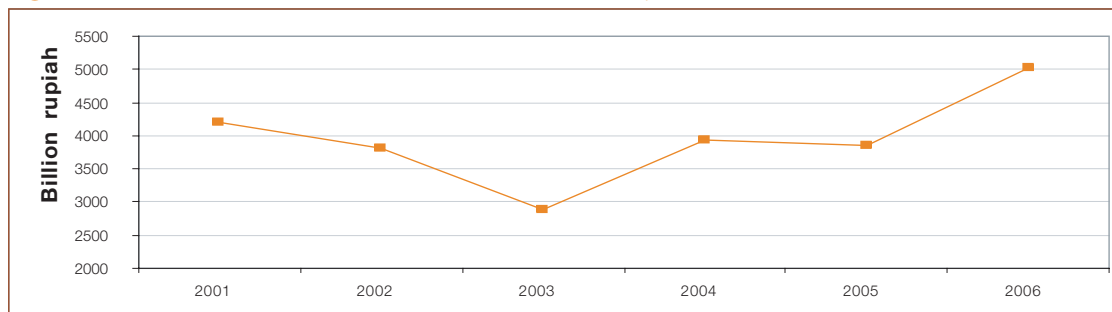
The distribution of the additional DAU funds starting in 2008 is still being discussed. Aceh can use the experience from distribution of *dana otsus* to improve the allocation of the additional resources:

1. Close fiscal disparities among districts by increasing the share of formula allocation and improving the formula used for distribution. The formula should be transparent, simple, and use more relevant variables that represent the needs in the region.
2. Improve accountability, information flow, and the management and evaluation system; and reduce delays. Create a separate account and reporting system for *dana otsus* in the local government budget.
3. Clarify ambiguous definitions in the regulation to improve allocation and monitoring and evaluation.

## General Allocation Fund (DAU)

**The DAU became the main source of revenue in Aceh after the decentralized system was introduced in 2001.** From the national allocation, Aceh received Rp. 5 trillion in 2006, or approximately 3.4 percent of national allocation. The average contribution of DAU to total revenue in post-decentralization Aceh was 44 percent. In real terms, the allocation of DAU to Aceh experienced a decline in 2002 and 2003 but increased significantly in 2006 (figure 3.19). The sharp increase in 2006 reflects the implementation of an increase of national DAU allocation to 26 percent of domestic net revenue and 100 percent coverage of civil service salaries, as mandated by Law 33/2004.

Figure 3.19. DAU allocation trend for NAD (constant 2006 prices)



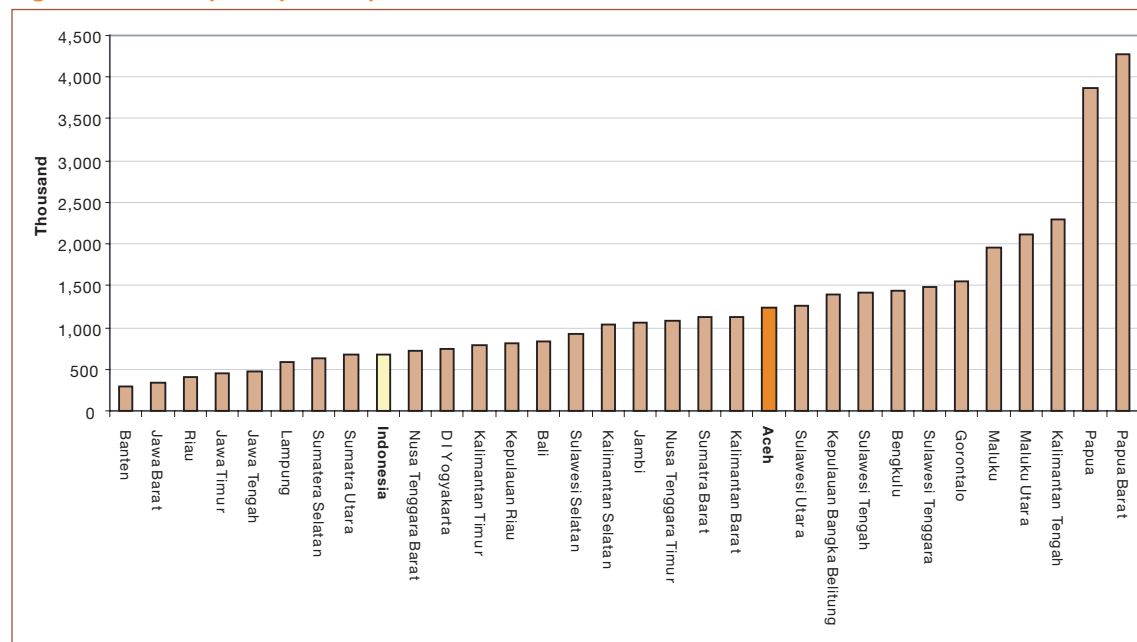
Source: World Bank staff calculations based data from MoF (constant 2006 prices).

**The DAU formula was enhanced in 2002, when revenue-sharing was included in calculating fiscal capacity.**

As a result, many resource-rich regions received less DAU than in the previous year. However, in Aceh, in 2002 10 local governments received the same DAU allocation that they had in 2001. The allocation of DAU in 2002 was made on the “hold-harmless” condition.<sup>24</sup> The allocation of DAU from 2003–2005 followed a similar concept and process. The only modifications were slightly different components used in the formula, or increased weights of some components (such as civil servants’ salaries).

**In 2006 Aceh benefited from higher DAU allocation and per capita distribution than the national average.** In per capita terms, Aceh received Rp. 1.2 million, more than double its 2001 allocation (figure 3.20).

**Figure 3.20. DAU per capita for provinces in Indonesia, 2006**



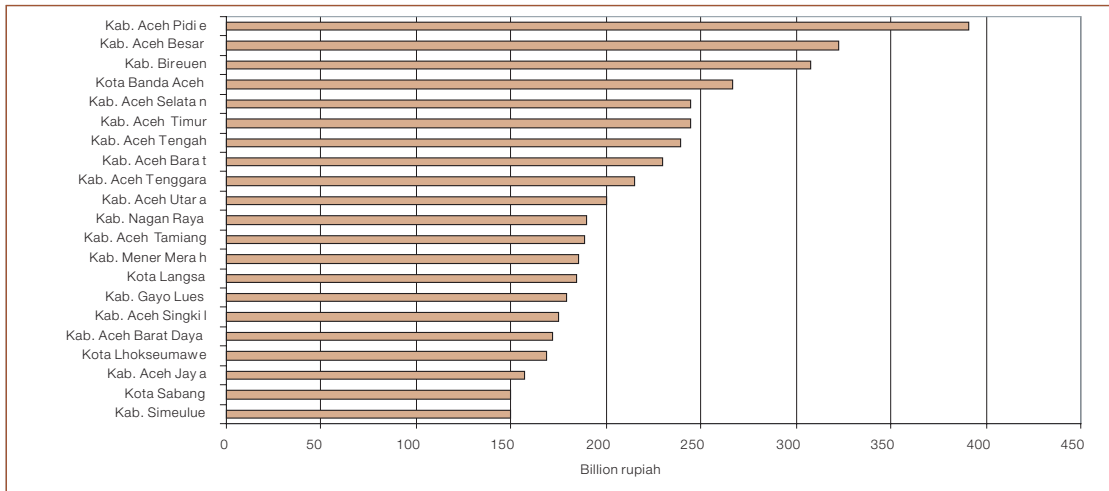
Source: World Bank staff calculations based on MoF data.

**All local governments, except Aceh Utara, received a large increase in DAU allocation in 2006.** As a resource-rich region, Kab. Aceh Utara received only the “hold-harmless” allocation in 2006. On average, the DAU allocation in Aceh increased by 67 percent in 2006 (figure B7). Within Aceh, DAU allocation varies widely among local governments. Kab. Aceh Pidie receives the largest allocation of Rp. 390 billion, followed by Kab. Aceh Besar and Kab. Bireun with more than Rp. 300 billion each. Despite its hold-harmless allocation, Aceh Utara still receives substantial DAU resources (figure 3.21).

<sup>24</sup> Under the “hold harmless” condition, the province or local government will not receive an allocation lower than the previous year’s allocation.



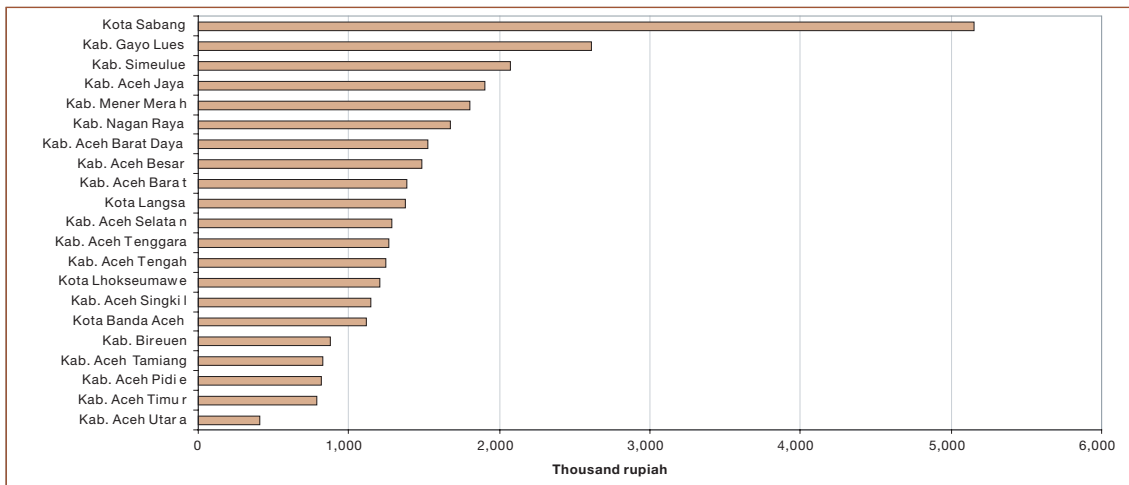
**Figure 3.21. DAU allocations to local government in Aceh, 2006**



Source: World Bank staff calculations based on MoF data.

The variations among local governments are even greater in per capita terms. Aceh Utara, Aceh Timur, and Pidie had some of the highest poverty rates in 2004 (30 percent–35 percent). Yet, they receive the smallest allocations (figure 3.22). Sabang received an allocation of over Rp. 5 million, more than double the allocation of Kab. Gayo Lues, which received the second highest per capita allocation.

**Figure 3.22. Per capita DAU allocation across local government in Aceh, 2006**

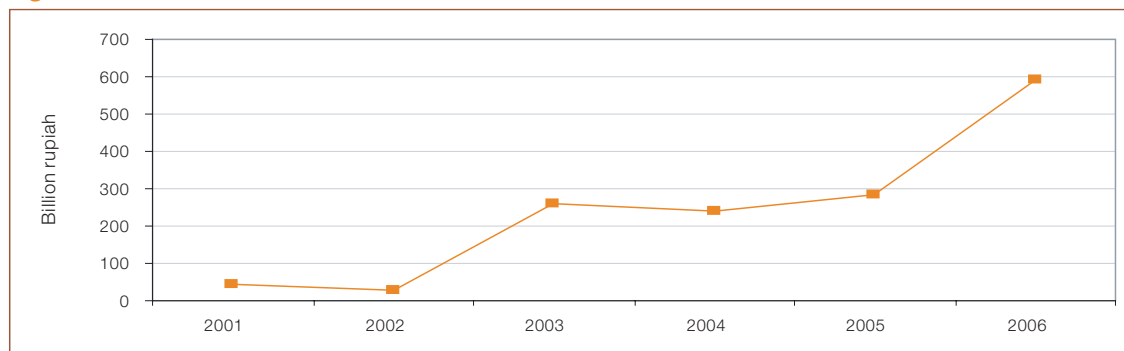


Source: World Bank staff calculations based on MoF data and BPS.

## Special Allocation Fund (DAK)

**Special autonomy Law 18/2001 granted Aceh priority in DAK allocation.** Aceh's earmarked grant (*dana alokasi khusus*, or DAK) allocation has increased significantly, but its contribution to overall revenue remains small. In 2006 Aceh received a DAK allocation of Rp. 593 billion, or almost 10 times what it was in 2001 (figure 3.23). The sharp 2006 increase was due in part to an expansion of the sectors included in the DAK allocation.

**Figure 3.23. Trend of DAK allocation to Aceh, 2001–06**

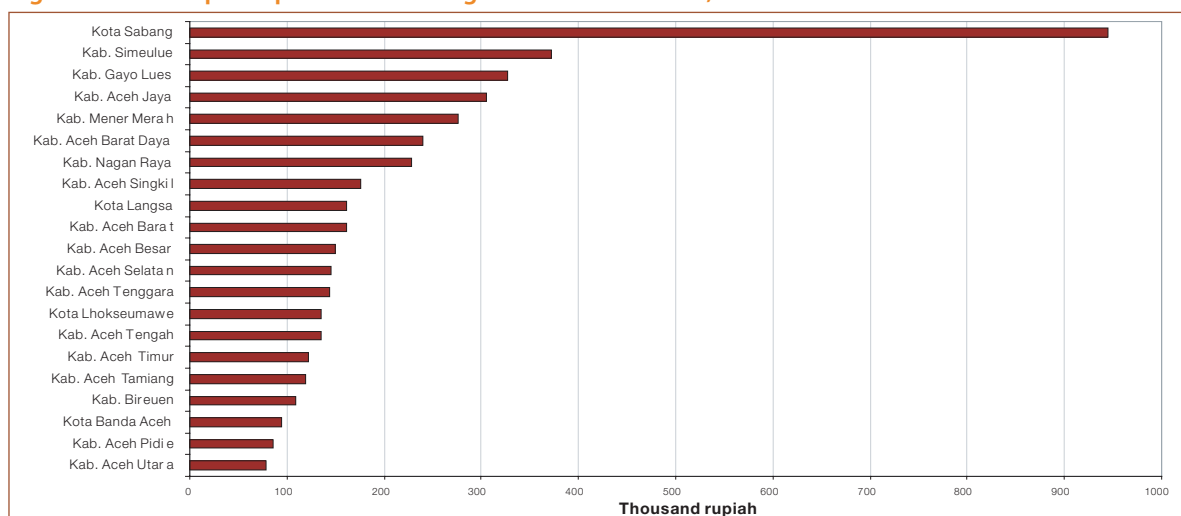


Source: World Bank staff calculations based on MoF data.

Note: Data are in real terms (constant 2006 prices).

**In comparison with other provinces in Indonesia, Aceh is among the top 10 provinces in DAK allocation, in both absolute and per capita figures.** In 2006 Aceh's 593 billion Rp allocation was equivalent to Rp. 147,000 per capita (figure B9). Within Aceh, DAK allocation varies across kabupaten/kota. Kab. Pidie receives the highest allocation—more than Rp. 40 billion—followed closely by Kab. Bireuen, Kab. Aceh Utara, and Kab. Aceh Timur. The common element found in all kabupaten/kota with the highest DAK allocations is that all of them are former conflict “hotspots.” (figure B10). In per capita terms, once again, the largest allocation goes to Sabang, followed by other districts with low population numbers (figure 3.24).

**Figure 3.24. DAK per capita across local governments in Aceh, 2006**



Source: World Bank staff calculations based on MoF data and BPS.

**In 2001 and 2002 DAK was used mainly for reforestation.**<sup>25</sup> In 2003, DAK allocation was expanded to cover infrastructure, education, health, government facilities, agriculture, fisheries, and the environment. Since 2003, infrastructure has become DAK's main focus, but the infrastructure allocation has decreased over the years. In 2003 infrastructure accounted for up to 50 percent of DAK-nonreforestation funds, but by 2006 it had declined to 30 percent. Education and health follow infrastructure, with an average of 25 percent and 18 percent, respectively. In 2004 the fisheries sector also received a share from DAK-nonreforestation. In 2006 agriculture accounts for 10 percent of nonreforestation DAK.

<sup>25</sup> Restoration funds are distributed as follows: 40 percent to producing regions, and 60 percent to central government to do reforestation activities all over the country, particularly in non-natural-resource-producing regions.

## Deconcentration and Emergency Funds

The share of deconcentration and emergency funds against total revenue in Aceh decreased from 57 percent in 1999 to approximately 15 percent in 2002 and has stayed at this level (table 3.7). The observed slight variations since 2002 can be explained by the increase in Aceh’s regional own-source revenue.

**Table 3.7. Share of deconcentration fund to total regional revenue, 1999–2005**

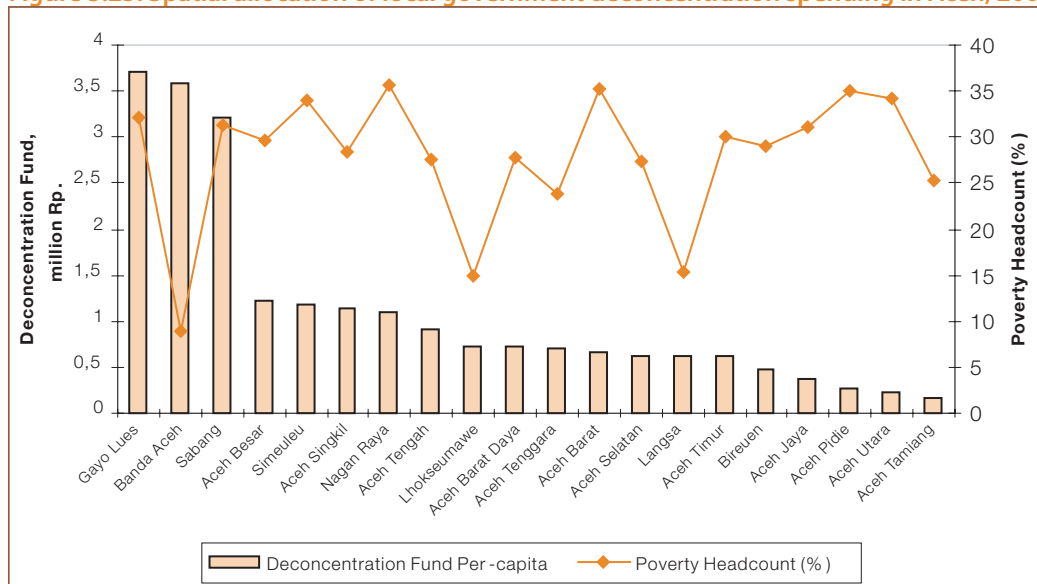
Revenue	1999		2002		2003		2004		2005	
	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%
Sub-national Revenue	2,425	433	8,713	85	10,122	83	10,433	87	9,081	83
Deconcentration Funds	3,178	56.7	1,522	15	2,124	17	1,602	13	1,873	17
Total Reg. Revenue + Deconcentration Funds	5,604	100	10,235	100	12,245	100	12,035	100	10,954	100

Source: World Bank staff calculations based on data from SIKD/MoF and BAPPEDA NAD.

Note: Data are in real terms (constant 2006 prices).

**The allocation of deconcentration funds in Aceh does not reach the poorest.** On one hand, the newly established Kab. Gayo Lues (the sixth poorest kabupaten) received the highest per capita allocation. On the other hand, the areas closer to the capital city, Banda Aceh—Kab. Aceh Besar and Kota Sabang—ranked in the top five for per capita allocations. It is plausible that their high per capita allocation reflects the fact that these three local governments have more major “central” infrastructures, such as a national port and government buildings. At the same time, Kab. Simeuleu (an island located on the west coast of Aceh) has almost four times lower per capita allocation than Kab. Aceh Besar. The poorest kabupaten, Nagan Raya, received three times lower per capita allocation than Kota Banda Aceh which has the lowest poverty headcount in Aceh (figure 3.25).

**Figure 3.25. Spatial allocation of local government deconcentration spending in Aceh, 2004**



Source: World Bank staff calculations based on data from BAPPEDA NAD and BPS.

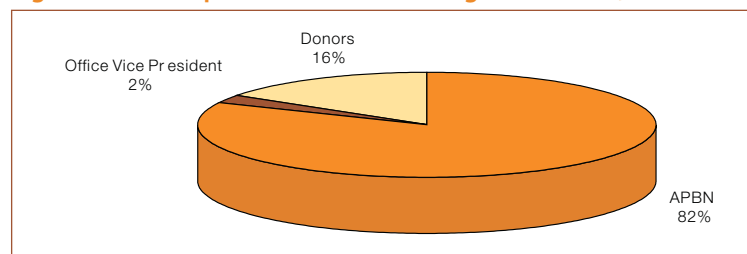
**Another source of revenue for the province and local government is the emergency fund.<sup>26</sup> Similar to the deconcentration fund, the emergency fund is categorized as regional government revenue since the actual spending is carried out in the region.** This fund is made available from the national budget (APBN) and is provided to the provincial and local governments for emergency needs and in emergency situations. Central government allocates 5 percent of national annual budget to the emergency fund. Law 33/2004 defines national-scale natural disasters or solvability crisis as emergency needs. The president declares a natural disaster to be a national natural disaster, such as the December 26, 2004 tsunami. In contrast, solvability crises at the provincial and local government levels are evaluated by the central government and the parliament. In Aceh, the province and local government budget show no record of emergency funds on their revenue accounts. It is most likely that central government spent the budget directly in the region through the national emergency board, for example, BAKORNAS. Thus, this amount was not recorded in the regional budget. In response to the tsunami, the central government set up a BAKORNAS office in Aceh to provide financial assistance during the emergency relief period before the Rehabilitation and Reconstruction Agency (BRR) was established.

### Revenues related to the peace process

**The signing of the Helsinki MoU included a provision for funds to flow to Aceh to support the peace process.** Following the peace accord, the central government disbursed Rp. 200 billion (US\$21.5 million) to strengthen the peace process in Aceh in 2005. The government pledged another Rp. 600 billion (US\$64.5 million) in APBN 2006.<sup>27</sup> The central government is expected to allocate approximately Rp. 700 billion (US\$97.8 million) in 2007. The money was allocated to support reintegration, particularly to help excombatants return to the community. In 2005 the Office of the Vice President, Republic of Indonesia, allocated Rp. 50 billion (US\$5.4 million) to support reintegration. In addition, the European Commission (EC) provided 4 million euros (US\$5.2 million) under its Rapid Reaction Mechanism, to help former political prisoners and excombatants to reintegrate in civilian life.<sup>28</sup> The European Commission also allocated funds in relation to the Aceh Monitoring Mission (AMM), established in September 2005 to sustain reintegration and monitor the implementation of the MoU. On December 20, 2005, the EC approved 15.9 million euros (US\$22.2 million) of assistance for Aceh to support the ongoing peace process.<sup>29</sup>

**Both central and provincial governments have proactively strengthened the peace process in Aceh.** On February 11, 2006, the Governor of Aceh established a reintegration agency, *Badan Reintegrasi Aceh* (BRA). The agency provides economic empowerment assistance to GAM returnees and compensation to conflict victims. The Gol's commitment to implement the Helsinki MoU in Aceh easily can be tracked in the budget allocation for reintegration. The Gol so far has pledged the most to fund reintegration needs, approximately 82 percent of the total funds pledged from 2005–07 (figure 3.26). Donors' present commitments for the 3 years (2005–07) amount to US\$35 million. Leading donors include the EC, JICA, and USAID.

**Figure 3.26. Composition of Aceh reintegration funds, 2005–07**



Source: World Bank staff estimates based on EU donor matrix and BRA estimates.

<sup>26</sup> Approximately 50 percent of the deconcentration fund is implemented by the province and cannot be disaggregated by local government. The data used in the figure are funds that were allocated to local governments only.

<sup>27</sup> *Republika* 2006.

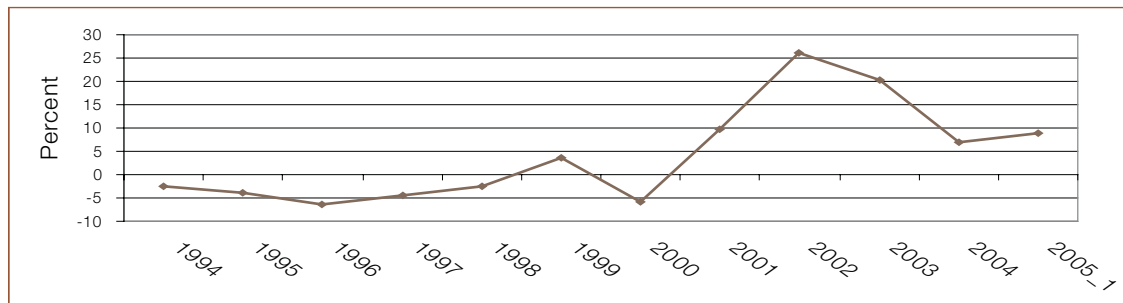
<sup>28</sup> European Union, Press Release September 2005. Aceh: Commission releases €4 million to support the peace process.

<sup>29</sup> European Union, Press Release, 20 December 2005, European Commission provides additional €15.85 million assistance for Aceh peace process. [www.delidn.cec.eu.int/en/newsroom/2005-PI13EN.pdf](http://www.delidn.cec.eu.int/en/newsroom/2005-PI13EN.pdf)

## Financing and Borrowing

Under the old budget format, the net budget surplus and deficit were calculated without proper treatment of financing flows.<sup>30</sup> Prior to decentralization, as had most local governments in Indonesia, local government in Aceh had generated budget deficits in most years. During 1994–98, local governments in Aceh ran an average deficit of 4 percent to total expenditure (figure 3.27). Only in 1999 did local governments in Aceh accumulate a small surplus.

Figure 3.27. Regional government surplus/deficit in Aceh, 1994–2005 (% of total expenditure)



Source: MoF and World Bank staff calculations.

After fiscal decentralization, the Aceh regional government generated a substantial surplus. In 2005 the provincial government surplus reached more than Rp. 1.5 trillion. Local governments also generated substantial surpluses until 2005, when they experienced a small deficit of approximately Rp. 0.3 trillion. Local governments used their budgets for post-tsunami reconstruction, especially to finance the reconstruction of government buildings and infrastructure. By the end of 2005, provincial and local governments in Aceh had accumulated significant reserves of Rp. 2.7 trillion (table 3.8).

It is important to note that the accumulation of reserves often is caused by delays in transferring oil and gas revenue-sharing from central government. These delays slow project implementation and disbursement. The amounts not disbursed appear as surplus in the provincial budget and are carried forward to the next fiscal year.

Table 3.8 Aceh's regional government has accumulated significant reserves (Rp. billions)

	2001	2002	2003	2004	2005*
Province	57	170	928	1,198	1,627
Kab/Kota	199	48	436	188	(397)
Total province and kab/kota	256	218	1,364	1,387	1,230
Carry over	95	365	725	1,584	1,447
Reserves end of period	351	583	2,089	2,971	2,677

Sources: MoF and World Bank staff calculations.

Note: \* = planned budget figure.

**Law 33/2004 allows regional governments to borrow directly from domestic sources and indirectly from international sources on approval from the MoF.** The sources of domestic loans come from central government, other regional governments, banks, nonbank institutions, and placement of regional bonds. The government regulation on regional borrowing (PP 54/2005) provides a set of arrangements on borrowing limits and conditions

30 Net budget surplus/deficit does not take into account loan, repayment, and carry-over from previous years as well as into the following year.

for the regional government. Cumulative borrowing from central and regional government may not exceed 60 percent of current GDP.<sup>31</sup> Regional government must follow four borrowing requirements:

1. Cumulative regional borrowing may not exceed 75 percent of the total general budget revenue of the previous year.
2. Debt service coverage ratio (DSCR) is at least 2.5 percent.
3. There are no arrears on the regional government's borrowing
4. Borrowing is approved by the regional parliament. In addition to loans, Law 11/2006 stipulates that Aceh's government is eligible to receive unconditional grants from international sources with the acknowledgement of the central government and regional parliament.

**Aceh's provincial government has had a borrowing history since 1981.** Local governments that have borrowing records are Aceh Barat, Aceh Selatan, Aceh Tengah, Aceh Tenggara, Aceh Timur, Aceh Utara, and Banda Aceh. The 2004 MoF data show that local governments in Aceh had larger borrowing transactions compared to provincial government. Most transactions were made by the local governments' water supply enterprises (*Perusahaan Daerah Air Minum*, or PDAM). Provincial PDAM made no borrowing transactions. Approximately 55 percent of total borrowing was made by the regional government; the remaining 45 percent was made by PDAM (table 3.9).

**Table 3.9 Borrowing record of regional government and PDAM in Aceh, 2004 (Rp. billions)**

	Amount borrowed	Payment due	Total arrears	Total outstanding
<u>Government</u>				
Province	24	46	36	17
Kab/kota	25	65	44	11
<i>Total government</i>	50	111	80	28
<u>PDAM</u>				
Province	-	-	-	-
Kab/kota	41	50	50	41
<i>Total PDAM</i>	41	50	50	41
<b>Total</b>	<b>90</b>	<b>161</b>	<b>130</b>	<b>69</b>

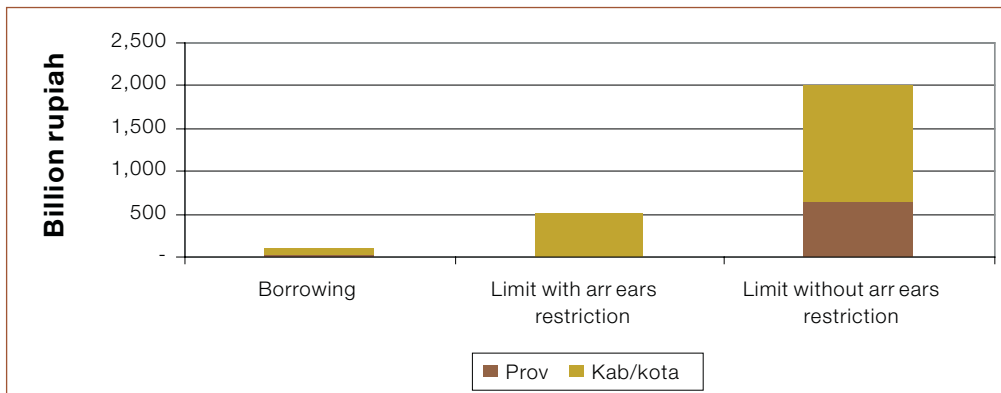
Source: MoF.

**Because the total borrowing amount has increased quite significantly since 2001, Aceh government needs to start paying more attention to its borrowing transactions.** The borrowing amount has increased from Rp. 55 billion in 2001 to Rp. 90 billion in 2004. The increase comes solely from local government, since there is no increment in the amount that the province is borrowing. Although there is a tendency for increasing borrowing, Aceh's accumulated borrowing amount is below that of many other provinces in Indonesia, and below the national average (Figure B11).

**To anticipate the tendency for a larger number of loans in the future, it is important that regional governments take into account the borrowing limitations set by the law.** A simulation of borrowing limitations shows that if arrears are taken into consideration, none among the local governments in Aceh that has a borrowing record can have another borrowing transaction. The limitation on arrears has a significant impact on the borrowing limit because local governments with high arrears records are excluded from borrowing (Figure 3.28). Even with these restrictions, local governments in Aceh can still borrow up to a total of Rp. 500 billion.

31 The cumulative borrowing of the central and regional governments equals the total borrowing of central government less the loans given to regional government, plus the total borrowing of regional government less the loans given by central government or other regional governments.

Figure 3.28 Borrowing limitation with and without arrears' restriction for Aceh



Source: World Bank staff calculations.

## Recommendations

- 1. Develop better coordination among the province, local government, BRR, and BRA in managing reconstruction, reintegration, and long-term development.** Fiscal decentralization and special autonomy have improved the fiscal capacity of the provincial and local governments in Aceh. In addition, the massive financial inflows from inside and outside the country to finance reconstruction and reintegration increased total revenue severalfold compared to what Aceh received in 1999. An integrated development program would enhance its implementation and address the geographic and sectoral gaps among local governments in Aceh.
- 2. Improve transparency and accountability of the allocation and distribution of the special autonomy fund as well as the recording in local governments' budgets.** The regional government in Aceh has been concerned that the calculation and allocation of the special autonomy fund from central government lacks transparency. Regional government does not have access to detailed information on oil and gas production and costs. Unnecessary delays in transferring the special autonomy fund would improve financial management as well as cash flows and the implementation of development programs to be financed by it. For their part, local governments should improve their financial management capacity and transparency in managing and spending the special autonomy fund. In the past, local government inconsistently recorded the special autonomy fund in their budgets.
- 3. Improve the management of the special autonomy fund. The objective, distribution criteria, and management of the fund should be clearly specified in the regional regulation (Qanun).** Two issues that need attention in the management of the dana otsus should: (1) elimination of fiscal disparities among districts, and (2) improving accountability, information flow, and management and evaluation systems of the fund to, among other goals, reduce delays. The current regulation (Qanun 4/2002) seems to lack clarity, thus allowing too much flexibility in use of the special autonomy fund. As a result, a large share of the dana otsus revenue has been directed to higher spending on routine and government apparatus.
- 4. Improve local tax systems to improve local governments' own-source revenue mobilization.** The local tax regime seems to favor collection in urban areas. Delegating collection of more taxes to local governments may increase incentives to improve tax collection, such as property tax (PBB). These issues must be decided at the national level. After the creation of new local governments, the provincial government should provide guidance on tax administration to the new and old local governments involved and provide assistance to the new established kabupaten on tax administration and collection. Clear assignment and management of tax sources can improve tax collection and accountability. Ending the conflict also provides the opportunity for local governments to improve tax collection and expand their tax bases.



5. **Improve the allocation of intergovernmental transfers. Transfers from central and provincial governments (for example, DAU, DAK, dana otsus, tax-sharing) and the deconcentrated fund should address horizontal fiscal imbalances among kabupaten/kota in Aceh.** There is evidence that kabupaten with small populations are receiving a disproportionate share of the funds and that indicators such as remoteness or poverty levels are not being taken sufficiently into account.
  
6. **Improve the planning and budgeting processes at the local level, for which provincial government and bupati (head of local government) leadership is key.** It is urgent that local governments accelerate their budget approval processes to be able to start implementing their projects at the beginning of each fiscal year. The matching of actual budgets with identified needs should be improved.



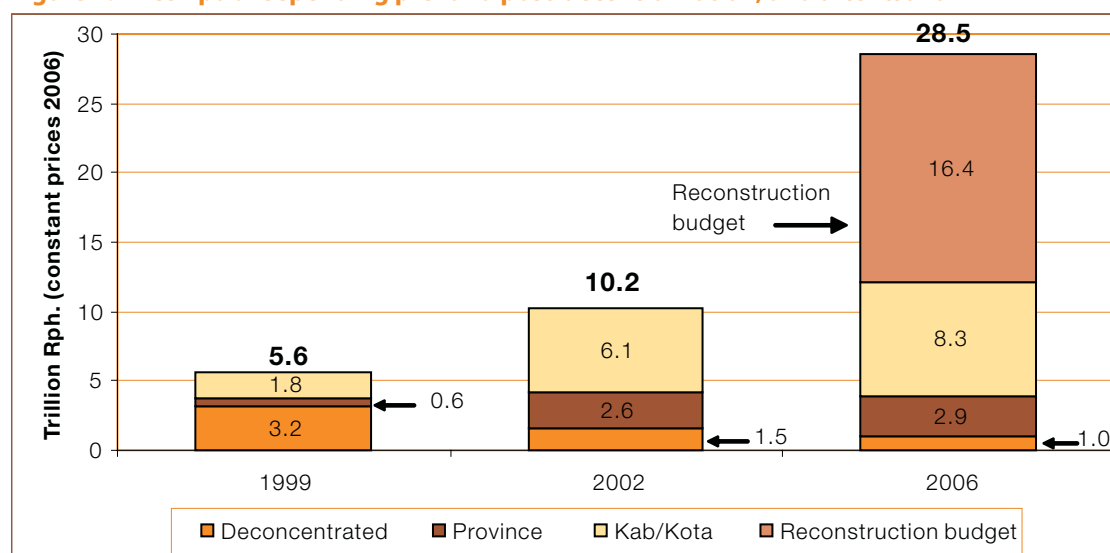
# 4 Expenditures

## Overview of Aceh's expenditures

**Following decentralization, the regional share of government spending in Indonesia has increased to over 30 percent.** In the past, the regional governments managed only 17 percent of the total expenditure spent in the region.<sup>32</sup> The increase reflects the transformation of major service delivery functions and transfer of approximately two-thirds of the central government work force to the regions.

**Overall public spending in Aceh has increased significantly in recent years.** This increase was driven by additional revenue gained from intergovernmental transfer after decentralization and from an additional oil and gas revenue-sharing from special autonomy provisions. Including reconstruction financing, total spending reached more than Rp. 25 trillion in 2006 (figure 4.1). Public spending in Aceh is anticipated to increase substantially in the next five years. If the resources are managed and spent effectively, the Acehnese have a huge opportunity to boost the region's economic development.

**Figure 4.1 Aceh public spending pre- and post-decentralization, and after tsunami**



Source: World Bank staff calculations based on data from SIKD/MoF, BPS-SK/BPS, and BRR.

Notes: The provincial and local governments' budgets for 2006 are projected using average growth after decentralization. Data are in real terms (constant 2006 prices).

**In 2005 the provincial and local government in Aceh spent Rp. 7.5 trillion and managed an additional allocation from line ministries of Rp. 1.9 trillion.** Both provincial and local government spending has increased substantially after the 1999 decentralization and the 2001 special autonomy (table 4.1).<sup>33</sup>

32 World Bank 2002.

33 The 1999 decentralization became effective in 2000, and the 2001 special autonomy status in 2002.

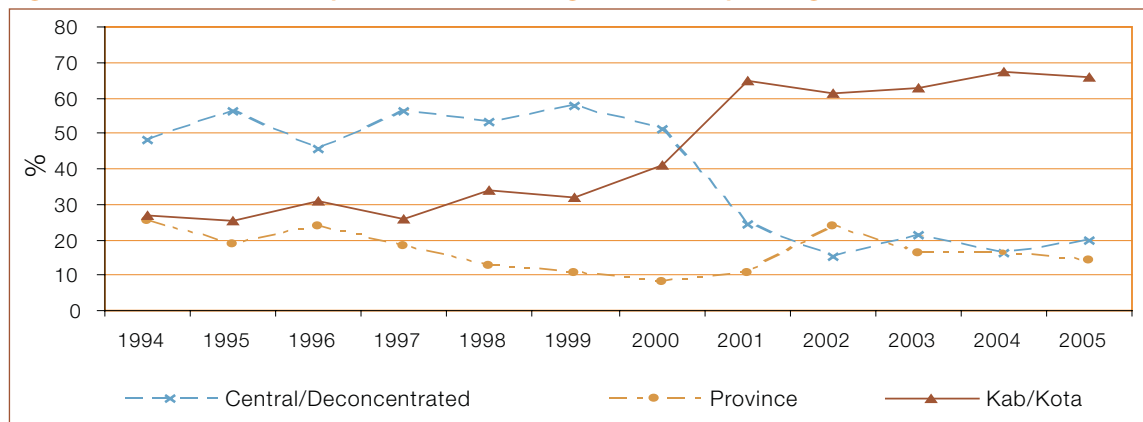
**Table 4.1 Aceh overall public expenditure pre- and post-decentralization**

Year	Deconcentrated		Province		Kab/kota		Total
	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion
1994	2,264.8	48.0	1,192.5	25.3	1,260.1	26.7	<b>4,717.3</b>
1995	3,416.8	55.9	1,153.0	18.9	1,537.1	25.2	<b>6,106.8</b>
1996	2,344.2	45.3	1,238.2	24.0	1,587.0	30.7	<b>5,169.5</b>
1997	3,919.3	56.0	1,272.4	18.2	1,808.0	25.8	<b>7,000.2</b>
1998	2,228.5	53.3	536.4	12.8	1,419.5	33.9	<b>4,184.4</b>
1999	3,178.4	57.6	583.0	10.6	1,755.8	31.8	<b>5,517.3</b>
2000	3,318.7	50.9	539.9	8.3	2,662.0	40.8	<b>6,520.6</b>
2001	1,916.8	24.3	849.1	10.8	5,126.7	65.0	<b>7,892.6</b>
2002	1,521.8	15.4	2,321.9	23.6	6,015.2	61.0	<b>9,858.8</b>
2003	2,123.5	21.2	1,594.3	15.9	6,309.2	62.9	<b>10,027.0</b>
2004	1,601.7	16.2	1,630.1	16.5	6,670.6	67.4	<b>9,902.4</b>
2005	1,873.3	19.9	1,358.2	14.4	6,198.0	65.7	<b>9,429.5</b>

Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK/BPS.  
Note: Data are in real terms (constant 2006 prices).

**There has been a significant transformation in the division of public spending in Aceh between the central and regional governments.** Before decentralization, the central government played an important role in regional development. In 1999 almost 60 percent of spending was carried out by the central government, leaving a limited role for regional government in providing service delivery and regional development. The planning and budgeting process started upon approval by the central government. After decentralization, provincial and local governments had greater authority over their budget allocations. On average, after decentralization, regional governments in Aceh have been managing more than two-thirds of total public spending. Local government is managing more than 60 percent of public spending; the province is managing almost 20 percent of total expenditure (figure 4.2).

**Figure 4.2 Shares of central, provincial, and local government spending in Aceh**



Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK/BPS.

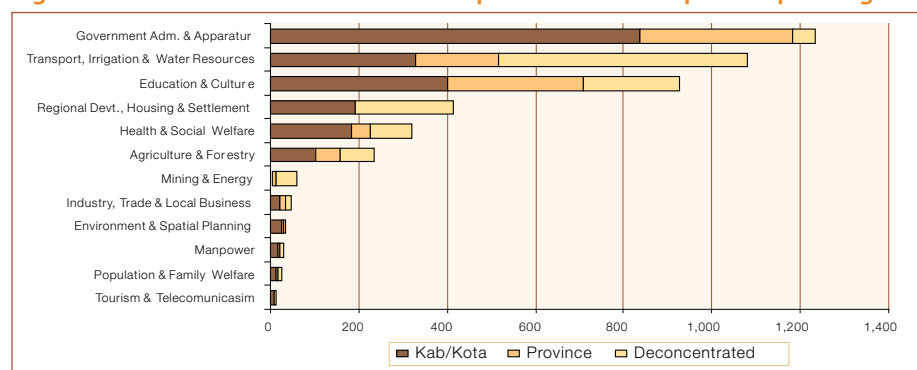
**The special autonomy status increased the power of the province to control regional government financing.** The special autonomy revenue is transferred directly from the center to the province, and from the province to local

governments. In 2002 total spending by the provincial government more than doubled compared to the 2001 level: the share of provincial government spending in total fiscal outlays increased to approximately 24 percent.

**Despite a decreased role in regional spending after decentralization, the central government continues to spend substantial resources in the region.** Central government spending is intended to finance projects that are classified as national priorities. In 2004 the central government alone contributed more than 30 percent to development spending. The data indicate that the central government continues to spend on largely decentralized functions.<sup>34</sup> The central, provincial, and local governments have similar spending patterns. The central government has spent mainly on five sectors that, by and large, also are prioritized by regional government: infrastructure, education, regional development, health, and agriculture. Beyond these five sectors, the provincial and local governments focused spending on government administration and apparatus.

**Two main decentralized functions, education and health, have been predominately the responsibility of local governments.** However, the central and provincial governments also spent almost equal shares on education and substantial shares on the health sector (figure 4.3). To avoid overlapping and inefficiency in budget allocation, since regional governments have better understanding of regional priorities, future spending by the central government on largely decentralized functions should be discouraged.

**Figure 4.3 Sectoral and institutional composition of development spending in Aceh, 2004 (Rp billions)**



Source: World Bank staff calculations based on data from BPS-SK/BPS and SIKD/MoF. Data are in real terms (constant 2006 prices).

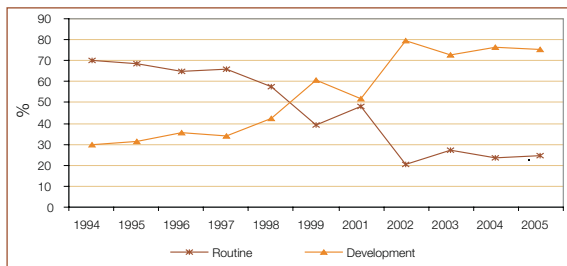
## Routine vs. Development Expenditure

**The analysis of expenditures is based on the old format classification of routine and development expenditure.** The old format classification covers a larger period, and new budget information in the new format can be mapped to the old format. However, the other way around is not possible. Thus, a pre- and post-decentralization analysis is possible only using the old format.

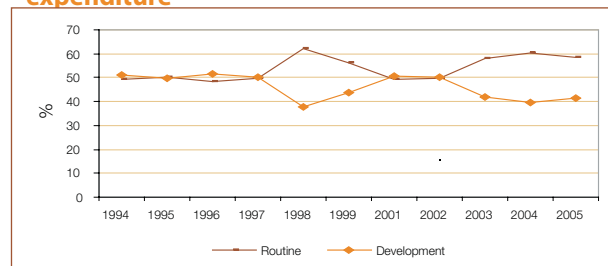
**Prior to decentralization, almost 70 percent of provincial government expenditure went toward routine budget.** Much of this spending was due to the provincial government's responsibility to pay the salaries of civil servants. In 2002 as Aceh received significant additional resources from special autonomy, the share of development spending in the total province expenditure increased substantially. Currently, routine and development spending make up approximately 25 percent and 75 percent, respectively (figure 4.4).

34 Decentralized functions consist of health, education, public works, environment, communications, agriculture, industry and trade, capital investment, land, cooperatives, human resources, and infrastructure services.

**Figure 4.4. Share of province's expenditure**



**Figure 4.5. Share of local government's expenditure**



Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK/BPS.

Similarly, before decentralization, local governments spent somewhat more on routine expenditures and will likely continue to do so. In 2005 almost 60 percent of local governments' expenditures were routine (figure 4.5). The high share of routine spending was due partly to the post-decentralization transfer of civil servants' salaries to local governments. The growing number of local governments resulting from decentralization also increased administrative spending.

Routine expenditure has increased more than three times from predecentralization levels, thus overtaking development spending. Aceh's spending on personnel has increased in absolute numbers but has remained constant at approximately 70 percent of all routine expenditure (table 4.2). This figure is in line with the Indonesia average (72 percent) but much higher than other oil- and gas-producing provinces (Papua, Riau, Kalimantan Timur). Since 2003, the share of financial assistance and unexpected expenses has increased noticeably.

**Table 4.2. Structure of regional routine expenditure in Aceh, 1999–2005**

Routine Expenditure	1999		2002		2003		2004		2005	
	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%
Personal	826.3	68.0	2,348.7	67.7	2,805.5	68.9	3,098.4	69.9	2,686.4	67.4
Goods & Services	122.0	10.0	402.3	11.6	444.1	10.9	499.3	11.3	516.7	13.0
Operational & Maintenances	27.8	2.3	116.6	3.4	115.5	2.8	100.1	2.3	91.2	2.3
Official Travel	22.1	1.8	52.4	1.5	87.1	2.1	83.4	1.9	104.5	2.6
Others	109.2	9.0	279.8	8.1	26.4	0.6	0.0	0.0	0.0	0.0
Financial Assistance & Unexpected Expenditure	106.9	8.8	269.1	7.8	593.2	14.6	650.7	14.7	586.4	14.7
<b>Total</b>	<b>1,214.3</b>	<b>100.0</b>	<b>3,469.0</b>	<b>100.0</b>	<b>4,071.7</b>	<b>100.0</b>	<b>4,431.9</b>	<b>100.0</b>	<b>3,985.3</b>	<b>100.0</b>

Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK/BPS. Data are in real terms (constant 2006 prices).

Regional development expenditure in Aceh quadrupled from 1999–2002, then had a decreasing trend in 2003–2004. The decrease can be explained at least in part by the intensification of the conflict starting in 2003.<sup>35</sup> Pre-decentralization, regional government invested mostly in infrastructure. Post-decentralization, government apparatus, education, and infrastructure remain the highest priorities for regional government. However, the share of the development budget spent on government apparatus increased, while the share of infrastructure declined (table 4.3). After decentralization, infrastructure spending increased, but it decreased sharply again soon after. Its share in total spending also is declining.

35 Following the change in local government budget format, the 2003 and 2004 data have been adjusted in accordance with routine and development categories. However, there might still be substantial data errors.



**Table 4.3. Regional development expenditure by sector in Aceh, 1999–2005**

Sector	1999		2001		2003		2004		2005	
	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%
Government Apparatus	138.9	12.4	403.9	13.3	1,142.6	29.8	1,464.9	37.9	1,239.8	34.7
Agriculture	65.2	5.8	286.8	9.5	216.8	5.7	197.8	5.1	202.5	5.7
Mineral and Energy	2.9	0.3	5.7	0.2	16.7	0.4	16.4	0.4	12.6	0.4
Industry and trade	38.7	3.4	276.9	9.1	58.5	1.5	44.2	1.1	51.6	1.4
Labor Force	0.2	0.0	4.9	0.2	16.4	0.4	27.9	0.7	24.0	0.7
Health, Social Welfare	134.9	12.0	258.8	8.5	265.9	6.9	283.1	7.3	237.8	6.7
Education and Culture	139.8	12.4	494.6	16.3	1,060.6	27.7	879.7	22.7	748.3	21.0
Environment and Spatial Planning	39.5	3.5	83.5	2.8	27.1	0.7	38.5	1.0	40.7	1.1
Family Planning and Demography	3.2	0.3	5.8	0.2	7.0	0.2	23.1	0.6	12.9	0.4
Infrastructure	561.2	49.9	1,211.0	39.9	1,020.0	26.6	893.2	23.1	1,000.7	28.0
Transport, Water and Irrigation	350.8	31.2	781.3	25.8	795.5	20.8	641.2	16.6	863.3	24.2
Tourism and Telecommunication	10.4	0.9	21.6	0.7	11.1	0.3	13.0	0.3	9.7	0.3
Housing and Settlement	200.0	17.8	408.1	13.5	213.5	5.6	239.0	6.2	127.7	3.6
<b>Total</b>	<b>1,124.6</b>	<b>100.0</b>	<b>3,031.9</b>	<b>100.0</b>	<b>3,831.7</b>	<b>100.0</b>	<b>3,868.7</b>	<b>100.0</b>	<b>3,570.9</b>	<b>100.0</b>

Source: World Bank staff calculations based on data from SIKD/MoF and BPS-SK/BPS. Data are in constant 2006 prices.

**Since 2003, development spending on government apparatus has become the highest spending priority for provincial and local governments.** The share of this sector in total development expenditure has increased continuously, from approximately 12 percent in 1999 to almost 40 percent in 2004. The increasing number of local governments likely increased the spending on government infrastructure and supervision.

**In 2002 a new concept of performance-based budgeting was introduced, and the government budgeting format was unified toward a more integrated approach to expenditure management.**<sup>36</sup> The new budget format is characterized by a shift from a *program/project-based approach* (distinction between routine and development spending) to a *beneficiaries approach* (distinction between expenditure on the government apparatus and expenditure on public services). Regional government in Aceh had widely adopted the new budget format by 2003. The provincial and local governments reporting their budget to MoF all use the new budget format. This transformation has enabled the evaluation of how much spending the regional government has allocated to projects that benefited the public and government apparatus.

**In 2003 the provincial and local governments allocated more than 50 percent of their budgets to public services** (table 4.4). The share of, as well as the total allocation to, public services declined in 2004 and 2005. The provincial and local governments allocated approximately 35 percent to apparatus expenses in 2003 and increased it to 40 percent in 2005.

36 These changes were stipulated in Ministry of Home Affairs Decree 29/2002 (Kepmen 29).



**Table 4.4. Composition of regional spending based on new budget format (apparatus and public services) in Aceh, 2003-05**

Expenditure	2003						2004						2005					
	Province		Kab/Kota		Total		Province		Kab/Kota		Total		Province		Kab/Kota		Total	
	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%	Rp Billion	%
Apparatur Expense	553.0	34.7	2,197.3	34.9	2,750.3	34.8	606.8	37.2	2,569.5	38.5	3,176.3	38.3	555.0	40.9	2,469.8	39.8	3,024.7	40.0
General Amintistration	362.4	22.7	1,646.6	26.1	2,009.0	25.4	381.4	23.4	1,880.1	28.2	2,261.4	27.2	328.9	24.2	1,929.0	31.1	2,257.9	29.9
Capital	86.5	5.4	259.5	4.1	346.0	4.4	80.0	4.9	284.5	4.3	364.5	4.4	96.9	7.1	295.0	4.8	391.9	5.2
Operational & Maintenance	104.1	6.5	291.2	4.6	395.3	5.0	145.5	8.9	404.9	6.1	560.4	6.6	129.2	9.5	245.8	4.0	375.0	5.0
Public Expense	1,037.0	65.0	3,503.6	55.6	4,540.7	57.5	1,020.4	62.6	3,453.2	51.8	4,473.6	53.9	790.8	58.2	3,154.2	50.9	3,945.0	52.2
General Amintistration	33.3	2.1	1,416.9	22.5	1,450.3	18.4	20.9	1.3	1,498.8	22.5	1,519.7	18.3	12.1	0.9	1,128.8	18.2	1,140.9	15.1
Capital	460.3	28.9	1,046.9	16.6	1,507.2	19.1	457.6	28.1	1,015.2	15.2	1,472.8	17.7	332.5	24.5	1,151.7	18.6	1,484.2	19.6
Operational & Maintenance	543.4	34.1	1,039.8	16.5	1,583.2	20.0	541.8	33.2	939.2	14.1	1,481.0	17.8	446.2	32.9	873.6	14.1	1,319.8	17.5
Unexpected Expenses	4.2	0.3	145.5	2.3	149.6	1.9	2.8	0.2	142.2	2.1	145.0	1.7	12.4	0.9	96.2	1.6	108.6	1.4
Financial Assitance & Sharing Expense			457.0	7.3	457.0	5.8			505.7	7.6	505.7	6.1			477.8	7.7	477.8	6.3
Total capital expenditure	546.8	34.3	1,306.4	20.7	1,853.2	23.5	537.6	33.0	1,299.7	19.5	1,837.2	22.1	429.4	31.6	1,446.7	23.3	1,876.1	24.8
<b>Total</b>	<b>1,594.3</b>	<b>100.0</b>	<b>6,303.4</b>	<b>100.0</b>	<b>7,897.7</b>	<b>100.0</b>	<b>1,630.1</b>	<b>100.0</b>	<b>6,670.6</b>	<b>100.0</b>	<b>8,300.6</b>	<b>100.0</b>	<b>1,358.2</b>	<b>100.0</b>	<b>6,198.0</b>	<b>100.0</b>	<b>7,556.2</b>	<b>100.0</b>

Source: World Bank staff calculations based on data from World Bank Decentralization Database and SKD/MoF. Data are in real terms (constant 2006 prices).

**As in other regions in Indonesia, local government in Aceh is not always able to realize expenditures as planned.** The disbursement of both development and routine spending is lower than the allocations. Aceh's local governments underspent on all routine items, particularly on operation and maintenance (OandM) (table 4.5). Overall in 2003, routine spending diverged from planned by more than 10 percent. Development spending diverged by more than 40 percent. Low realization of expenditure may indicate local government's low absorptive capacity. In addition, delays in transfer of revenues from natural resources sharing also may have contributed to this low realization. Because the need for investments and development programs in Aceh is rising, it is important to ensure that local governments increase their absorptive capacities, particularly of development spending.

**Table 4.5. Planned vs. actual spending in Aceh, 2002–03**

	2002			2003		
	Planned	Realized	% difference	Planned	Realized	% difference
Personal	1,570	1,160	(35.4)	871	797	(9.23)
Goods and Services	162	137	(17.7)	98	85	(15.09)
Operation and Maintenance	50	36	(39.0)	22	18	(25.42)
Official travel	21	20	(9.1)	15	13	(19.24)
Other	306	128	(139.5)	-	-	-
<b>Total Routine</b>	<b>2,109</b>	<b>1,480</b>	<b>(42.4)</b>	<b>1,006</b>	<b>913</b>	<b>(10.23)</b>
<b>Total Development</b>	<b>1,154</b>	<b>1,088</b>	<b>(6.1)</b>	<b>1,264</b>	<b>883</b>	<b>(43.26)</b>

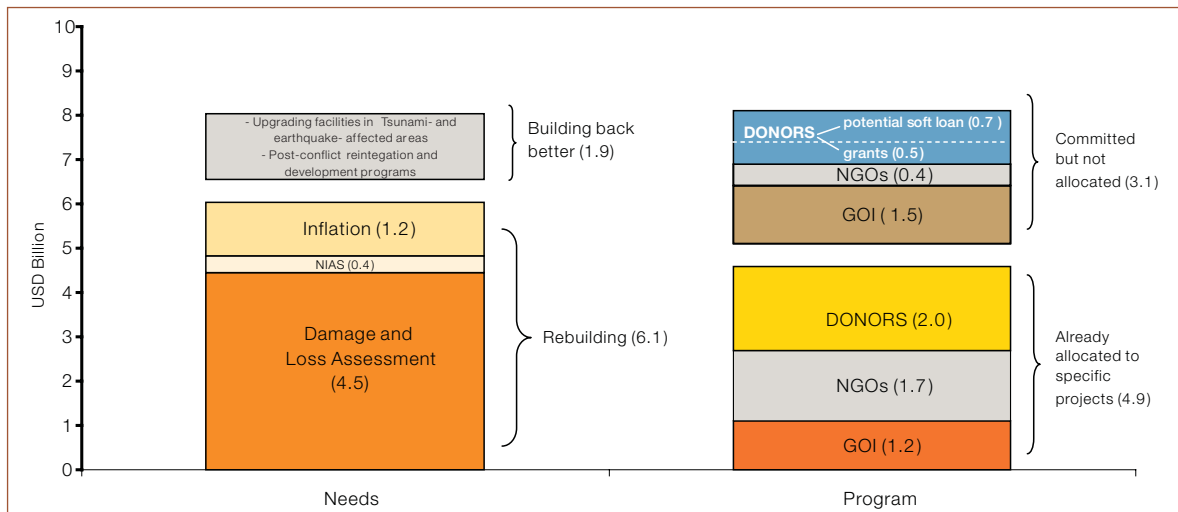
Source: World Bank staff calculations based on data from SIKD/MoF.

Note: Local government data based on a nonrandom sample of seven LG in Aceh that submitted planned and realized data in 2002–03. The seven LG were Aceh Besar, Aceh Tenggara, Aceh Utara, Pidie, Aceh Barat, Banda Aceh, and Langsa.

## Expenditure on the Reconstruction Program

**Reconstruction after the tsunami and earthquake is bringing substantial inflows to Aceh and Nias. By end June 2006, US\$4.9 billion in projects and programs had been allocated to reconstruction.** This amount is more than half of the anticipated total reconstruction program but not yet enough to fully meet the existing reconstruction needs. However, rising inflation will increase the costs of the reconstruction program by an estimated 40 percent, or US\$1.2 billion. The difference between US\$8 billion in total pledges for reconstruction and development, and US\$6.1 in costs, leaves additional resources of approximately US\$1.9 billion that could be invested in long-term development programs (figure 4.6).

**Figure 4.6. Reconstruction needs vs. allocated and committed resources in Aceh**

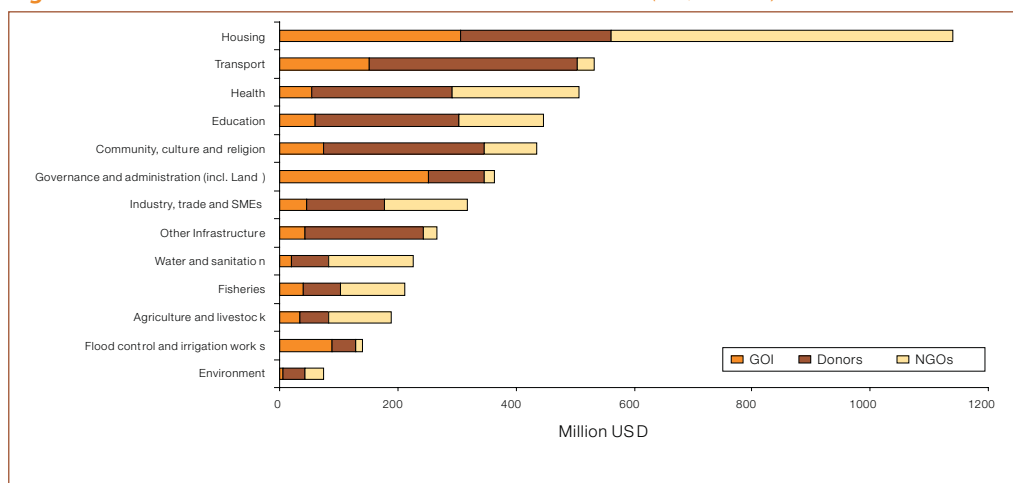


Source: BRR/World Bank staff estimates, June 2006.

## Sectoral trends and gaps

**Infrastructure and social sectors have received the highest allocations.** These 2 clusters command a combined US\$3.7 billion—or 75 percent—of the existing US\$4.9 billion reconstruction portfolio. Housing is the leading sector with US\$1.1 billion, followed by transport, health, education, and community infrastructure (figure 4.7). Housing has become the main focus of BRR and NGOs, followed by sectors such as local government development (BRR) and health and livelihoods (NGOs). Donors are focusing on education and transport.

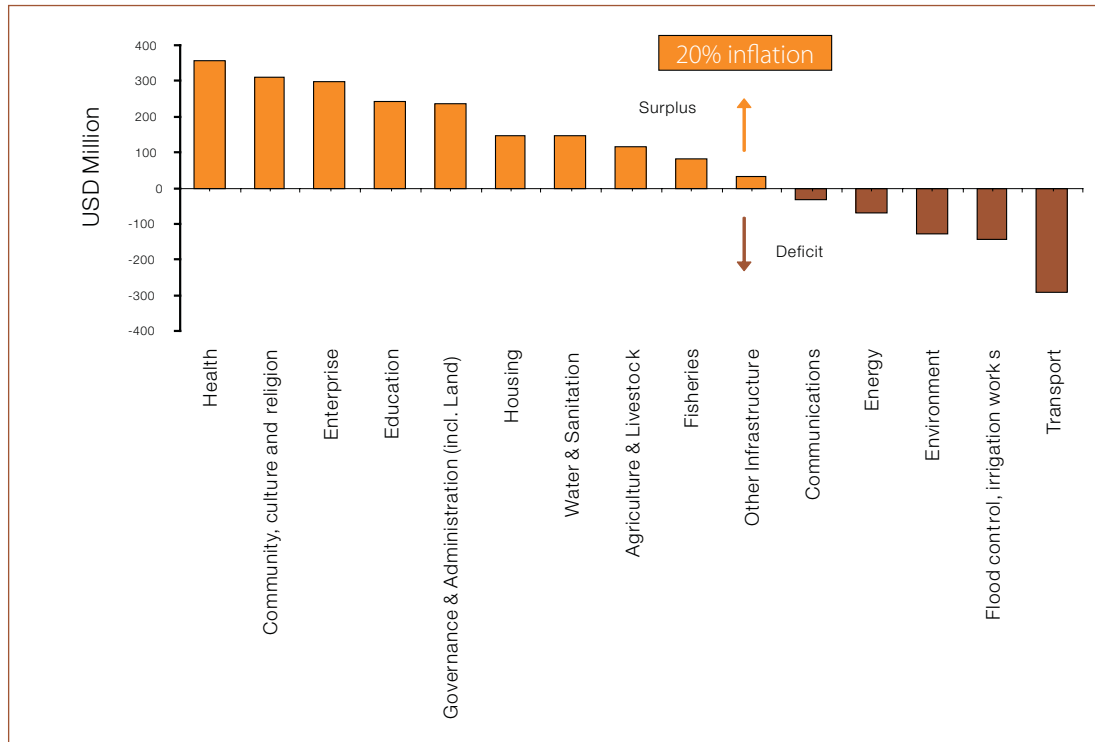
**Figure 4.7. Sectoral distribution of reconstruction funds (US\$ million)**



Source: World Bank staff estimates, June 2006.

**Critical financing gaps remain across sectors and regions.** Although sufficient funds have been pledged to support rehabilitation and reconstruction, the current allocation of funds will not meet even the minimum needs in some sectors and in many geographic areas. The most critical sector is transport with its large insufficient funding gap (figure 4.8).

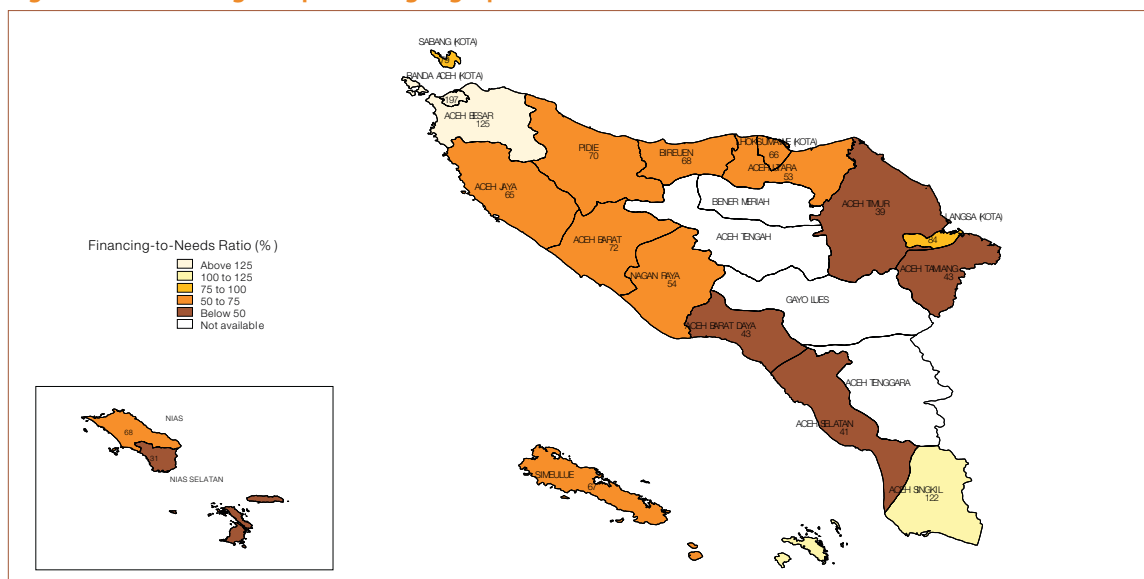
Figure 4.8. Allocation of funds compared to core minimum needs, by sector, June 2006 (US\$ million)



Source: BRR/World Bank staff.

On the regional gap, areas around Banda Aceh and Aceh Besar have more than adequate resources to rebuild, whereas other areas, such as a large part of the West Coast, South of Meulaboh, and the North-East Coast of Aceh (Kab. Aceh Timur and Aceh Tamiang), have inadequate resources (figure 4.9).

Figure 4.9. Financing compared to geographic needs



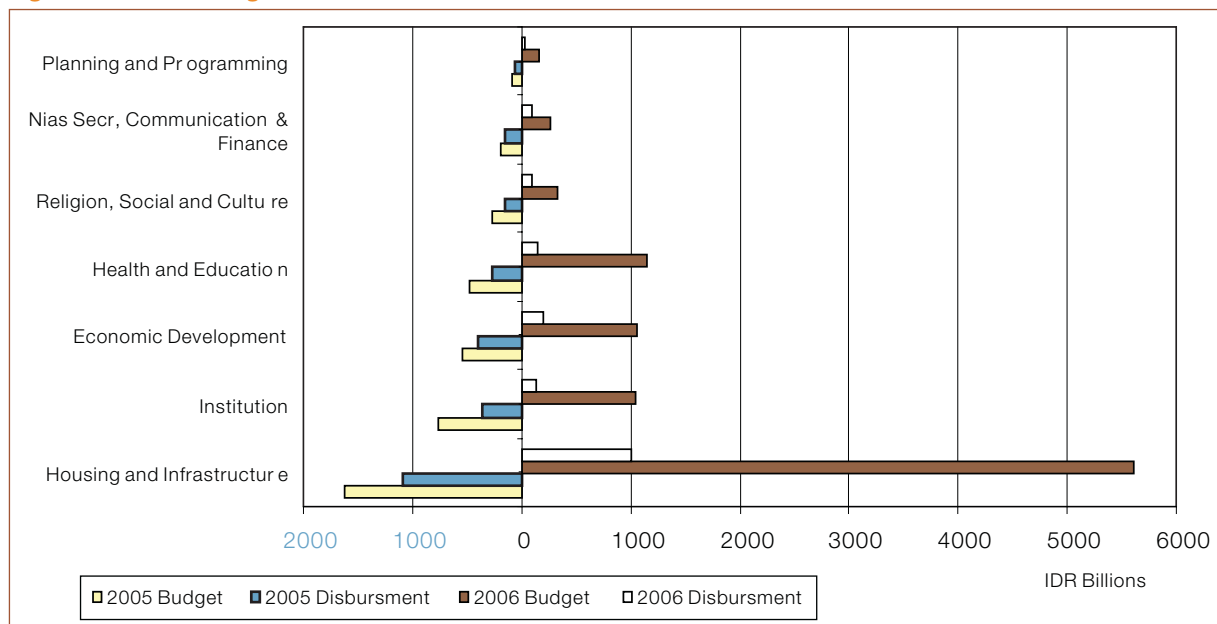
Source: BRR concept note and World Bank staff calculations, December 2005.

Note: Aceh Singkil's needs are likely to be higher because of damage and losses after the March 28 2005 earthquake.

**Disbursements have been rising substantially since September 2005 and stood at US\$1.5 billion in June 2006. Despite this increase, disbursements to reconstruct Aceh remain below expectations.** The disbursement rates of key players vary significantly. By end-June 2006, NGOs have disbursed 46 percent of their commitments, donors 22 percent, and the BRR 29 percent. These disbursement figures show that most players are having great difficulty in disbursing their committed funds. The total program for the entire reconstruction period (2005–09) is US\$8.0 billion. This amount means an average yearly disbursement rate of approximately US\$1.8 billion, or US\$150 million/month. Current disbursement rates are far from the amounts necessary to successfully “build back better” in the agreed period.

**Compared to the 2005 budget, the 2006 BRR budget has increased by 50 percent. Among the sectors, infrastructure has experienced the largest increase in allocations.** With Rp. 4.6 trillion available from the 2005 carry-over and 2006 budget, the infrastructure sector (including housing) is the focus of 2006 project implementation (figure 4.10).

**Figure 4.10. BRR budgets and disbursements, 2005 and 2006**

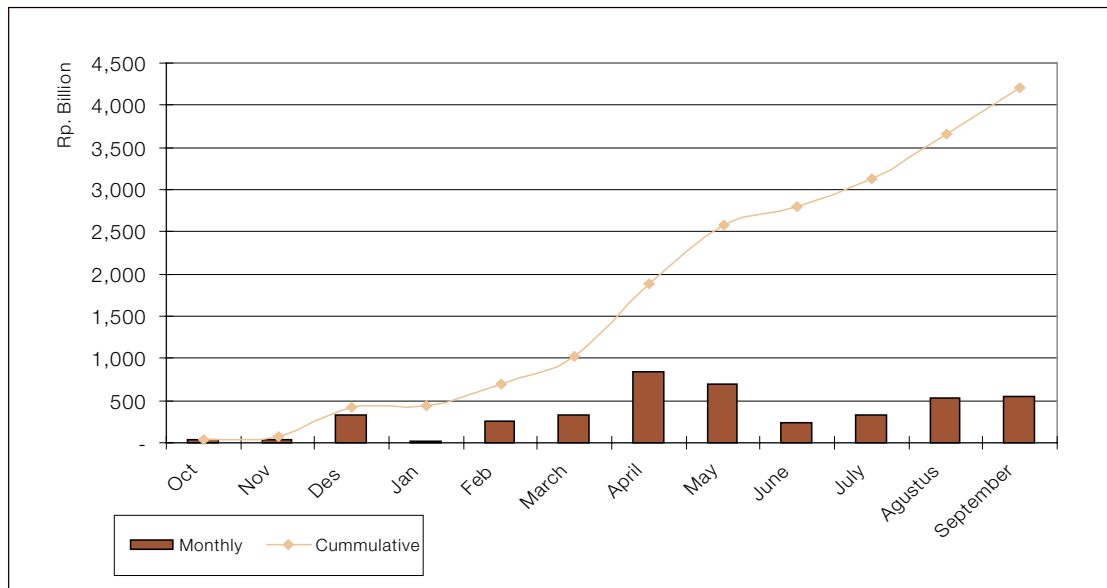


Source: BRR.

**BRR is the dominant reconstruction player.** Its portfolio is approximately twice as large as the next major player’s (Red Cross). The total government commitment including BRR for the 5-year rehabilitation and reconstruction program in Aceh is approximately US\$2.4 billion. The budget of approximately US\$800 million for 2007 provides BRR with an opportunity to expand its position in reconstruction financing. BRR will be left with only US\$500 million to spend in 2008–09.

**By end of September 2006, BRR had spent Rp. 4.2 trillion** (figure 4.11). Spending has equalled 31 percent of the total 2005 and 2006 budget. As of June 2006, BRR had disbursed 62.73 percent **from its 2005 budget allocated (Rp. 3.96 trillion)**. **As of September, BRR had only spent 18 percent of its 2006 budget allocated (Rp. 9.6 trillion)**. Disbursement patterns seem to suggest that BRR may not be able to disburse its complete budget in 2006.

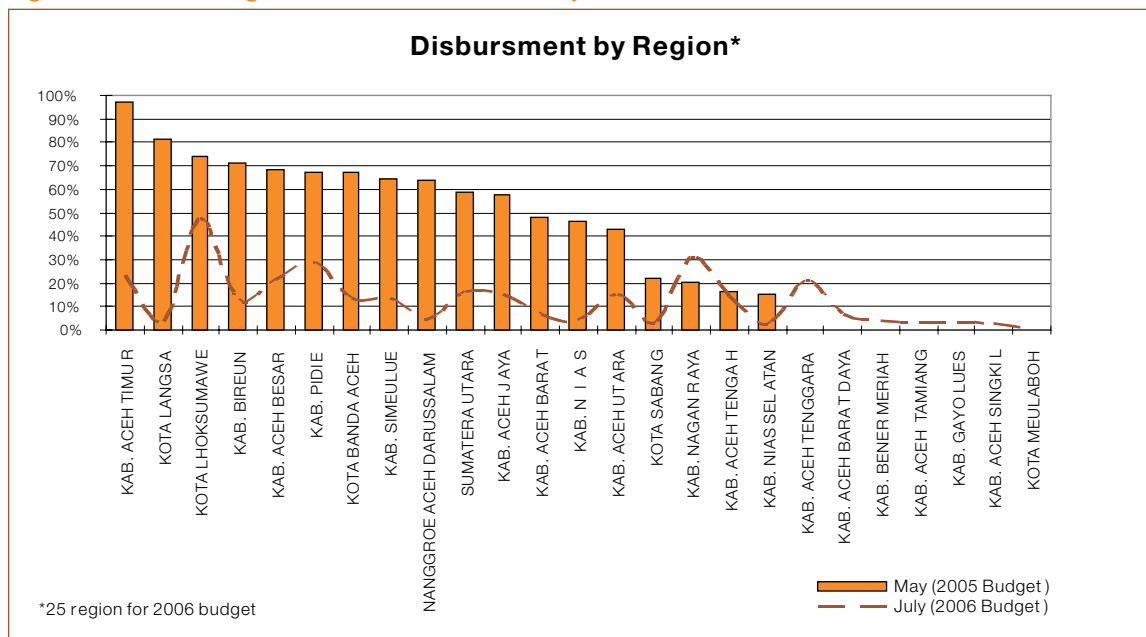
Figure 4.11. Disbursement of BRR 2005 and 2006 budget (Rp. billion)



Source: BRR.

**Disbursements are uneven across sectors and even more so across regions.** Lhokseumawe, Kab. Pidie, Kab. Nagan Raya, and Kab. Aceh Tenggara have disbursement rates of 20 percent or higher. Kab. Aceh Tamiang, Kab. Aceh Singkil, and Kab. Gayo Lues have the lowest disbursement rates: below 5 percent (figure 4.12).

Figure 4.12. BRR budget disbursements in Aceh by district, 2005 and 2006



Source: BRR.

**The relatively low disbursement levels of BRR projects are due to a combination of structural and specific problems.** Unclear reporting, responsibility, and accountability lines; inadequate staffing and lack of incentives; complexity in procurement procedures; and rising living and operational costs not captured in the 2005 DIPA (issuance of spending authority) are some of Aceh's structural problems. Complexity and insufficient preparation and supervision of projects, as well as lack of training for project managers, are some of the specific problems that must be addressed.

## Recommendations

1. **Now is a great opportunity for Aceh to “build back better” after the devastating tsunami and long-standing conflict.** Large amounts of reconstruction funds, coupled with large amounts of APBD, enable Aceh to address structural poverty problems, boost the region’s economic development, and improve the quality of providing public services. However, the accountability and transparency of regional government must be enhanced to ensure that the public resources are managed and spent effectively.
2. **Now is the time to make strategic (re-)allocation decisions regarding reconstruction funds.** By end-2006, more than US\$6 billion—approximately 75 percent of total funds—are expected to be allocated. At this still rather early stage of reconstruction, despite the large amount of available resources, very few players still have significant amounts of “programmable” funds. Remaining financing gaps need to be addressed urgently. Sufficient funds have been pledged overall to support the rehabilitation and reconstruction. However, in some critical areas, the allocation of funds already programmed by the central government and the donors will not meet even the minimum needs, particularly transport. Several regions also remain severely underfunded, particularly Aceh Barat Daya, Aceh Selatan, Aceh Timur, Aceh Tamiang, and Nias.
3. **Future spending by the central government on largely decentralized functions should be discouraged** since regional governments have a better understanding of regional priorities so can avoid overlapping and inefficiency in budget allocation. Central government spending can be targeted well through earmarked grants (DAKs) that focus on lagging regions and activities relating to national priorities and having large economies of scale.
4. **The different government layers must scrutinize the tendency toward increased outlays on overall routine expenditure and on government apparatus development expenditure.** This scrutiny is especially necessary given the indications that increased spending on government apparatus has not yet resulted in better management of fiscal resources. Public spending should be devoted to development-related activities that improve service delivery and social welfare and yield long-term economic and social benefits.
5. **To improve program implementation, budget realization of local government spending should be increased.** The realization of both development and routine spending is generally much lower than the budgeted expenditure. Low realization of expenditure is caused by several factors that need to be addressed, such as the local governments’ low absorptive capacity and delays in budget approvals and revenue transfers, especially natural resources sharing.
6. **Given the complex circumstances and vast scope of work being undertaken by BRR flexibility for BRR spending cycles should be increased, enabling BRR to carry over unspent budget.** This flexibility should be combined with an improvement of BRR’s programming and oversight capacity.







# 5 Sectoral Analyses with Recommendations

This chapter explores the health, education, and infrastructure sectors. Each sector analysis is followed by recommendations.

## Health

**Access to primary health care facilities is generally better in Aceh than in the rest of Indonesia.** According to *Podes* (BPS Village Potential Survey), in 2005 Aceh had 277 *puskesmas* (health centers), 705 *pustu* (subhealth centers), 427 private doctor practices, 1,078 private midwife practices, 4,247 *posyandu* (health posts), and 2,765 *polindes* (public midwife practices).<sup>37</sup> According to UNICEF's Health and Nutrition Survey<sup>38</sup>, approximately 25 percent of villages in Aceh Province do not have on-site health facilities. However this survey might overestimate the need for health facilities since there are many small villages in Aceh whose population and distance to larger villages would not justify a health facility. Compared to the national average, an average Acehnese facility serves a smaller population (14,577 vs. 26,789 people) and has a smaller service area (200 vs. 242 km<sup>2</sup>).

**Unequal distribution of hospitals creates unnecessary needs in some districts.** Most hospitals (20 out of 37) are clustered in the 4 city districts (Banda Aceh, Lhokseumawe, Langsa, and Sabang) while 5 districts remain without a hospital. Due to the small population of many districts as well as the distance to other districts with hospitals, hospitals per district may not be a very useful indicator. Aceh has a similar health services profile relative to Indonesia's: hospitals per population (0.89 vs. 0.77 per 100,000 population), population per hospital bed (1,703 vs. 1,641), and hospital service area (1,500 vs. 1,200 km<sup>2</sup>).

**Health care facilities are generally available, but a large number are not functioning.** For example, in Kab. Bireuen, only 19 percent of the *polindes* are in good or reasonable condition. Services cannot be provided at the remaining 81 percent, which are not functional due to lack of maintenance exacerbated by the conflict and tsunami (figure 5.1).<sup>39</sup> In the absence of on-site health providers, mobile health units should improve village access to formal curative care. Over the last few years, the number of such units increased. In theory, mobile units increase access to health care. However, in reality, many villages are not served by the *puskesmas keliling*; and if a village is served, the *puskesmas keliling* provides services on irregular days (GDS).<sup>40</sup>

**Figure 5.1. Polindes in Kecamatan Padang Tiji, Kab. Pidie**



Source: World Bank staff, June 6, 2006.

37 Large data inconsistencies are identified between provincial and district government health bureaus. The number of facilities reported by the provincial health bureau is significantly larger than that reported by the district health bureau. District health bureau data is more reliable, but information from all 21 bureaus is not available.

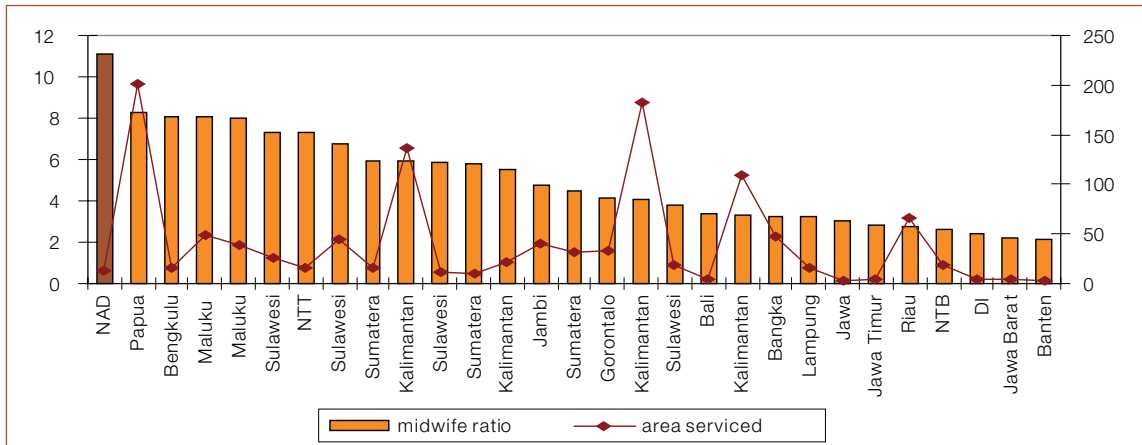
38 UNICEF 2005.

39 Health Bureau District Bireuen, 2004. Bireuen may not be an exception. Staff from Aceh Utara, Lhokseumawe, and Pidie health bureaus report similar facility conditions.

40 Governance and Decentralization Survey 2, 2006. Explanation of the methodology appears in the survey appendix B7.

**Aceh's health work force is relatively large compared to other provinces.** With 11 midwives per 10,000 people, the midwife workforce per capita in Aceh is the highest in Indonesia (Figure 5.2). The Acehese midwife serves an average of approximately 12 km<sup>2</sup>, whereas in all provinces excluding Kepulauan Riau and DKI Jakarta, midwives serve double that area. The number of doctors also is slightly higher in Aceh than in the rest of Indonesia (2 vs. 1.8 per 10,000). The same goes for other health care workers (5 vs. 3.6 per 10,000) (tables D20 and D21 in the statistical appendix D).

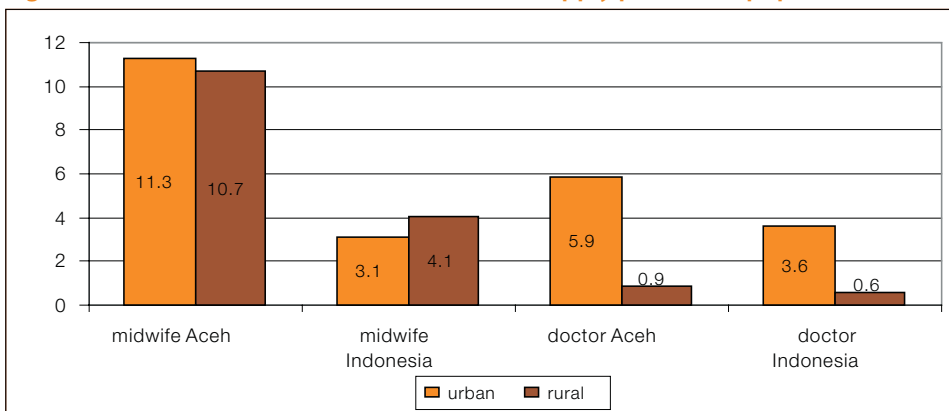
**Figure 5.2. Public and private midwife workforce per 10,000 population and square km served**



Source: Podes 2005.

**Health providers favor urban over rural areas.** Contrary to the Indonesian average, midwife distribution in Aceh is slightly skewed toward urban areas (Figure 5.3). This finding is supported by anecdotal evidence from GDS and district health bureaus that suggests that, during the years of conflict, midwives left rural areas and moved to urban areas. Low living standards and the conflict are among the reasons given for the movement of providers to urban areas. Doctors also are heavily skewed toward urban areas but not significantly different from the Indonesian average.

**Figure 5.3. Urban vs. rural midwife and doctor supply per 10,000 population**



Source: Podes 2005.

**Use of health care services in Aceh is relatively high.** The use rate of health facilities (private and public) is 194 per 1,000 people, higher than the national average of 154 per 1,000. The share of births assisted by a qualified provider also is relatively high. In Aceh, 75 percent of deliveries are assisted by a qualified midwife or doctor vs. 61 percent average for Indonesia. The majority of the population uses public health care services. In Aceh, 77 percent of the total outpatient visits are to public facilities, whereas the average for Indonesia is significantly lower at 46 percent. Comparison of data from Podes (doctors and midwives) suggests that not many providers in Aceh are purely private.

**Use of puskesmas services varies tremendously in Aceh.** Puskesmas receive on average 230 outpatients per week (GDS),<sup>41</sup> or 360 according to a survey by Universitas Gajah Mada (UGM).<sup>42</sup> However, there is vast variation among Aceh's puskesmas ranging from 0 to over 6,500 outpatients per week. Almost one-third of the facilities had under 100 visits per week, or 20 visits per day. An assessment should be made to understand why these facilities provide such a small number of services and whether the maintenance of each facility is justified.

**On many fronts, quality of health care services can be improved. Many facilities are below minimum acceptable standards.** The GDS survey shows that 5 of 34 puskesmas do not have clean water; 12 puskesmas do not have their own generators so face frequent blackouts, and 1 puskesmas has no electricity. Of the 34 puskesmas surveyed, every puskesmas had at least 1 medicine out of stock. In addition, on average, 2–3 of the 13 basic medications were out of stock or had been in the past 3 months. Half of the puskesmas had at least 1 of the 4 main vaccines missing. Provider absenteeism is endemic in the public health system. A 2004 study found that 40 percent of the health providers in Indonesia were absent during official working hours. Based on anecdotal evidence, it seems unlikely that Aceh is any different.<sup>43</sup>

## Health outcomes

**Aceh's overall health outcome indicators seem to be worse than the national average.** Different sources have been used to contrast information from different sources (provincial and district health bureaus, SUSENAS, BPS, and UNICEF). A variety of reasons (tsunami damage, data collection problems due to the conflict) contribute to a lack of accuracy of data in the health sector. Immunization coverage in Aceh is lower than the national average. All data sources suggest that tuberculosis (*Bacillus of Calmette and Guerin-BCG*), DPT3 (combined vaccination against diphtheria: pertussis-whooping cough-tetanus), and measles immunizations are well below the national average (table 5.1).<sup>44</sup>

**Table 5.1. Immunization coverage comparison (%)**

	Aceh (UNICEF 2005) (%)	Aceh (Dinas Kesehatan 2004) (%)	Aceh (SUSENAS 2004) (%)	Indonesia (SUSENAS 2002–03) (%)
BCG	62	36.4	76.2	90.2
DPT 3	48	33.3	21.1	43.2
Polio 3	n.a.	n.a.	6.6	12.8
Measles	49	31.8	76.5	84.2

Sources: UNICEF 2005, Dinas kesehatan 2004, and the Indonesian Demographic and Health Survey (IDHS) 2002–03.

**Data from a UNICEF survey conducted in Aceh after the tsunami shows worse health outcomes in Aceh than in the rest of Indonesia.** The survey was conducted in March and September 2005 in 18 districts in Aceh province that were representative of disease incidence in children below 6 years and pregnant women. The fact that both surveys took place after the tsunami somewhat conditions the analysis. The survey shows that, in Aceh, 37 percent of children suffer from Acute Respiratory Infection (ARI) and 38 percent from fever. These percentages are higher than the average for Indonesia, in which 6.3 percent of children suffer from ARI and 20 percent from fever. Malnutrition incidence indicators also were worse in Aceh, where 44 percent of children were underweight, compared to 26 percent in Indonesia.<sup>45</sup>

41 GDS covered 34 puskesmas in 6 districts.

42 UGM (Universitas Gajah Mada) facility survey contains reliable use data of 165 puskesmas throughout the province.

43 Smeru 2004.

44 UNICEF health and nutrition survey, September 2005.

45 Abreu 2005.



## Impact of conflict and tsunami on health system and health outcomes

**During the conflict, although health facilities were not purposely targeted—as schools were—health infrastructure was seriously damaged.** During the first week of martial law in 2003, three health subcenters and 35 village maternity clinics were burned down in Kab. Bireuen and Kab. Pidie. They were in addition to the 8 health centers, 19 health subcenters, and 7 mobile units destroyed in the province during previous years of hostilities. Furthermore, between 1999 and 2004, 20 health care staff lost their lives, and another 29 health care staff from 20 districts were subject to violence. As a result of the conflict, many midwives left their posts to live in the city. The conflict overburdened the health care system due to the large number of displaced people, restricted access to services in conflict areas, and increased need for specialized care. In addition, during the conflict, many health workers moved from rural to urban areas, resulting in sparse provision of health care services in rural areas. Even although the conflict has ended, these providers have not returned to their postings. In some villages, services have been discontinued, whereas in others, services are at irregular hours depending on the provider. Villagers often depend on a provider at a more distant location.

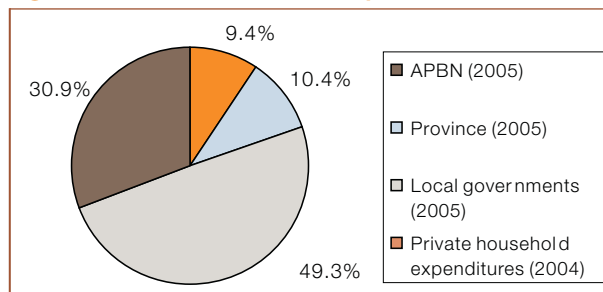
**The tsunami caused widespread damage to health facilities and human resources.** The earthquake and tsunami of December 26 caused significant destruction to the health sector, damaging or destroying 8 hospitals, 41 puskesmas, 59 pustu, 44 posyandu, and 240 polindes. The provincial health bureau also was heavily damaged, with a heavy loss of data. Many health professionals lost their lives. The reduction in the health workforce has been addressed by replacing them with almost twice the number of health care providers. Approximately 1,306 new health staff, including 222 medical doctors and 162 midwives, were recruited shortly after to replace perished staff. Most new health workers were hired by NGOs, work at temporary health service posts, and are not paid by government salaries.

**The tsunami left more than 500,000 people homeless. Most were forced to move to internally displaced persons (IDP) camps. This move created specific health care issues.** As of July 2006, over 50,000 people remained in the IDP camps. The IDP camps have to deal with the limited access to water and poor sanitation. Despite the perceived larger threats to health nutrition indicators, a recent study by UNICEF did not identify significant differences in wasting, global acute malnutrition, stunting, underweight, and anemia between children living in IDP camps and non-IDPs.<sup>46</sup> Recovery is ongoing, but it is taking longer than expected. By July 2006, 25 percent of the damaged health infrastructure had been rebuilt. Eight major hospital reconstruction and rehabilitation projects had been completed; another 13 were ongoing. Half of the damaged puskesmas and pustu are being reconstructed.

## Spending on health vs. quality of health care and health outcomes

**In 2005 total expenditures on health were almost Rp. 700 billion, the majority contributed by the province and districts.** Health expenditures are largely decentralized; 60 percent of health expenditures are spent by the province and districts. Household, private, out-of-pocket spending on health is almost one-third at over Rp. 200 billion.<sup>47</sup> Central government spending through APBN contributes only 9 percent of expenditures (Figure 5.4).

Figure 5.4. Sources of health expenditures



Sources: SIKD and SUSENAS 2004.

46 UNICEF 2005.

47 Household expenditure data from SUSENAS 2004 is used to approximate 2005 expenses.

**A larger percentage of the poorer households had health care expenditures than did the richer households. However, the wealthier households spent more in real terms.** On average, an Acehnese household spends Rp. 3,504 per month on health, or 2.0 percent of his/her total expenditure (SUSENAS 2004) (Table 5.2). This figure is relatively low in comparison to the average Indonesian household, which spends Rp 7,722 or 3.7 percent of his/her total monthly expenditures on health. The low share of relatively expensive private services and lower puskesmas fees could have contributed to the relatively low private health expenditures in Aceh.

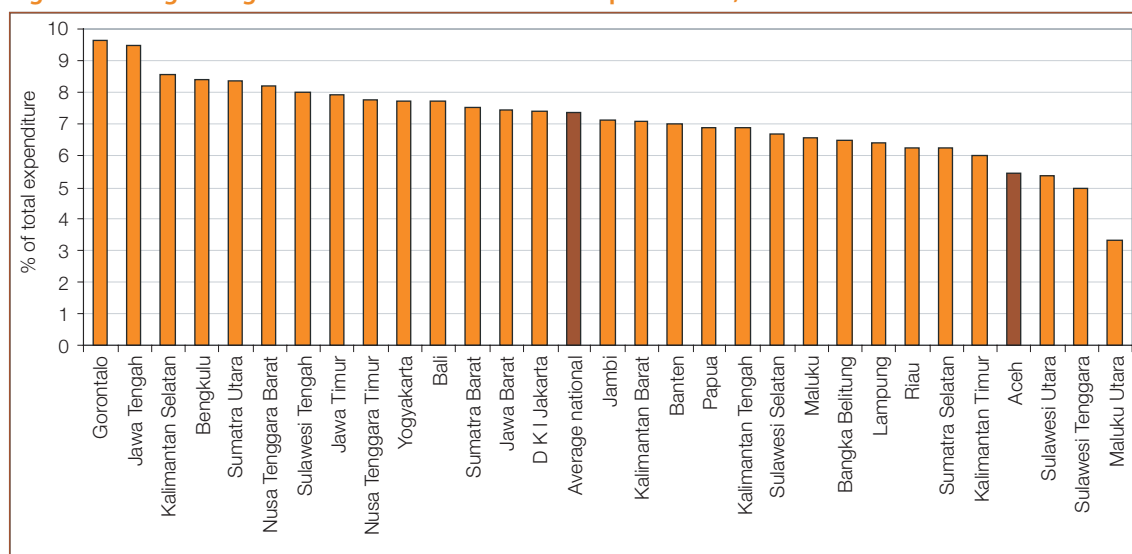
**Table 5.2 Household monthly average health expenses across income quintiles (%)**

	Poorest	2	3	4	Richest	Average
Acehnese household health expenses (Rp)	2,616	2,439	2,959	3,187	6,320	3,504
Share of total hh expenses (%)	2.1	1.7	1.8	1.8	2.3	2.0
Indonesian household health expenses (Rp)	3,399	4,249	5,403	7,381	18,179	7,724
Share of total hh expenses (%)	2.9	3.0	3.2	3.5	4.7	3.7

Source: SUSENAS 2004.

**In 2004 as a share of total spending, Aceh health expenditure were among the lowest in Indonesia.** Regional governments on average spent above 7% of their total expenditure on health, whereas Aceh regional governments spent slightly higher than 5% (Figure 5.5)

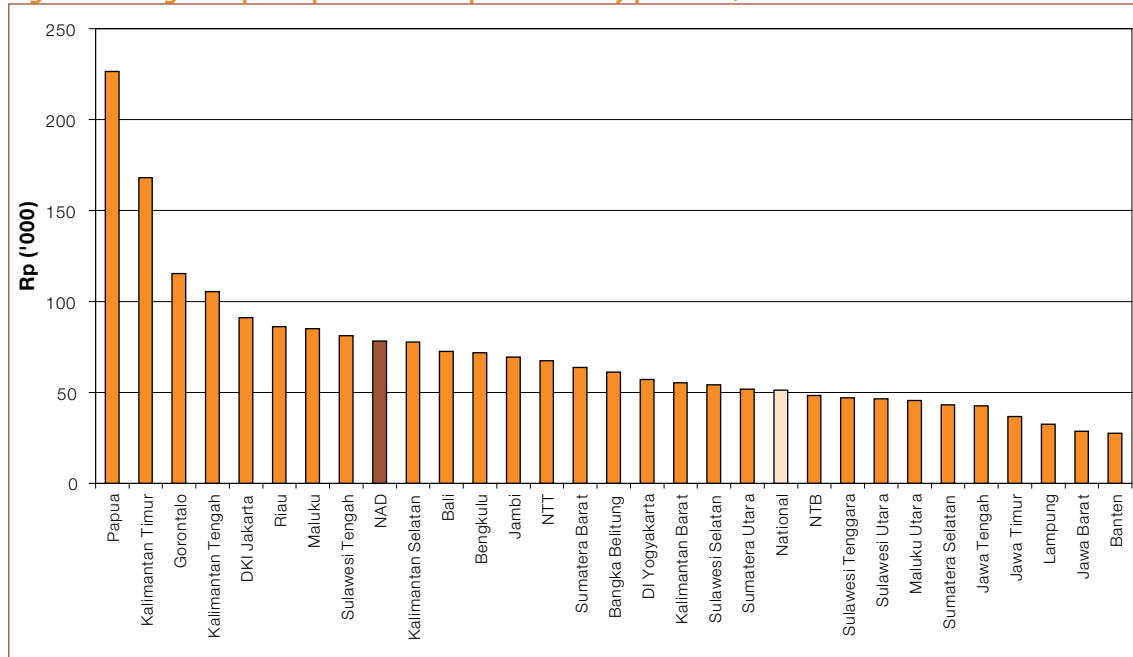
**Figure 5.5. Regional governments' share of health expenditures, 2004**



Sources: WB staff, SIKD, 2004.

**In contrast, per capita regional health spending in Aceh is higher than the Indonesian average.** Regional government per capita health expenditure in Aceh is approximately Rp 78,000, well above the Indonesian average of Rp. 51,000 (Figure 5.6).

Figure 5.6. Regional per capita health expenditures by province, 2004

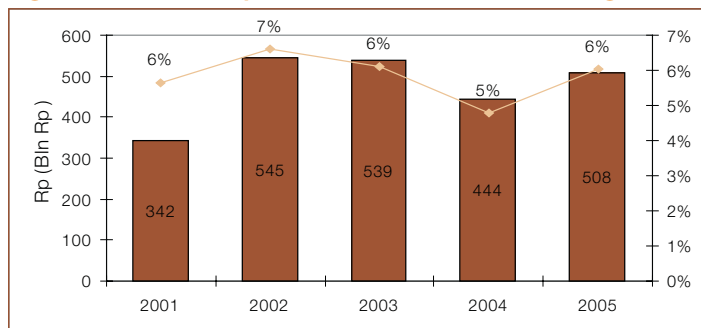


Source: World Bank staff.

Note: Data for DKI Jakarta is not available.

After decentralization, regional health expenditures increased in absolute terms, but the share in total regional expenses did not change much (Figure 5.7). As a result of the special autonomy status, absolute health expenditures increased by approximately 50 percent, but the share of total expenditures allocated to health stayed between 5 percent and 7 percent.

Figure 5.7. Health expenditures as a share of total regional expenditures, 2001–05



Source: World Bank staff estimates based on MoF data (constant 2006 prices).

**District governments spend more on health than do provincial and central governments.** After decentralization, the share of province expenditures in total public health spending decreased when local government health expenditures rose. In 2005 only 15 percent of total public health expenses were contributed by the province, vs. 71 percent from districts and 14 percent from the center. A similar breakdown applies to contributions to routine and development expenditures (Table 5.3).

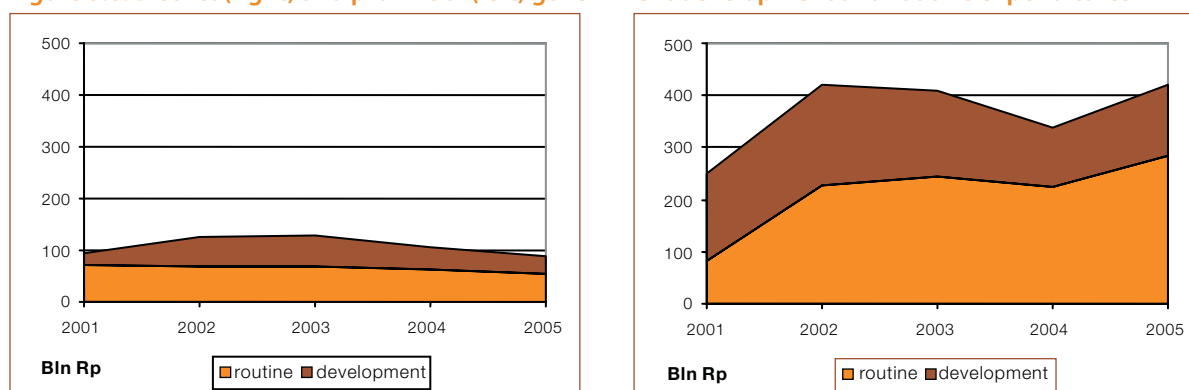
**Table 5.3. Central, provincial, and district health expenditures, 2005**

	Central		Province		District		Total	
	Bln Rp	%	Bln Rp	%	Bln Rp	%	Bln Rp	%
<b>Total</b>	99	13.6	88	15	420	71.3	607	100
<b>Development</b>	23	11.9	34	18	135	70.2	192	100
<b>Routine</b>	77	14.5	54	13.6	285	71.9	416	100

Source: World Bank staff calculations (constant 2006 prices).

**Routine expenditure is increasing whereas development expenditure is decreasing. This trend is increasing the share of routine spending for health.** Since decentralization, regional routine expenditures more than doubled from Rp. 152 billion to 339 billion, mostly due to an increase in district routine spending. Development expenditure has decreased. In 2001 development spending was Rp. 21 billion higher than in 2005 (Figure 5.8). As a result of both trends, the share of routine expenditures increased from 45 percent in 2001 to 67 percent in 2005. Across districts, there is wide variation in routine vs. development spending. Kab. Langsa has relatively high routine expenditures (up to 79 percent of total district health spending), whereas Kab. Aceh Barat Daya spent relatively high shares on development (44 percent). An increasing share of routine expenditures is spent on health provider wages. Salaries as a share of total expenditures have increased from 33 percent in 2001, or 74 percent of routine expenditures, to 54 percent, or 83 percent of routine expenditures, in 2004 (Figure 5.9).

**Figure 5.8. District (right) and provincial (left) government development and routine expenditures**

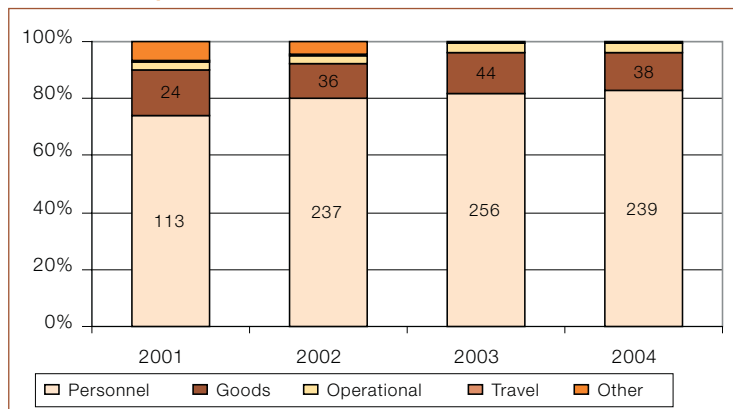


Source: World Bank staff estimates based on MoF data (constant 2006 prices).

**Operational costs are too small to guarantee quality services.** In 2004 only 0.8 million (2 percent of total health expenditures) was spent on operational costs. Puskesmas facilities receive a small allocation for operational expenses, which is always below the requested budget allocation. As a result, there are not enough resources to fully operate the puskesmas. For example, due to lack of funds, the puskesmas keliling (mobile unit) often does not operate, and pusling must be used as an ambulance.



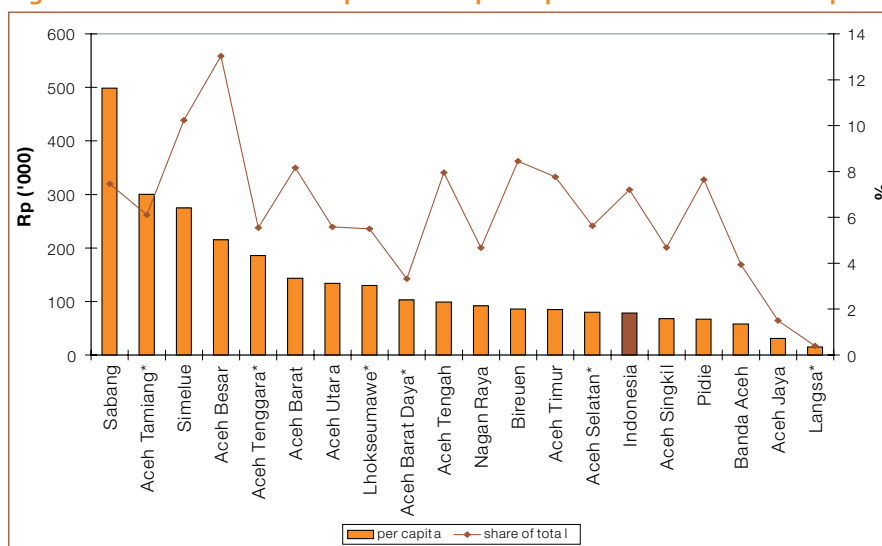
**Figure 5.9. Total routine health expenditures broken down for personnel or salaries, goods, and other (shares and Rp billion)**



Source: World Bank staff estimates based on MoF data (constant 2006 prices).

**The majority of local governments in Aceh spend more on health than the national average district.** Although, proportionately, Aceh's districts spend roughly the same on health, their per capita health expenditures vary greatly. Sabang spends 33 times as much per person as the new district, Langsa. District health expenditures range between 1.5 percent and 13.0 percent of total expenditures (Figure 5.10).

**Figure 5.10. District health expenditures per capita and share of total expenditures, 2004 and 2005**



Source: World Bank staff calculations based on MoF data (constant 2006 prices)

Note: \* = districts for which no 2005 data were available and 2004 data was used.

## Health care policies

**The health card, replaced by JPK Gakin (health insurance for poor households) in 2005, regulation from Aceh's Governor, and JPK-MM (health insurance for the poor) all are intended to decrease out-of-pocket costs.** JPK-Gakin entitles poor households to free third-class health care in- and outpatient services. The 2002 governor's regulation entitles all Acehnese to free puskesmas services. JPK-MM direct block grants aim to "increase access (for the poor) and quality of health care services by reducing out-of-pocket health care costs."<sup>48</sup> This

48 Manlak Depkes, 2005 Since July 2005 the central government has provided direct subsidies in the form of block grants to puskesmas. The JPK-MM block grant is earmarked for 4 puskesmas activities: Basic Health Services, Delivery Service Packet, Management and Operational Resources, and Nutrition Rehabilitation and Revitalization. Puskesmas that participate in the program must sign a Letter of Agreement on the Provision of Aid agreeing to use resources according to strict guidelines.

combination of policies may contribute to the observed relatively low private health care expenditures made by Acehese households.

**The majority of puskesmas do not require puskesmas fees, but not all puskesmas are aware of the regulations.** GDS 2 results suggest that 67 percent of the puskesmas patients paid no fees for the services. The remaining 33 percent spent between 1,000 and 400,000 Rp.<sup>49</sup> Sixty-nine percent of the puskesmas report not to have any puskesmas fees for outpatient services, whereas the remainder charges between 200 Rp and 6,000 Rp. The lack of compliance with the governor's regulation may be the result of limited dissemination of the regulation. Eighty percent of the district health bureau heads and almost 40 percent of puskesmas staff are not aware of regulations related to puskesmas tariffs. No additional funding has been provided to puskesmas to compensate for lost income, which has contributed to tight operational budgets. Before 2002, puskesmas were allowed to keep 20 percent of the collected service fees, which could be used for staff incentives and operational funds. The total revenue collected by fees varies by use: an "average" puskesmas with 350 patients per week and a fee of Rp. 1,500 would receive a yearly income through retribution of 5.2 million Rp. Lack of compensation on average could have contributed to a 10 percent loss of puskesmas income.

**Block grant disbursement delays grants have affected service delivery.** Puskesmas report major delays in the disbursement of the JPK-MM block grant. Not all puskesmas can prepay the services and, as a result, interruption in the provision of services has been reported. Once funds have finally arrived in puskesmas accounts, the funds remain unspent since rules are not clear about the reimbursement of puskesmas expenses. Other entitlements such as the free provision of midwifery are already paid by the patients and can thus not easily be returned. Puskesmas heads do not have the authority to reallocate funds so they remain unspent until further news from the district health bureau. Central block grants are a step back from decentralization because they supercede district authorities. Since decentralization, district governments have been responsible to maintain the public health sector. The block grant program from the central government overrules district authorities, and so contradicts the objective of decentralization. Direct block grants to maintain minimum levels of health services while enhancing local government capacity may have been the result of the central government's realization that local governments were not able to provide minimum services. This, however, does not seem to be the intention of JPK-MM (nor BOS, the education sector equivalent). No institutional capacity enhancement programs for local government that signal this intention are in place.

## Recommendations

1. **Three priority areas to improve health service delivery are (1) streamlining the health information system, (2) improving expenditure allocations to maintenance and operations, and (3) assessing the human resource capacity of local government health bureau staff.** Public health expenditure as a share of total expenditure is relatively low in Aceh, but per capita health care expenditure is relatively high. Relative to other districts in Indonesia, district spending on health, which contributes 71 percent of health expenditures, is low. Private contributions from households make up a large share of total health expenditures. The public resources earmarked for health and the funds provided by the reconstruction effort provide an opportunity to significantly improve the health care system in Aceh.
2. **Whereas the current focus is on the quantity of facilities and health providers, the focus should be improving the quality of services. The spending mix should be improved to address absenteeism, low incentives to work in rural areas, as well as the bad condition and lack of operational funds of many facilities.** The increasing number of districts and villages has led to a false demand for health facilities. Attention should be moved from the current focus on building new facilities. Maintenance has been neglected, and operational expenditures are sometimes too small to be of use. Services would benefit from higher maintenance and operational expenditures.

<sup>49</sup> High costs are incurred when inpatient services are required.

3. **Proper mapping of health care facilities, their maintenance, and human resources are important before deciding to build more health care services.** Since decentralization, the number of puskesmas and pustu has kept increasing. Despite a high number of public and private health care providers, human resources are not always sufficient to actually staff the new facilities. As a result, facilities are minimally equipped, and the working environment does not support health care staff, who consequently leave their posting.
4. **There is a need to rebuild the data management information system to support prioritization of the health budget allocation.** Government health institutions are overwhelmed with data, which seem to be collected without a clear purpose. As a result, little attention is paid to the quality of the data. Comparison of different data sources within the health bureau shows inconsistencies. In addition, as a result of the conflict and the tsunami, much data has been lost. A proper stocktaking of health infrastructure, human resources, and services is therefore very difficult. The lack of an institutionalized flow of data between districts and province further hampers the quality of data. Proper verification of data is not possible, and verification has not received the attention it deserves.
5. **Central government spending should be on centralized tasks only.** The central government subsidies (block grants) to puskesmas cover a responsibility of the district government. The allocation of central government spending in the regions is very unpredictable. District governments cannot depend on this revenue, which is subject to changing regulations to operate. It is notable that districts seem to adapt their expenditures accordingly, not assuming full responsibility for areas for which they are responsible.
6. **The mobility of health care providers should be facilitated to increase the effectiveness of health care services.** At the village level, providers depend on their own transportation. Provision of transport for health care staff, especially midwives in the field, is essential to increase use of their services. Without the support of the puskesmas, provision of antenatal care, assistance during birth, postnatal care, immunizations, and socialization of best information and best practice depend on the midwife.

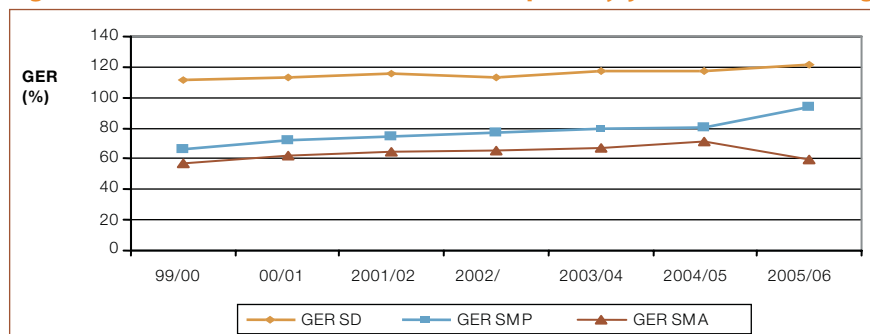
## Education

### Education system and outcomes

**Provincial Education Bureau data suggest that over the past five years enrollment rates in Aceh have steadily increased.** Between 2000 and 2004, elementary school (SD) gross enrollment rate increased slightly from 111 percent to 118 percent; junior high school (SMP) gross enrollment rate increased from 67 percent to 80 percent; and senior high school (SMA) gross enrollment rates from 57 percent to 72 percent (Figure 5.11). Comparison to national gross enrollment rates (GERs) over time shows that Aceh has relatively high enrollment rates. In 2004 national GERs for primary, junior secondary and senior secondary were 107 percent, 82 percent, and 54 percent, respectively.<sup>50</sup>

<sup>50</sup> Draft Indonesia public expenditure analysis of the education sector, 2006.

**Figure 5.11. Gross enrollment rate trends for primary, junior, and senior high school in Aceh, 1999–2006**

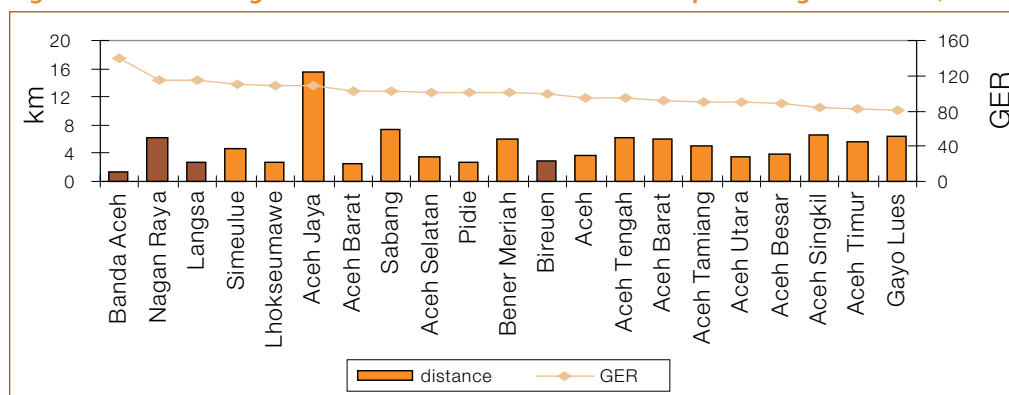


Source: Ministry of National Education and BPS population data, various years.

**Trends in enrollment rates are more reliable than enrollment levels, which seem overestimated.<sup>51</sup> Review of the education bureau data and BPS population data is necessary to make a reliable estimate of enrollment rates.** Three different sources (BPS, Education Bureau, and SUSENAS) on 2004–05 SD student enrollment numbers (both private and public) vary from 523,228 to 579,804 students. The religion bureau data does not seem to vary significantly, creating GERs ranging from 118 percent to 127 percent.<sup>52</sup> Other data issues include an inconsistency between the number of SD students graduated in 2004–05 with the number of SD students enrolled in the final grade of that year.

**Net and gross primary school enrollment rates suggest proper access to primary schools but large district variations remain; Kab. Aceh Jaya seems to perform well below average.** Podes 2005 suggests there were 1,033 pre-schools and 3,560 primary schools in Aceh province. Compared to the national average, net enrollment rates in primary education in Aceh are slightly higher: 93 percent in 2004. Only 4 districts fall below the national average: Kab. Aceh Barat Daya, Kab. Nagan Raya, Kab. Aceh Barat, and Kab. Aceh Jaya (figure B12). A GER exceeding 90 percent for a particular level of education suggests that the aggregate number of places for students approaches the number required for universal access of the official age-group.<sup>53</sup> Secondary education enrollment seems to be higher than national average. There is quite a bit of variation in enrollment rates between districts. Banda Aceh is an outlier with GER of 140 percent, possibly due to an influx of students not registered in the city after the tsunami. The other districts vary between 80 percent and 115 percent GER. The average distance to a junior high school outside the village is 5 km, but students have to cover an average of 16 km in Kab. Aceh Jaya. The distance to SMP and SMP GER are not significantly correlated (Figure 5.12).

**Figure 5.12. Junior high school GER and distance to schools per local government, 2005**



Source: Podes 2005, Provincial Education Bureau, and Census.

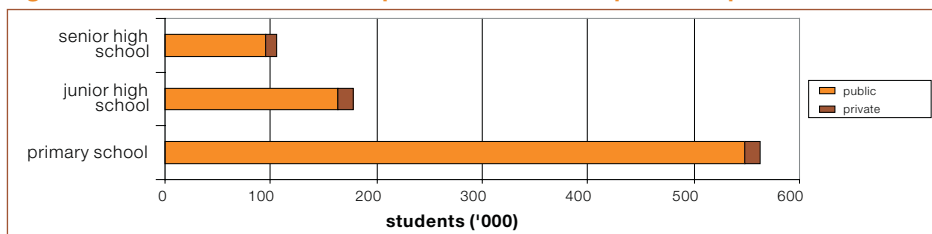
51 The number of students in school of age group 7–12 (2005) from the education bureau exceeds the number of children of the same age group in the population census.

52 “Rangkuman Data Pendidikan” and “Data Kebutuhan Guru” Dinas Pendidikan Propinsi, Aceh Dalam Angka, and Ministry of National Education.

53 UNESCO Institute for Statistics, “Education Indicators,” 2003

**Public schools are generally preferred because of lower costs, better equipment, and higher quality. However, some public schools have limited enrollment.** Fewer than 10 percent of the students go to private schools (Figure 5.13). Public and private schools have the same curriculum, teaching hours, and national test requirements. Private schools are in demand where public schools are not available, where public schools have maximum enrollment levels, and where there are households who can afford expensive, better quality education. SMA Anak Bangsa Banda Aceh and SMA Yapena Lhokseumawe are examples of better quality private education. High fees enable hiring quality teachers, and buying good books and quality equipment.

**Figure 5.13. Number of students per education level, public vs. private, 2004–05**



Source: Dinas Pendidikan Propinsi.

**The new education law No. 19/2005 requires teachers to have a bachelor’s degree, but throughout Aceh only 37 percent of teachers fulfill this requirement.**<sup>54</sup> At primary school level, between 13 percent and 28 percent of teachers fulfill this requirement (Table 5.4). Teacher qualifications in Aceh are lower than the national average: 55 percent and 73 percent of teachers have the minimum qualifications required for primary and junior secondary levels, respectively.<sup>55</sup> Teachers at religious schools on average have higher degrees than teachers at nonreligious schools. Although teachers at religious schools have higher levels of educational attainment (58 percent–75 percent vs. 50 percent), Provincial Education Bureau data suggest that student performance on the national tests is similar. Junior high school teachers are more qualified than elementary school teachers. The highest qualifications are found at the senior high school level.

**Table 5.4. Teacher qualifications in Aceh province, 2005–06 (%)**

	SD		MI		SMP		MTs		SMA/MA
	Public	Private	Public	Private	Public	Private	Public	Private	Public + private
D1	44	50	26	34	13	16	5	13	2
D2	37	26	43	26	9	6	3	4	1
D3	6	8	6	12	32	27	19	26	19
Bachelors degree or higher	13	15	25	28	46	51	73	58	77
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Provincial Education Bureau NAD.

**Teacher absenteeism is relatively high.** The GDS, which included 72 teachers in Aceh Utara, Aceh Besar, and Aceh Barat, suggests that 30 percent of the teachers were absent during school time, engaged in tasks outside school, sick, or attending to private business. A study that included 147 schools in Indonesia found that 19 percent of the teachers were absent.<sup>56</sup> Quality teaching is further hindered by the poor condition of school buildings. Almost one-quarter (23 percent) of elementary classrooms are classified as heavily damaged and require complete reconstruction. Only 44 percent of elementary classrooms in Aceh are considered in good condition, whereas 33

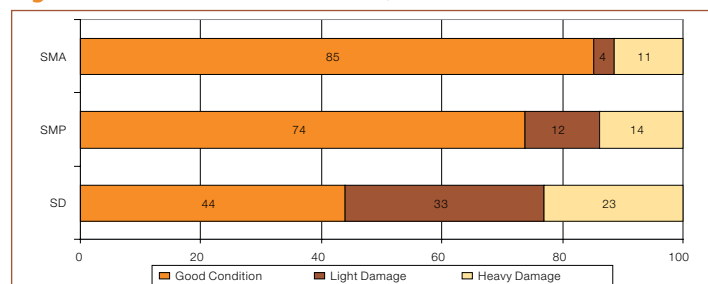
54 Provincial Education Bureau, NAD.

55 Ministry of National Education, Indonesia: Educational Statistics in Brief 2004/2005.

56 SMERU 2004.

percent have light damage and requires some reconstruction work (Figure 5.14). Although the general condition of higher levels of education is much better, more than 1 in 10 classrooms should be completely renovated.

**Figure 5.14. Classroom condition, 2005**

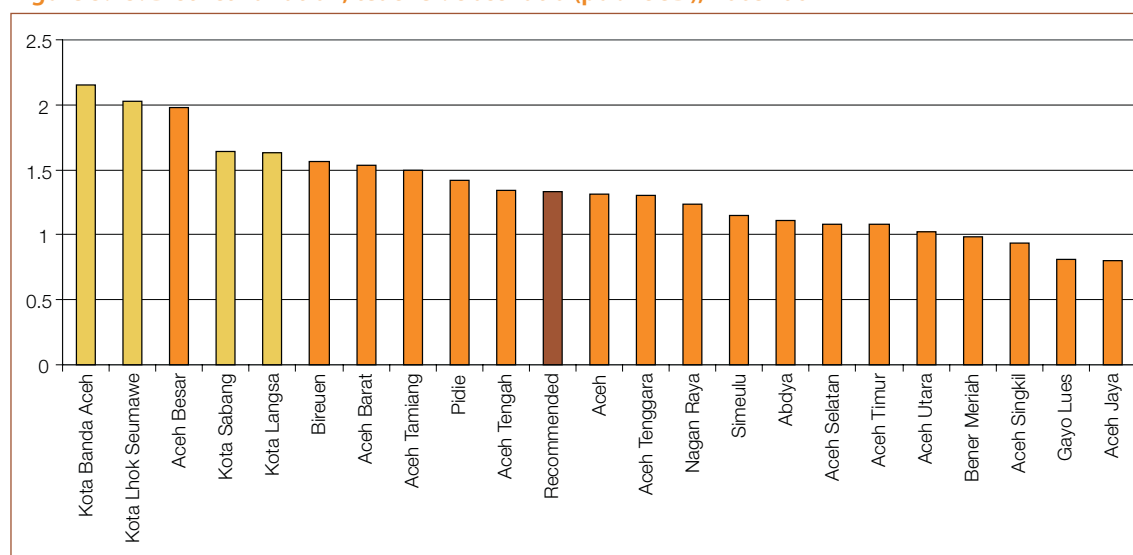


Source: Provincial Education Bureau, NAD.

**A scarcity of schoolbooks impedes education.** GDS survey shows that approximately one-fourth of Aceh's schools had one Indonesian language book and one mathematics book per student. The remainder had on average enough books to cover 45 percent of the students. A similar problem affects the rest of Indonesia.

**Teachers favor urban areas, creating unnecessary needs in rural areas.** A teacher-class ratio of 1:3 is sufficient to meet minimum service standards. Data per district indicates that there are significantly more teachers in urban than in some rural areas (Figure 5.15). This problem has been persistent in recent years.

**Figure 5.15. District variation, teacher: class ratio (public SD), 2005–06**



Source: Provincial Education Bureau, NAD.

**Minimum service standards do not necessarily reflect regional needs and increase inefficiency of human resource allocation.** Teacher need is calculated based on the number of teachers per school. According to minimum service standards rules, each elementary school should have a minimum of 6 class teachers, one sports, and one religion teacher. Based on this rule, another 4,654 teachers are needed for primary schools (SD). The student teacher ratio (STR) of elementary schools in Aceh is already half the targeted STR of 40:1 indicated by the minimum service standards. Allocating additional teachers would only increase the already inefficient use of human resources. An increase in the number of teachers would be warranted only if the number of students increases significantly. The almost complete primary enrollment rates and declining fertility do not foresee such a need in the near future. School regrouping where geography allows it and multilevel teaching in more remote areas would reduce the need for so many teachers.

## Impact of the conflict and tsunami on the education system and outcomes

The long-running conflict has inflicted major damage on education infrastructure. Loss of human resources, temporary drop-out of students, and delays in policy implementation are all major setbacks for education services. Between August 1998 and August 2001, 369 school buildings were torched, of which 70 percent were primary schools. Even worse was the period of martial law, which began in 2003 (Table 5.5).

**Table 5.5. Number of schools destroyed per district, August 1998–June 2003**

District	August 1998–August 2001 Period			Martial Law, 19 May–18 June 2003 Period			Total
	SD	SMP	SMA and SMK	SD	SMP	SMA and SMK	
Pidie	28	15	6	219	29	4	<b>301</b>
Bireuen	7	1	1	119	11	5	<b>144</b>
North Aceh	66	26	14	3	1	1	<b>111</b>
East Aceh	17	5	4	37	8	7	<b>78</b>
Central Aceh	36	5	1	0	0	0	<b>42</b>
West Aceh	13	9	3	6	2	0	<b>33</b>
Aceh Selatan	65	18	6	0	0	0	<b>89</b>
Other districts	11	8	4	41	14	3	<b>81</b>
<b>Total</b>	<b>243</b>	<b>87</b>	<b>39</b>	<b>425</b>	<b>65</b>	<b>20</b>	<b>879</b>

Source: Bappeda and NAD Department of Education.

**Many children displaced to conflict IDP camps quit school, at least temporarily.** According to the NAD Department of Education, in 2003 the number of IDPs reached approximately 41,000, including 16,352 students (approximately one percent of the students). The education process was interrupted, and many students of primary and secondary schools failed to take school final examinations.<sup>57</sup> Teachers were also victims, and many of them moved to urban areas. The government showed commitment to provide temporary tents and rebuild damaged schools. In 2003 a Rp. 40 billion (approximately US\$4.4 million) budget was allocated for reconstruction and other humanitarian assistance. Within the already approved 30 percent education fund budget, expenditures were adjusted to shift from nonphysical expenses to emergency education infrastructure development.

**The earthquake and tsunami of December 26, 2004 took the lives of almost 2,500 teachers and tens of thousands of students.** More than 2,000 schools were reported severely damaged or destroyed. However, many schools were already in bad condition due to conflict or lack of maintenance. For example, in Kab. Bireuen, only 25 percent of the damage was due to the tsunami or earthquake. Reconstruction is on its way. Teachers have been recruited to replace the casualties, but the majority of damaged schools still need to be rebuilt. By April 2006, 2,400 of 2,500 perished teachers had been replaced. Two hundred and sixty schools had been rebuilt, and another 104 schools are in progress. Approximately 1,500 schools will still require rehabilitation after the tsunami pledges have been achieved. Unfortunately, coordination was lacking in the reconstruction efforts. The results are overlapping reconstruction in urban areas and large gaps in rural areas.

**The tsunami temporarily disturbed education, but most children ultimately went back to school.** According to the October 2005 population census in Aceh, 95 percent of children aged 7–12 are attending school, which is not different from the pre-tsunami enrollment levels. Impact of the tsunami on the continuance of education and passing rate of students can be made only after data issues mentioned in the beginning of this chapter have been resolved.

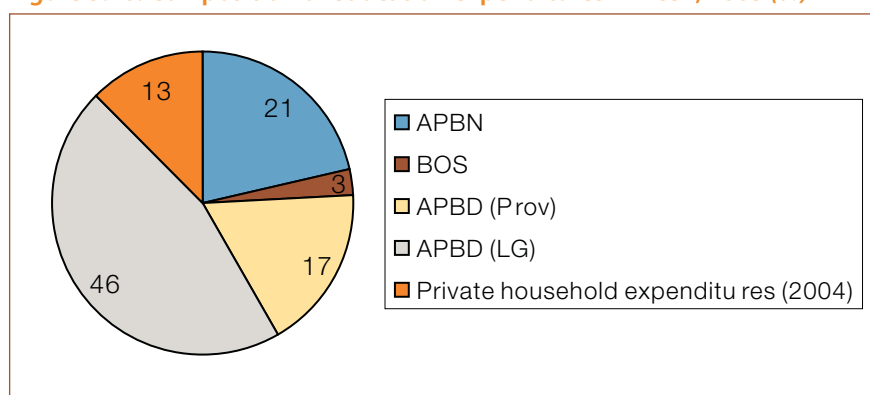
<sup>57</sup> Serambi Indonesia, 26 May 2003.

**Young children aged 0-4 were disproportionately casualties to the tsunami, which will cause a shift in student distribution.** A basic comparison of the population census of 2005 with the population projection of 2005 indicates a 7 percent reduction in the number of children in the age group of 0–4 years, and a 3 percent reduction in the age group of 5–9 years. This means that approximately 40,000 pupils fewer than initially planned will go to primary education during the next four years. Comparison of new student enrollment numbers with projections from before the tsunami shows the decline in enrollment; 114,410 new students vs. the predicted 126,510.<sup>58</sup> Thus, decreasing class sizes initially for SD and later for SMP need to be expected. The generous amount of funds allocated to the education sector after the tsunami can be used for programs to improve the quality of teaching and leave a legacy of better quality education in Aceh.

## Spending on Education vs. Quality of Education and Education Outcomes

**Education expenditures in Aceh include those by central government (APBN), regional governments (APBD I + II), and private households. In 2005 they totaled Rp. 8 trillion.** Public education expenditures, if not defined differently, include expenses by the religious and culture bureaus. Local governments are the biggest spenders with approximately Rp. 1.2 trillion or 46 percent of total expenses. They are followed by Rp. 655 billion of central spending (APBN and BOS contribute to 24 percent of spending). Private contributions from households should not be neglected; they contributed Rp. 340 billion to total education spending (Figure 5.16).

**Figure 5.16. Composition of education expenditures in Aceh, 2005 (%)**



Source: SIKD MoF, BOS MoNE, and SUSENAS 2004.

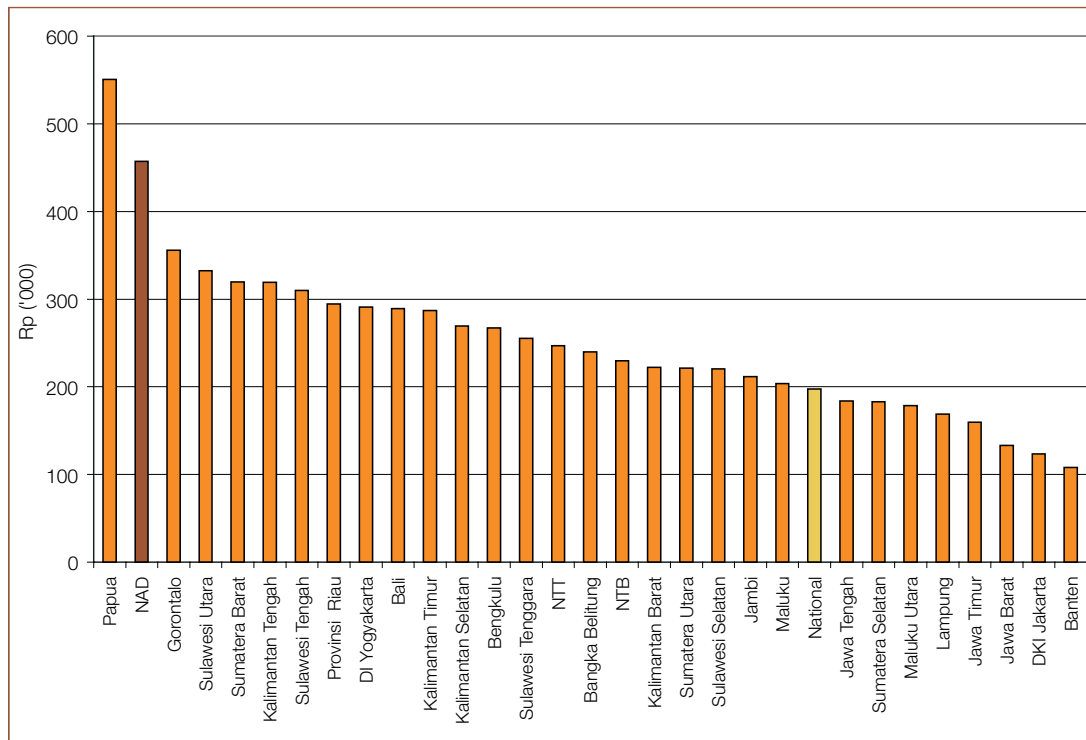
**Private expenditures contribute significantly to total education expenditures.** Extrapolating adjusted 2004 SUSENAS to 2005 suggests that private contributions to education add another Rp. 340 billion to education spending. Analysis of the Governance and Decentralization Survey data shows that private spending for junior and senior high school goes primarily to books, writing materials, and transport when necessary, whereas enrollment and monthly fees seem to take a smaller share of spending.

**Aceh has the second highest per capita education expenditures of all provinces in Indonesia.** Together with Papua, Aceh province spends significantly more on education relative to its population than all other provinces in Indonesia. A per capita spending of Rp. 457,000 is more than twice the national average of Rp. 198,000 (Figure 5.17).

<sup>58</sup> Provincial Education Bureau, 2005.



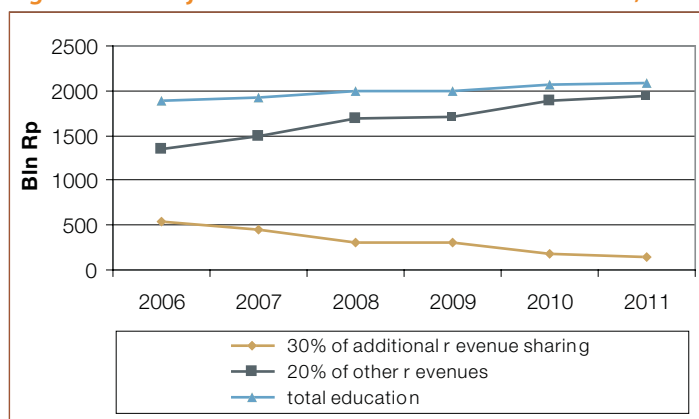
Figure 5.17. Regional government per capita education expenditures per province, 2004



Source: World Bank staff calculations.

The new Aceh Autonomy Law No. 11/2006 maintains allocation of funds for education. A minimum of 30 percent of additional revenue-sharing should be allocated to education expenses in Aceh. A minimum of 20 percent of total province and district government expenses should be allocated to education. This new law guarantees stable allocation of revenues to the education sector with no dependence on oil and gas revenues, enabling the education bureaus to plan for the near future. A projection of revenues until 2011 indicates that approximately Rp. 2 trillion will be available to province and local governments in Aceh for education over the next 5 years (Figure 5.18).

Figure 5.18. Projection of Aceh resources for education, 2006–11

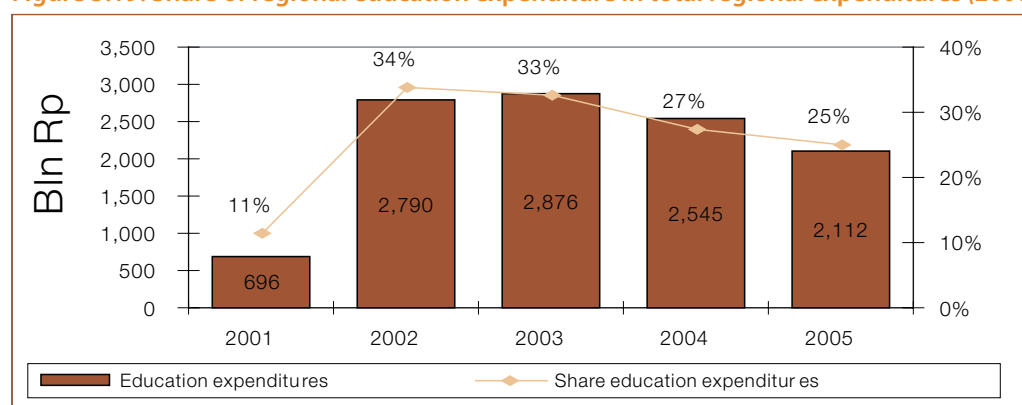


Source: World Bank staff calculations.

In absolute terms, regional education expenditures quadrupled after decentralization but then decreased slowly. Nevertheless, the share of education expenses in total regional expenses remains above 25 percent. Before the introduction of special autonomy, provincial and local governments managed Rp. 70 billion and 491 billion,

respectively. In 2002 regional resources grew to Rp. 440 billion and Rp. 1.8 trillion, but then they declined slowly to Rp. 319 billion and Rp. 1.7 trillion, respectively, by 2005. The share of education expenses increased drastically after the first Aceh autonomy law was implemented; in 2002, 34 percent of provincial and district expenses were allocated to education. Since then, shares have decreased but remain above 25 percent in line with the new Autonomy Law (Figure 5.19). Spending by the education bureau has increased since decentralization; local governments contribute the majority of spending. It seems that provincial education spending after 2004 decreased due to the pledge of central government to increase spending through the BOS program starting in July 2005.<sup>59</sup>

**Figure 5.19. Share of regional education expenditure in total regional expenditures (2006 constant prices)**



Source: World Bank staff calculations.

**Routine expenses are mainly a district expense, whereas development spending is almost equally divided among central, provincial, and local governments.** Local governments spent 74 percent of total routine spending; central government adds another 24 percent; and the province's contribution is almost insignificant. With 34 percent, 29 percent, and 37 percent, the different levels of government make almost equal contributions to education development spending (Table 5.6).

**Table 5.6. Central, provincial, and district education spending, 2005 (constant 2006 prices)**

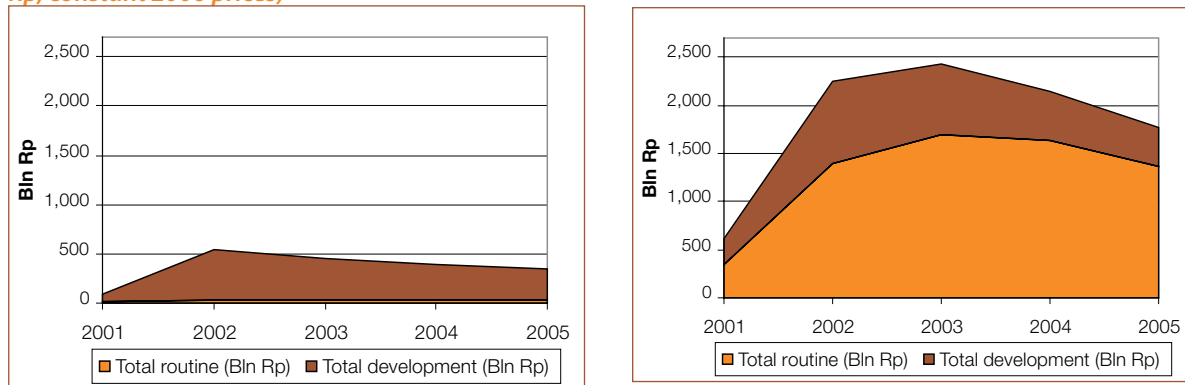
	Central		Province		District		Total	
	Bln Rp	%	Bln Rp	%	Bln Rp	%	Bln Rp	%
<b>Total</b>	813	27.8	341	11.7	1771	60.5	2,925	100
<b>Development</b>	370	33.9	313	28.7	407	37.3	1,090	100
<b>Routine</b>	443	24.1	28	1.5	1364	74.3	1,835	100

Source: World Bank staff calculations.

**Routine expenditure is taking an increasing share of total education expenditures, leaving little room for development expenditures.** The share of routine expenditures has been increasing since 2002. From 2003 onward, more than 60 percent of total regional education expenditures were routine expenditures. In 2005 two-thirds of regional education expenditures were routine (Figure 5.20).

<sup>59</sup> BOS is a block grant from central government to schools to cover primary and junior school operational costs. Schools sign a Letter of Agreement on the Provision of Aid according to which they have to comply with regulations regarding registration forms, textbooks and materials, costs for training, examinations, and other fees. The size of the block grant is based on the number of pupils and level of education: Rp. 235,000 per primary school student and Rp. 324,500 per junior secondary student.

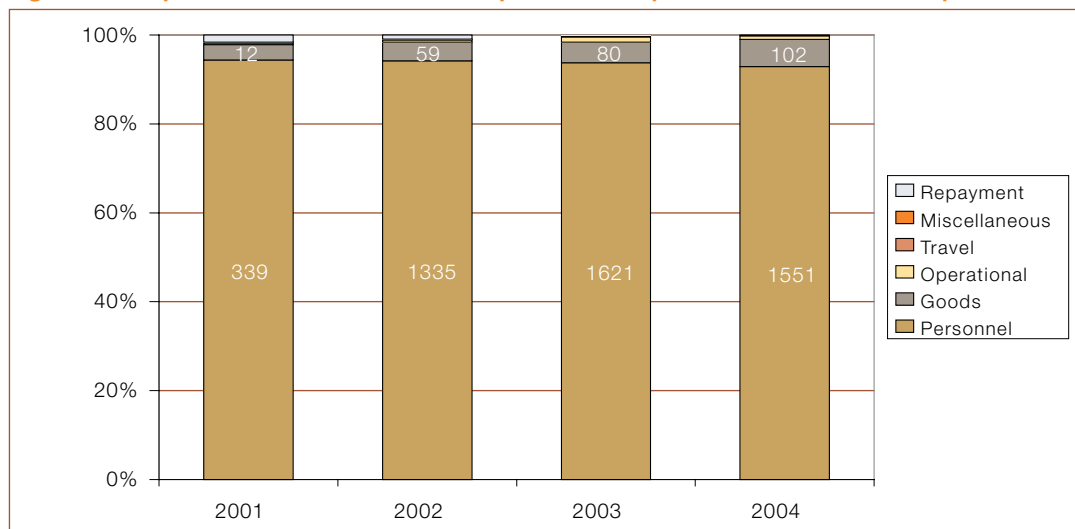
**Figure 5.20. Province (left) and district (right) government routine and development expenditures (billion Rp, constant 2006 prices)**



Source: World Bank staff calculations.

**Almost all routine expenditures are allocated to the salaries of teachers.** By the end of 2004, 93 percent of routine expenditure was attributed to salaries, a slightly lower share than the national average (96 percent). As a result, goods and operational expenditures for education represent a very small share of the total expenditure. In 2003 and 2004, less than US\$10 million was spent on these two categories (Figure 5.21).

**Figure 5.21. Specified routine education expenditures (Rp. billions) (constant 2006 prices)**



Source: World Bank staff calculations.

**The new Teacher Law (No. 19/2005) will increase the expenditures on teacher wages in the coming years.** This law stipulates that teachers of all levels of schooling should have a four year diploma or a bachelor's degree; envisages that all teachers must be certified within 10 years, and gives additional incentives for teachers who teach in conflict and natural disaster areas.<sup>60</sup> The law could increase the number of teachers in remote areas and reduce absenteeism. The new teacher law will certainly put additional fiscal demands on the resources for education because more educated teachers receive a higher base salary. Only if the current number of teachers is limited and more efficiently used will the law benefit education.

**Local governments on average spend a very significant share of their total expenses on education.** Only four districts spent below 20 percent of total expenses on education (figure B8). There are significant variations in education allocations across districts. Many, but not all, districts adhere to the autonomy law (to contribute at least

60 Pasal 29, Law 19/2005.

30 percent of district spending to education). Between 2002 and 2005, a significant portion of the education fund was allocated to government institutions not related to public education. This trend has been reversed in the last years. Training for government officials not related to schooling was funded through the education fund (highest in 2002 with 14 percent) (Table 5.7). *Qanun* no. 23/2002 stipulates the use of the education fund only for public education, so spending not related to education violates Acehese regulations.<sup>61</sup>

**Table 5.7. Allocation of the education fund resources** (real expenditures, Rp billions)

	2002	%	2003	%	2004	%	2005	%	2006	%
Provincial Education Bureau	220,6	32	245,2	35	243,4	34	193,7	39	161,8	34
Other departments and agencies	96,5	14	62,4	9	62,3	9	53,7	11	7,2	2
Library and education committee	3,0	0	3,3	0	2,7	0	3,0	1	2,8	1
Universities and training center	51,2	7	56,0	8	57,7	8	48,8	10	59,4	12
District Education Bureau	279,7	40	262,1	37	264,5	37	196,0	40	228,3	48
Education Heritage Fund	49,0	7	70,0	10	70,0	10	0,0	0	0,0	0
Other	0,0	0	2,0	0	5,0	1	0,0	0	20,5	4
<b>Total Education Fund</b>	<b>700,0</b>		<b>700,0</b>		<b>721,4</b>		<b>491,0</b>		<b>480,0</b>	

Source: Dinas Pendidikan NAD "Perbandingan Alokasi Dana Pendidikan Tahun 2002–2006."

Note: 2005 and 2006 are planned budget.

**In 2004 and 2005, a large share of provincial expenditure went to basic (primary and secondary) education.**

Even though the share of education expenditure spent on public education has always been above 50 percent, it was particularly high in 2004 and 2005: 79 percent and 86 percent, respectively. In 2006 the allocation to public education decreased slightly to 66 percent due to the increased allocation to research and development of science and technology (*Ilmu Pengetahuan dan Teknologi*, or IPTEK) and to the new budget lines, "Development of Islamic Education" and "Education Management" (Table 5.8).

**Table 5.8. Provincial spending breakdown, 2002–06**

	2002	%	2003	%	2004	%	2005	%	2006	%
Primary education and preschool	82	37	56	23	139	54	122	64	107	66
Junior and senior secondary education	41	18	64	26	64	25	42	22		
Tertiary education	10	5								
Extracurricular education/nonformal education/education for early school children	45	20	48	20	48	18	23	12	21	13
Synchronization and coordination of education development	36	16	57	23						
Research and development of IPTEK	7	3	19	8	8	3	4	2	8	5
Development of Islamic education and <i>dayah</i> development									12,7	8
Education management									13	8
<b>Total province</b>	<b>221</b>	<b>100</b>	<b>244</b>	<b>100</b>	<b>259</b>	<b>100</b>	<b>189</b>	<b>100</b>	<b>162</b>	<b>100</b>

Source: Provincial Education Bureau, NAD.

61 The education fund must be allocated to (1) pre-madrasah education, (2) primary education, (3) high schools and vocational schools, (4) education at *dayah*, (5) higher education, (6) nonformal education, (7) special schools, (8) provincial board of education (known as Majelis Pendidikan Daerah), (9) education trust fund, (10) scholarships, (11) R&D in education, and (12) libraries and school reading rooms.

**Public spending on lower levels of education is more pro-poor.** Enrollment rates for elementary school are very equal and hardly vary among income groups. Variations among enrollment rates increase with level of education. Junior high school enrollment rates of the poorest income quintile in Aceh are 10 percentage points lower than enrollment rates of the highest income quintile. For senior high school, the inequality increases to 25 percentage points. Half of the children from the lowest income quintile are enrolled in senior high school compared to three-quarters of the children from the highest income quintile (Table 5.9).

**Table 5.9. Enrollment levels per income quintile, 2004**

Income quintile	SD	SMP	SMA
Poorest	95	76	50
2	96	78	59
3	96	80	61
4	96	84	70
Richest	95	86	75

Source: Susenas 2004.

## Education Budget Process

**The education budget process remains a top-down exercise.** The budget process in the era of decentralization has not significantly changed from the past. In theory, a system of bottom-up planning is set in place starting from a proposal of the school master, the *musyawarah*, to provide community input and then going to district, provincial, and central government. In reality, there is overwhelming evidence of top-down planning (GDS).

**At all levels, education planners are hindered by incomplete financial information.** School officials, both teachers and heads, have become accustomed to waiting for public financing, delays in disbursement, and uncertainties about their rightful benefits. These hinder advance planning and the possibility of checks and balances. District education bureaus are not certain of the financial support they will receive from provincial and central sources until they receive the money. At the same time, provincial stakeholders lack data from the districts because not all districts send their financial and education data back to the province level. Slow disbursement of resources drastically reduces the impact of financial flows. Resources often experience delays in disbursement varying from months to half a year, resulting in the cancellation of budget items or delays in implementing projects.

## Recommendations

1. **Aceh's momentum should be used to increase enrollment into higher levels of education.** The new autonomy law ensures a minimum allocation to education, and the resources available for the tsunami reconstruction create an opportunity to drastically improve education in Aceh. Net enrollment rates for elementary schools are almost 100 percent, whereas higher levels of education have lower enrollment rates. **More attention should be paid to increasing access to higher levels of education, from which more significant rates of returns can be found.**
2. **The government should make quality of education a priority.** Current data indicates that enrollment rates are relatively high in comparison to the national average, but there are clear issues of low maintenance and lack of infrastructure.
3. **The education bureau is overwhelmed with a large quantity of data, but quality data is lacking. Identification and collection of key (financial) input, process, and outcome indicators are essential for planning.** At the district level, although required by new regulations on the budgeting process, data are rarely used for policy-making and budget programming, (Kepmendagri No. 29/2002). Without basic data, good planning is not possible. The provincial government does not have the authority to request

information from local governments. Thus, reports from local governments to the provincial government are rare and of poor quality, an issue that clearly affects the quality of provincial reports. The implementation of the “one-roof” education system, in which both nonreligious and religious education will fall under the education bureau from 2008, provides an opportunity to improve data collection and evidence-based policy-making.

4. **Education budget planning and programming should be based on performance indicators, not on minimum education service standards.** Minimum service standards should reflect district needs and be feasible both practically and financially. The intention to comply with the “9 teachers per school” regulation would further reduce the student-teacher ratio, putting additional financial burdens on the system without improving efficiency. The “9 teachers” rule also would limit the flexibility of local governments to provide other solutions to education supply problems. Solutions could include regrouping exercises in urban areas and multi-level teaching in rural areas.
5. **To ensure equal distribution of teachers, the civil servant staffing policies must be reevaluated.** Although the education bureau is aware of the clearly uneven distribution of teachers between urban and rural areas, it has made no real attempts to redistribute teachers. In theory, the new teacher law increases incentives to teach in remote and conflict areas. However, in reality rural areas continue to suffer from a lack of qualified teachers.
6. **More resources should be allocated for maintenance.** The share of education resources spent on maintenance is insignificant in comparison to the share spent on teachers’ salaries. The new teacher law is likely to result in an increasing share of expenditure going to teachers’ salaries.
7. **In reality, spending authority remains with the center. The BOS program has increased central authority.** A large share of district education expenditure, such as financial resources from DAK, is already earmarked, and the province and district governments do not have the authority to use the money for what they deem necessary. Bottom-up planning in education with greater participation from all stakeholders, including parents, school committees, and local governments should be promoted.
8. **Timely disbursement of financial resources and early and accurate information about volume and time of disbursement are essential.** District planners should have timely information about the amount of education resources available to them so that they can use the resources efficiently.

## Infrastructure

**Even prior to the tsunami of December 2004, Aceh’s infrastructure was in poor condition because of a lack of public and private investment. The natural disaster crippled an already deteriorating sector.** Aceh’s inadequate power, water and sanitation, and transportation infrastructure prior to the disaster highlights the lack of economic development in a resource-rich region.

**Apart from major investments in industries including oil and gas, natural fertilizer, and cement, the private sector has made little direct investment by in infrastructure. Regional government was and is the major investor in infrastructure development.** The volume of regional infrastructure spending in real terms has increased from Rp. 452 billion in 1999 to Rp. 1,188 billion in 2002. Infrastructure development in Aceh is behind national levels on many fronts. The number of villages with electricity and households with telephone connections or private sanitation and waste management all fall below the national average. On the other hand, electrification rates and road density are significantly higher than the national average (Table 5.10).

**Table 5.10. Aceh infrastructure indicators compared to national averages, various years (%)**

	<i>Aceh</i>	<i>Indonesia</i>
Households with access to electricity	73.0	68.7
Villages without electricity	7.7	7.3
Telephone connections	6.2	12.2
Irrigated land as a % of arable land	52.8	54.6
Private sanitation	34.2	52.2
Waste management	3.7	8.5
Road density (km/1000 persons)*	7	1.7
Good road conditions**	55	49

Source: Podes 2005.

Notes: \* = Bappeda 2004. \*\* = 2002.

The tsunami and earthquake disasters devastated public infrastructure and its **services**. The disasters extensively damaged the water and sanitation network; regional, kabupaten, kota, and village roads; drains; and electricity and communication facilities as well as irrigated land and irrigation infrastructure. **The conflict directly damaged some fundamental infrastructure assets, and affected infrastructure indirectly** on several fronts. Many key skills needed to implement projects were not available in Aceh. Accountability and transparency could not be guaranteed. Corruption became a significant problem, and many resources intended for routine operations and maintenance did not reach intended recipients.

## Electric Power

**Approximately 27 percent of Aceh's households do not have access to electricity.** This condition exists despite the fact that 92 percent of Aceh's 5,800 villages are reported to be electrified (Podes 2005). Generally, households are not connected because they are unable to pay high connection fees. In addition, power cuts are common in Aceh and have become even more frequent after the tsunami due to infrastructure damage. Aceh has insufficient power generation and transmission capacity, and the conflict destroyed part of the electricity supply. Most power comes either from North Sumatra or by (costly) small diesel-powered generators. **The national power company, PLN,** estimates that the conflict destroyed as many as 35 electricity generating units. Approximately 6,751 kilowatts of capacity, or 9 percent, were lost from a capacity of 71,500 kilowatts as a result of the conflict.

## Roads and Transportation

**Roads are the dominant mode of transport in Aceh.** The road network comprises national roads (1,716 km), provincial roads (1,572 km), and district (kabupaten) and village roads (15,340 km). Road density in Aceh is higher than the national average. The road density is 0.5 km/km<sup>2</sup>, or approximately 7.0 km/1,000 persons. The national average road density is 0.3 km/km<sup>2</sup>, or 1.7 km/1,000 persons. These roads support a relatively flexible transport operation. However, because district and village roads account for most of the network (82 percent), financial pressure is placed on local governments to maintain the local network. Inadequate resources and poor resource allocation often lead to inadequate maintenance and deteriorating district roads.

**Before the tsunami, roughly 25 percent of the road network was classified as being in poor condition.** For national/provincial/kabupaten roads, the share of roads in poor condition were 31 percent, 46 percent, and 20 percent, respectively (Table 5.11). Unbalanced road development between the western and the eastern part of the province, where oil and gas industries are located; the poor conditions of roads; and an inadequate budget for road maintenance led to relatively high private and public transportation costs.

**Table 5.11. Road network in Aceh, 2004**

Type of road	Good conditon		Fair condition		Poor condition		Total length	
	km	%	km	%	km	%	km	%
National	127	7.4	1,052	61.3	538	31.3	1,716.27	100
Provincial	199	12.6	646	41.1	727	46.2	1,571.66	100
Kabupaten	2,995	19.5	9,410	61.3	2,995	19.5	15,339.37	100
<b>Total</b>	<b>3,320</b>	<b>17.8</b>	<b>11,108</b>	<b>59.4</b>	<b>4,259</b>	<b>22.8</b>	<b>18,687.30</b>	<b>100</b>

Source: BAPPEDA.

**The transport sector sustained significant damage as a result of the tsunami.** The west coast road linking Banda Aceh with Meulaboh (250 km) suffered the greatest damage. In Banda Aceh alone, 380 km of secondary urban roads were severely damaged. In total, almost 3,000 km of road was classified as impassable. On the east coast, the tsunami had less of an impact. However, the trucks and heavy traffic volumes to bring in materials and supplies for the reconstruction have put increasing pressure on road conditions.

## Irrigation

**The conflict damaged the irrigation system.** Prior to the tsunami, Aceh had approximately 465,000 ha of arable land<sup>62</sup> of which almost 267,000 ha (60 percent) was incorporated in irrigation schemes. Seventy percent of irrigation projects are medium to large scale. Only 25 percent are covered by small to medium schemes (150–500 ha), and five percent small to very small schemes (<150 ha). The ratio of irrigated land to arable land in Aceh is slightly higher than the nation-wide average. Irrigation networks and water sources were destroyed by the fighting. Some irrigation canals were intentionally damaged to cause flooding and destruction of agricultural land. Irrigation maintenance, rehabilitation, and upgrade activities had to be suspended due to security concerns. Irrigation land and other arable land were severely affected by the tsunami. Apart from the loss of standing crops and livestock, losses also resulted from sediment deposits, seawater inundation, salinity, damage to irrigation and drainage infrastructure, and farm roads. The precise scale of losses (land area affected and reduced productivity) and level of recovery are unknown and difficult to determine.

**Aceh falls behind other provinces in implementing irrigation reforms such as transferring responsibility to local Water Users Association (WUAs).** Traditional water user groups (*Keujruen Blang*) are responsible for determining the planting period and planting pattern; and managing water use in the irrigation network. According to the Water Resources Service of Aceh, at least 1,125 WUAs have been formed. However, the level of responsibility that the government has transferred to these groups is uncertain.

## Water and Sanitation

**Prior to the tsunami, access to formal water and sanitation services in Aceh was low.** Only 9 percent of households were connected to PDAM's (local water supply enterprise) piped water supply, compared to the national average of 17 percent.<sup>63</sup> Most people obtained water from wells constructed either with their own funds, or by communities/villages with access to project financing. During the conflict years, many households obtained water from military tankers. All urban and rural sanitation in Aceh is on-site, mainly in the form of septic tanks and pit latrines, which often are constructed adjacent to wells. Prior to the tsunami, Aceh had limited sludge collection, no waste water treatment, and no urban sewerage in Aceh. This is consistent with the rest of Indonesia, in which only an estimated 1 percent of the population is connected to a sewerage system.<sup>64</sup>

<sup>62</sup> Includes irrigated and nonirrigated cultivated land but excludes swamps.

<sup>63</sup> Plummer, 2005

<sup>64</sup> *ibid*



**Aceh's already inadequate water and sanitation network, including treatment installations, the piping network, water tankers, and water wells were extensively damaged by the tsunami and earthquake.** The tsunami alone destroyed almost 17,000 of the 28,000 pipe connections available in Banda Aceh district. The only sludge treatment plant of Banda Aceh was destroyed. The local level drainage was rendered ineffective because of earthquake-induced land settlement. The majority of the shallow wells and aquifers which were the main source of water to the local population became contaminated and saline.

## Infrastructure Spending

**Local governments play a major role in infrastructure spending in Aceh.** After decentralization and the special autonomy, responsibility for most public infrastructure services was transferred to local government (Table 5.12). Nevertheless, total infrastructure spending by regional government has been decreasing.

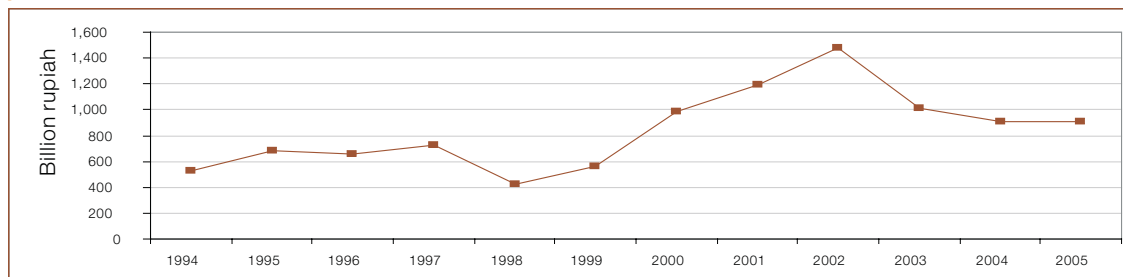
**Table 5.12. Aceh infrastructure spending: Province vs. Kab/Kota, 2001–05 (constant 2006 prices)**

	Routine				Development				Total expenditure
	Province	Kab/ Kota	Total revenue	% of total expenditure	Province	Kab/ Kota	Total revenue	% of total expenditure	
2001	47	24	70	5.6	86	1,105	1,190	94.4	<b>1,260</b>
2002	47	87	134	8.3	354	1,123	1,477	91.7	<b>1,611</b>
2003	39	80	118	10.4	228	788	1,015	89.6	<b>1,134</b>
2004	39	90	129	12.5	237	668	905	87.5	<b>1,035</b>
2005	33	80	113	11.1	250	661	911	88.9	<b>1,025</b>

Source: World Bank staff estimates.

**Following decentralization and special autonomy, regional development spending on infrastructure increased substantially to almost Rp. 1.5 trillion in 2002 but has decreased in the last few years.** Infrastructure spending increased in constant prices from an average of Rp. 596 billion before 1999 to a post-decentralization average of almost Rp. 1,150 billion (Figure 5.22).

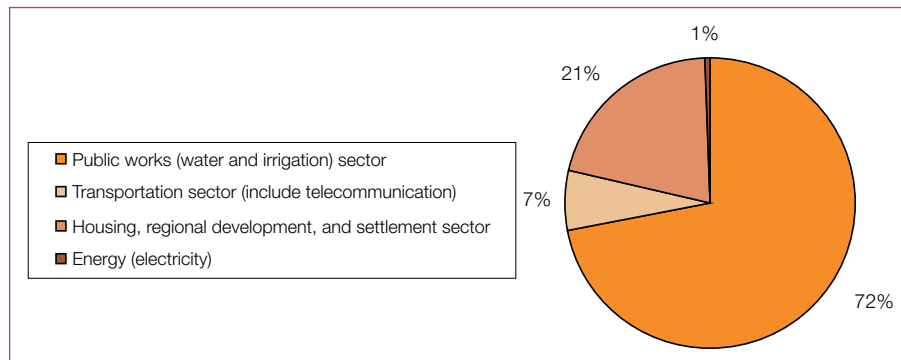
**Figure 5.22. Trends in regional development infrastructure spending in Aceh, 1994–2005 (constant 2006 prices)**



Source: World Bank staff calculations

**Development spending on public works (water and irrigation, roads) accounts for three-fourths of total infrastructure development spending, worth over Rp. 700 billion in 2005 (Figure 5.23).**

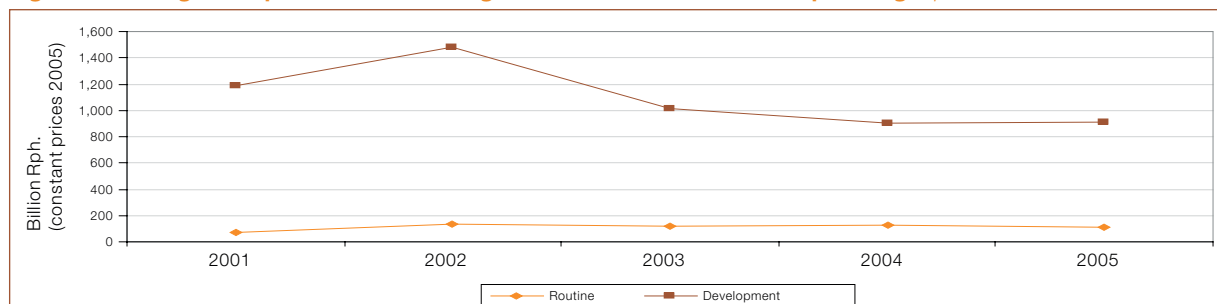
**Figure 5.23. Average development spending in subsectors, 2003–05**



Source: World Bank staff estimates (constant 2006 prices).

**Routine spending, which includes salaries and other operational costs, remained fairly constant since 2002, but development spending declined.** Average routine spending during 2002–05 was approximately Rp. 120 billion, or 11 percent of total infrastructure spending indicating the provincial government’s commitment to building up the infrastructure network. However, during the same period, development spending declined by over Rp. 500 billion (Figure 5.24). The development budget’s decline might have been caused by the worsening conflict between GAM and GOI, which peaked in 2003 after the introduction of martial law.

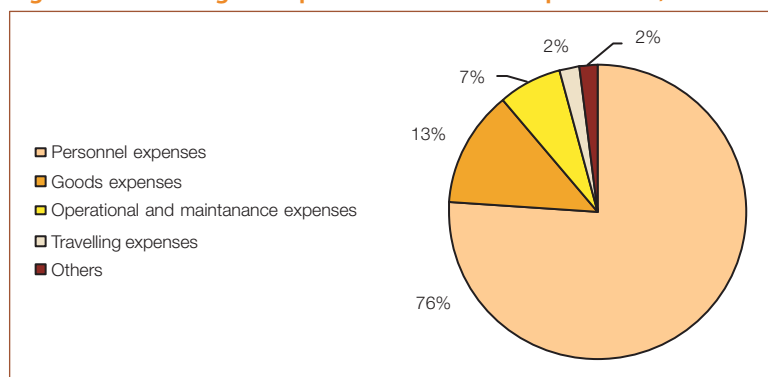
**Figure 5.24. Regional (province and local government) infrastructure spending (Rp billion)**



Source: World Bank data. Data are in constant 2006 prices.

**Routine expenses consist primarily of salaries, with little attention being paid to maintaining existing assets.** The data show that on average during 2001–04, salaries accounted for the largest share of routine spending at 76 percent. During the same period, operational and maintenance expenses were rather low at 7 percent (Figure 5.25).

**Figure 5.25. Average composition of routine expenditure, 2001–04 (%)**



Source: World Bank staff estimates.

**The three major issues facing provincial and local governments with regard to infrastructure spending include:**

1. Provincial and local governments seem not to be prioritizing infrastructure spending based on local needs. Aceh has no distinct infrastructure spending pattern that derives from local needs. The majority of spending is split between public works and transportation.<sup>65</sup>
2. Capacity varies between local government units. Staff numbers were generally adequate, but skills mix and motivation were inadequate. Lack of technical expertise to perform project planning, implementation, supervision, and maintenance needs to be addressed.
3. BRR presence may lead local governments to spend less on development and more on routine. However, given the temporary nature of BRR's mandate as well as the transfer of all assets to local and provincial governments by BRR, there will be significant development and maintenance needs for infrastructure sector at the local government level.

**Reconstruction Spending for Infrastructure and Role of the Rehabilitation and Reconstruction Agency (BRR)**

**Funding for rehabilitation and reconstruction of infrastructure comes from the Government of Indonesia, which is channeling large amounts through BRR and local governments, and through multilateral and bilateral donors and NGOs.** Infrastructure and the social sectors have received the greatest resource allocations. However, an apparent “surplus” in total available funds to build back minimum needs hides shortfalls in key sectors. Infrastructure shows a US\$653 million deficit of available funds for reconstruction. The lack of sufficient funding for the transport sector is clearly a critical issue because an efficient transport network is vital for the delivery of rehabilitation and reconstruction assistance and for overall economic development.

**There are significant differences in the availability of funds between regions in Aceh.** The areas immediately adjacent to Banda Aceh (Banda Aceh Kota and Aceh Besar) have more than adequate resources to rebuild, but other areas are severely under-funded. Inflation is now one of the major problems for the reconstruction effort, with wages of construction workers up by 40 percent–50 percent during 2005. Funding critical gaps in infrastructure will likely fall to GOI through BRR and local governments. Many NGOs will complete their reconstruction tasks by the end of 2006 and are unlikely to make additional commitments. Similarly, other bilateral and multilateral donors will likely continue to fund projects that they have funded previously and will concentrate on housing, education, health, and livelihoods.

**It is essential that BRR keep the local and provincial governments involved at all times** because they are directly responsible for the present and subsequent operation and maintenance of infrastructure. Some major infrastructure projects including major roads and large-scale drainage systems are beyond the capacity of international agencies and NGOs. Thus, deeper involvement of provincial and local governments in infrastructure financing is crucial. In addition, current local government allocation of resources does not seem sufficient to maintain assets.

**Recommendations**

1. **BRR will need to involve the local and provincial governments more in becoming owners of projects financed.** Ownership not only will help build local government skills and capacity but also will ensure that local and provincial governments are immediately involved in the maintenance and upkeep of the newly reconstructed assets. To increase local government ownership, it is recommended that local governments be requested to cofinance infrastructure projects with BRR and other NGOs if possible. Ideally, local governments would cover an increasing share of the costs of infrastructure projects over the next years starting from 2007.
2. **The different government levels (central, provincial and local) should promote a favorable investment climate to attract private sector investments in infrastructure.** A favorable climate

<sup>65</sup> In contrast, Papua, allocates almost 90 percent of infrastructure budget to transportation development.

requires addressing longer term issues, such as transparent public management and desperately needed legal reforms. They should encourage the private sector to undertake some of the major reconstruction and rehabilitation projects.

- 3. Local governments' technical and institutional absorptive capacity constraints must be improved.** Weak capacity of local governments limits the realization of increases in spending despite readily available funding. Technical assistance projects by donors and other agencies are critical to help ensure that local governments are well prepared and have the capacity to implement high quality projects. Their executing and implementing capacity must be maintained after 2009, when the reconstruction process will be over. The infrastructure development plans need to be disseminated down to the subdistrict level so that coordination is improved and responsibility is handed over efficiently.
- 4. Maintenance of existing infrastructure assets and those under construction must be guaranteed.** Maintenance is of utmost priority to ensure sustainability and to avoid decay of existing and newly developed infrastructure. To gain ground, an optimal balance is required between routine (maintenance) and development expenses. This balance will require strategies for local and provincial governments to have ownership of all the projects with which they will be left after the donor-financed reconstruction is completed.
- 5. To make infrastructure spending more effective, local governments and BRR will need to prepare a long-term plan for infrastructure development in the province.** This collaborative plan will necessitate greater coordination between provincial and local governments. In the short to medium term, BRR will be in the driver's seat of reconstruction and development of infrastructure in the region. However, in the medium term, local governments must develop their capacities as regulators and planners, as investors in selected infrastructure subsectors, and, most importantly, as policy-makers. It will be useful to develop a medium-term fiscal and expenditure framework that will determine the expenditure ceilings over the medium term—for both capital and current expenditures on operations and maintenance. This framework will need to specify expenditures over a longer period in accordance with the revenue forecast.
- 6. BRR and the regional governments should strengthen monitoring and evaluation (MandE) systems.** The first 18 months of rehabilitation and reconstruction might have resulted in more cost-effective and sustainable infrastructure if MandE systems had been more robust. The sector must establish a workable MandE system that can be utilized by all projects at all levels of implementation: from national to kabupaten.



## 6 Local Governments' Capacity to Manage Budget Funds



## Decentralization: Local government's workloads have increased in quantity and quality

### **Local governments need to improve the skills of current staff. The need for additional staff is less pronounced.**

Decentralization has changed the type of work of local governments. Staff may require new or additional training to perform these new responsibilities. Decentralization not only shifted responsibilities to local governments but also increased the available administrators (through transfers) and resources. Thus, managing decentralization should not require additional staff. Special Autonomy does provide additional financial resources, and additional staff may be required to administer these funds.

### **Decentralization added to the workload of local governments, but the transfer of additional human and other resources ensured that administrative workloads remained similar.**

Decentralization granted control of local government finances and regional civil service to local governments. The decentralization laws stipulate that central government agencies at the regional level must merge with the respective agencies of the regional government. Thus, all assets and staff of the previous agencies were transferred to the regional governments. While there has been a large shift of responsibilities to local governments, the parallel shift of resources and staff has ensured that local government staffs do not perform additional amounts of work. They simply work under a different authority.

### **Decentralization required improving administrative skills at the local level because the type of work performed by local governments has changed.**

Prior to decentralization, local governments were merely representatives and implementers of central government's policies and programs (GTZ 2003). With decentralization, the new task of local governments is to analyze the needs and identify priorities for their regions, which require better skilled and trained staff. Local government administrators need to build their capacities and experience in policy formulation and effective resource allocation.

## Impact of the Conflict and Tsunami on District Administrations

### **The conflict had a profound impact on the operations of local governments, especially in the rural areas.**

It is estimated that at the peak of its operations, GAM successfully controlled between 70 percent and 80 percent of the Province of Aceh, including its local governments, through the intimidation of civil servants at all levels of government. It was reported that over half of the village heads were under GAM control, and virtually none of the kabupatens had a fully functioning administration.

### **No detailed assessment exists of the impact of the long-running conflict in Aceh on the public financial capacity.**

Anecdotal evidence seems to support a hypothesis that a high intensity of conflict and/or presence of GAM hampered government functions mainly due to travel restrictions. Administrators could not stay in their villages; supervisors could not check on implementation; and planning information could not be collected. The conflict also resulted in a huge financial burden to replace public service infrastructure, although administrative buildings were rarely attacked and largely escaped from conflict damage.

### **According to BRR, 5,266 civil servants died in the tsunami.**

Most of the victims were staff delivering public services and extension workers. Fewer administrators were killed. As early as five months after the tsunami, all tsunami victims holding administrative government positions had been replaced. Most of the victims were in the lower echelons, which are relatively overrepresented in the local government hierarchy.<sup>66</sup> However, several district leaders themselves mentioned that the mechanism in selecting officials to fill in positions was not clear and transparent, affecting both quality of staff and their motivation.

<sup>66</sup> This finding is based on the joint World Bank/local NGO survey that focused on 6 sampled government agencies (public works, health, education, planning, agriculture and fisheries) in 10 local governments (Banda Aceh, Aceh Besar, Aceh Jaya, Aceh Barat, Nagan Raya, Aceh Singkil, Pidie, Bireuen, and Aceh Utara). In the 58 line agencies assessed, there are a total of 3,869 government employees, or an average of 67 staff per office.

**The tsunami severely damaged physical infrastructure, but not at the district administrative level.** The destruction of government physical structures in the 10 sampled kabupatens was centered primarily on *kecamatan* (subdistrict) offices. Again, public service infrastructure suffered more than buildings used by the administration. Some administrative line agencies from Kab. Simeulue, Kota Banda Aceh, and Kab. Aceh Singkil were damaged. More severely damaged was Kab. Aceh Jaya, in which all administrative line agencies' offices were destroyed. The local government administrative line agencies in the other kabupaten were mostly undamaged.

**Local governments were fairly responsive in the emergency relief phase, but were not pro-active enough in the reconstruction process.** In three of the worst hit districts (Kab. Aceh Besar, Kab. Simeulue, and Kab. Aceh Jaya), the community saw that the district leaders mobilized people to assist in the evacuation of victims and to clean up their districts. However, local governments failed to gather information on the needs of their people and develop clear reconstruction strategies. Local governments did not allocate their resources effectively to rebuild their districts. Instead, they expressed the expectation that reconstruction would be taken on mainly by higher levels of government or the international community.

## Administrative Capacity is Weak in General

**In the face of a substantial increase in funds and the authority to manage the funds, the capacities of local governments to efficiently manage public funds remains insufficient.** This judgment is indicated by the results of the Public Financial Management (PFM) Survey,<sup>67</sup> which assesses local governments' financial management capacity, regulatory framework, and accountability.<sup>68</sup> The PFM Survey does not thoroughly measure available equipment and infrastructure, but government officials say a lack of working equipment hinders the planning and budgeting processes. Buildings are generally considered sufficient and are not mentioned as a constraint to administration. The average overall score for managing public funds of the 9 local governments surveyed is 41 percent (Table 6.1). The two highest scores belong to Kab. Aceh Utara (71 percent) and Kota Banda Aceh (59 percent), while the lowest belongs to Kab. Aceh Jaya (19 percent). In Aceh, on average, the highest scores were obtained for procurement and internal audit (58 percent and 52 percent, respectively). However, the system for responding to and resolving complaints relating to the procurement process in the local government is still weak (33 percent). Moreover, almost all community leaders interviewed identified procurement as the activity most prone to lack of transparency.

67 The PFM survey was conducted in two phases in Aceh in May and September 2006. The PFM framework was developed by World Bank and GOI's Ministry of Home Affairs.

68 The PFM framework and methodology as well as scoring and strategic areas are discussed in detail in appendix B.

**Table 6.1. Results of the PFM survey in 9 sites in Aceh (%)**

Strategic area	Nagan Raya	Aceh Barat	Aceh Jaya	Aceh Besar	Aceh Timur	Aceh Utara	Biruen	Pidie	Banda Aceh	Av. score for 9 LGs
Regulatory Framework	12	8	20	56	56	56	56	56	48	<b>29</b>
Planning and Budgeting	25	26	25	42	51	74	47	36	53	<b>34</b>
Cash Management	23	50	14	48	34	57	36	48	70	<b>41</b>
Procurement	60	69	33	62	63	79	71	71	67	<b>58</b>
Accounting	19	22	11	59	52	74	41	41	59	<b>34</b>
Internal Audit	67	61	11	67	78	78	44	67	56	<b>52</b>
Public Debt and Investment	13	50	0	38	50	63	13	0	50	<b>30</b>
Asset Management	41	64	14	45	36	68	36	50	41	<b>41</b>
External Audit and Oversight	0	0	11	67	33	67	33	33	67	<b>29</b>
<b>Average</b>	<b>33</b>	<b>42</b>	<b>19</b>	<b>53</b>	<b>52</b>	<b>71</b>	<b>45</b>	<b>47</b>	<b>59</b>	<b>41</b>

Source: PFM survey 2006.

**The lowest scores were obtained for debt and investment management, external audit, and regulatory framework** (30 percent, 29 percent, and 29 percent, respectively). In greater detail, the PFM results reveals that local governments have weak regulatory frameworks to enhance transparency and public participation (39 percent), to manage public funds effectively (41 percent), and to enforce rules and organizational structures (33 percent). External audit is weak because routine external audits (42 percent) and effective independent oversight are lacking (32 percent). To illustrate, all surveyed district governments (except Nagan Raya and Singkil) mentioned that their budgets are public documents and are available to any interested party. However, access to these same district budgets without accompanying high-level authorization is limited.

**Local government also is weak in planning and budgeting as well as in accounting and reporting. The weakest link in the planning and budgeting process is the connection between the budget and the medium-term plan** (15 percent). The consistency among participatory bottom-up planning, local government planning, and the budget also is weak (26 percent). This finding indicates ad hoc use of funds rather than a coherent strategy. Accounting and reporting capacity and the capacity for cash management is weak (34 and 41 percent respectively). Overall, community leaders mentioned that the process of eliciting public input in the public hearing to formulate the district project plans is perceived to be a formality. These leaders perceive that the line agencies already have developed a set of project plans that they will propose and put in the district budget.

**The key challenge for local governments was identified as the capacity of available staff, not the number of staff.** Decentralization and special autonomy have increased the need for better qualified, rather than more, administrators. The PFM survey supports this claim empirically. Local governments often lack working equipment to work effectively, in particular, in the planning and budgeting processes. In interviews, district staff emphasized that they experienced difficulties in obtaining accurate data from the field due to limited resources. The qualifications levels of government officials in Aceh are reasonably good compared to the rest of Indonesia. This review shows that educational attainment levels of government employees in Aceh are higher than the national average, although



this does not apply to the higher (post-graduate) attainment levels (Table 6.2). The distribution of staff qualifications among districts is relatively even. Some differences remain. Staff in kota have the highest educational attainment levels followed by government staff in old kabupaten and then staff in new kabupaten (table B2).

**Table 6.2. Educational attainment of government employees in Aceh, 2003 (%)**

	<SLTA	SLTA	DIPLOMA	S1	S2	S3
Indonesia average	5.41	41.13	25.06	26.07	2.14	0.19
Aceh	4.39	37.38	23.46	32.76	1.86	0.16

Source: World Bank staff calculations based on data from National Personnel Agency (BKN).

**Development expenditures on government apparatus continued to rise even while expenditures on infrastructure declined.** In 1999 the level of spending on development expenditures for the administrative sector was approximately one-quarter of the level of funds allocated for infrastructure. By 2003 spending on the administrative sector had surpassed infrastructure spending and continues to do so. After 2002 the development expenditures for government apparatus continued to rise despite declining total development expenditures.<sup>69</sup> As noted, the conflict and the tsunami damaged public service infrastructure much more than the administrative infrastructure. Thus, the overall shift of capital investment to administrative apparatus is contrary to the identified needs.

## Proliferation of districts: Causes and consequences

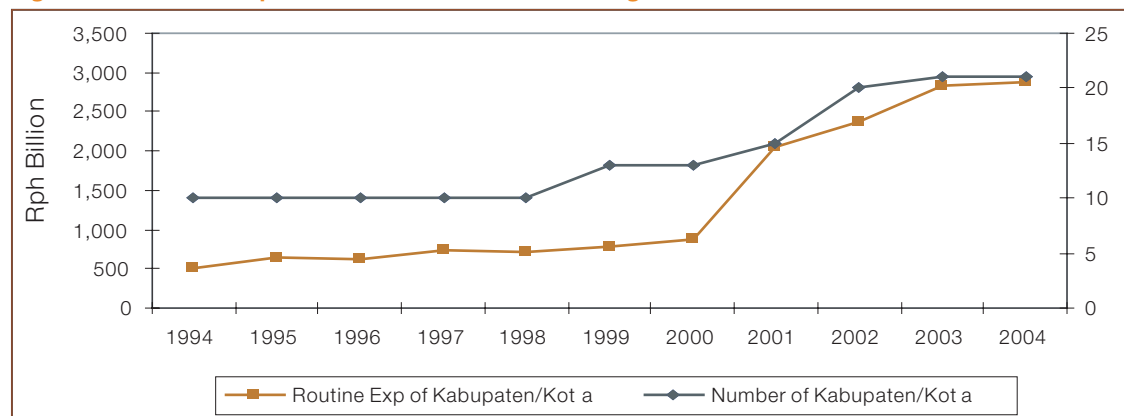
**Since the beginning of decentralization, the number of districts (local governments) and subdistricts within Aceh Province has increased.** Prior to decentralization, there were 10 local governments within Aceh Province. By 2003 the number had increased to 21. In addition there was a growth in the number of kecamatan (subdistricts) within the kabupaten. With the exception of one kota (Sabang), all local governments have increased the number of kecamatan in their areas. As a result, the number of kecamatan in Aceh Province nearly doubled from 140 in 1999 to 235 in 2005.

**The mushrooming of kabupaten and kecamatan is unnecessary and costly,** increasing administrative and personnel costs. The proliferation of administrative bodies is driven mainly by rent-seeking and is made possible by legal loopholes. The capacity of staff in newly established kabupaten is lower than in the older ones. The proliferation of administrative structures further reduces the already low capacity of local governments. In contrast, decentralization and special autonomy have increased the need for highly qualified administrators. While local governments justify the additional administrative structures with geographic needs and improved government services, the opportunity to appoint new bureaucrats and obtain additional allocations from the center is what is actually driving the proliferation. The establishment of new administrative structures through a parliamentary initiative allows for additional districts without proper checks.

**The continuing increase in routine expenditures relative to development expenditures is largely driven by the increase in the number of local governments and kecamatan.** They cause a corresponding expansion in the number of government structures and the creation of new echelon positions. The data show a close relationship between the trends in routine expenditure and the number of local governments (Figure 6.1). The proliferation of local governments commenced in 1998, but initially it did not result in a notable increase in routine expenditure. As the implementation of decentralization—and the shift of authority and funds to local governments—got underway in 2000, the spending for routine expenditures started to increase significantly.

<sup>69</sup> The development spending for apparatus represents expenditures on investments in physical infrastructure and equipment for government administrations operations. These expenditures include purchases of government office buildings for general government administration and cars for heads of districts and agencies.

Figure 6.1. Routine expenditures and number of local government in Aceh, 1994–2004



Source: World Bank staff. All data are in real terms (2005 constant prices).

**The establishment of a new kabupaten reduces the delivery of government services.** The PFM survey shows that government capacity in the newly established kabupaten is weaker than in the older kabupaten. The separation of urban areas from the more rural periphery into a kota and a kabupaten has been defended with the argument that kotas have different service needs compared to kabupaten. To the contrary, the PFM survey shows that the kabupaten have less capacity once they have been separated from their urban centers.

**The establishment of new districts using a parliamentary initiative bypasses the requirements stipulated by law.** Law No. 129/2000 on the separation and amalgamation of regions stipulates the requirements and process to establish new districts, including the approval by the originating kabupaten. This stipulation counterbalances burgeoning local governments. Applications for the creation of new kabupaten are submitted to parliament to be passed as national law. In addition, the decree stipulates that a new kabupaten must consist of a minimum of three kecamatan.<sup>70</sup> However, there is an alternative method for setting up a new local government, which is through a parliamentary initiative. This approach appears to have enabled those promoting the establishment of a new local government to bypass the requirements to obtain prior approval from the originating local government. Anecdotal evidence indicates that this method is less transparent than the first.<sup>71</sup>

## Local Governments are not investing in increasing local capacities

**Contrary to the identified needs, local governments spend little on training. Instead, a major share of their capital investments goes to buildings, equipment, and vehicles.** While the PFM survey has identified skills development as a priority, local governments allocate only a marginal portion of their total budgets to training. On average, local governments spent approximately 25 percent of their total budgets on capital investment expenditures. Among these types of capital investment, the largest share is spent on buildings. Of the approximately 25 percent of their budget for capital investment (combined apparatus and public services), local governments spend half of this amount on buildings, equipment, and vehicles. Capital investment expenditures for buildings dominate the three spending types. Buildings account for one-third of all capital expenditures, despite not being identified as a priority need. Equipment and vehicles expenditures account for 11 percent and 8 percent, respectively (Table 6.3)

70 GOI, 2000.

71 A particular case refers to a former bupati of Riau Island kabupaten (which is currently a province), who was a prominent initiator for the establishment of the Province of Riau Islands.

**Table 6.3. Share of capital investments for buildings, equipment, and vehicles, 2003–06**

Year	Capital exp. as % APBD	Bldgs., eqpt., and transport as % capital expenditures	Building as % of capital expenditures.	Equipment as % of capital expenditures	Transport as % capital expenditures
2003	20.52	55.34	30.08	13.28	11.98
2004	22.85	56.63	39.63	9.79	7.21
2005	28.10	48.12	32.03	10.16	5.93
2006	28.80	48.42	31.97	9.92	6.53
<b>Average</b>	<b>25.07</b>	<b>52.13</b>	<b>33.43</b>	<b>10.79</b>	<b>7.91</b>

Source: World Bank staff estimates.

**On average, local governments spend less than 1.5 percent of their total budgets for expenditures on development of human resources.** The weak capacity identified by the PFM survey and the increased need for highly qualified staff after decentralization suggest that a larger investment in staff development is warranted. Bearing in mind the limited sample of this exercise, the results show that, while staff in new kabupaten have less administrative capacity, these districts are not spending more on human resource development to increase their capacity (Table 6.4).

**Table 6.4. Expenditures to develop human resources out of total local government budget, 2003–06 (%)**

Year	Av. training exp. as % APBD (all local governments)	Av. training exp. as % APBD (old local governments)	Av. training exp. as % APBD (new local governments)
2003	0.91	1.09	0.58
2004	1.07	1.11	0.97
2005	1.54	1.42	1.74
2006	1.55	1.40	1.75
<b>Average</b>	<b>1.27</b>	<b>1.26</b>	<b>1.26</b>

Source: World Bank staff estimates.

**New local governments spend slightly more on capital investment than older local governments.** The results indicate that new local governments have substantial set-up costs, as indicated by the relatively higher spending by new kabupaten/kota on capital investments in buildings, equipment, and vehicles as a proportion of local governments' total budgets. More expenditures on equipment and vehicles are going to administration than to public services. On average, the administration absorbs approximately 43 percent of the capital investment for equipment and 70 percent of the capital investment for vehicles. In view of the established needs in education and health, these expenditures are very hard to defend.

## District Leaders' and Community Perceptions of the Key Issues in the Budget Process

**The standard public hearing mechanism does not ensure adequate community participation in the budget process.**<sup>72</sup> All district leaders mentioned that they had elicited public opinion through the standard public hearing mechanism (*Musrenbang*). However, some district leaders mentioned that the *Musrenbang* was not effective because the village leaders who participate in the public hearing at the subdistrict level do not know how to determine their needs. Most of the projects proposed by the village leaders went to "their wants rather than real needs."

72 The results presented here are based on the sample of 10 kabupatens affected by the tsunami but are judged to be fairly representative of all Aceh provinces.

**Transparency problems persist in the district government bureaucracies.** Of the 10 districts visited, community leaders in 8 districts mentioned issues with transparency in the district governments. The procurement practices of government projects have been identified as the area most prone to a lack of transparency. In some cases, the lack of transparency was said to have affected the whole bureaucracy.

## Recommendations

- 1. Planning departments (provincial and district Bappeda) should scrutinize the allocation of funds for general public administration.** The expansion of the government system and structures had a profound impact on the local governments' budget structure. Expansion has shifted expenditures from public service delivery toward general public administration. Despite the increased spending on public administration, the capacity of local governments remains weak.
- 2. It would be prudent for the provincial and national governments to prevent the creation of new kabupatens.** The mushrooming of kabupatens seems to have reduced the capacity to manage budget funds. The creation of new kabupatens also results in dis-economies of scale, adding to costs for additional personnel, equipment and buildings at the expense of investments in public services. Therefore, the process of screening the establishment of new kabupatens needs to be made more transparent.
- 3. BRR, donors and the provincial government should give top priority to strengthening the capacity of local governments.** The main threat to the efficient use of public resources results from the lack of capacity for financial management and the lack of transparency and accountability at all levels. However, given that local governments have invested heavily in general administration but with little positive impact, their capacity must be enhanced, especially for planning, budgeting, transparency, and accountability to improve the allocation of public funds.
- 4. Local governments should complete their regulatory frameworks to ensure that their resources are allocated strategically and in an accountable and transparent manner.** Once their regulatory frameworks are in place, external audits could be used to ensure that local governments are accountable. Local governments should establish proper regulatory frameworks and mechanisms for participatory planning, and accurate and timely accounting and reporting procedures. In addition, they should set up and enforce an independent and transparent monitoring and oversight mechanism.
- 5. Additional investments in the administrative apparatus should clearly result in measurable efficiency improvements.** If the efficiency gains do not justify the investment, the resources should be shifted to public services. Returns on investing public funds in improving public services are likely to be greater than constructing new buildings for the general administration.

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# Appendix

## Appendix A. Key Issues and Recommendations

Chapter	Key issues	Key recommendations	Relevant institution
<b>Budget process</b>			
	Budget discipline is lacking. Budget process often does not follow timeline set by laws and regulations, which hampers timely implementation of development programs.	Improve planning and budgeting capacity of technical agency ( <i>dinas</i> ) through TA, and enhance coordination between <i>dinas</i> and regional planning board (BAPPEDA)	Local parliament, local government, donors.
	Mismatch between allocated funds and development outcomes across regions. Sectoral and geographic gaps persist.	Base budget allocation on reliable data, which guides sectoral and geographic allocation to focus on sectors with low outcomes and more underdeveloped areas. Improve quality of data.	Local government, BPS, donors.
<b>Revenue</b>			
	Capacity of local government to manage public resources remains too weak to deal with large increase in public revenues.	Improve capacity of local governments in managing public resources, especially planning, accounting, and external audit. Enhance coordination among province, local government, BRR, and BRA on reconstruction, reintegration, and long-term development.	Regional government, local governments, BRR, BRA, and donors.
	Delays in transfer and misallocation of special autonomy fund, plus lack of information regarding oil and gas production, reduce effectiveness of fund.	Improve transparency, information sharing, and accountability on allocation and distribution of special autonomy fund, and increase timeliness of transfer.	Central government.
	Province receives 40% of special autonomy fund; 21 districts in charge of public services receive remaining 60%.	Transfer greater control of special autonomy fund to local governments by increasing their share. Province should monitor and evaluate its use.	Regional government.
	There is significant fiscal disparity (revenue per capita) among districts. Intergovernmental transfers do not reduce these disparities.	Improve distribution of revenue among districts (DAU, DAK), taking into account poverty and revenue sharing from oil and gas. Revise formulas for revenue allocation among districts.	National and provincial government (distribution of revenues, allocation of provincial and central govt. monies).
	Local own revenues (PAD) remain small after decentralization. Splitting local governments has created problems for distribution of PAD sources between old and new local governments.	Undertake analysis of own-source revenue potential and measure effectiveness of tax collection. Analyze current local tax structure regime to identify other potential tax sources.	Provincial and local governments, donors.
<b>Expenditure</b>			
	Functional allocation is not always the most efficient. Local governments spent an increasing share of total expenditures on routine expenses. Government apparatus has become highest spending priority for provincial and local governments.	Scrutinize tendency toward increased outlays on overall routine expenditure and on government apparatus development expenditure. Set clear limits on these.	Province and local government

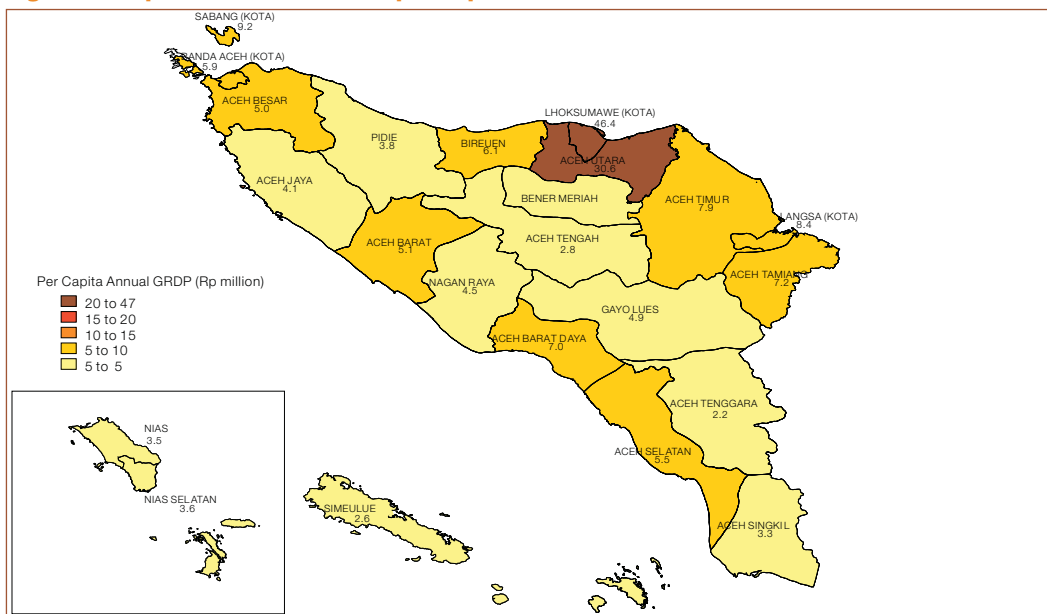
	There is a high divergence between planned budget and realization. Local governments not able to spend as planned. Possible explanations: low absorptive capacity, lack of planning and budget management, delays in transfer of revenues from central and provincial governments, unstable security.	Undertake analysis to better understand gap between planned and realized budgets. Improving timeliness of transfers from center and province to local governments will increase realization.	Central, province, and local government donors.
	Large sectoral and regional reconstruction financial gaps persist.	Improve allocative efficiency of reconstruction funds by focusing on identified geographic and sectoral gaps	BRR, local governments, donors
	Low disbursement rates in reconstruction projects (particularly BRR).	Improve reporting, responsibility, and accountability lines. Improve project preparation and supervision; provide TA to project managers. Simplify procurement procedures. Allow flexibility in spending BRR's yearly budgets.	BRR, central government, and Parliament
	Central government continues to spend on largely decentralized functions in region, thereby opposing decentralization.	Prevent future spending by central government on largely decentralized functions. Target central government spending through earmarked grant (DAK).	National government.
<b>Health</b>			
	Health information system in Aceh is severely disabled due to conflict and tsunami.	Rebuild data management information system to support prioritization of health budget allocation.	Provincial and local governments, BPS, donors.
	Health care facilities are generally available, but a large number are not functioning due to lack of maintenance and staff.	Link construction of new facilities with needs assessment; improve addressing identified needs with resources.	Provincial and local governments.
	Health workforce is relatively large in comparison to other provinces in Indonesia but unequally distributed throughout province, partly due to conflict.	Provide appropriate incentives to health workers to return to rural areas.	Provincial and local governments.
<b>Education</b>			
	Aceh spending on education is and will be relatively high in comparison to other provinces in Indonesia. However, higher spending has not translated into major improvement of education outcomes.	Improve allocation of education fund. Strengthen M&E of use of education fund and its impact.	Provincial and local government.
	Quality of teaching is inhibited by poor condition of school buildings and lack of learning equipment. Functional allocation is heavily skewed to teacher salaries.	Increase share of resources used for maintenance of education facilities. Provide appropriate incentives to address uneven distribution of teachers	Provincial and local governments.

	Minimum service standards exist but are not appropriate to information policy. Minimum service standards do not necessarily reflect regional needs and increase inefficiency of human resource allocation.	provincial and district education bureau should adapt minimum education service standards to be feasible both practically and financially.	Provincial and local governments.
	Education bureau is overwhelmed with data, but quality data are lacking. Identification and collection of key (financial) input, process, and outcome indicators are essential for planning.	Improve education information system.	Provincial and local governments, donors.
<b>Infrastructure</b>			
	Low allocation for operations and maintenance (O&M) has resulted in poor maintenance of public infrastructure and deteriorated public service delivery.	Improve budget allocation for infrastructure, focusing on maintenance of public infrastructure.	Provincial and local governments.
	After end of BRR's mandate in 2009, local governments will be essential to ensure sustainability and maintenance of infrastructure reconstruction.	To increase ownership of projects, BRR needs to involve local governments more in project design and implementation. Cofinancing projects can promote ownership and smooth the transition. Provide TA to prepare local governments and address technical and institutional absorptive capacity constraints. Strengthen M&E systems.	BRR and local governments.
		Promote a favorable investment climate to attract investments from private sector in infrastructure.	Provincial and local governments.
<b>Local government capacity</b>			
	Local governments' capacity and skills need improving. In face of substantial increase in inflow of funds and authority to manage them, capacity of local governments to efficiently manage public funds is weak, especially regarding external audit and regulatory framework.	Improve local government capacity in PFM. Provide appropriate incentives for local government officials to assume increased responsibilities.	Provincial and local government, donors.
	Mushrooming of (sub)districts is unnecessary and costly, and increases administrative and personnel costs.	Provincial and national governments should prevent/limit creation of new districts.	National and provincial governments.
	Standard public hearing mechanism along does not ensure adequate community participation in budget process.	Enhance transparency in budget planning to ensure that public proposals are incorporated in budget. Strengthen local civil society capacity in monitoring budget.	Provincial and local governments, donors.



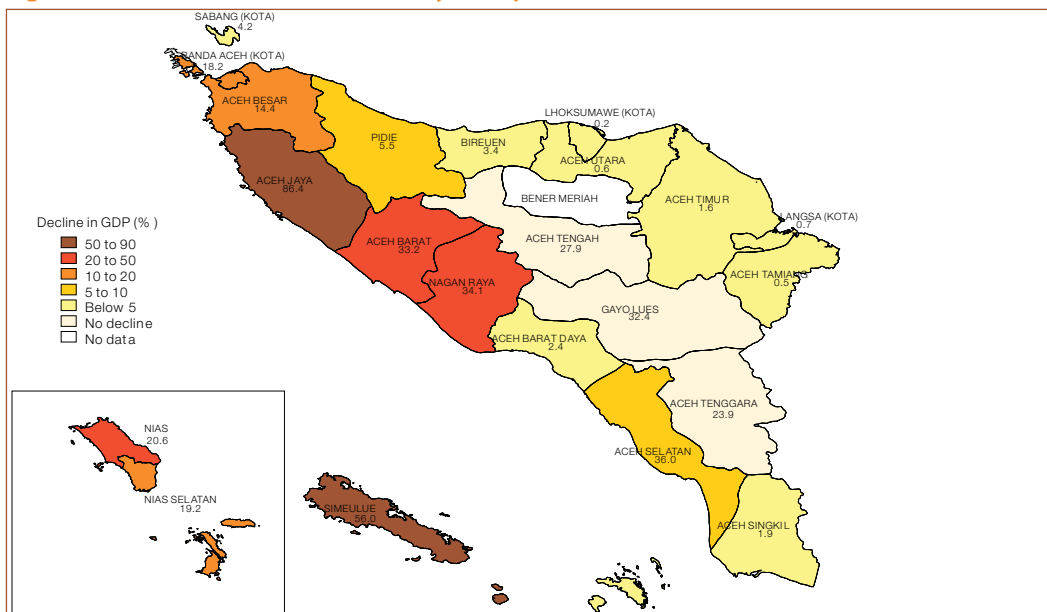
## Appendix B. Figures and Tables

**Figure B1. Spatial distribution of per capita GDP in Aceh, 2004**



Source: BPS data, mapped by World Bank staff.

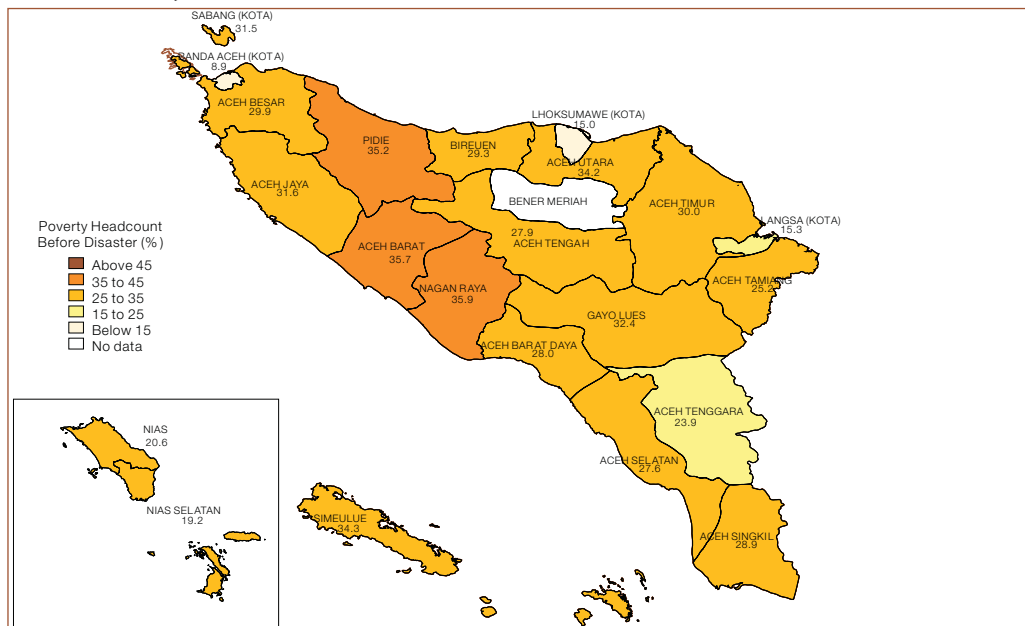
**Figure B2. Estimated decline in GDP by kabupaten, 2005 (%)**



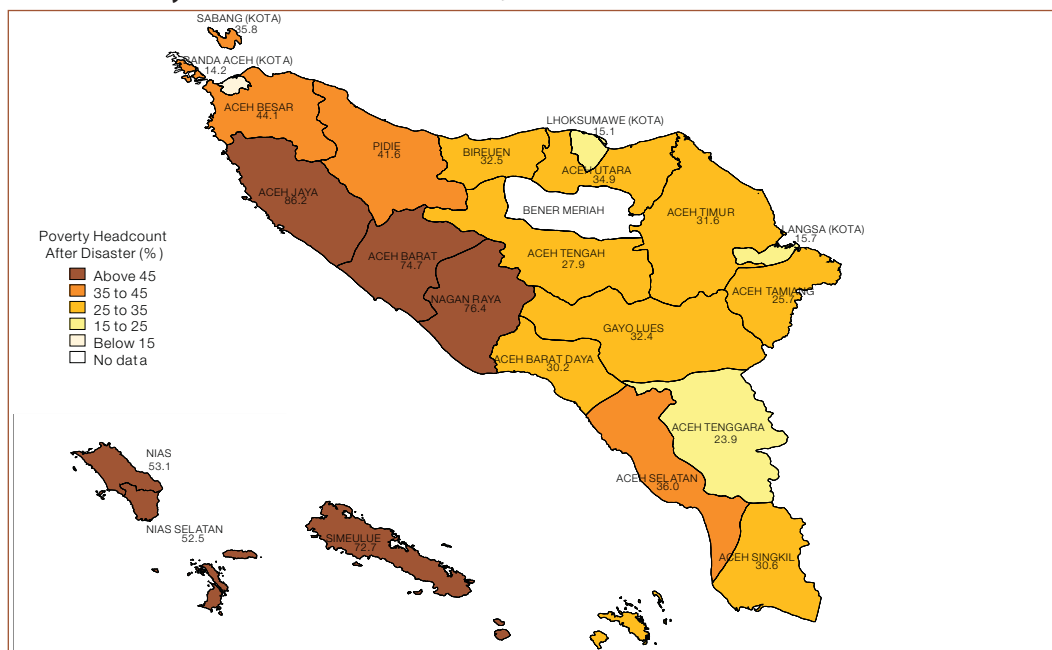
Source: World Bank staff estimates.

Figure B3. Poverty headcount across Aceh's districts (%)

Panel A. Poverty headcount before the disaster

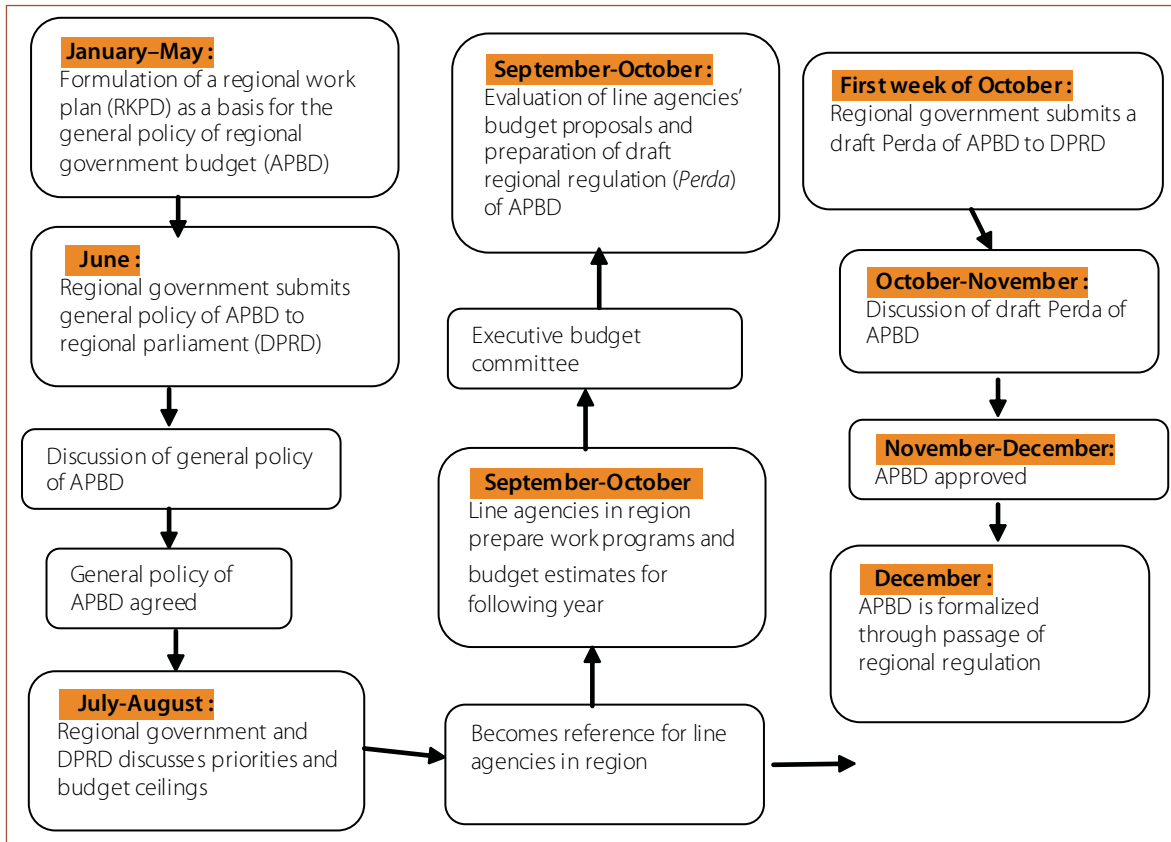


Panel B. Poverty headcount after the disaster, 2004



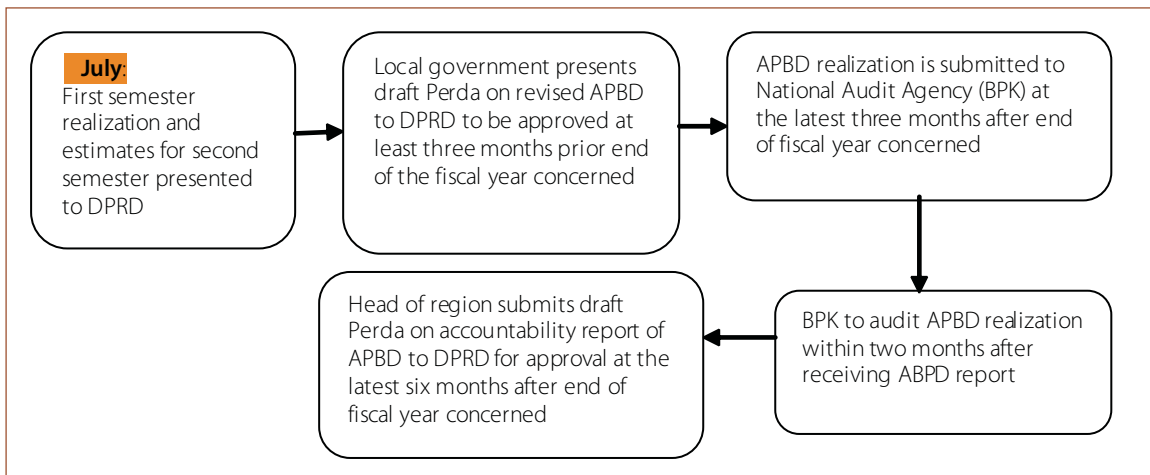
Sources: BPS (actual 2004 data) and World Bank staff (estimates of post-disaster poverty rates).

**Figure B4. Budget preparation process**



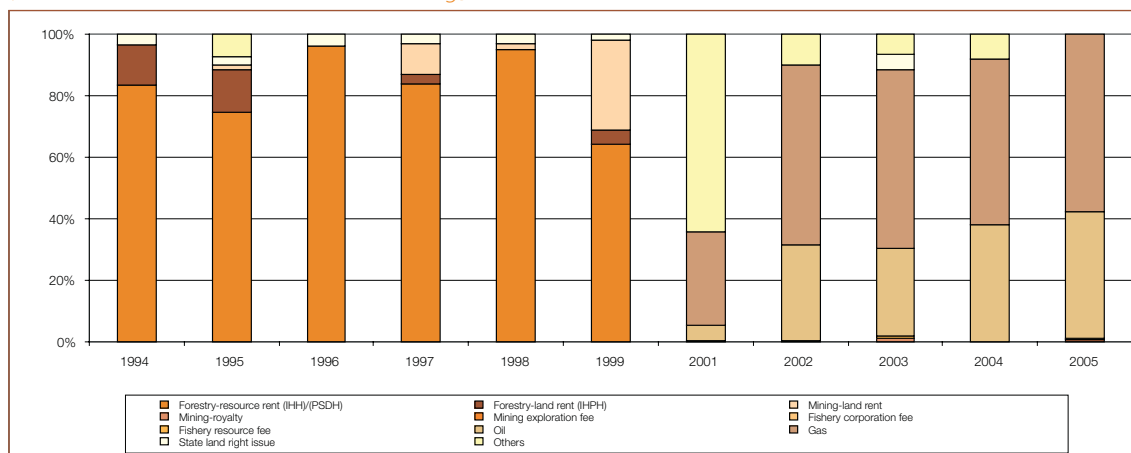
Source: DG Budget and Fiscal Balance-MoF based on Law 17/2003, Law 15/2004, Law 32/2004, Law 33/2004, Kepmen 29/2002.

**Figure B5. Budget evaluation**



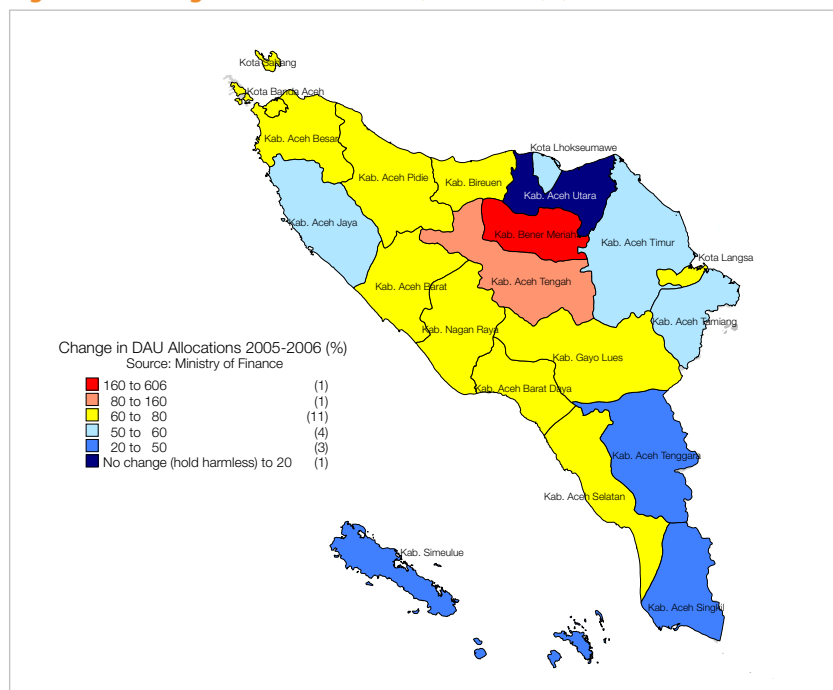
Sources: Law 15/2004, Law 17.2003, PP 58/2005, PP 56/2005.

**Figure B6. Composition of natural resources revenue-sharing, pre- and post-decentralization, 1994–2005**  
(% of total natural resources revenue-sharing)



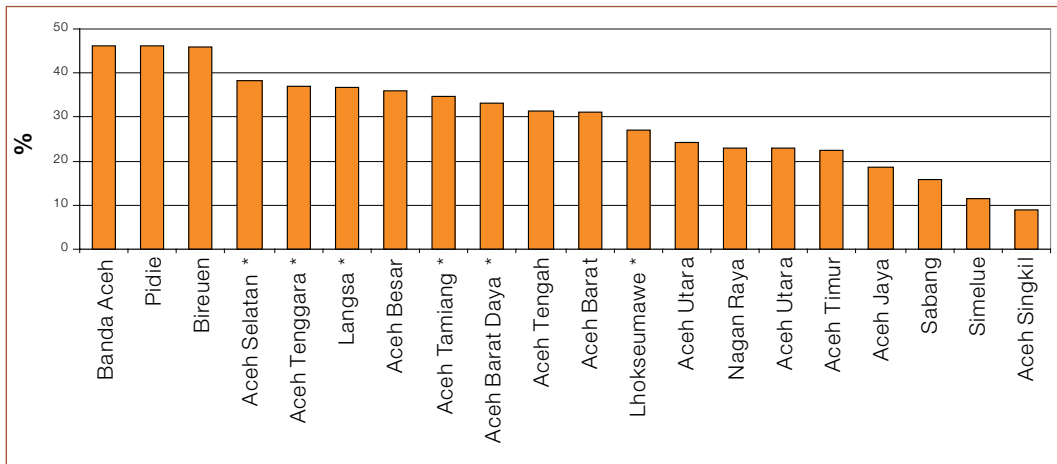
Source: World Bank staff calculations based on data from SIKD/MoF.

**Figure B7. Change in DAU allocation, 2005–06 (%)**



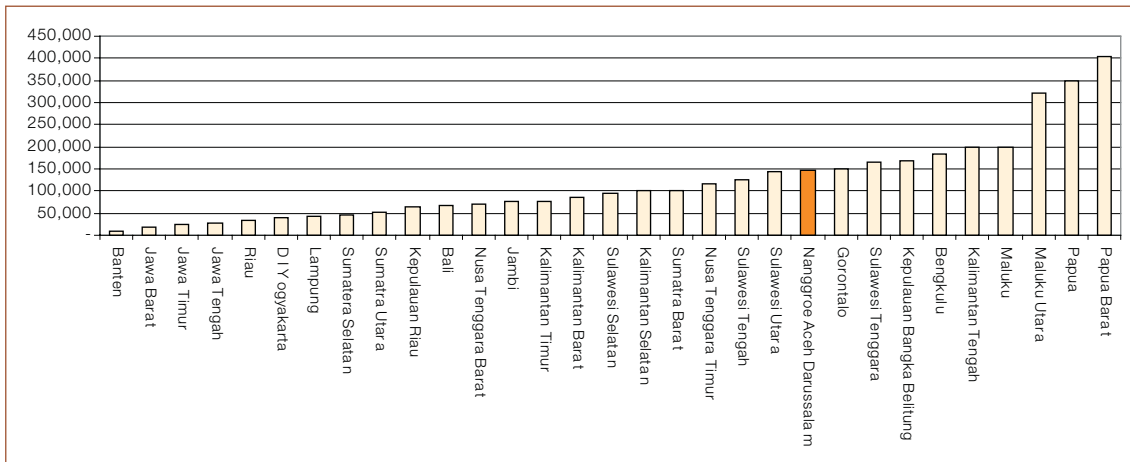
Source: MoF and World Bank staff calculations.

**Figure B8. Education expenditures (including culture) as % of total district expenditures across selected districts in Aceh, 2005 and 2004**



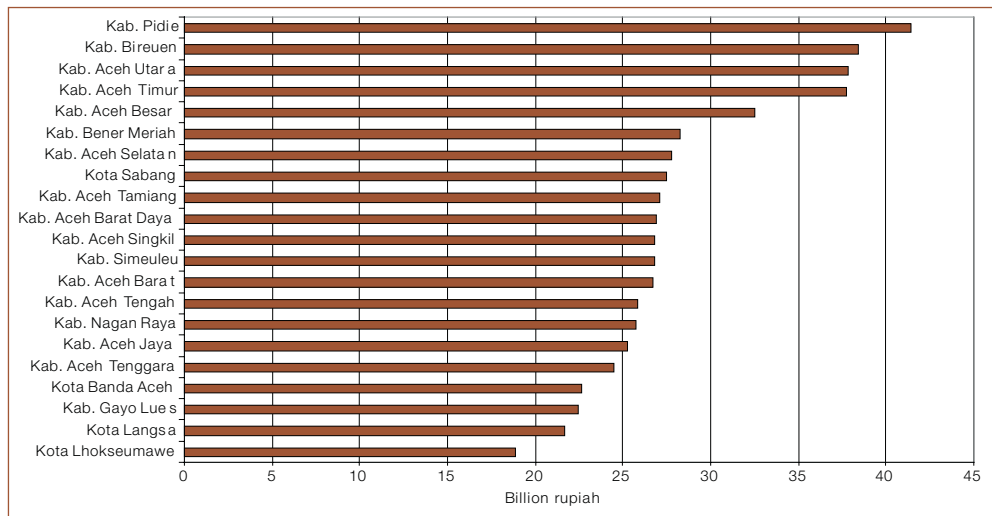
Source: World Bank staff calculations.

**Figure B9. DAK per capita among provinces in Indonesia, 2006**



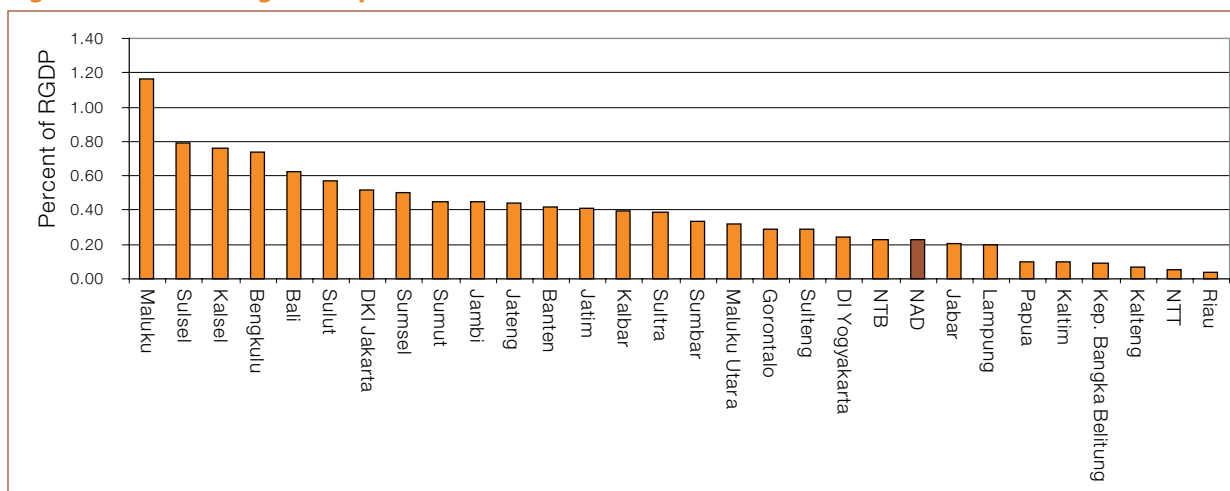
Source: World Bank staff calculations based on MoF data.

**Figure B10. DAK allocation among local government in Aceh, 2006**



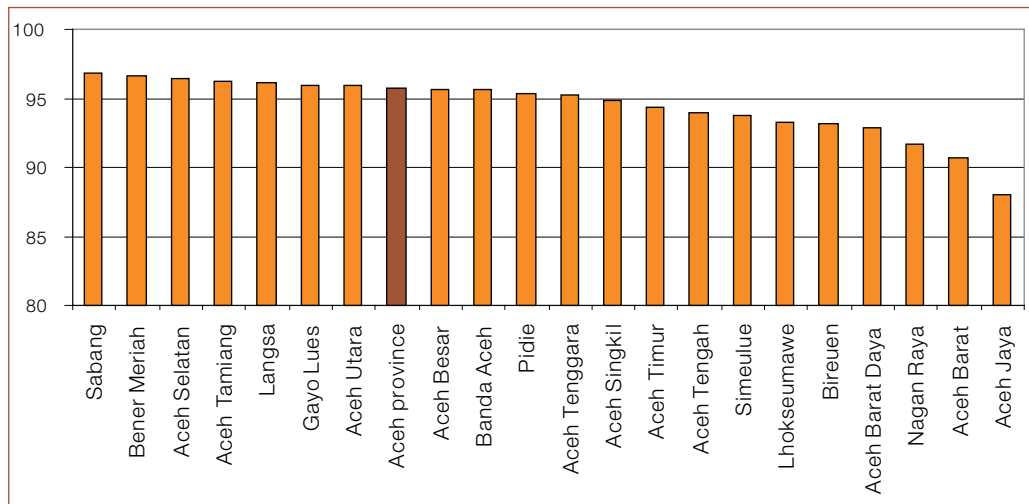
Source: World Bank staff calculations based on MoF data.

**Figure B11. Borrowing across provinces in Indonesia as % of GDP, 2004**



Sources: MoF and World Bank staff calculations.

**Figure B12. District primary school net enrollment rates, 2005**



Source: BPS Aceh census 2005.

**Table B1. Benefits from natural resource revenue-sharing, by region (Rp millions)**

	Annual average pre-decentralization	Annual average post-decentralization
Aceh Barat	3,820	74,903
Aceh Besar	245	53,412
Aceh Selatan	1,988	83,208
Aceh Singkil	-	298
Aceh Tengah	1,632	35,801
Aceh Tenggara	487	60,460
Aceh Timur	2,004	162,592
Aceh Utara	332	469,233
Aceh Bireuen	-	55,501
Pidie	169	73,510
Simeulue	-	16,419
Kota Banda Aceh	225	53,113
Kota Sabang	117	52,052
Kota Langsa	-	22,680
Kota Lhokseumawe	-	35,519
Aceh Barat Daya	-	31,125
Gayo Lues	-	31,063
Aceh Tamiang	-	39,331
Nagan Raya	-	13,549
Aceh Jaya	-	17,875

Sources: MoF and World Bank staff calculations.

**Table B2. Qualifications of government staff in Aceh, 2003**

	<SLTA (% kab/ kota staff)	SLTA (% kab/ kota staff)	Diploma (% kab/ kota staff)	S1 (% kab/ kota staff)	S2 (% kab/ kota staff)	Total staff (%)
<b>Overall</b>	<b>3.77</b>	<b>31.22</b>	<b>20.78</b>	<b>25.17</b>	<b>0.57</b>	
Aceh Selatan*	4.03	39.46	26.99	28.72	0.79	<b>4.84</b>
Aceh Tenggara	5.62	50.05	20.42	22.88	1.02	<b>4.37</b>
Aceh Timur	8.28	39.34	24.24	27.91	0.23	<b>4.47</b>
Aceh Tengah	3.53	38.77	29.90	27.34	0.45	<b>6.36</b>
Aceh Barat	3.29	40.16	26.64	29.25	0.63	<b>5.00</b>
Aceh Besar	2.78	34.75	24.81	36.43	1.20	<b>8.71</b>
Banda Aceh	3.34	33.36	14.46	41.06	6.98	<b>18.48</b>
Pidie	6.59	32.66	27.40	32.86	0.49	<b>10.67</b>
Aceh Utara	6.72	39.53	24.76	28.84	0.15	<b>5.86</b>
Simeuleu	2.88	47.53	24.74	24.45	0.40	<b>1.65</b>
Aceh Singkil	2.64	42.42	19.74	34.24	0.97	<b>2.17</b>
Bireuen	4.57	33.35	30.19	31.62	0.26	<b>7.04</b>
Aceh Barat Daya	4.15	33.27	33.75	27.87	0.96	<b>1.97</b>
Gayo Lues	4.91	43.18	24.78	26.10	1.03	<b>1.30</b>
Aceh Tamiang	3.72	35.80	28.89	31.25	0.33	<b>2.87</b>
Nagan Raya	4.27	41.88	28.70	24.74	0.40	<b>2.12</b>
Aceh Jaya	4.75	39.55	28.21	27.21	0.28	<b>1.34</b>
Sabang	6.27	43.36	17.20	32.29	0.88	<b>2.06</b>
Langsa	3.32	39.90	19.99	35.58	1.17	<b>4.08</b>
Lhokseumawe	2.82	39.33	17.16	38.81	1.85	<b>4.63</b>

Source: World Bank staff calculations based on data from National Personnel Agency (BKN)

Note: \* = Government staff with doctoral degrees have not been included. Since only Banda Aceh had two public universities in 2003 (UNSYIAH and IAIN), and the data provided included university employees as government staff, Banda Aceh would have shown an unrealistically high share of higher skilled government staff.



## Appendix C. Methodological Notes

### C.1 Provincial and Local Government Budget (APBD)

Provincial and local government budget (*Anggaran Pendapatan dan Belanja Daerah/APBD*) is the yearly budget allocated and/or spent by provincial and local governments. The budget consists of two categories: planned (proposal for parliament approval) and realization (actual spending or accountability report of the head of the region). Data span from 1994 to 2006 from several sources. For 1994–99, data was provided by BPS. For 2000–04, data was derived from MoF's Regional Financial Information System (*Sistem Informasi Keuangan Daerah*, or SIKD). Data for 2005 was obtained from provincial and local governments in Aceh. A projection is made for 2006 numbers.

Since decentralization, regional governments have the legal obligation to submit APBD data to the Ministry of Finance (SIKD) in a timely manner. Central government can impose sanctions by withholding the DAU transfer if a local government fails to submit on time. However, many local governments do not submit their budgets to MoF. In 2003, 334 of 370 total local governments in Indonesia submitted their APBD report to the MoF. In Aceh, only 10 of 20 local governments submitted their APBD reports in 2003, and 12 of 21 in 2004. The MoF complemented missing SIKD data by collecting data directly from provincial and local governments.

To obtain the aggregate picture of revenue and expenditure of provincial and local government in Aceh, missing data for certain districts and years were projected using the shares of RGDP (Regional Gross Domestic Product) of missing local governments as an inflation factor. The real value of the time series was calculated using a projection for the 2006 CPI.

### C.2 Aceh Revenue Projection (2006–11) and Sensitivity of Oil Price Simulation

The projection is based on some macro assumptions, such as economic growth, fiscal growth, inflation rate, and oil price, that link to the central government budget projection. The oil price simulations are based on 3 scenarios: low (US\$50/brl), moderate (US\$60/brl), and high (US\$75/brl) oil prices.

Natural resources revenue-sharing and General Allocation Fund (DAU) are two main components of revenue that use oil prices and sensitivity simulations. A weighted share is given to gas and oil revenue in Aceh using gas production data. For DAU, it is assumed that Aceh receives a 3 percent share from regular national DAU allocation (average yearly allocation). An additional 2 percent will be allocated starting in 2008 based on the new law 11/2006. For other revenue components, which consist of own-source revenue, specific allocation fund, and other revenue, the projection is based on the 5 percent growth assumption.

### C.3 Borrowing Simulation

The objective of the simulation is to see the borrowing capability as well as the borrowing ceiling of regional government in Aceh. The simulation is based on Law 33/2004 on Fiscal Balance between Central and Regional Government and Government Regulation PP 54/2005 on Regional Borrowing.

The regulation stipulates that regional government needs to meet the following requirements to have a medium- and long-term loan: (1) the remaining borrowing of regional government plus the intended borrowing amount is not greater than 75 percent of regional budget general revenue of the previous year; (2) the projection ratio of regional government financial capacity in returning the loan is at a minimum of 2.5; (3) regional government does not have any arrears on any loan that comes from central government, and (4) the loan is approved by regional parliament.

Based on the regulation, the borrowing ceiling simulation for the Aceh regional government in 2004 was reached by:

1. Multiplying the general revenue of regional government from 2003 by 0.75. General revenue consists of all revenue components except the specific allocation fund (DAK), emergency fund, old loans, and other revenue.

2. Calculating the financial capacity ratio of regional government, based on the following formula:  

$$\text{DSCR} = \frac{\{\text{PAD} + (\text{DBH} - \text{DBHDR}) + \text{DAU}\} - \text{obligatory expenses}}{\text{Borrowing principal} + \text{interests} + \text{other costs}} \geq 2.5$$

DSCR: Debt service coverage ratio  
 PAD: Own-source revenue  
 DAU: General Allocation Fund  
 DBH: Revenue-Sharing  
 DBHDR: Revenue-Sharing Reforestation Fund  
 Obligatory Spending: Personnel and Parliament Expenses
3. Obtaining the amount of regional government arrears.

Finally, the ceiling will consist of two types: (1) borrowing limits with arrears restriction, when the local government may not borrow because it still has arrears, and (2) borrowing limits without arrears restriction, which is taken from the minimum amount between point 1 and point 2 above.

## C.4 Reconstruction Finance Estimate

Finance for reconstruction is estimated based on two key parameters:

### 1. Needs

The overall needs for reconstruction are based on the Damage and Loss Assessment undertaken in January 2005 and adjusted after the Nias earthquake and estimated inflation. For Nias, the estimated needs were carried out separately by using data from International Organization for Migration (IOM) and BRR damage assessment after the March 28, 2005 earthquake and applying Damage and Loss Methodology for Aceh.

Core minimum needs are a subset of Damage and Loss Assessment and Master Plan. Core needs are defined as (1) full replacement of all public sector damage (per damage and loss assessment); (2) financing of private sector needs such as housing, agriculture, and fishing to the limit set by the Master Plan; (3) partial financing of environmental damage, which can be addressed only to a very limited degree by external interventions, and (4) inflation adjustment given recent price trends.

Core minimum needs serve as a baseline for sectoral analysis that shows the sectoral gap between available funds and sectoral needs.

### 2 Financing funds

The financial numbers are based on execution and focused on implementing agencies. Finance is categorized based on Damage and Loss Assessment sectors: social sector, infrastructure and housing, productive sectors, and cross sectors, each of which is composed of several subsectors.

Finance figures include both ongoing activities as well as agreed projects that cover both tsunami-affected and non-affected areas. The figures also include on-budget and off-budget spending.

The fund consists of commitment, allocation, and disbursement. Commitments are defined as funds that have been pledged by donors, NGOs, and GOI. Allocated funds are funds that have been allocated to specific projects. While disbursements are funds that have been spent on projects (donor disbursement), actual spending is that made against project activities (GOI spending) and funds that have been spent on projects directly or have been transferred to implementing agencies (NGO disbursement).

## C.5 Impact of Tsunami on GDP at Kabupaten Level

Estimating the impact on GDP at the kabupaten level involves the following steps<sup>73</sup>:

- Estimate the value of damage at the kabupaten level.

<sup>73</sup> This methodology is derived from the report "Aceh and Nias One Year after the Tsunami: The Recovery Effort and Way Forward," BRR and International Partner, 2005.

- Since the estimates of damage only cover damage to nonproductive sectors, the authors first use the aggregate Damage and Losses assessment to estimate the ratio of the damage in productive sectors (including 50 percent of damage to infrastructure) to the damage in nonproductive sectors. They then use this estimated ratio (25 percent) to obtain the monetary value of damage to productive sectors, by kabupaten.
- The aggregate DandL assessment for the productive sectors indicates that damage (including 50 percent of the infrastructure damage) is US\$670 million (352 + 318), and losses (over 4 years) are US\$952 million (including 50 percent of infrastructure losses). Assuming that 40 percent of the losses will be borne during the first year, these number indicate that every \$1 of damage (stock concept) will transform into \$0.57 of losses (flow concept) during the first year after the impact.
- Applying this ratio to the previously obtained estimates of the productive sector damage by kabupaten, the authors obtain the estimates of productive sector losses by kabupaten, which are then compared to the 2004 levels of GDP by kabupaten.

## C.6 Poverty Data

The poverty estimates data from 1992 to 2004 are from BPS. A simulation was done to estimate the impact of the tsunami on poverty levels in Aceh. This estimate does not take into account mitigating effects of post-tsunami livelihood and welfare programs.

The 2004 poverty elasticity with respect to growth was used to estimate the 2005 poverty rates. Tsunami estimated damages were used to estimate losses as a percentage of GDP by districts. Elasticity of poverty was obtained by using regression analysis between estimated loss of GDP and poverty numbers. The elasticities and the 2004 percentage of GDP change was used to estimate post-tsunami poverty numbers on the basis of the 2004 poverty numbers.

## C.7 Governance and Decentralization Survey (GDS)

The Governance and Decentralization Survey 2, following the GDS 1+ in 2002, is a survey fielded across 132 Indonesian districts (kabupaten/kota) and 31 provinces between May and August 2006. The GDS sought to provide insights into the measurement of post-decentralization public service delivery levels and trends across a range of sectors, including health, education, basic infrastructure, administrative services, and the police. Furthermore, it sought to capture prevailing local incentive relationships and health and education facilities financing that govern the provision of these services.

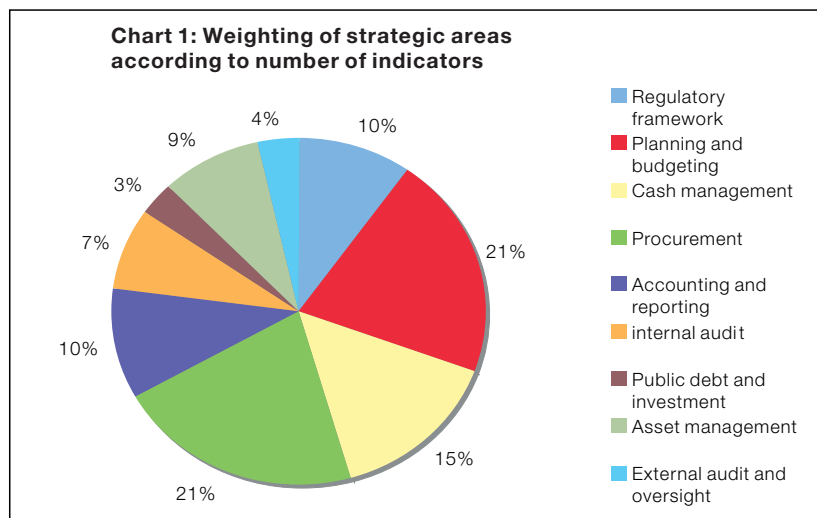
Ninety kabupatens (regency) and kota (municipality) were randomly selected throughout Indonesia. Data from 5 districts in Aceh (Aceh Barat, Aceh Besar, Aceh Singkil, Banda Aceh, and Simeulue) was used for this report. Citizens' experiences of service delivery and governance are linked with perspectives from local officials, health and education facilities, and district-level (kabupaten/kota) policy-makers. The sample included 298 household respondents from 60 hamlets using the Probability Proportional to Size (PPS) random sample, and respondents from 30 elementary schools, 15 junior high schools, and 14 puskesmas.

## C.8 PFM Framework: Strategic Areas, Outcomes, and Indicators

The PFM framework was developed by the World Bank and Government of Indonesia's Ministry of Home Affairs to assess local governments' financial management capacity. The framework is divided in nine strategic areas key to effective management of public finances by district governments: (1) Regulatory Framework, (2) Planning and Budgeting, (3) Cash Management, (4) Procurement, (5) Accounting and Reporting, (6) Internal Audit, (7) Public Debt and Investment, (8) Asset Management, and (9) External Audit and Oversight.

Each strategic area is divided into between 1 and 5 outcomes, and lists of indicators are provided for each outcome. The outcomes represent a desired achievement within each strategic area, and indicators are used to assess how district governments are performing in that area. It should be noted that international best practices have not been used to form the basis of the outcomes because, in practice, the gulf between them and the present reality is too great to generate viable results.

Respondents are required to answer “yes” or “no” to each statement represented by each indicator. Affirmative responses are added for each outcome, and a score is calculated according to the percentage of “yes” responses. Some strategic areas have more indicators than others; hence, they have more weight in the overall results. For example, planning and budgeting covers 49 indicators, yet debt and public investment covers only 8. Other more heavily weighted strategic indicators include procurement (41 indicators) and cash management (31 indicators).



Source: Authors.

## Survey sites

The PFM framework in Aceh was implemented in two batches. The first round, led by LGSP-USAID, covered 5 districts in Aceh (Kota Banda Aceh, Kab. Aceh Besar, Kab. Aceh Jaya, Kab. Aceh Barat, and Kab. Nagan Raya) and 2 districts in Nias (Kab. Nias and Kab. Nias Selatan). All Aceh sites were badly affected by the December 2004 tsunami; both districts in Nias were heavily affected by the March 2005 earthquake. The second batch, implemented by the World Bank, covered four districts in Aceh (Kab. Pidie, Kab. Bireuen, Kab. Aceh Utara, and Kab. Aceh Timur).

Researchers involved come from well-regarded universities with strong backgrounds in accounting and local finances. The University of North Sumatera provided researchers for Nias; Hasanudin University for Aceh Barat and Nagan Raya, Pidie, and Bireuen; Andalas University for Aceh Jaya, Aceh Utara, and Aceh Timur; and TARI institute and Syiah Kuala University for Banda Aceh and Aceh Besar.

## Methodology

Results were obtained through interviews and FGDs (focus group discussions) with local government representatives in the relevant departments. These include BAPPEDA, the finance department; DPRD, the local revenue department; the local treasury office; public works agency; and local supervision agency. To ensure data accuracy, “yes” responses are required to be supported by either relevant documentation and/or cross-checked with additional respondents.

## Interpretation of results

A score is given for each strategic area and survey site, and an overall score is given for each survey site. For comparison and evaluation, strategic area scores can be graded according to the categories shown below.



Overall score (%)	
80–100	Excellent/fully acceptable
60–79	Very good/substantially acceptable
40–59	Good/fairly acceptable
20–39	Moderate/partially acceptable
0–19	Poor/not acceptable

## Appendix D. Statistical Appendix

### Revenue

**Table D1. The composition of regional government revenue in Aceh (constant 2006 prices)**

Revenue	1999		2001		2002		2003		2004		2005	
	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%
Own-source revenue (PAD)	185	7.6	194	3.0	306	3.5	349	3.4	502	4.8	331	3.6
Tax-sharing	252	10.4	404	6.2	333	3.8	399	3.9	561	5.4	399	4.4
Non-tax-sharing (natural resource)	26	1.1	1,453	22.4	3,413	39.2	2,618	25.9	4,034	38.7	3,681	40.5
SDO	877	36.2										
INPRES	1,085	44.8										
DAU			4,059	62.7	3,842	44.1	3,368	33.3	3,891	37.3	3,825	42.1
DAK			78	1.2	122	1.4	284	2.8	262	2.5	269	3.0
Others	0	0.0	288	4.5	697	8.0	3,104	30.7	1,184	11.3	576	6.3
<b>Total</b>	<b>2,425</b>	<b>100</b>	<b>6,475</b>	<b>100</b>	<b>8,713</b>	<b>100</b>	<b>10,122</b>	<b>100</b>	<b>10,433</b>	<b>100</b>	<b>9,081</b>	<b>100</b>

**Table D2. The composition of provincial government revenue in Aceh (constant 2006 prices)**

Revenue	1999		2001		2002		2003		2004		2005	
	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%
Own-source revenue (PAD)	78	13.1	95	9.9	160	6.1	168	5.4	305	8.8	163	4.8
Tax-sharing	49	8.2	77	8.0	72	2.8	81	2.6	77	2.2	56	1.7
Non-tax-sharing (natural resource)	18	3.0	324	33.7	2,078	79.5	1,045	33.7	2,808	80.9	2,808	83.2
SDO	98	16.5										
INPRES	353	59.3										
DAU			319	33.2	260	9.9	124	4.0	117	3.4	336	10.0
DAK			13	1.4	0	0.0	6	0.2	0	0.0	1	0.0
Others	0	0.0	133	13.8	44	1.7	1,679	54.1	166	4.8	12	0.3
<b>Total</b>	<b>596</b>	<b>100</b>	<b>961</b>	<b>100</b>	<b>2,615</b>	<b>100</b>	<b>3,103</b>	<b>100</b>	<b>3,473</b>	<b>100</b>	<b>3,376</b>	<b>100</b>

**Table D3: The composition of local government (kabupaten/kota) revenue in Aceh (constant 2006 prices)**

Revenue	1999		2001		2002		2003		2004		2005	
	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%
Own-source revenue (PAD)	107	5.8	98	1.8	146	2.4	180	2.6	196	2.8	168	2.9
Tax-sharing	203	11.1	327	5.9	260	4.3	318	4.5	484	7.0	343	6.0
Non-tax-sharing (natural resource)	8	0.4	1,129	20.5	1,335	21.9	1,573	22.4	1,226	17.6	873	15.3
SDO	779	42.6										
INPRES	732	40.0										
DAU			3,740	67.8	3,583	58.7	3,244	46.2	3,774	54.2	3,489	61.2
DAK			65	1.2	122	2.0	279	4.0	262	3.8	268	4.7
Others	0	0.0	155	2.8	653	10.7	1,425	20.3	1,018	14.6	564	9.9
<b>Total</b>	<b>1,829</b>	<b>100</b>	<b>5,515</b>	<b>100</b>	<b>6,098</b>	<b>100</b>	<b>7,019</b>	<b>100</b>	<b>6,960</b>	<b>100</b>	<b>5,705</b>	<b>100</b>

**Table D4. The composition of provincial and local government revenue in Aceh, 2004 (per capita and % share of total revenue)**

No.	Districts	PAD		Tax-sharing		Non-tax-sharing		DAU		DAK		Other		Total
		Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp
1	Prov. Aceh	48,527	8.8	12,185	2.2	446,497	80.9	18,616	3.4	-	-	26,367	4.8	552,193
2	Kab. Aceh Barat	34,035	2.8	55,892	4.6	194,920	16	724,869	59.6	60,185	4.9	147,225	12.1	1,217,126
3	Kab. Aceh Besar	15,940	1.6	26,994	2.7	158,717	16	634,284	64.1	23,483	2.4	130,856	13.2	990,274
4	Kab. Aceh Selatan	19,694	1.8	48,105	4.3	184,679	16.4	688,720	61.3	45,742	4.1	136,027	12.1	1,122,967
5	Kab. Aceh Singkil	n.a	n.a	n.a	n.a	n.a	n.a	720,736	-	53,018	n.a	n.a	n.a	n.a
6	Kab. Aceh Tengah	24,873	3	30,413	3.7	55,302	6.7	551,340	66.4	29,048	3.5	139,075	16.8	830,051
7	Kab. Aceh Tenggara	25,942	2.3	46,506	4.1	188,744	16.8	727,638	64.6	50,443	4.5	87,474	7.8	1,126,747
8	Kab. Aceh Timur	12,268	1.4	87,564	10	250,864	28.5	461,114	52.4	34,928	4	33,253	3.8	879,992
9	Kab. Aceh Utara	78,029	5	85,498	5.5	405,642	26.2	410,153	26.5	14,240	0.9	553,627	35.8	1,547,188
10	Kab. Bireuen	12,097	1.6	61,745	8.2	101,311	13.5	457,866	60.8	31,287	4.2	88,208	11.7	752,513
11	Kab. Pidie	11,521	1.5	21,610	2.8	104,945	13.6	492,703	63.7	23,775	3.1	118,759	15.4	773,313
12	Kab. Simeuleu	n.a	n.a	n.a	n.a	n.a	n.a	1,260,242	-	100,351	n.a	n.a	n.a	n.a
13	Kota Banda Aceh	39,618	4.1	51,932	5.4	109,813	11.3	614,208	63.4	47,894	4.9	104,918	10.8	968,383
14	Kota Sabang	191,267	4	391,211	8.2	902,356	19	2,817,157	59.4	193,057	4.1	246,982	5.2	4,742,031
15	Kota Langsa	17,843	1.6	75,843	6.8	122,645	11	640,407	57.3	79,335	7.1	181,167	16.2	1,117,240
16	Kota Lhokseumawe	67,887	5	286,713	21.2	205,981	15.3	688,446	51	68,503	5.1	32,221	2.4	1,349,751
17	Kab. Aceh Barat Daya	24,400	1.9	46,302	3.7	305,063	24.3	727,590	57.9	49,385	3.9	103,830	8.3	1,256,569
18	Kab. Gayo Lues	38,877	2.1	54,253	2.9	404,766	21.8	1,257,281	67.7	80,657	4.3	22,511	1.2	1,858,345
19	Kab. Aceh Tamiang	17,812	2.2	103,317	12.8	176,220	21.9	402,115	50	79,557	9.9	25,362	3.2	804,383
20	Kab. Nagan Raya	20,800	1.5	318,980	23.7	0	0	879,670	65.3	49,319	3.7	78,120	5.8	1,346,888
21	Kab. Aceh Jaya	n.a	n.a	n.a	n.a	n.a	n.a	1,150,727	n.a	68,785	n.a	n.a	n.a	n.a
22	Kab. Bener Meriah	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
	<b>Average</b> (districts)	38,406	2.6	105,463	7.7	241,998	17.4	815,363	58.3	59,150	4.4	131,154	10.7	1,334,339
	<b>Minimum</b> (districts)	11,521	1.4	21,610	2.7	55,302	6.7	402,115	26.5	14,240	0.9	22,511	1.2	752,513
	<b>Maximum</b> (districts)	191,267	5.0	391,211	23.7	902,356	28.5	2,817,157	67.7	193,057	9.9	553,627	35.8	4,742,031



**Table D5. The composition of provincial and local government own source revenue (PAD) in Aceh, 2004**  
(per capita and % share of total PAD)

No	Districts	Local taxes		Local charges		Profit from local-owned enterprise		Other eligible pad		Total
		Rp	%	Rp	%	Rp	%	Rp	%	Rp
1	Prov. Aceh	33,811	69.7	943	1.9	448	0.9	13,325	27.5	<b>48,527</b>
2	Kab. Aceh Barat	7,379	21.7	12,372	36.4	1,541	4.5	12,743	37.4	<b>34,035</b>
3	Kab. Aceh Besar	2,410	15.1	1,608	10.1	25	0.2	11,898	74.6	<b>15,940</b>
4	Kab. Aceh Selatan	3,478	17.7	5,028	25.5	1,920	9.7	9,268	47.1	<b>19,694</b>
5	Kab. Aceh Singkil	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	<b>n.a</b>
6	Kab. Aceh Tengah	3,644	14.7	15,559	62.6	278	1.1	5,392	21.7	<b>24,873</b>
7	Kab. Aceh Tenggara	4,377	16.9	9,481	36.5	0	0	12,085	46.6	<b>25,942</b>
8	Kab. Aceh Timur	838	6.8	8,433	68.7	58	0.5	2,938	23.9	<b>12,268</b>
9	Kab. Aceh Utara	5,735	7.3	1,906	2.4	2,111	2.7	68,277	87.5	<b>78,029</b>
10	Kab. Bireuen	4,177	34.5	2,712	22.4	630	5.2	4,579	37.8	<b>12,097</b>
11	Kab. Pidie	3,290	28.6	4,853	42.1	264	2.3	3,114	27	<b>11,521</b>
12	Kab. Simeuleu	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	<b>n.a</b>
13	Kota Banda Aceh	21,585	54.5	14,543	36.7	0	0	3,491	8.8	<b>39,618</b>
14	Kota Sabang	17,195	9	22,440	11.7	12,285	6.4	139,342	72.9	<b>191,267</b>
15	Kota Langsa	10,854	60.8	4,259	23.9	0	0	2,730	15.3	<b>17,843</b>
16	Kota Lhokseumawe	48,400	71.3	2,443	3.6	0	0	17,044	25.1	<b>67,887</b>
17	Kab. Aceh Barat Daya	4,221	17.3	1,117	4.6	4	0	19,058	78.1	<b>24,400</b>
18	Kab. Gayo Lues	8,620	22.2	21,794	56.1	8,426	21.7	37	0.1	<b>38,877</b>
19	Kab. Aceh Tamiang	4,269	24	4,963	27.9	0	0	8,580	48.2	<b>17,812</b>
20	Kab. Nagan Raya	4,995	24	1,013	4.9	0	0	14,792	71.1	<b>20,800</b>
21	Kab. Aceh Jaya	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	<b>n.a</b>
22	Kab. Bener Meriah	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	<b>n.a</b>
	<b>Average</b> (districts)	9,145	26.3	7,913	28.0	1,620	3.2	19,728	42.5	<b>38,406</b>
	<b>Minimum</b> (districts)	838	6.8	1,013	2.4	0	0.0	37	0.1	<b>11,521</b>
	<b>Maximum</b> (districts)	48,400	71.3	22,440	68.7	12,285	21.7	139,342	87.5	<b>191,261</b>

**Table D6. DAU Allocation by districts in Aceh** (current, Rp billions)

No	Districts	2001	2002	2003	2004	2005	2006
1	Prov. Aceh	165.8	172.4	76.1	76.1	271.1	460.9
2	Kab. Aceh Barat	174.8	174.8	76.3	115.7	139.5	229.5
3	Kab. Aceh Besar	167.0	167.0	192.2	192.2	192.2	322.7
4	Kab. Aceh Selatan	137.1	137.5	114.3	126.3	145.7	244.9
5	Kab. Aceh Singkil	88.0	101.5	93.3	106.0	117.8	174.7
6	Kab. Aceh Tengah	146.1	146.1	149.7	158.7	120.3	239.2
7	Kab. Aceh Tenggara	130.6	130.6	89.1	117.3	149.2	215.4
8	Kab. Aceh Timur	220.5	180.1	139.0	143.9	159.0	244.4
9	Kab. Aceh Utara	245.6	199.9	149.1	199.9	199.9	199.9
10	Kab. Bireuen	138.9	138.9	154.0	159.1	183.7	308.1
11	Kab. Pidie	233.0	233.0	221.8	233.0	242.1	391.5
12	Kab. Simeuleu	87.3	87.3	79.7	90.0	105.4	149.3
13	Kota Banda Aceh	138.0	138.0	134.5	145.1	160.4	266.7
14	Kota Sabang	79.9	79.9	77.8	80.3	92.7	149.8
15	Kota Langsa		57.5	62.6	85.5	104.8	184.3
16	Kota Lhokseumawe		62.7	87.3	95.5	108.1	168.5
17	Kab. Aceh Jaya			41.9	77.7	100.0	157.4
18	Kab. Nagan Raya			64.9	94.9	116.3	189.4
19	Kab. Aceh Barat Daya			47.6	80.5	103.2	171.5
20	Kab. Gayo Lues			58.9	85.7	112.2	179.3
21	Kab. Aceh Tamiang			52.5	92.0	120.7	188.7
22	Kab. Bener Meriah					57.7	185.0
	<b>Total</b>	<b>2,152.4</b>	<b>2,207.1</b>	<b>2,162.4</b>	<b>2,555.5</b>	<b>3,101.9</b>	<b>5,020.9</b>

**Table D7. DAK Allocation (non-reforestation) by districts in Aceh (current, Rp billions)**

No	Districts	2003	2004	2005	2006
1	Prov. Aceh	-	-	-	-
2	Kab. Aceh Barat	9.2	9.7	13.1	26.7
3	Kab. Aceh Besar	7.0	8.4	11.4	32.5
4	Kab. Aceh Selatan	10.9	8.5	14.5	27.8
5	Kab. Aceh Singkil	3.6	7.8	11.2	26.8
6	Kab. Aceh Tengah	12.5	8.4	11.8	25.8
7	Kab. Aceh Tenggara	10.2	8.5	11.7	24.4
8	Kab. Aceh Timur	8.4	10.9	16.0	37.8
9	Kab. Aceh Utara	4.4	6.9	11.6	37.9
10	Kab. Bireuen	4.8	10.9	10.5	38.5
11	Kab. Pidie	8.7	9.0	14.7	41.4
12	Kab. Simeuleu	10.2	7.2	11.2	26.8
13	Kota Banda Aceh	8.4	6.7	7.7	22.6
14	Kota Sabang	9.6	5.5	7.7	27.5
15	Kota Langsa	3.4	10.8	8.3	21.7
16	Kota Lhokseumawe	3.7	9.5	7.1	18.9
17	Kab. Aceh Jaya	8.6	5.5	11.6	25.3
18	Kab. Nagan Raya	8.8	5.5	11.7	25.8
19	Kab. Aceh Barat Daya	8.7	5.5	12.2	26.9
20	Kab. Gayo Lues	8.2	5.5	10.4	22.5
21	Kab. Aceh Tamiang	9.1	5.5	11.3	27.1
22	Kab. Bener Meriah	0.0	0.0	4.0	28.3
	<b>Total</b>	<b>158.5</b>	<b>156.1</b>	<b>229.6</b>	<b>592.8</b>

**Table D8. The allocation of special autonomy fund (*dana otsus*) by districts in Aceh, 2005**

No	Districts	Total (Rp billions)	Share of total allocation (%)	Per capita
1	Prov. Aceh	613.7	40.0	151,987.91
2	Kab. Aceh Barat	25.4	1.7	153,958.61
3	Kab. Aceh Besar	31.6	2.1	145,544.94
4	Kab. Aceh Selatan	29.9	2.0	157,092.35
5	Kab. Aceh Singkil	27.1	1.8	177,637.93
6	Kab. Aceh Tengah	29.4	1.9	153,334.39
7	Kab. Aceh Tenggara	30.0	2.0	176,239.76
8	Kab. Aceh Timur	50.7	3.3	163,801.53
9	Kab. Aceh Utara	362.9	23.7	748,871.68
10	Kab. Bireuen	31.5	2.1	89,488.19
11	Kab. Pidie	41.2	2.7	85,613.36
12	Kab. Simeuleu	21.2	1.4	294,186.02
13	Kota Banda Aceh	21.8	1.4	91,057.15
14	Kota Sabang	14.7	1.0	506,384.32
15	Kota Langsa	18.7	1.2	139,011.75
16	Kota Lhokseumawe	19.4	1.3	138,495.34
17	Kab. Aceh Barat Daya	21.2	1.4	188,656.52
18	Kab. Gayo Lues	30.2	2.0	438,895.34
19	Kab. Aceh Tamiang	38.2	2.5	167,625.11
20	Kab. Nagan Raya	27.7	1.8	245,414.37
21	Kab. Aceh Jaya	26.2	1.7	316,241.08
22	Kab. Bener Meriah	21.4	1.4	208,970.66
	<b>Total</b>	<b>1,534.3</b>	<b>100.0</b>	<b>379,970.03</b>

**Table D9: Regional government revenue across provinces, 2004 (per capita and % share of total revenue)**

No.	Provinces	PAD		Tax-sharing		Non-tax-sharing		DAU		DAK		Others		Total Rp
		Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	
1	Aceh	86,549	4.9	107,759	6.1	483,166	27.2	642,198	36.1	45,715	2.6	413,599	23.2	<b>1,778,986</b>
2	Sumatra Utara	145,001	20.8	77,819	11.2	2,834	0.4	393,023	56.5	15,085	2.2	61,710	8.9	<b>695,470</b>
3	Sumatra Barat	136,874	15.4	62,431	7.0	5,676	0.6	604,964	67.9	29,897	3.4	50,746	5.7	<b>890,588</b>
4	Riau	204,576	12.0	322,471	18.9	710,567	41.6	383,356	22.5	3,238	0.2	83,209	4.9	<b>1,707,417</b>
5	Jambi	166,317	15.1	188,398	17.1	52,882	4.8	608,092	55.1	32,924	3.0	54,704	5.0	<b>1,103,317</b>
6	Sumatra Selatan	100,942	13.5	104,962	14.1	151,793	20.4	336,155	45.1	9,486	1.3	42,220	5.7	<b>745,557</b>
7	Bengkulu	93,261	10.5	60,230	6.8	2,057	0.2	648,438	73.3	32,155	3.6	47,926	5.4	<b>884,067</b>
8	Lampung	75,442	13.5	45,582	8.2	28,265	5.1	369,281	66.1	13,088	2.3	27,303	4.9	<b>558,960</b>
9	D K I Jakarta	734,914	55.7	468,471	35.5	10,254	0.8	105,974	8.0	0	0.0	0	0.0	<b>1,319,613</b>
10	Jawa Barat	114,608	25.3	64,217	14.2	12,774	2.8	225,048	49.6	3,415	0.8	33,485	7.4	<b>453,546</b>
11	Jawa Tengah	96,379	19.6	36,304	7.4	1,204	0.2	301,870	61.3	15,118	3.1	41,487	8.4	<b>492,362</b>
12	Yogyakarta	173,029	22.2	48,866	6.3	626	0.1	483,380	62.1	14,161	1.8	58,671	7.5	<b>778,734</b>
13	Jawa Timur	122,103	23.8	49,982	9.8	1,116	0.2	286,731	56.0	7,182	1.4	45,035	8.8	<b>512,148</b>
14	Kalimantan Barat	99,908	12.5	64,387	8.0	6,694	0.8	565,040	70.4	28,077	3.5	38,052	4.7	<b>802,158</b>
15	Kalimantan Tengah	135,680	8.6	170,960	10.8	55,879	3.5	1,099,225	69.5	68,860	4.4	50,171	3.2	<b>1,580,776</b>
16	Kalimantan Selatan	168,376	16.9	105,761	10.6	57,821	5.8	569,181	57.1	31,467	3.2	64,113	6.4	<b>996,718</b>
17	Kalimantan Timur	427,553	13.8	961,871	31.1	929,190	30.0	610,365	19.7	17,070	0.6	151,458	4.9	<b>3,097,507</b>
18	Sulawesi Utara	118,171	13.0	64,947	7.1	2,808	0.3	615,764	67.8	34,971	3.8	72,028	7.9	<b>908,689</b>
19	Sulawesi Tengah	86,512	8.2	78,031	7.4	5,529	0.5	793,850	75.5	39,819	3.8	48,342	4.6	<b>1,052,083</b>
20	Sulawesi Selatan	114,872	13.9	78,705	9.5	4,690	0.6	549,653	66.4	31,027	3.7	49,168	5.9	<b>828,115</b>
21	Sulawesi Tenggara	87,964	9.3	67,071	7.1	7,516	0.8	683,761	72.2	45,583	4.8	54,716	5.8	<b>946,611</b>
22	Bali	336,746	32.5	70,267	6.8	1,370	0.1	516,754	49.9	21,202	2.0	88,887	8.6	<b>1,035,227</b>
23	Nusa Tenggara Barat	71,988	11.4	37,293	5.9	39,555	6.3	424,152	67.2	21,763	3.4	36,708	5.8	<b>631,459</b>
24	Nusa Tenggara Timur	80,868	8.7	51,390	5.5	1,553	0.2	715,162	76.9	34,399	3.7	46,629	5.0	<b>930,002</b>
25	Maluku	121,420	8.8	105,688	7.7	16,312	1.2	1,029,428	74.5	52,631	3.8	55,707	4.0	<b>1,381,185</b>
26	Papua	185,034	5.3	307,043	8.9	48,901	1.4	1,818,923	52.5	189,410	5.5	916,479	26.4	<b>3,465,790</b>
27	Maluku Utara	55,832	4.0	141,752	10.2	80,664	5.8	957,822	68.9	87,149	6.3	67,188	4.8	<b>1,390,407</b>
28	Banten	139,777	29.1	110,537	23.0	416	0.1	197,225	41.0	4,045	0.8	29,089	6.0	<b>481,090</b>
29	Bangka Belitung	212,176	18.1	97,082	8.3	87,272	7.4	634,647	54.0	43,472	3.7	100,183	8.5	<b>1,174,831</b>
30	Gorontalo	103,448	8.4	62,964	5.1	8,085	0.7	929,284	75.3	66,589	5.4	63,874	5.2	<b>1,234,244</b>
	<b>National</b>	149,994	19.4	102,534	13.3	53,035	6.9	388,104	50.2	17,046	2.2	61,829	8.0	<b>772,542</b>
	<b>Minimum</b>	55,832	4.0	36,304	5.1	416	0.1	105,974	8.0	0	0.0	0	0.0	<b>453,546</b>
	<b>Maximum</b>	734,914	55.7	961,871	35.5	929,190	41.6	1,818,923	76.9	189,410	6.3	916,479	26.4	<b>3,465,790</b>

**Table D10. Regional government own source revenue (PAD), 2004 (per capita and % share of total PAD)**

No	Provinces	Local taxes		Local charges		Profit from local- owned enterprises		Other eligible PAD		Total
		Rp	%	Rp	%	Rp	%	Rp	%	
1	Aceh	43,459	50.2	5,680	6.6	1,166	1.3	36,244	41.9	<b>86,549</b>
2	Sumatra Utara	116,487	80.3	18,959	13.1	1,629	1.1	7,926	5.5	<b>145,001</b>
3	Sumatra Barat	88,113	64.4	16,487	12.0	12,103	8.8	20,171	14.7	<b>136,874</b>
4	Riau	140,782	70.9	19,256	9.7	8,599	4.3	30,024	15.1	<b>198,661</b>
5	Jambi	105,610	71.0	22,588	15.2	4,009	2.7	16,597	11.2	<b>148,804</b>
6	Sumatra Selatan	71,500	70.8	9,838	9.7	2,754	2.7	16,850	16.7	<b>100,942</b>
7	Bengkulu	61,594	71.5	15,227	17.7	2,339	2.7	7,041	8.2	<b>86,201</b>
8	Lampung	56,831	75.3	10,753	14.3	1,631	2.2	6,227	8.3	<b>75,442</b>
9	D K I Jakarta	628,334	85.5	48,351	6.6	11,664	1.6	46,565	6.3	<b>734,914</b>
10	Jawa Barat	85,664	74.7	16,297	14.2	3,073	2.7	9,574	8.4	<b>114,608</b>
11	Jawa Tengah	61,486	63.8	23,295	24.2	1,278	1.3	10,319	10.7	<b>96,379</b>
12	Yogyakarta	121,314	70.1	29,314	16.9	9,079	5.2	13,323	7.7	<b>173,029</b>
13	Jawa Timur	87,630	74.0	19,592	16.5	2,612	2.2	8,660	7.3	<b>118,494</b>
14	Kalimantan Barat	75,548	75.6	11,343	11.3	852	0.9	12,216	12.2	<b>99,959</b>
15	Kalimantan Tengah	7,268	13.8	19,166	36.4	1,071	2.0	25,203	47.8	52,708
16	Kalimantan Selatan	121,600	72.2	14,286	8.5	6,000	3.6	26,490	15.7	<b>168,376</b>
17	Kalimantan Timur	235,530	63.3	74,573	20.1	28,165	7.6	33,600	9.0	<b>371,868</b>
18	Sulawesi Utara	77,812	65.8	20,480	17.3	4,207	3.6	15,673	13.3	<b>118,171</b>
19	Sulawesi Tengah	49,051	79.7	5,630	9.1	163	0.3	6,694	10.9	<b>61,537</b>
20	Sulawesi Selatan	72,896	63.5	23,570	20.5	6,176	5.4	12,229	10.6	<b>114,872</b>
21	Sulawesi Tenggara	47,743	54.1	18,969	21.5	5,590	6.3	15,882	18.0	<b>88,184</b>
22	Bali	274,930	81.6	32,653	9.7	12,865	3.8	16,297	4.8	<b>336,746</b>
23	Nusa Tenggara Barat	41,756	58.0	12,992	18.0	5,303	7.4	11,937	16.6	<b>71,988</b>
24	Nusa Tenggara Timur	25,020	30.9	16,784	20.8	5,420	6.7	33,644	41.6	<b>80,868</b>
25	Maluku	54,388	44.8	16,748	13.8	893	0.7	49,390	40.7	<b>121,420</b>
26	Papua	63,620	37.3	21,289	12.5	12,699	7.4	72,847	42.7	<b>170,455</b>
27	Maluku Utara	28,848	51.9	9,794	17.6	0	0.0	16,973	30.5	<b>55,615</b>
28	Banten	115,569	82.7	17,402	12.4	1,272	0.9	5,534	4.0	<b>139,777</b>
29	Bangka Belitung	146,780	69.2	22,715	10.7	1,164	0.5	41,517	19.6	<b>212,176</b>
30	Gorontalo	44,439	43.0	33,081	32.0	5,246	5.1	20,682	20.0	<b>103,448</b>
	<b>National</b>	107,801	73.3	20,356	13.8	4,004	2.7	14,968	10.2	<b>147,129</b>
	<b>Minimum</b>	7,268	13.8	5,630	6.6	0	0.0	5,534	4.0	<b>52,708</b>
	<b>Maximum</b>	628,334	85.5	74,573	36.4	28,165	8.8	72,847	47.8	<b>734,914</b>

## EXPENDITURE

**Table D11. Local, provincial, and central government (deconcentrated) expenditures in Aceh (constant 2006 prices)**

Expenditures	1999		2001		2002		2003		2004		2005	
	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%	Rp billions	%
<b>Kabupaten/Kota</b>												
Routine	985	56.1	2,537	49.5	3,000	49.9	3,672	58.2	4,027	60.4	3,632	58.6
Development	771	43.9	2,590	50.5	3,016	50.1	2,637	41.8	2,644	39.6	2,566	41.4
<b>Total</b>	<b>1,756</b>	<b>100.0</b>	<b>5,127</b>	<b>100.0</b>	<b>6,015</b>	<b>100.0</b>	<b>6,309</b>	<b>100.0</b>	<b>6,671</b>	<b>100.0</b>	<b>6,198</b>	<b>100.0</b>
<b>Province</b>												
Routine	229	39.3	407	48.0	469	20.2	400	25.1	405	24.9	353	26.0
Development	354	60.7	442	52.0	1,853	79.8	1,194	74.9	1,225	75.1	1,005	74.0
<b>Total</b>	<b>583</b>	<b>100.0</b>	<b>849</b>	<b>100.0</b>	<b>2,322</b>	<b>100.0</b>	<b>1,594</b>	<b>100.0</b>	<b>1,630</b>	<b>100.0</b>	<b>1,358</b>	<b>100.0</b>
<b>Total Regional</b>	<b>2,339</b>	<b>42.4</b>	<b>5,976</b>	<b>75.7</b>	<b>8,337</b>	<b>84.6</b>	<b>7,903</b>	<b>78.8</b>	<b>8,301</b>	<b>83.8</b>	<b>7,556</b>	<b>80.1</b>
<b>Deconcentrated Fund</b>	<b>3,178</b>	<b>57.6</b>	<b>1,917</b>	<b>24.3</b>	<b>1,522</b>	<b>15.4</b>	<b>2,124</b>	<b>21.2</b>	<b>1,602</b>	<b>16.2</b>	<b>1,873</b>	<b>19.9</b>
<b>Total</b>	<b>5,517</b>	<b>100.0</b>	<b>7,893</b>	<b>100.0</b>	<b>9,859</b>	<b>100.0</b>	<b>10,027</b>	<b>100.0</b>	<b>9,902</b>	<b>100.0</b>	<b>9,430</b>	<b>100.0</b>

**Table D12. Routine and development expenditures by districts in Aceh, 2004 (Rp billion, per capita, and % share of total expenditure)**

No	Districts	Routine			Development			Total	
		Total (Rp billion)	Per capita	%	Total (Rp billion)	Per capita	%	Rp billion	Per capita
1	Prov. Aceh	263	64,416	24.9	796	194,760	75.1	<b>1,060</b>	<b>259,176</b>
2	Kab. Aceh Barat	117	722,378	59.4	80	492,854	40.6	<b>197</b>	<b>1,215,233</b>
3	Kab. Aceh Besar	177	583,125	66.0	91	300,281	34.0	<b>268</b>	<b>883,406</b>
4	Kab. Aceh Selatan	135	722,010	63.3	78	418,342	36.7	<b>213</b>	<b>1,140,352</b>
5	Kab. Aceh Singkil	n.a	n.a	n.a	n.a	n.a	n.a	<b>n.a</b>	<b>n.a</b>
6	Kab. Aceh Tengah	187	648,933	61.5	117	405,418	38.5	<b>303</b>	<b>1,054,351</b>
7	Kab. Aceh Tenggara	103	609,773	56.2	80	474,436	43.8	<b>182</b>	<b>1,084,209</b>
8	Kab. Aceh Timur	202	648,596	77.3	60	190,824	22.7	<b>262</b>	<b>839,419</b>
9	Kab. Aceh Utara	299	613,303	40.7	435	891,983	59.3	<b>734</b>	<b>1,505,286</b>
10	Kab. Bireuen	176	503,010	65.4	93	266,355	34.6	<b>269</b>	<b>769,365</b>
11	Kab. Pidie	284	600,030	76.1	89	188,934	23.9	<b>374</b>	<b>788,963</b>
12	Kab. Simeuleu	63	876,469	47.2	70	979,685	52.8	<b>133</b>	<b>1,856,155</b>
13	Kota Banda Aceh	161	675,154	74.8	54	227,456	25.2	<b>215</b>	<b>902,611</b>
14	Kota Sabang	77	2,710,870	59.5	53	1,843,998	40.5	<b>130</b>	<b>4,554,868</b>
15	Kota Langsa	80	594,839	59.6	54	402,600	40.4	<b>134</b>	<b>997,439</b>
16	Kota Lhokseumawe	133	957,396	70.2	56	406,904	29.8	<b>189</b>	<b>1,364,300</b>
17	Kab. Aceh Barat Daya	71	633,224	54.8	58	522,295	45.2	<b>129</b>	<b>1,155,519</b>
18	Kab. Gayo Lues	69	1,011,914	51.5	65	953,448	48.5	<b>134</b>	<b>1,965,363</b>
19	Kab. Aceh Tamiang	98	428,137	60.0	65	285,813	40.0	<b>163</b>	<b>713,950</b>
20	Kab. Nagan Raya	83	748,658	55.9	66	591,736	44.1	<b>149</b>	<b>1,340,394</b>
21	Kab. Aceh Jaya	n.a	n.a	n.a	0	n.a	n.a	<b>n.a</b>	<b>n.a</b>
22	Kab. Bener Meriah	n.a	n.a	n.a	0	n.a	n.a	<b>n.a</b>	<b>n.a</b>
	<b>Average</b> (districts)	140	793,768	61.1	83	546,853	38.9	<b>232</b>	<b>1,340,621</b>
	<b>Minimum</b> (districts)	63	428,137	40.7	0	188,934	22.7	<b>129</b>	<b>713,950</b>
	<b>Maximum</b> (districts)	299	2,710,870	77.3	435	1,843,998	59.3	<b>734</b>	<b>4,554,868</b>



**Table D13: Routine expenditures by economic classification and districts in Aceh, 2004 (per capita and % share of total routine)**

No	Districts	Personnel		Goods		Operations and maintenance		Official travel		Others		Unexpected expense		Pension and assistance		Financial assistance		Total
		Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	
1	Prov. Aceh	42,648	66.2	13,397	20.8	5,005	7.8	2,913	4.5	0	0.0	452	0.7	0	0.0	0	0.0	64,416
2	Kab. Aceh Barat	533,793	73.9	44,748	6.2	14,348	2.0	9,816	1.4	0	0.0	9,014	1.2	0	0.0	110,661	15.3	722,378
3	Kab. Aceh Besar	458,654	78.7	29,286	5.0	10,567	1.8	5,230	0.9	0	0.0	3,831	0.7	0	0.0	75,556	13.0	583,125
4	Kab. Aceh Selatan	457,885	63.4	85,219	11.8	20,445	2.8	14,557	2.0	0	0.0	5,350	0.7	0	0.0	138,553	19.2	722,010
5	Kab. Aceh Singkil	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
6	Kab. Aceh Tengah	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
7	Kab. Aceh Tenggara	443,941	72.8	40,306	6.6	164	0.0	1,168	0.2	21	0.0	15,870	2.6	0	0.0	108,303	17.8	609,773
8	Kab. Aceh Timur	416,037	64.1	73,210	11.3	12,636	1.9	15,046	2.3	0	0.0	23,712	3.7	0	0.0	107,955	16.6	648,596
9	Kab. Aceh Utara	459,334	74.9	54,984	9.0	9,099	1.5	6,528	1.1	0	0.0	60,307	9.8	0	0.0	23,051	3.8	613,303
10	Kab. Bireuen	418,790	83.3	44,932	8.9	6,064	1.2	8,035	1.6	0	0.0	6,830	1.4	0	0.0	18,359	3.6	503,010
11	Kab. Pidie	433,365	72.2	48,473	8.1	7,977	1.3	2,519	0.4	0	0.0	39,056	6.5	0	0.0	68,639	11.4	600,030
12	Kab. Simeuleu	628,624	71.7	116,953	13.3	20,265	2.3	44,660	5.1	0	0.0	0	0.0	0	0.0	65,967	7.5	876,469
13	Kota Banda Aceh	567,815	84.1	85,811	12.7	12,924	1.9	6,489	1.0	0	0.0	0	0.0	0	0.0	2,116	0.3	675,154
14	Kota Sabang	1,551,199	57.2	602,763	22.2	96,168	3.5	103,094	3.8	0	0.0	5,688	0.2	0	0.0	351,959	13.0	2,710,870
15	Kota Langsa	386,763	65.0	76,213	12.8	10,265	1.7	19,309	3.2	0	0.0	15,894	2.7	0	0.0	86,395	14.5	594,839
16	Kota Loksamawe	490,452	51.2	143,644	15.0	18,645	1.9	17,866	1.9	0	0.0	34,927	3.6	0	0.0	251,860	26.3	957,396
17	Kab. Aceh Barat Daya	405,671	64.1	52,805	8.3	8,021	1.3	12,649	2.0	0	0.0	14,815	2.3	0	0.0	139,264	22.0	633,224
18	Kab. Gayo Lues	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
19	Kab. Aceh Tamiang	258,128	60.3	75,077	17.5	6,116	1.4	11,602	2.7	0	0.0	27,226	6.4	0	0.0	49,988	11.7	428,137
20	Kab. Nagan Raya	423,692	56.6	57,356	7.7	11,589	1.5	15,430	2.1	0	0.0	6,725	0.9	0	0.0	233,867	31.2	748,658
21	Kab. Aceh Jaya	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
22	Kab. Bener Meriah	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
	<b>Average (districts)</b>	520,884	68.3	101,986	11.0	16,581	1.8	18,375	2.0	1	0.0	16,828	2.7	0	0.0	114,531	14.2	789,186
	<b>Minimum (districts)</b>	258,128	51.2	29,286	5.0	164	0.0	1,168	0.2	0	0.0	0	0.0	0	0.0	2,116	0.3	428,137
	<b>Maximum (districts)</b>	1,551,199	84.1	602,763	22.2	96,168	3.5	103,094	5.1	21	0.0	60,307	9.8	0	0.0	351,959	31.2	2,710,870

Table D14. Development expenditure by sector and districts in Aceh, 2004 (per capita and % share of total development)

No	Districts	Government Apparatus		Agriculture and Forestry		Mining and Energy		Trade and Business Development		Manpower		Health and Social Welfare		Education and Culture		Environment and Spatial Planning		Regional Development and Housing		Transport, Water and Irrigation		Demography and Family Planning		Telecommunication and Tourism		Total		
		Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph
1	Prov. Aceh	68,379	35.1	11,641	60	1,488	0.8	2,814	1.4	1,381	0.7	8,733	4.5	60,533	31.1	1,026	0.5	-	0.0	37,097	19.0	1,190	0.6	459	0.2	194,760	0.2	
2	Kab. Aceh Barat	157,831	32.0	16,744	34	3,959	0.8	1,575	0.3	35,168	7.1	34,588	7.0	104,039	21.1	9,266	1.9	-	0.0	129,684	26.3	-	0.0	-	0.0	492,854	0.0	
3	Kab. Aceh Besar	41,278	13.7	14,713	49	2,741	0.9	3,978	1.3	-	0.0	20,720	6.9	87,801	29.2	439	0.1	-	0.0	126,412	42.1	1,082	0.4	13.16	0.4	300,281	0.4	
4	Kab. Aceh Selatan	129,923	31.1	25,279	60	-	0.0	22,258	5.3	1,738	0.4	22,268	5.3	138,790	33.2	2,426	0.6	803	0.2	74,857	17.9	-	0.0	-	0.0	418,342	0.0	
5	Kab. Aceh Singkil	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
6	Kab. Aceh Tengah	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
7	Kab. Aceh Tenggara	147,712	31.1	17,867	38	-	0.0	5,797	1.2	-	0.0	23,413	4.9	135,933	28.7	7,634	1.6	-	0.0	126,338	26.6	6,542	1.4	3,201	0.7	474,436	0.7	
8	Kab. Aceh Timur	101,459	53.2	6,705	35	-	0.0	285	0.1	3,711	1.9	26,014	13.6	10,195	5.3	6,800	3.6	-	0.0	34,454	18.1	-	0.0	1,201	0.6	190,824	0.6	
9	Kab. Aceh Utara	362,980	40.7	38,557	43	5,104	0.6	4,338	0.5	1,981	0.2	98,276	11.0	101,544	11.4	4,786	0.5	251,730	28.2	6,775	0.8	12,205	1.4	3,707	0.4	891,983	0.4	
10	Kab. Bireuen	67,465	25.3	24,726	93	-	0.0	3,050	1.1	1,630	0.6	26,508	10.0	70,627	26.5	-	0.0	-	0.0	72,349	27.2	-	0.0	-	0.0	266,355	0.0	
11	Kab. Pidie	64,778	34.3	18,940	100	-	0.0	1,978	1.0	-	0.0	10,666	5.6	64,234	34.0	608	0.3	23,345	12.4	3,252	1.7	1,132	0.6	-	0.0	188,934	0.0	
12	Kab. Simeuleu	370,394	37.8	27,789	28	-	0.0	5,065	0.5	-	0.0	177,956	18.2	170,216	17.4	6,127	0.6	-	0.0	217,023	22.2	1,959	0.2	3,156	0.3	979,685	0.3	
13	Kota Banda Aceh	89,263	39.2	5,352	24	-	0.0	4,081	1.8	1,250	0.5	14,532	6.4	57,593	25.3	6,160	2.7	621	0.3	46,606	20.5	-	0.0	1,998	0.9	227,456	0.9	
14	Kota Sabang	880,359	45.0	79,246	43	-	0.0	19,896	1.1	50,982	2.8	179,661	9.7	250,387	13.6	43,312	2.3	-	0.0	354,195	19.2	-	0.0	35,960	2.0	1,843,998	2.0	
15	Kota Lingsa	205,607	51.1	24,042	60	-	0.0	1,014	0.3	715	0.2	1,328	0.3	84,056	20.9	-	0.0	-	0.0	85,838	21.3	-	0.0	-	0.0	402,600	0.0	
16	Kota Lheksaumawe	189,812	46.6	-	0.0	-	0.0	1,794	0.4	-	0.0	36,560	9.0	39,420	9.7	39,455	9.7	-	0.0	97,797	24.0	2,066	0.5	-	0.0	406,904	0.0	
17	Kab. Aceh Barat Daya	183,925	35.2	28,239	54	-	0.0	14,251	2.7	-	0.0	41,619	8.0	129,230	24.7	10,939	2.1	-	0.0	106,703	20.4	-	0.0	7,389	1.4	522,295	1.4	
18	Kab. Gayo Lues	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
19	Kab. Aceh Tamiang	80,676	28.2	19,977	70	-	0.0	767	0.3	829	0.3	28,213	9.9	68,017	23.8	-	0.0	-	0.0	85,598	29.9	1,738	0.6	-	0.0	285,813	0.6	
20	Kab. Nagan Raya	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
21	Kab. Aceh Jaya	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
22	Kab. Bener Meriah	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
	<b>Average</b> (districts)	201,564	36.3	23,212	49	843	0.2	6,008	1.2	6,534	0.9	49,488	8.4	100,992	21.6	9,197	1.7	19,750	2.7	104,525	21.2	1,782	0.3	4,138	0.4	526,184	0.4	
	<b>Minimum</b> (districts)	41,278	13.7	0	0.0	0	0.0	285	0.1	0	0.0	1,328	0.3	10,195	5.3	0	0.0	0	0.0	3,252	0.8	0	0.0	0	0.0	188,934	0.0	
	<b>Maximum</b> (districts)	880,359	53.2	79,246	100	5,104	0.9	22,258	5.3	50,982	7.1	179,661	18.2	250,387	34.0	43,312	9.7	251,730	28.2	354,195	42.1	12,205	1.4	35,960	2.0	1,843,998	2.0	

Table D15. Education, health, and infrastructure expenditures by routine & development and districts in Aceh, 2004 (per capita, % share of total sector, and % share of sector of total expenditure)

No	Districts	Education						Health						Infrastructure						Total Expenditure Rph
		Routine		Development		Total Education	% Education of Total Exp	Routine		Development		Total Health	% Health of Total Exp	Routine		Development		Total Infrastructure	% Infrastructure of Total Exp	
		Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	
1	Prov. Aceh	5,428	8.6	57,472	91.4	62,900	24.3	10,170	59.9	6817	40.1	16,987	6.6	6,207	14.1	37,662	85.9	4,3870	16.9	259,176
2	Kab. Aceh Barat	283,151	73.1	104,039	26.9	387,190	31.9	71,697	67.5	34,588	32.5	106,285	8.7	23,370	15.1	131,188	84.9	154,559	12.7	1,215,233
3	Kab. Aceh Besar	310,680	78.4	85,613	21.6	396,293	44.9	42,601	68.7	19,430	31.3	62,032	7.0	10,051	7.3	127,454	92.7	137,505	15.6	883,406
4	Kab. Aceh Selatan	296,196	68.1	138,790	31.9	434,986	38.1	44,289	69.0	19,858	31.0	64,148	5.6	13,023	14.7	75,659	85.3	88,683	7.8	1,140,352
5	Kab. Aceh Singkil	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
6	Kab. Aceh Tenggara	315,708	63.5	181,259	36.5	496,968	47.1	39,460	61.7	24,456	38.3	63,916	6.1	7,405	5.2	136,156	94.8	143,561	13.6	1,054,351
7	Kab. Aceh Tenggara	264,814	66.1	135,933	33.9	400,747	37.0	48,038	68.4	22,190	31.6	70,228	6.5	14,721	10.4	126,338	89.6	141,060	13.0	1,084,209
8	Kab. Aceh Timur	181,367	94.7	10,195	5.3	191,561	22.8	72,370	73.6	26,014	26.4	98,384	11.7	14,182	29.2	34,454	70.8	48,636	5.8	839,419
9	Kab. Aceh Utara	243,153	70.5	101,544	29.5	344,697	22.9	49,494	72.4	18,825	27.6	68,318	4.5	12,422	4.6	260,444	95.4	272,866	18.1	1,505,286
10	Kab. Bireuen	316,696	81.8	70,627	18.2	387,323	50.4	35,097	73.1	12,902	26.9	47,999	6.2	11,262	13.5	72,349	86.5	83,611	10.9	769,365
11	Kab. Pidie	285,773	81.8	63,613	18.2	349,387	44.3	46,044	84.1	8,716	15.9	54,760	6.9	12,072	31.2	26,597	68.8	38,670	4.9	788,963
12	Kab. Simeuleu	34,862	17.0	170,216	83.0	205,078	11.0	30,563	24.8	9,289	75.2	123,452	6.7	11,853	5.2	217,023	94.8	228,876	12.3	1,856,155
13	Kota Banda Aceh	381,722	86.9	57,593	13.1	439,316	48.7	35,583	71.0	14,532	29.0	50,115	5.6	25,294	34.9	47,227	65.1	72,521	8.0	902,611
14	Kota Sabang	522,064	67.6	250,141	32.4	772,205	17.0	229,206	65.5	120,884	34.5	350,091	7.7	94,367	21.0	354,195	79.0	448,562	9.8	4,554,868
15	Kota Langsa	283,222	77.1	84,056	22.9	367,278	36.8	8,047	85.8	13,328	14.2	9,374	0.9	16,887	16.4	85,838	83.6	102,725	10.3	997,439
16	Kota Lhokseumawe	402,383	91.1	39,420	8.9	441,803	32.4	47,975	56.8	36,560	43.2	84,535	6.2	21,521	18.0	97,797	82.0	119,318	8.7	1,364,300
17	Kab. Aceh Barat Daya	253,807	66.3	129,230	33.7	383,037	33.1	28,089	44.2	35,440	55.8	63,529	5.5	9,382	8.1	106,703	91.9	116,085	10.0	1,155,519
18	Kab. Gayo Lues	509,706	78.0	143,364	22.0	653,070	33.2	31,236	46.6	35,754	53.4	66,990	3.4	19,976	7.6	242,923	92.4	262,900	13.4	1,965,363
19	Kab. Aceh Tamiang	178,886	72.5	68,017	27.5	246,903	34.6	29,018	51.0	27,853	49.0	56,871	8.0	6,706	7.3	85,598	92.7	92,304	12.9	713,950
20	Kab. Nagan Raya	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
21	Kab. Aceh Jaya	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
22	Kab. Bener Meriah	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
	<b>Average (districts)</b>	<b>297,905</b>	<b>72.6</b>	<b>107,862</b>	<b>27.4</b>	<b>405,767</b>	<b>34.5</b>	<b>52,283</b>	<b>63.8</b>	<b>32,483</b>	<b>36.2</b>	<b>84,766</b>	<b>6.3</b>	<b>19,088</b>	<b>14.7</b>	<b>131,055</b>	<b>85.3</b>	<b>150,144</b>	<b>11.1</b>	<b>1,340,635</b>
	<b>Minimum (districts)</b>	<b>34,862</b>	<b>17.0</b>	<b>10,195</b>	<b>5.3</b>	<b>191,561</b>	<b>11.0</b>	<b>8,047</b>	<b>24.8</b>	<b>1,328</b>	<b>14.2</b>	<b>9,374</b>	<b>0.9</b>	<b>6,706</b>	<b>4.6</b>	<b>26,597</b>	<b>65.1</b>	<b>38,670</b>	<b>4.9</b>	<b>713,950</b>
	<b>Maximum (districts)</b>	<b>522,064</b>	<b>94.7</b>	<b>250,141</b>	<b>83.0</b>	<b>772,205</b>	<b>50.4</b>	<b>229,206</b>	<b>85.8</b>	<b>120,884</b>	<b>75.2</b>	<b>350,091</b>	<b>11.7</b>	<b>94,367</b>	<b>34.9</b>	<b>354,195</b>	<b>95.4</b>	<b>448,562</b>	<b>18.1</b>	<b>4,554,868</b>

**Table D16. Regional government routine and development expenditures across provinces, 2004** (Rp billions, per capita, and % share of total expenditure)

No	Provinces	Routine			Development			Total	
		Rp blns	Per capita (rp)	%	Rp blns	Per capita (rp)	%	Rp blns	Per capita (rp)
1	Aceh	3,017	737,896	51.4	2,853	697,709	48.6	<b>5,870</b>	<b>1,435,605</b>
2	Sumatra Utara	5,178	427,072	68.8	2,345	193,424	31.2	<b>7,523</b>	<b>620,496</b>
3	Sumatra Barat	2,698	594,880	70.1	1,150	253,556	29.9	<b>3,848</b>	<b>848,437</b>
4	Riau	4,142	925,620	52.7	3,716	830,468	47.3	<b>7,858</b>	<b>1,756,088</b>
5	Jambi	1,422	541,490	55.4	1,144	435,623	44.6	<b>2,565</b>	<b>977,113</b>
6	Sumatra Selatan	2,480	374,092	53.9	2,118	319,480	46.1	<b>4,597</b>	<b>693,572</b>
7	Bengkulu	920	593,977	69.5	403	260,330	30.5	<b>1,323</b>	<b>854,307</b>
8	Lampung	2,663	376,978	74.3	922	130,589	25.7	<b>3,585</b>	<b>507,567</b>
9	D K I Jakarta	4,023	459,785	37.2	6,784	775,291	62.8	<b>10,807</b>	<b>1,235,077</b>
10	Jawa Barat	10,352	268,103	69.6	4,523	117,134	30.4	<b>14,874</b>	<b>385,237</b>
11	Jawa Tengah	10,564	324,614	72.1	4,097	125,892	27.9	<b>14,661</b>	<b>450,506</b>
12	Yogyakarta	1,661	515,297	69.8	720	223,334	30.2	<b>2,381</b>	<b>738,631</b>
13	Jawa Timur	11,172	306,232	66.1	5,725	156,935	33.9	<b>16,897</b>	<b>463,167</b>
14	Kalimantan Barat	2,070	513,347	65.5	1,090	270,342	34.5	<b>3,161</b>	<b>783,689</b>
15	Kalimantan Tengah	1,480	791,014	51.4	1,397	746,908	48.6	<b>2,877</b>	<b>1,537,921</b>
16	Kalimantan Selatan	1,790	554,561	61.2	1,135	351,767	38.8	<b>2,925</b>	<b>906,328</b>
17	Kalimantan Timur	3,346	1,209,761	43.4	4,368	1,579,195	56.6	<b>7,713</b>	<b>2,788,956</b>
18	Sulawesi Utara	1,412	654,115	75.2	466	215,850	24.8	<b>1,878</b>	<b>869,964</b>
19	Sulawesi Tengah	1,451	644,234	63.5	835	370,678	36.5	<b>2,286</b>	<b>1,014,912</b>
20	Sulawesi Selatan	4,612	551,118	67.8	2,186	261,251	32.2	<b>6,799</b>	<b>812,369</b>
21	Sulawesi Tenggara	1,139	592,311	62.6	681	354,193	37.4	<b>1,820</b>	<b>946,504</b>
22	Bali	2,262	665,739	71.0	926	272,575	29.0	<b>3,188</b>	<b>938,314</b>
23	Nusa Tenggara Barat	1,732	424,046	71.9	676	165,417	28.1	<b>2,407</b>	<b>589,463</b>
24	Nusa Tenggara Timur	2,125	511,213	58.9	1,482	356,716	41.1	<b>3,607</b>	<b>867,930</b>
25	Maluku	1,028	826,121	63.5	591	475,083	36.5	<b>1,619</b>	<b>1,301,204</b>
26	Papua	4,189	2,235,652	50.2	4,153	2,216,103	49.8	<b>8,342</b>	<b>4,451,754</b>
27	Maluku Utara	674	771,693	56.5	519	594,180	43.5	<b>1,192</b>	<b>1,365,873</b>
28	Banten	1,786	195,591	49.7	1,804	197,597	50.3	<b>3,589</b>	<b>393,188</b>
29	Bangka Belitung	582	568,610	60.6	379	370,111	39.4	<b>961</b>	<b>938,721</b>
30	Gorontalo	595	662,687	55.4	480	534,438	44.6	<b>1,074</b>	<b>1,197,126</b>
	<b>National</b>	92,561	424,877	60.8	59,667	273,883	39.2	<b>152,228</b>	<b>698,760</b>
	<b>Minimum</b>	582	195,591	37.2	379	117,134	24.8	<b>961</b>	<b>385,237</b>
	<b>Maximum</b>	11,172	2,235,652	75.2	6,784	2,216,103	62.8	<b>16,897</b>	<b>4,451,754</b>

**Table D17. Regional government routine expenditure by economic classification across provinces, 2004 (per capita and % share of total routine)**

No	Province	Personnel		Goods		Operations and maintenance		Official travel		Others		Unexpected expense		Pension and assistance		Financial assistance		Total	
		Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%	Rp	%
1	Aceh	521,266	70.6	81,948	11.1	15,782	2.1	13,093	1.8	2	0.0	23,671	3.2	0	0.0	82,136	11.1	737,896	
2	Sumatra Utara	330,568	77.4	45,590	10.7	7,797	1.8	8,487	2.0	0	0.0	3,104	0.7	0	0.0	31,527	7.4	427,072	
3	Sumatra Barat	461,351	77.6	59,521	10.0	14,291	2.4	11,929	2.0	56	0.0	4,559	0.8	0	0.0	43,173	7.3	594,880	
4	Riau	477,586	51.6	175,695	19.0	42,758	4.6	37,571	4.1	42,234	4.6	41,794	4.5	0	0.0	107,981	11.7	925,620	
5	Jambi	378,783	70.0	68,182	12.6	19,776	3.7	15,911	2.9	19,129	3.5	12,924	2.4	19	0.0	26,767	4.9	541,490	
6	Sumatra Selatan	267,872	71.6	45,320	12.1	10,086	2.7	11,044	3.0	0	0.0	8,069	2.2	0	0.0	31,701	8.5	374,092	
7	Bengkulu	446,529	75.2	62,836	10.6	15,718	2.6	14,316	2.4	15,798	2.7	15,934	2.7	0	0.0	22,847	3.8	593,977	
8	Lampung	292,098	77.5	34,737	9.2	13,528	3.6	8,117	2.2	0	0.0	3,594	1.0	0	0.0	24,903	6.6	376,978	
9	DKI Jakarta	378,658	82.4	71,351	15.5	7,050	1.5	661	0.1	0	0.0	2,065	0.4	0	0.0	0	0.0	459,785	
10	Jawa Barat	198,375	74.0	22,127	8.3	6,618	2.5	4,208	1.6	3,821	1.4	4,828	1.8	0	0.0	28,126	10.5	328,103	
11	Jawa Tengah	246,446	75.9	26,801	8.3	6,256	1.9	3,457	1.1	687	0.2	5,939	1.8	0	0.0	35,028	10.8	324,614	
12	Yogyakarta	420,904	81.7	33,581	6.5	8,566	1.7	6,493	1.3	0	0.0	5,108	1.0	0	0.0	40,645	7.9	515,297	
13	Jawa Timur	226,273	73.9	30,342	9.9	7,262	2.4	4,098	1.3	2,086	0.7	6,995	2.3	3	0.0	29,174	9.5	306,232	
14	Kalimantan Barat	347,237	67.6	65,390	12.7	13,263	2.6	17,554	3.4	3,784	0.7	27,161	5.3	0	0.0	38,958	7.6	513,347	
15	Kalimantan Tengah	524,664	66.3	104,570	13.2	22,312	2.8	30,755	3.9	31,230	3.9	29,965	3.8	0	0.0	47,517	6.0	791,014	
16	Kalimantan Selatan	405,770	73.2	60,632	10.9	16,906	3.0	13,767	2.5	0	0.0	6,297	1.1	0	0.0	51,189	9.2	554,561	
17	Kalimantan Timur	545,880	45.1	224,030	18.5	43,544	3.6	57,044	4.7	70,567	5.8	46,465	3.8	0	0.0	222,231	18.4	1,209,761	
18	Sulawesi Utara	544,025	83.2	46,212	7.1	9,505	1.5	15,700	2.4	0	0.0	9,612	1.5	0	0.0	29,062	4.4	654,115	
19	Sulawesi Tengah	459,313	71.3	73,755	11.4	18,644	2.9	24,007	3.7	35,648	5.5	19,415	3.0	4	0.0	13,448	2.1	644,234	
20	Sulawesi Selatan	418,054	75.9	56,848	10.3	16,812	3.1	12,895	2.3	0	0.0	7,579	1.4	0	0.0	38,930	7.1	551,118	
21	Sulawesi Tenggara	464,317	78.4	42,541	7.2	15,759	2.7	20,790	3.5	0	0.0	14,941	2.5	0	0.0	33,963	5.7	592,311	
22	Bali	478,706	71.9	50,883	7.6	16,816	2.5	9,882	1.5	0	0.0	7,380	1.1	0	0.0	102,073	15.3	665,739	
23	Nusa Tenggara Barat	319,610	75.4	37,377	8.8	7,509	1.8	9,423	2.2	168	0.0	2,849	0.7	0	0.0	47,110	11.1	424,046	
24	Nusa Tenggara Timur	377,825	73.9	41,058	8.0	15,742	3.1	23,073	4.5	0	0.0	4,154	0.8	0	0.0	49,361	9.7	511,213	
25	Maluku	610,160	73.9	53,577	6.5	17,055	2.1	42,611	5.2	38,330	4.6	26,010	3.1	0	0.0	38,378	4.6	826,121	
26	Papua	1,112,037	49.7	331,904	14.8	88,818	4.0	112,799	5.0	55,819	2.5	278,461	12.5	0	0.0	255,815	11.4	2,235,652	
27	Maluku Utara	451,851	58.6	110,960	14.4	11,226	1.5	55,149	7.1	18,377	2.4	56,646	7.3	0	0.0	67,484	8.7	771,693	
28	Banten	131,493	67.2	24,198	12.4	8,019	4.1	3,574	1.8	0	0.0	1,931	1.0	0	0.0	26,376	13.5	195,591	
29	Bangka Belitung	382,124	67.2	79,438	14.0	15,035	2.6	28,876	5.1	0	0.0	5,651	1.0	0	0.0	57,485	10.1	568,610	
30	Gorontalo	536,006	80.9	49,685	7.5	12,664	1.9	25,913	3.9	0	0.0	9,040	1.4	0	0.0	29,378	4.4	662,687	
	<b>National</b>	303,464	71.4	46,171	10.9	11,116	2.6	9,899	2.3	4,719	1.1	10,599	2.5	1	0.0	38,908	9.2	424,877	
	<b>Minimum</b>	131,493	45.1	22,127	6.5	6,256	1.5	661	0.1	0	0.0	1,931	0.4	0	0.0	0	0.0	195,591	
	<b>Maximum</b>	1,112,037	83.2	331,904	19.0	88,818	4.6	112,799	7.1	70,567	5.8	278,461	12.5	19	0.0	255,815	18.4	2,235,652	

Table D18. Regional government development expenditure by sectors across provinces, 2004 (per capita and % share of total development)

No	Provinces	Government Apparatus		Agriculture and Forestry		Mining and Energy		Trade and Business Development		Manpower		Health and Social Welfare		Education and Culture		Environment and Spatial Planning		Regional Development and Housing		Transport, Water and Irrigation		Demography and Family Planning		Telecommunication and Tourism		Total
		Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	
1	Aceh	265,041	38.0	34,691	5.0	2,963	0.4	8,434	1.2	2,468	0.4	49,349	7.1	153,918	22.1	6,523	0.9	54,684	7.8	112,605	16.1	4,775	0.7	2,257	0.3	697,709
2	Sumatra Utara	48,426	25.0	9,446	4.9	299	0.2	1,792	0.9	496	0.3	13,971	7.2	14,753	7.6	10,111	5.2	12,979	6.7	79,754	41.2	537	0.3	859	0.4	193,424
3	Sumatra Barat	64,738	25.5	13,543	5.3	945	0.4	6,934	2.7	802	0.3	16,249	6.4	23,498	9.3	7,950	3.1	23,002	9.1	91,946	36.3	780	0.3	3,169	1.2	253,556
4	Riau	167,465	20.2	44,732	5.4	18,173	2.2	34,793	4.2	2,862	0.3	65,896	7.9	135,512	16.3	11,852	1.4	138,216	16.6	197,963	23.8	1,958	0.2	11,045	1.3	830,468
5	Jambi	122,838	28.2	29,119	6.7	2,444	0.6	10,215	2.3	1,559	0.4	36,203	8.3	37,081	8.5	5,401	1.2	7,484	1.7	179,641	41.2	1,445	0.3	2,191	0.5	435,623
6	Sumatra Selatan	67,371	21.1	9,359	2.9	3,159	1.0	2,462	0.8	803	0.3	21,361	6.7	30,458	9.5	4,017	1.3	1,045	0.3	175,575	55.0	1,215	0.4	2,446	0.8	319,480
7	Bengkulu	115,413	44.3	10,660	4.1	1,188	0.5	5,043	1.9	2,266	0.9	13,680	5.3	26,941	10.3	3,024	1.2	26,225	10.1	50,578	19.4	710	0.3	4,603	1.8	260,330
8	Lampung	38,102	29.2	6,535	5.2	1,665	1.3	1,213	0.9	445	0.3	14,158	10.8	9,772	7.5	2,359	1.8	16,329	12.5	38,209	29.3	755	0.6	748	0.6	130,589
9	DKI Jakarta	188,007	24.2	14,643	1.9	3,580	0.5	15,508	2.0	6,901	0.9	94,058	12.1	126,146	16.3	35,631	4.6	49,745	6.4	225,170	29.0	5,957	0.8	9,945	1.3	775,291
10	Jawa Barat	34,580	29.5	4,538	3.9	795	0.7	2,482	2.1	843	0.7	11,849	10.1	13,571	11.6	5,764	4.9	5,985	5.1	35,048	29.9	580	0.5	1,101	0.9	117,134
11	Jawa Tengah	37,510	29.8	4,778	3.8	448	0.4	2,203	1.7	945	0.8	19,395	15.4	15,316	12.2	3,739	3.0	4,563	3.6	35,059	27.8	982	0.8	956	0.8	125,892
12	Yogyakarta	67,740	30.3	8,154	3.7	0	0.0	2,598	1.2	1,603	0.7	24,429	10.9	29,561	13.2	3,910	1.8	96	0.0	80,572	36.1	2,428	1.1	2,244	1.0	223,334
13	Jawa Timur	51,023	32.5	5,870	3.7	374	0.2	3,363	2.1	1,078	0.7	14,229	9.1	22,989	14.6	3,918	2.5	8,281	5.3	43,459	27.7	1,456	0.9	894	0.6	156,935
14	Kalimantan Barat	67,689	25.0	14,020	5.2	1,145	0.4	4,158	1.5	444	0.2	19,633	7.2	42,709	15.8	2,561	0.9	35,530	13.1	79,702	29.5	1,062	0.4	1,889	0.7	270,342
15	Kalimantan Tengah	161,293	21.6	88,038	11.8	5,513	0.7	25,266	3.4	1,767	0.2	46,860	6.3	89,493	12.0	19,853	2.7	50,127	6.7	253,750	34.0	1,869	0.3	3,079	0.4	746,908
16	Kalimantan Selatan	97,942	27.8	23,908	6.8	4,556	1.3	3,794	1.1	1,422	0.4	35,246	10.0	38,689	11.0	5,884	1.6	37,700	10.7	100,780	28.6	906	0.3	1,340	0.4	351,767
17	Kalimantan Timur	441,980	28.0	77,068	4.9	8,274	0.5	16,138	1.0	5,868	0.4	71,203	4.5	86,426	5.5	23,142	1.5	26,395	1.7	815,632	51.6	4,315	0.3	2,753	0.2	1,579,195
18	Sulawesi Utara	130,266	60.4	10,708	5.0	326	0.2	1,312	0.6	463	0.2	11,472	5.3	15,421	7.1	2,674	1.2	19,686	9.1	21,226	9.8	197	0.1	2,099	1.0	215,850
19	Sulawesi Tengah	94,772	25.6	21,503	5.8	2,777	0.7	8,773	2.4	2,961	0.8	31,946	8.6	38,148	10.3	4,164	1.1	68,869	18.6	93,625	25.3	1,795	0.5	1,346	0.4	370,678
20	Sulawesi Selatan	97,868	37.4	13,144	5.0	904	0.3	4,859	1.9	1,212	0.5	23,365	8.9	20,470	7.8	9,888	3.6	8,227	3.1	79,101	30.3	981	0.4	1,832	0.7	261,251
21	Sulawesi Tenggara	178,554	50.4	13,022	3.7	12,249	3.5	3,491	1.0	2,509	0.7	14,082	4.0	25,103	7.1	5,931	1.7	29,334	8.3	67,802	19.1	633	0.2	1,483	0.4	354,193
22	Bali	100,170	36.7	17,242	6.3	52	0.0	3,694	1.4	1,287	0.5	32,462	11.9	29,069	10.7	9,731	3.6	673	0.2	73,113	26.8	1,589	0.6	3,493	1.3	272,575
23	Nusa Tenggara Barat	57,545	34.8	8,977	5.4	778	0.5	1,802	1.1	887	0.5	21,865	13.2	25,452	15.4	1,939	1.2	13,991	8.5	30,169	18.2	1,298	0.8	714	0.4	166,417
24	Nusa Tenggara Timur	123,920	34.7	26,050	7.3	6,121	1.7	6,028	1.7	2,883	0.8	35,217	9.9	61,111	17.1	2,703	0.8	24,041	6.7	62,618	17.6	2,707	0.8	3,317	0.9	356,716
25	Maluku	122,305	25.7	46,624	9.8	1,377	0.3	7,490	1.6	2,134	0.4	30,211	6.4	39,037	8.2	4,860	1.0	27,253	5.7	191,051	40.2	1,130	0.2	1,609	0.3	475,883
26	Papua	798,175	36.0	124,636	5.6	10,213	0.5	52,720	2.4	7,985	0.4	204,009	9.2	369,722	16.7	15,448	0.7	58,349	2.6	545,175	24.6	21,108	1.0	8,562	0.4	2,216,103
27	Maluku Utara	252,177	42.4	29,490	5.0	6,007	1.0	8,437	1.4	4,255	0.7	37,416	6.3	55,581	9.4	2,997	0.5	26,875	4.5	164,641	27.7	2,429	0.4	3,875	0.7	594,180
28	Banten	53,139	26.9	10,051	5.1	2,721	1.4	4,034	2.0	1,508	0.8	15,500	7.8	32,620	16.5	25,767	13.0	4,507	2.3	45,503	23.0	1,298	0.7	950	0.5	197,597
29	Bangka Belitung	111,417	30.1	19,017	5.1	6,092	1.6	3,291	0.9	994	0.3	26,839	7.3	37,145	10.0	11,885	3.2	55,919	15.1	95,519	25.8	1,315	0.4	677	0.2	370,111
30	Gorontalo	166,937	31.2	35,567	6.7	1,500	0.3	9,310	1.7	2,024	0.4	75,425	14.1	43,011	8.0	9,260	1.7	33,320	6.2	154,675	28.9	1,096	0.2	2,314	0.4	534,438
	<b>National</b>	<b>81,186</b>	<b>29.6</b>	<b>12,865</b>	<b>4.7</b>	<b>1,884</b>	<b>0.7</b>	<b>5,219</b>	<b>1.9</b>	<b>1,484</b>	<b>0.5</b>	<b>24,969</b>	<b>9.1</b>	<b>35,136</b>	<b>12.8</b>	<b>7,771</b>	<b>2.8</b>	<b>16,582</b>	<b>6.1</b>	<b>83,250</b>	<b>30.4</b>	<b>1,560</b>	<b>0.6</b>	<b>1,977</b>	<b>0.7</b>	<b>273,883</b>
	<b>Minimum</b>	<b>34,580</b>	<b>20.2</b>	<b>4,538</b>	<b>1.9</b>	<b>0</b>	<b>0.0</b>	<b>1,213</b>	<b>0.6</b>	<b>444</b>	<b>0.2</b>	<b>11,472</b>	<b>4.0</b>	<b>9,772</b>	<b>5.5</b>	<b>1,939</b>	<b>0.5</b>	<b>96</b>	<b>0.0</b>	<b>21,226</b>	<b>9.8</b>	<b>197</b>	<b>0.1</b>	<b>677</b>	<b>0.2</b>	<b>117,134</b>
	<b>Maximum</b>	<b>798,175</b>	<b>60.4</b>	<b>124,636</b>	<b>11.8</b>	<b>18,173</b>	<b>3.5</b>	<b>52,720</b>	<b>4.2</b>	<b>7,985</b>	<b>0.9</b>	<b>204,009</b>	<b>15.4</b>	<b>369,722</b>	<b>22.1</b>	<b>35,631</b>	<b>13.0</b>	<b>138,216</b>	<b>18.6</b>	<b>815,632</b>	<b>55.0</b>	<b>21,108</b>	<b>1.1</b>	<b>11,045</b>	<b>1.8</b>	<b>2,216,103</b>

**Table D19. Regional government education, health, and infrastructure expenditures by routine & development across provinces, 2004 (per capita, % share of total sector, and % share of sector of total expenditure)**

No	Provinces	Education						Health						Infrastructure						Total Expenditure
		Routine		Development		Total Education	% Education of Total Exp	Routine		Development		Total Health	% Health of Total Exp	Routine		Development		Total Infrastructure	% Infrastructure of Total Exp	
		Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	Rph	%	
1	Aceh	306,638	67.1	150,569	32.9	457,208	31.8	509,21	65.1	27,294	34.9	78,214	5.4	20,389	10.8	168,415	89.2	188,803	13.2	1,455,605
2	Sumatra Utara	206,559	93.3	14,834	6.7	221,393	35.7	37,597	72.6	14,154	27.4	51,752	8.3	14,513	13.0	97,413	87.0	111,926	18.0	620,496
3	Sumatra Barat	296,327	92.7	23,399	7.3	319,726	37.7	48,560	76.1	15,270	23.9	63,830	7.5	21,594	15.8	115,307	84.2	136,901	16.1	848,437
4	Riau	254,486	67.7	121,329	32.3	375,815	21.4	48,419	44.1	61,441	55.9	109,860	6.3	35,965	9.3	351,103	90.7	387,068	22.0	1,756,088
5	Jambi	182,160	86.0	29,648	14.0	211,808	21.7	40,064	57.7	29,336	42.3	69,399	7.1	21,850	10.4	187,635	89.6	209,485	21.4	977,113
6	Sumatra Selatan	156,036	85.2	27,036	14.8	183,072	26.4	22,770	52.7	20,471	47.3	43,241	6.2	13,581	7.1	177,820	92.9	191,401	27.6	693,572
7	Bengkulu	240,841	90.1	26,435	9.9	267,276	31.3	58,512	81.5	13,262	18.5	71,775	8.4	24,719	24.2	77,336	75.8	102,054	11.9	854,307
8	Lampung	159,215	94.2	9,772	5.8	168,987	33.3	19,085	58.8	13,365	41.2	32,449	6.4	13,102	19.2	55,171	80.8	68,273	13.5	507,567
9	D K I Jakarta	12,615	10.2	110,849	89.8	123,464	10.0	9,621	10.6	81,473	89.4	91,094	7.4	45,781	14.2	276,275	85.8	322,056	26.1	1,235,077
10	Jawa Barat	119,624	89.8	13,548	10.2	133,172	34.6	17,601	61.5	11,030	38.5	28,631	7.4	10,028	19.5	41,334	80.5	51,362	13.3	385,237
11	Jawa Tengah	168,528	91.7	15,309	8.3	183,837	40.8	23,778	55.8	18,838	44.2	42,616	9.5	12,553	24.0	39,792	76.0	52,345	11.6	450,506
12	Yogyakarta	261,920	90.0	29,118	10.0	291,038	39.4	37,227	65.1	19,966	34.9	57,193	7.7	24,241	23.1	80,667	76.9	104,908	14.2	738,631
13	Jawa Timur	137,533	86.2	21,986	13.8	159,519	34.4	24,325	66.4	12,323	33.6	36,647	7.9	13,473	20.6	51,884	79.4	65,357	14.1	463,167
14	Kalimantan Barat	191,187	86.0	31,153	14.0	222,340	28.4	37,237	67.4	18,008	32.6	55,245	7.0	12,461	10.0	112,027	90.0	124,488	15.9	783,689
15	Kalimantan Tengah	253,774	79.5	65,449	20.5	319,223	20.8	64,246	60.9	41,228	39.1	105,474	6.9	25,843	7.7	308,074	92.3	333,917	21.7	1,537,921
16	Kalimantan Selatan	230,815	85.6	38,689	14.4	269,504	29.7	47,582	61.2	30,148	38.8	77,730	8.6	19,118	12.0	140,211	88.0	159,329	17.6	906,328
17	Kalimantan Timur	211,771	73.8	75,114	26.2	286,885	10.3	98,513	58.6	69,608	41.4	188,121	6.0	32,837	3.7	847,897	96.3	880,734	31.6	2,788,956
18	Sulawesi Utara	317,162	95.4	15,421	4.6	332,583	38.2	35,547	76.4	10,951	23.6	46,498	5.3	19,751	32.5	41,035	67.5	60,786	7.0	869,964
19	Sulawesi Tengah	280,089	90.4	29,905	9.6	309,994	30.5	52,348	64.5	28,763	35.5	81,111	8.0	23,714	12.6	164,223	87.4	187,937	18.5	1,014,912
20	Sulawesi Selatan	199,755	90.7	20,470	9.3	220,225	27.1	32,998	60.9	21,143	39.1	54,141	6.7	16,825	16.1	87,672	83.9	104,497	12.9	812,269
21	Sulawesi Tenggara	231,094	90.6	24,080	9.4	255,175	27.0	35,345	75.1	11,730	24.9	47,075	5.0	19,728	17.0	96,583	83.0	116,311	12.3	946,504
22	Bali	259,939	89.9	29,069	10.1	289,008	30.8	41,582	57.4	30,910	42.6	72,492	7.7	22,471	23.3	73,806	76.7	96,278	10.3	938,314
23	Nusa Tenggara Barat	204,259	88.9	25,452	11.1	229,711	39.0	28,587	59.2	19,697	40.8	48,284	8.2	15,024	25.3	44,456	74.7	59,480	10.1	589,463
24	Nusa Tenggara Timur	185,957	75.3	60,929	24.7	246,886	28.4	34,737	51.5	32,684	48.5	67,420	7.8	13,193	12.9	88,985	87.1	102,178	11.8	867,930
25	Maluku	164,518	80.8	39,037	19.2	203,555	15.6	57,399	67.4	27,731	32.6	85,129	6.5	23,319	11.8	218,828	88.2	248,147	19.1	1,301,204
26	Papua	395,806	53.5	34,569	4.6	430,375	16.6	12,1727	39.7	184,920	60.3	306,647	6.9	66,893	9.6	656,372	90.4	693,265	15.6	4,451,754
27	Maluku Utara	132,013	74.0	46,481	26.0	178,494	13.1	25,465	55.9	20,107	44.1	45,572	3.3	16,627	8.2	189,058	91.8	205,886	15.1	1,365,873
28	Banten	75,479	69.8	32,620	30.2	108,099	27.5	13,520	49.0	14,093	51.0	27,613	7.0	7,014	12.1	51,044	87.9	58,058	14.8	393,188
29	Bangka Belitung	202,681	84.5	37,145	15.5	239,826	25.5	37,882	62.0	23,224	38.0	61,106	6.5	14,544	8.6	153,753	91.4	168,297	17.9	938,271
30	Coronab	312,735	87.9	43,011	12.1	355,746	29.7	41,643	36.1	73,788	63.9	115,430	9.6	17,979	8.7	188,565	91.3	206,543	17.3	1,197,126
	<b>National</b>	<b>165,538</b>	<b>83.4</b>	<b>32,870</b>	<b>16.6</b>	<b>198,408</b>	<b>28.4</b>	<b>28,855</b>	<b>59.0</b>	<b>22,431</b>	<b>43.7</b>	<b>51,286</b>	<b>7.3</b>	<b>16,306</b>	<b>13.9</b>	<b>101,053</b>	<b>86.1</b>	<b>117,359</b>	<b>16.8</b>	<b>698,760</b>
	<b>Minimum</b>	<b>12,615</b>	<b>10.2</b>	<b>9,772</b>	<b>4.6</b>	<b>108,099</b>	<b>10.0</b>	<b>9,621</b>	<b>10.6</b>	<b>10,951</b>	<b>18.5</b>	<b>27,613</b>	<b>3.3</b>	<b>7,014</b>	<b>3.7</b>	<b>39,792</b>	<b>67.5</b>	<b>51,362</b>	<b>7.0</b>	<b>385,237</b>
	<b>Maximum</b>	<b>395,806</b>	<b>95.4</b>	<b>34,569</b>	<b>89.8</b>	<b>739,375</b>	<b>40.8</b>	<b>121,727</b>	<b>81.5</b>	<b>184,920</b>	<b>89.4</b>	<b>306,647</b>	<b>9.6</b>	<b>66,893</b>	<b>32.5</b>	<b>847,897</b>	<b>96.3</b>	<b>880,734</b>	<b>31.6</b>	<b>4,451,754</b>

## SECTORAL AND SOCIAL INDICATORS

Table D20. Health Services Indicators in Aceh, 2005 (PODES 2005)

No	Districts	Number of doctors	Ratio of doctor/ 10000 population	Number of doctors/km2 (service area)	Number of Midwives	Ratio of midwives /10.000 population	Number of midwives/ km2 (service area)
1	Kab. Aceh Barat	13	0.9	225.2	127	8.3	23.1
2	Kab. Aceh Besar	74	2.6	40.1	451	16.1	6.6
3	Kab. Aceh Selatan	32	1.6	120.4	139	6.9	27.7
4	Kab. Aceh Singkil	26	1.7	137.5	134	8.8	26.7
5	Kab. Aceh Tengah	21	1.3	205.5	204	12.5	21.2
6	Kab. Aceh Tenggara	36	2.0	116.4	152	8.4	27.6
7	Kab. Aceh Timur	24	0.7	251.7	371	11.1	16.3
8	Kab. Aceh Utara	42	0.9	76.0	468	9.5	6.8
9	Kab. Bireuen	60	1.7	31.7	514	14.4	3.7
10	Kab. Pidie	64	1.3	53.6	715	14.2	4.8
11	Kab. Simeuleu	10	1.2	205.1	96	11.9	21.4
12	Kota Banda Aceh	148	7.5	0.4	124	6.2	0.5
13	Kota Sabang	16	5.1	9.6	37	11.8	4.1
14	Kota Langsa	38	2.9	6.9	134	10.2	2.0
15	Kota Lhokseumawe	119	7.1	1.5	139	8.2	1.3
16	Kab. Aceh Barat Daya	18	1.6	218.2	97	8.5	40.5
17	Kab. Gayo Lues	10	1.5	381.7	59	8.8	64.7
18	Kab. Aceh Tamiang	46	2.0	32.8	237	10.1	6.4
19	Kab. Nagan Raya	7	0.6	817.0	107	9.0	53.4
20	Kab. Aceh Jaya	8	1.3	242.5	56	8.9	34.6
21	Kab. Bener Meriah	8	0.7	181.7	114	10.3	12.8
	<b>Total</b>	<b>820</b>			<b>4,475</b>		
	<b>Average</b>	<b>39</b>	<b>2.2</b>	<b>159.8</b>	<b>213</b>	<b>10.2</b>	<b>19.3</b>
	<b>Minimum</b>	<b>7</b>	<b>0.6</b>	<b>0.4</b>	<b>37</b>	<b>6.2</b>	<b>0.5</b>
	<b>Maximum</b>	<b>148</b>	<b>7.5</b>	<b>817.0</b>	<b>715</b>	<b>16.1</b>	<b>64.7</b>

Sources: BPS, PODES 2005.



Table D21. Health Services Indicators across Provinces, 2005 (PODES 2005)

No	Province	Number of doctors	Ratio of doctor/ 10000 population	Number of doctors/km2 (service area)	Number of Midwives	Ratio of midwives /10.000 population	Number of midwives/ km2 (service area)
1	Prop. Aceh	818	2.0	68	4,471	11.1	12
2	Prop. Sumatra Utara	2,761	2.2	25	7,142	5.8	10
3	Prop. Sumatra Barat	1,013	2.2	43	2,723	5.9	16
4	Prop. Riau	903	1.5	118	1,616	2.7	66
5	Prop. Jambi	537	2.0	94	1,270	4.8	40
6	Prop. Sumatra Selatan	1,002	1.5	97	3,048	4.5	32
7	Prop. Bengkulu	311	1.9	64	1,287	8.1	15
8	Prop. Lampung	710	1.0	50	2,302	3.2	15
9	D K I Jakarta	2,893	3.3	n.a.	907	1.0	n.a.
10	Prop. Jawa Barat	5,531	1.4	6	8,615	2.2	4
11	Prop. Jawa Tengah	5,356	1.6	6	9,973	3.0	3
12	Prop. Yogyakarta	1,307	4.0	2	792	2.4	4
13	Prop. Jawa Timur	6,410	1.7	7	10,294	2.8	5
14	Prop. Kalimantan Barat	494	1.2	301	1,367	3.3	109
15	Prop. Kalimantan Tengah	317	1.7	484	1,125	5.9	137
16	Prop. Kalimantan Selatan	520	1.6	74	1,778	5.5	22
17	Prop. Kalimantan Timur	711	2.5	295	1,152	4.1	182
18	Prop. Sulawesi Utara	937	4.3	16	1,273	5.8	12
19	Prop. Sulawesi Tengah	360	1.6	188	1,541	6.7	44
20	Prop. Sulawesi Selatan	1,659	2.0	38	3,242	3.8	19
21	Prop. Sulawesi Tenggara	306	1.6	123	1,431	7.3	26
22	Prop. Bali	1,378	4.0	4	1,156	3.4	5
23	Prop. Nusa Tenggara Barat	445	1.1	45	1,096	2.6	18
24	Prop. Nusa Tenggara Timur	502	1.2	94	3,077	7.3	15
25	Prop. Maluku	176	1.4	222	1,009	8.0	39
26	Prop. Papua	463	1.8	908	2,084	8.3	202
27	Prop. Maluku Utara	146	1.6	240	712	8.0	49
28	Prop. Banten	1,069	1.1	6	2,018	2.2	3
29	Prop. Bangka Belitung	187	1.8	88	346	3.3	47
30	Prop. Gorontalo	173	1.9	70	374	4.1	33
	<b>Total</b>	<b>36,502</b>			<b>78,314</b>		
	<b>Average</b>	<b>1,313</b>	<b>2.0</b>	<b>130</b>	<b>2,641</b>	<b>4.9</b>	<b>41</b>
	<b>Minimum</b>	<b>146</b>	<b>1.0</b>	<b>2</b>	<b>346</b>	<b>1.0</b>	<b>3</b>
	<b>Maximum</b>	<b>6,410</b>	<b>4.3</b>	<b>908</b>	<b>10,294</b>	<b>11.1</b>	<b>202</b>

Sources: BPS, PODES 2005.

**Table D22. Education Outcomes and Services Indicators in Aceh, 2005**

No	Districts	Net Enrollment Rate (%)		Gross Enrolment Rate (%)			Number of Schools			Service area (Km2)		
		BPS Census		Provincial Education Dinas			BPS, PODES 2005			BPS, PODES 2005		
		SD		SD	SMP	SMA	SD	SMP	SMA	SD	SMP	SMA
1	Kab. Aceh Barat	90.7	136.9	91.9	64.1	19	151	28	194	104.6	154.1	
2	Kab. Aceh Besar	95.7	117.3	89.3	58.8	30	196	51	15.1	58.2	99.0	
3	Kab. Aceh Selatan	96.4	157.0	101.6	52.4	21	223	43	17.3	89.6	183.4	
4	Kab. Aceh Singkil	94.9	115.8	80.9	49.9	16	164	30	21.8	119.2	223.5	
5	Kab. Aceh Tengah	93.9	116.7	97.5	64.3	11	184	35	23.5	123.3	392.3	
6	Kab. Aceh Tenggara	95.2	111.1	95.4	60.8	23	171	39	24.5	107.4	182.1	
7	Kab. Aceh Timur	94.4	138.5	85.2	46.7	21	299	55	20.2	109.8	287.6	
8	Kab. Aceh Utara	95.9	114.7	93.6	56.8	38	407	79	7.8	40.4	84.0	
9	Kab. Bireuen	93.2	120.4	104.6	58.4	29	274	47	6.9	40.5	65.6	
10	Kab. Pidie	95.4	117.5	101.5	67.9	42	451	95	7.6	36.1	81.7	
11	Kab. Simeuleu	93.8	120.0	107.8	29.9	13	108	40	19.0	51.3	157.8	
12	Kota Banda Aceh	95.6	130.1	148.0	112.0	24	79	22	0.8	2.8	2.6	
13	Kota Sabang	96.8	128.1	107.4	64.1	4	35	8	4.4	19.1	38.3	
14	Kota Langsa	96.1	111.9	120.1	70.3	13	69	20	3.8	13.1	20.2	
15	Kota Loksumawe	93.2	121.5	114.0	70.7	10	72	16	2.5	11.3	18.1	
16	Kab. Aceh Barat Daya	92.8	130.2	101.8	62.9	10	120	22	32.7	178.5	392.8	
17	Kab. Gayo Lues	96.0	127.0	80.1	46.8	7	77	13	49.6	293.6	545.3	
18	Kab. Aceh Tamiang	96.2	113.9	94.3	42.1	22	175	50	8.6	30.2	68.6	
19	Kab. Nagan Raya	91.7	147.2	112.8	48.0	10	111	24	51.5	238.3	571.9	
20	Kab. Aceh Jaya	88.0	189.5	102.4	42.1	2	82	12	23.7	161.6	969.9	
21	Kab. Bener Meriah	96.6	136.2	102.1	61.1	13	112	28	13.0	51.9	111.8	
	<b>Average</b>	<b>94.7</b>	<b>117.5</b>	<b>80.3</b>	<b>71.5</b>	<b>378</b>	<b>3560</b>	<b>757</b>	<b>15.6</b>	<b>73.2</b>	<b>146.6</b>	
	<b>Minimum</b>	<b>88.0</b>	<b>111.1</b>	<b>80.1</b>	<b>29.9</b>	<b>2.0</b>	<b>35.0</b>	<b>8.0</b>	<b>0.8</b>	<b>2.8</b>	<b>2.6</b>	
	<b>Maximum</b>	<b>96.8</b>	<b>189.5</b>	<b>148.0</b>	<b>112.0</b>	<b>42.0</b>	<b>451.0</b>	<b>95.0</b>	<b>51.5</b>	<b>293.6</b>	<b>969.9</b>	

**Table D23. Education Services Indicators by provinces, 2005 (PODES 2005)**

No	Provinces	Service Area			School / 10.000 students		
		SD/km2	SMP/km2	SMA/km2	SD	SMP	SMA
1	Aceh	15.6	73.2	146.6	65.7	27.5	16.4
2	Sumatra Utara	7.7	31.0	65.5	51.8	26.8	18.6
3	Sumatra Barat	10.8	57.0	116.7	66.0	27.4	18.7
4	Riau	31.1	108.9	272.2	52.3	34.4	16.9
5	Jambi	15.9	84.2	198.5	92.0	36.9	20.1
6	Sumatra Selatan	19.9	86.7	195.7	54.6	23.4	13.2
7	Bengkulu	14.2	72.2	155.9	63.2	26.5	14.9
8	Lampung	6.8	25.1	69.6	55.5	30.1	17.2
9	D K I Jakarta	n.a.	n.a.	n.a.	36.7	26.6	20.9
10	Jawa Barat	1.5	7.9	19.3	45.7	18.9	11.6
11	Jawa Tengah	1.4	8.1	25.3	61.7	20.4	11.9
12	Yogyakarta	1.4	6.4	15.3	75.0	33.1	25.4
13	Jawa Timur	1.7	9.0	23.4	72.4	28.2	15.6
14	Kalimantan Barat	36.4	175.4	504.3	72.6	32.4	15.5
15	Kalimantan Tengah	59.4	345.1	908.7	94.1	34.8	18.6
16	Kalimantan Selatan	11.1	57.3	162.6	86.9	35.8	17.2
17	Kalimantan Timur	96.0	351.4	760.0	60.9	37.7	24.5
18	Sulawesi Utara	7.1	27.8	76.1	87.6	47.6	24.0
19	Sulawesi Tengah	25.2	115.7	338.5	92.9	41.0	20.5
20	Sulawesi Selatan	8.1	41.6	97.6	67.5	28.0	17.0
21	Sulawesi Tenggara	18.3	83.7	199.3	72.3	33.4	17.4
22	Bali	2.2	16.6	31.5	45.7	18.9	11.6
23	Nusa Tenggara Barat	5.8	23.3	49.5	61.7	20.4	11.9
24	Nusa Tenggara Timur	10.9	63.7	194.3	75.0	33.1	25.4
25	Maluku	25.4	100.6	232.9	80.0	45.1	25.8
26	Papua	169.7	1,045.8	2,802.8	84.6	35.5	21.3
27	Maluku Utara	32.9	134.6	299.0	60.4	25.8	15.4
28	Banten	1.2	5.3	12.2	42.1	19.8	11.4
29	Bangka Belitung	20.4	102.0	234.6	61.6	23.4	15.4
30	Gorontalo	14.1	75.6	253.4	68.6	68.6	68.6
31	Kepulauan Riau	n.a.	n.a.	n.a.	50.2	50.2	50.2
32	Papua Barat	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	<b>Average</b>	<b>23.2</b>	<b>115.0</b>	<b>291.8</b>	<b>60.4</b>	<b>25.8</b>	<b>15.4</b>
	<b>Minimum</b>	<b>1.2</b>	<b>5.3</b>	<b>12.2</b>	<b>36.7</b>	<b>18.9</b>	<b>11.4</b>
	<b>Maximum</b>	<b>169.7</b>	<b>1,045.8</b>	<b>2,802.8</b>	<b>94.1</b>	<b>68.6</b>	<b>68.6</b>

Sources: BPS, PODES 2005.

**Table D24. Infrastructure Outcomes Indicators in Aceh**

No	Districts	Electrification (%HH)	Telephone connection (%HH)	Share of agriculture land (%)	Irrigated agriculture land (%)	Private sanitation (% of village)	Kabupaten's Road density (Km/1000 people)	% of Kabupaten's Road in Good Condition
		PODES 2005						Ministry of Public Work, 2002
1	Aceh Barat	45.1	0.1	17.0	24.0	27.2	2.7	55.7
2	Aceh Besar	68.7	4.5	16.6	62.9	34.4	7.1	34.2
3	Aceh Selatan	65.4	4.1	4.6	59.3	19.0	3.3	61.8
4	Aceh Singkil	75.2	3.5	14.3	51.7	28.4	n.a.	n.a.
5	Aceh Tengah	80.2	4.8	10.7	97.8	22.5	4.3	77.2
6	Aceh Tenggara	77.0	2.2	6.5	83.9	16.8	4.1	60.3
7	Aceh Timur	75.3	2.9	7.7	36.0	62.4	3.8	61.2
8	Aceh Utara	74.2	4.4	16.8	69.9	40.8	4.5	55.7
9	Bireuen	78.7	4.9	12.4	75.0	63.8	n.a.	n.a.
10	Pidie	74.0	3.1	10.7	83.7	5.3	2.0	64.6
11	Simeulue	47.0	8.7	8.9	21.2	45.2	5.7	30.9
12	Banda Aceh	81.4	16.4	4.2	32.6	64.0	n.a.	n.a.
13	Sabang	86.7	20.9	0.4	0.0	61.1	n.a.	n.a.
14	Langsa	91.3	18.1	11.8	18.0	98.0	n.a.	n.a.
15	Lhokseumawe	95.5	37.1	18.8	38.3	89.7	n.a.	n.a.
16	Aceh Barat Daya	47.6	5.4	9.1	76.8	7.0	n.a.	n.a.
17	Gayo Lues	74.3	3.8	2.0	86.1	13.4	n.a.	n.a.
18	Aceh Tamiang	92.1	4.6	10.4	5.9	62.2	n.a.	n.a.
19	Nagan Raya	55.3	1.4	8.3	36.8	23.8	n.a.	n.a.
20	Aceh Jaya	12.9	0.1	29.6	4.1	22.2	n.a.	n.a.
21	Bener Meriah	77.8	1.9	3.2	86.6	17.4	n.a.	n.a.
	<b>Average</b>	<b>73.0</b>	<b>6.2</b>	<b>10.5</b>	<b>52.8</b>	<b>34.2</b>	<b>4.2</b>	<b>55.7</b>
	<b>Minimum</b>	<b>12.9</b>	<b>0.1</b>	<b>0.4</b>	<b>0.0</b>	<b>5.3</b>	<b>2.0</b>	<b>30.9</b>
	<b>Maximum</b>	<b>95.5</b>	<b>37.1</b>	<b>29.6</b>	<b>97.8</b>	<b>98.0</b>	<b>7.1</b>	<b>77.2</b>

**Table D25. Infrastructure Outcomes Indicators by Provinces**

No	Provinces	PODES 2005										Ministry of Public Works, 2002	
		Electrification (%HH)	Telephone connection (%HH)	Share of agriculture land (%)	Irrigated agriculture land (%)	Private sanitation (% of village)	Kabupaten's Road density (Km/1000 people)	% of Kabupaten's Road in Good Condition					
1	Aceh	73.0	6.2	10.5	52.8	3.7	2.8	55.4					
2	Sumatera Utara	83.4	11.1	11	53.7	9.9	1.8	38					
3	Sumatera Barat	70	12.6	10	66.8	17.4	2.5	45.6					
4	Riau	59.9	7.7	3.1	27.4	7.2	1.7	50.6					
5	Jambi	56.1	7.5	6.8	42.8	7.9	2.9	47.5					
6	Sumatera Selatan	56.4	10.3	9.5	17.7	9.1	1.1	48.6					
7	Bengkulu	56.5	8.1	9.7	57.6	13.3	2.2	56.8					
8	Lampung	51.1	6.2	12.8	50.5	5.9	1.3	45.5					
9	DKI Jakarta	98.7	64.2	2.3	70.8	95.9	n.a.	n.a.					
10	Jawa Barat	76	13.6	30.4	73.3	11.9	0.3	66.2					
11	Jawa Tengah	65.4	4.9	36.2	65.1	8.3	0.6	63.1					
12	DI Yogyakarta	83.4	7.7	20.4	75.9	12.3	1.2	49					
13	Jawa Timur	70.9	12.3	32.2	80	9.5	0.6	65.6					
14	Kalimantan Barat	59.6	9.8	4.7	25	5.8	1.7	38.5					
15	Kalimantan Tengah	57.1	13.6	4.9	31.1	2.9	2.9	34.8					
16	Kalimantan Selatan	70.7	8.8	15.3	16.2	7.3	1.7	60					
17	Kalimantan Timur	79.9	16.2	3.4	36.6	10.8	1.5	50.5					
18	Sulawesi Utara	72.2	14.5	5.7	73.5	13	1.7	51.7					
19	Sulawesi Tengah	51.9	6.9	4.1	66.6	5.1	3.2	46.7					
20	Sulawesi Selatan	68.3	11.6	13.1	52.1	10.3	1.9	51.6					
21	Sulawesi Tenggara	48.8	5.5	4	70.6	4	2.1	47.2					
22	Bali	74.5	15.2	18.3	98.9	23.7	1.5	71.1					
23	Nusa Tenggara Barat	34.4	3.2	20.9	74.7	9	1.2	54.6					
24	Nusa Tenggara Timur	29.5	3.9	4.4	53.6	3.8	2.7	40.3					
25	Maluku	56.5	9.6	0.3	78.9	3.8	3.2	22.1					
26	Papua	38	9.5	0.2	27.8	2.2	6.3	27.5					
27	Maluku Utara	52.6	5.9	0.5	60.3	4.7	3.8	9.4					
28	Banten	79.1	21.7	22.6	53.8	11.7	0.4	67.8					
29	Kepulauan Bangka Belitung	78.4	9.5	15.5	18.4	8.1	2.4	52.3					
30	Gorontalo	45.7	5.6	3.2	62.7	7.1	4.4	56.6					
31	Kepulauan Riau	76.1	22.2	0.3	51.6	24.7	n.a.	n.a.					
32	Prop. Papua Barat	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.					
	<b>Average</b>	<b>68.7</b>	<b>12.2</b>	<b>7.1</b>	<b>54.6</b>	<b>8.5</b>	<b>2.1</b>	<b>48.8</b>					
	<b>Minimum</b>	<b>29.5</b>	<b>3.2</b>	<b>0.2</b>	<b>16.2</b>	<b>2.2</b>	<b>0.3</b>	<b>9.4</b>					
	<b>Maximum</b>	<b>98.7</b>	<b>64.2</b>	<b>36.2</b>	<b>98.9</b>	<b>95.9</b>	<b>6.3</b>	<b>71.1</b>					

**Table D26. Population by districts in Aceh (1999-2005)**

No	Districts	1999	2000	2001	2002	2003	2004	2005
1	Kab. Aceh Barat	479,200	440,239	431,787	423,334	228,149	162,250	165,258
2	Kab. Aceh Besar	306,149	288,760	291,562	294,364	302,752	303,019	216,998
3	Kab. Aceh Selatan	555,280	261,309	285,940	310,571	167,511	186,860	190,530
4	Kab. Aceh Singkil		120,040	124,727	129,416	175,175	147,119	152,594
5	Kab. Aceh Tengah	265,079	228,380	251,000	273,621	280,058	287,799	192,027
6	Kab. Aceh Tenggara	237,929	211,649	214,154	216,660	168,488	168,309	170,245
7	Kab. Aceh Timur	781,669	708,830	589,377	469,925	253,257	312,070	309,699
8	Kab. Aceh Utara	589,010	632,200	561,065	489,931	396,755	487,369	484,592
9	Kab. Bireuen		340,269	341,615	342,962	352,174	349,350	352,312
10	Kab. Aceh Pidie	638,669	479,410	496,686	513,963	519,205	473,500	481,587
11	Kab. Simeulue		57,060	56,097	55,134	76,896	71,449	72,110
12	Kota Banda Aceh	206,139	219,070	219,831	220,593	269,942	238,699	239,501
13	Kota Sabang	24,610	23,649	23,482	23,315	27,531	28,489	29,079
14	Kota Langsa		117,260	117,271	117,283	141,212	134,279	134,247
15	Kota Lhokseumawe		141,039	141,054	141,068	156,934	138,679	139,932
16	Kab. Aceh Barat Daya					153,893	111,370	112,230
17	Kab. Gayo Lues					83,921	68,190	68,784
18	Kab. Aceh Tamiang					238,824	228,820	228,089
19	Kab. Nagan Raya					153,393	111,519	112,961
20	Kab. Aceh Jaya					93,905	79,959	82,789
21	Kab. Mener Merah							102,336
	<b>Total/Province</b>	<b>4,083,734</b>	<b>4,269,164</b>	<b>4,145,648</b>	<b>4,022,140</b>	<b>4,239,975</b>	<b>4,089,098</b>	<b>4,037,900</b>

Source: BPS / MoF baseline data for DAU calculation

**Table D27. Poverty Headcount (%) and Human Development Index by districts in Aceh**

No	Districts	Poverty Headcount (%)					Human Development Index		
		1999	2000	2002	2003	2004	1996	1999	2002
		BPS/MoF Baseline data for DAU Calculation			BPS		UNDP		
1	Kab. Aceh Barat	18.3	15.0	38.1	36.1	35.7	67.1	64.3	65.6
2	Kab. Aceh Besar	23.2	22.0	33.2	30.5	29.9	68.4	66.8	67.2
3	Kab. Aceh Selatan	7.5	12.4	28.3	29.4	27.6	64.2	62.1	63.8
4	Kab. Aceh Singkil	n.a	12.4	28.3	29.5	28.9	n.a	n.a	62.2
5	Kab. Aceh Tengah	14.3	13.0	28.4	28.9	27.9	68.3	66	66.7
6	Kab. Aceh Tenggara	26.4	26.8	29.8	24.2	23.9	67.7	63.9	66.8
7	Kab. Aceh Timur	20.4	17.7	25.3	31.6	30.0	69.5	65.4	66.7
8	Kab. Aceh Utara	37.3	18.5	25.5	38.2	34.2	69.5	63.1	65.9
9	Kab. Bireuen	n.a	18.5	25.3	30.0	29.3	n.a	n.a	70.5
10	Kab. Aceh Pidie	2.4	2.5	44.0	38.9	35.2	67.8	64.1	67.8
11	Kab. Simeuleu	n.a	15.0	38.1	35.0	34.3	n.a	n.a	61.8
12	Kota Banda Aceh	5.0	3.4	10.3	9.7	8.9	74.2	70.5	71.9
13	Kota Sabang	22.8	21.6	36.7	32.4	31.5	70.1	63.7	69.5
14	Kota Langsa			25.3	16.3	15.3	n.a	n.a	n.a
15	Kota Lhokseumawe				16.4	15.0	n.a	n.a	n.a
16	Kab. Nagan Raya				34.7	35.9	n.a	n.a	n.a
17	Kab. Aceh Jaya				32.0	31.6	n.a	n.a	n.a
18	Kab. Aceh Barat Daya				27.9	28.0	n.a	n.a	n.a
19	Kab. Gayo Lues				32.2	32.4	n.a	n.a	n.a
20	Kab. Aceh Tamiang				26.0	25.2	n.a	n.a	n.a
	<b>Aceh</b>	<b>17.4</b>	<b>15.0</b>	<b>29.8</b>	<b>29.8</b>	<b>28.5</b>	<b>69.4</b>	<b>65.3</b>	<b>66</b>

**Table D28. Poverty Headcount (%) and Human Development Index across Province in Indonesia**

No	Provinces	Poverty rates (%)					Human Development Index		
		1999	2000	2002	2003	2004	1996	1999	2002
		BPS/MoF Baseline data for DAU Calculation		BPS			UNDP		
1	Aceh	17.4	15.0	29.8	29.8	28.5	69.4	65.3	66
2	Sumatera Utara	19.1	17.2	15.8	15.9	14.9	70.5	66.6	68.8
3	Sumatera Barat	16.5	14.2	11.6	11.2	10.5	69.2	65.8	67.5
4	Riau	19.2	12.5	13.6	13.5	13.1	70.6	67.3	69.1
5	Jambi	27.0	28.2	13.2	12.7	12.5	69.3	65.4	67.1
6	Sumatera Selatan	26.5	25.2	22.3	21.5	20.9	68	63.9	66
7	Bengkulu	24.9	21.5	22.7	22.7	22.4	68.4	64.8	66.2
8	Lampung	25.9	30.6	24.1	22.6	22.2	67.6	63	65.8
9	DKI Jakarta	7.7	4.5	3.4	3.4	3.2	76.1	72.5	75.6
10	Jawa Barat	20.6	19.8	13.4	12.9	12.1	68.2	64.6	65.8
11	Jawa Tengah	27.3	28.4	23.1	21.8	21.1	67	64.6	66.3
12	Yogyakarta	23.6	25.4	20.1	19.9	19.1	71.8	68.7	70.8
13	Jawa Timur	26.6	29.8	21.9	20.9	20.1	65.5	61.8	64.1
14	Kalimantan Barat	26.8	27.4	15.5	14.8	13.9	63.6	60.6	62.9
15	Kalimantan Tengah	24.1	14.5	11.9	11.4	10.4	71.3	66.7	69.1
16	Kalimantan Selatan	18.4	14.8	8.5	8.2	7.2	66.3	62.2	64.3
17	Kalimantan Timur	20.0	20.9	12.2	12.2	11.6	71.4	67.8	70
18	Sulawesi Utara	26.1	11.5	11.2	9.0	8.9	71.8	67.1	71.3
19	Sulawesi Tengah	28.8	29.0	24.9	23.0	21.7	66.4	62.8	64.4
20	Sulawesi Selatan	22.8	18.8	15.9	15.9	14.9	66	63.6	65.3
21	Sulawesi Tenggara	26.3	28.5	24.2	22.8	21.9	66.2	62.9	64.1
22	Bali	9.8	8.3	6.9	7.3	6.9	70.1	65.7	67.5
23	Nusa Tenggara Barat	29.1	33.4	27.8	26.3	25.4	56.7	54.2	57.8
24	Nusa Tenggara Timur	36.4	45.3	30.7	28.6	27.9	60.9	60.4	60.3
25	Maluku	44.5	55.8	34.8	32.9	32.1	68.2	67.2	66.5
26	Papua	31.5	52.5	41.8	39.0	38.7	60.2	58.8	60.1
27	Maluku Utara	40.7	44.3	14.0	13.9	12.4			65.8
28	Banten		17.1	9.2	9.6	8.6			66.6
29	Bangka Belitung		10.2	11.6	10.1	9.1			65.4
30	Gorontalo		32.9	32.1	29.3	29.0			64.1
	<b>National</b>	<b>23.4</b>	<b>23.6</b>	<b>18.2</b>	<b>17.4</b>	<b>16.7</b>	<b>67.7</b>	<b>64.3</b>	<b>65.8</b>

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