

times the national average of \$12,²⁰ even though 80 per cent of the provincial population had almost no access to imported commodities. Even when the foreign enclaves and different tariff structures are integrated, geographic factors are likely to cause continued high import dependence in Irian Jaya.

Extension of Indonesian administration, development of education and integration into the national economy have been major goals of the Indonesian government in Irian Jaya. These goals have been pursued at considerable national cost and have been accompanied by large international subsidies.

²⁰ Our own rough estimates put per capita imports at \$0.50 in South Kalimantan, \$0.60 in Maluku, \$0.75 in South Sulawesi, \$1.25 in West Sumatra, and \$1.30 in North Sulawesi. The much higher national average is accounted for largely by Java's dependence on imports, and the low outer islands level of imports is to some extent influenced by trans-shipment of imports from Java.

5 Public Finance and Resource Allocation

Irian Jaya receives an extraordinarily high level of national and international subsidy. In recent years it has been of a similar order of magnitude to Dutch subsidies in colonial times and not far below the per capita subsidy to Papua New Guinea from Australia. But the impact of government expenditures on provincial incomes and especially on indigenous incomes has been relatively small.

Skilled manpower, materials and communications are all very expensive in Irian Jaya and this raises the cost of any public program. The limited extent of monetised economic activity has limited local capacity to raise taxation and has caused very heavy reliance on external finance. The effectiveness of government expenditures in raising local incomes has also been reduced by inadequate co-ordination of public sector expenditures.

The total budget for Irian Jaya has run to nearly Rp 16 billion annually over the past few years (see Table 13). The central government grants are larger than those to the most populous provinces of Indonesia.¹ The special routine grant to Irian Jaya has ranged between 15 and 20 per cent of total central government subsidies to provincial routine budgets over the past few years.

The central government subsidy to the Irian Jaya development budget was a much smaller proportion of the national total, but at Rp 3.5 billion in 1970/71 and 1971/72 it was still considerably higher than to many more populous provinces.²

¹ In 1971/72 West Java received a Rp 6.85 billion subsidy from the central government for routine expenditures, compared with Rp 9.15 billion to Irian Jaya. In that year, the 21 million residents of West Java received Rp 317 per capita while residents of Irian Jaya received Rp 11,024. See R. Daroesman, 'An Economic Survey of West Java', *Bulletin of Indonesian Economic Studies*, 8(2), July 1972, p. 47.

Comparison is complicated by the inclusion of subsidies to central government departments in the central government grant to Irian Jaya. There are no equivalent grants to other provinces. But excluding these grants the subsidy to Irian Jaya was over 13 per cent of the total Rp 83.5 billion grant to the provinces in 1972/73. See RAPBN 1971, 1972/3.

² For example, West Sumatra and North Sulawesi. See Hindra Esmara, 'An

Table 13 Irian Jaya budgets, 1971/72 and 1972/73 (Rp million)

	1971/72	1972/73
Routine Budget	12,362	12,132
Central government subsidy	9151	*
Special rice subsidy	1500	
Provincial Income	1711	*
Company taxes	265	
Income tax	104	
Other tax	234	
Import duties	673	
Income from sales, etc.	344	
Retributions	36	
Other	55	
Development Budget	3500	3500
Fundwi	1934	1831
Pelita ^b	816	1669
Task Forces	750	
Kabupaten Subsidy	80	109
Total	15,942	15,741

* Breakdowns not available.

^b Includes counterpart expenditures on Fundwi projects. See Table 15.

Source: *Nota Keuangan RAPB Propinsi Irian Barat* [Financial note on the Irian Jaya Budget] 1971/72 and 1972/73.

The central government finances over 80 per cent of all routine expenditures. The proportion of the routine budget financed by provincial revenues is high compared with other Indonesian provinces, but it is inflated by the retention of revenue from customs duties, excise and personal and corporate income taxes, which are paid to the central government in other provinces. As shown in Table 13, these taxes accounted for well over half the provincial government contribution to the routine budget in 1971/72. The sources of revenue retained by provincial governments elsewhere are still small.

The routine budget covering government salaries, maintenance of government offices and various subsidies has accounted for about 80 per cent of government expenditure in recent years. Table 14 shows how the composition of the routine budget has changed since 1969/70. Since becoming autonomous units under Basic Law No. 12 in 1969, *kabupaten* have been granted more control over the allocation of funds within their areas. The grants to *kabupaten* are largely to cover wage and material costs which were previously paid by

Economic Survey of West Sumatra', *Bulletin of Indonesian Economic Studies*, 7(1), 1971, pp. 37-9 and Boediano, 'An Economic Survey of North Sulawesi', 8(3), 1972, pp. 87-9.

Table 14 Routine expenditure (planned), 1969/70 to 1972/73

	1969/70	1970/71	1971/72	1972/73
A. Rupiah million				
General				
Personnel	1602	3310	2484	855
Equipment, goods	498	733	2865	1219
'Development' items	—	—	916	1857
Departmental services (central departments)	—	—	—	2149
Other	2934 ^a	2332 ^b	—	—
Special rice subsidy	1590	1570	1500	1300
Provincial grants to <i>kabupaten</i>	—	793	2224	3483
Other subsidies				
Non-rice food subsidies	450	250	—	—
Fuel	387	327	378	—
Other	—	—	578 ^c	582 ^d
Central government administration of Irian Jaya (esp. Sektor Khusus)	510 ^e	397	888	733
Reserve	40	800	529	154
Total	8011	10,512	12,362	12,332 ^f
B. Per cent				
General				
Personnel	20	31	20	7
Equipment, goods	6	7	23	10
'Development' items	—	—	8	15
Departmental services (central departments)	—	—	—	17
Other	37	22	—	—
Special rice subsidy	20	15	12	11
Provincial grants to <i>kabupaten</i>	—	8	18	28
Other subsidies				
Non-rice food subsidies	6	2	—	—
Fuel	5	3	3	—
Other	—	—	5	5
Central government administration of Irian Jaya (esp. Sektor Khusus)	6	4	7	6
Reserve	—	8	4	1
Total	100	100	100	100

^a Includes expenditure on Act of Self Determination.

^b Includes Rp 1202 million on 'social, political and economic matters'.

^c Includes Rp 321 million for provincial government enterprises and Rp 257 million for schools.

^d No specification.

^e Includes Rp 321 million for UN Mission on Act of Self Determination.

^f Includes Rp 200 million deficit not covered in total planned revenue of Rp 12,132 billion.

Source: *Nota Keuangan RAPB Propinsi Irian Barat* [Financial note on the Irian Jaya Budget] 1971/72 and 1972/73.

the provincial government. They also cover large allocations to schools and general 'development' activities. Since 1971/72 a separate 'development' item has appeared in the routine budget covering expenditure previously included under other headings,³ and to a lesser extent funds released by elimination of a number of subsidies formerly paid by the provincial government. Just under 6 per cent of the routine budget was allocated to the central government for administration within the Sektor Khusus in 1972/73.

The special rice subsidy which maintains prices at IBRp 2 per kilo throughout the province remains a substantial element in the budget. It has fallen slightly in recent years, but realised expenditures may be well above allocations in 1972/73 owing to the rise in world and Indonesian rice prices. Upward price adjustments over the period 1969-71 enabled elimination of many of the subsidies which were required for maintenance of low commodity and public utility prices and which had placed major strains on the provincial budget. Transfer of responsibility for fuel and electricity distribution from provincial government bodies to Pertamina and the PLN and subsequent rationalisation of prices enabled subsidies for these services to be removed. Since 1971 Merpati has operated without subsidy and the subsidy for telegraph and telephone services has been reduced substantially.

Over 40 per cent of the Rp 1.8 billion allocated by the provincial government for 'development' in the routine budget in 1972/73 is to be spent on government administration and equipment. Preparation for a new *kabupaten* capital close to Jayapura at Abepura, administrative reorganisation, and expenditures on health, education (each Rp 150 million), roads and bridges (each Rp 100 million) are other important items in this 'development' budget.

Within the major development budgets, over 50 per cent of expenditures in Pelita and Fundwi programs in recent years have come from the United Nations grant (Table 15). Government allocations to Fundwi counterpart funds have been over double those to the Pelita program drawn up by Indonesian planning authorities. As a result, development expenditures by the Indonesian government have been influenced towards Fundwi priorities. Most of the Fundwi expenditures have been directed towards transport and communications. Sea and air transport have together been allocated over \$10 million and telecommunications and road transport have also received large allocations (see Table 15). Second priority has been given to projects aimed at developing human resources, especially vocational and teacher

³ In 1969/70 and 1970/71 the 'Other' category under General Expenditure in Table 14 included some 'development' items such as development of air and sea communications, and rehabilitation of infrastructure.

training. The remaining Fundwi funds have been spread over a large number of projects with development of sea fisheries and forestry receiving special attention.

Table 15 Planned Pelita and Fundwi development expenditures, 1969/70 to 1971/72^a (Rp million)

	Total	Indonesian Government		UN Allocation (Fundwi) ^b
		Pelita	Fundwi Counterpart Funds	
Total	16,567.2	2581.7	5308.5	8676.0
Percentage Distribution				
<i>Communications</i>	56	13	73	57
Sea transport		4	25	25
Air communications		—	34	21
Road transport		5	11	5
Telecommunications		5	4	6
<i>Primary Industry</i>	15	13	10	18
Agriculture ^c		5	4	5
Forestry		7	4	5
Sea Fisheries		1	2	8
Education, etc.	12	5	11	15 ^d
Electricity	5	13	2	5
Health	4	8	3	3
Public Works	2	15 ^e	—	—
Industry	1	3	—	1
Other	5	28	—	1
	100	100	100	100

^a Three-year allocations 1969-72 of Pelita and Counterpart funds and UN allocations to completion of Fundwi projects.

^b US\$ = Rp 400.

^c Includes animal husbandry and inland fisheries.

^d Includes 7 per cent on vocation training centre and 5 per cent on teacher training.

^e Primarily for housing, drinking water, sewerage.

Source: Fundwi, *Laporan Tahunan Lakbangda*, March 1972.

Overall emphasis in the Pelita program is similar to Fundwi but greater stress is placed on urban services (electricity supply, drinking water, drainage, housing, and urban transport). Pelita also makes substantial allocations to equipment for Lakbangda (Rp 329 million), equipment for Radio Indonesia (Rp 110 million) and construction of religious buildings (Rp 86 million).

Most of the Task Forces annual budget of Rp 750 million for 1970/71 and 1971/72 has gone towards village development courses (Kursus Pelopor

Tembangunan Desa KPPD), provision of agricultural equipment and extension services, supply of teachers to highlands schools and (planned) resettlement of highlands villages. The per capital kabupaten subsidies from the central government have amounted to only Rp 244.7 million since beginning in 1970/71, but they appear to have had a significant impact on kabupaten infrastructure. These funds have been used to improve urban roads in Sorong and Wamena, minor roads connecting towns, several urban markets, and the airports at Serui and Merauke.⁴

Execution of development programs has proceeded less quickly than planned. No plan for Irian Jaya was included in the original national Pelita and this delayed the provincial execution of Pelita by ten months. Distance from Jakarta, poor communications and an inexperienced administration have caused delays. Longer-term programs were disturbed in 1969 by the Act of Self Determination. Until the surrender of Ferry Awom in late 1970 development projects could not begin in a large part of the kabupaten of Manokwari. Execution of the Task Forces program has been hampered by delays in the arrival of funds to project areas⁵ and by problems of transporting materials to the highlands. Periodic shortages of cement, corrugated iron and other imported building materials and lack of private, local stocks have held up construction.⁶ In mid-1972, most Pelita projects were at least one year behind schedule.⁷

Fundwi projects have also been delayed by transport, communications and organisational problems. Several, including the Irian Jaya Joint Development Foundation, were held up by difficulties in recruiting appropriate personnel. Delays in the arrival of counterpart funds have reduced the effectiveness of some Fundwi expenditures. Costs on some projects were very much higher than anticipated and unforeseen problems prevented implementation of others. A major review of the program was undertaken in

⁴ Roads have been built to connect Sarmi and Mararena, Biak and Korem, Serui and Matembo and Wamena and Pikke. Market places have been constructed in three highlands centres (Wamena, Enarotali and Waghete) and at Nabire and have made important contributions to local trade.

⁵ For example the KPPD at Wamena still awaited funds for the 1971/72 financial year in mid-1972.

⁶ In 1972 a meeting of organisations concerned with Irian Jaya development recommended that the provincial government put capital into a 'pooling system' to ensure continuity in supply of these essential goods.

⁷ In February 1972 a Sektor Khusus team sent to investigate the progress of Pelita projects throughout Irian Jaya reported that for 1969/70 11.4 per cent (Rp 281.1 million) and for 1970/71 22.7 per cent (Rp 659.9 million) of the total development budget had not yet been disbursed.

July 1971, when funds allocated to the abortive Forest Industries Development Corporation were made available to other projects. However, it is hoped that almost all major disbursements will have been completed by the end of 1973.

The budgetary framework for public expenditures has reduced their effectiveness. Programs and annual budgets have not been framed specifically to further government economic objectives in the province. Projects have been selected without comparison of returns from alternative patterns of expenditure. Indeed, the fragmentation of budgets has made it almost impossible to make such comparisons or to formulate integrated programs.

The fragmentation of budgets appears to be an unnecessary aggravation of planning problems. The division of budgets into routine and development is largely spurious. Apart from the usual arbitrariness of the division, the routine budgets have their own development sections which are not integrated with the development budgets and much of the development budget is used for rehabilitation and repairs. The division of the Fundwi program into foreign and counterpart budgets has no rationale now that the rupiah parity fairly accurately reflects the scarcity of foreign exchange.

Formulation of separate development programs each with its own budget has led to misallocation of finance between projects and over time. Projects on the Fundwi list have had very much freer access to capital and skills than other very important projects in the Pelita and Task Forces programs.⁸ And some Fundwi projects have experienced a superfluity of capital and skills through the program although resources may not be available to maintain them in future years.

With the winding up of Fundwi disbursements, international aid to the province is likely to continue in other forms. In 1969, the Netherlands made approximately \$5 million available to the Asian Development Bank, to finance investments in Irian Jaya. The UNDP has committed itself to some post-Fundwi expenditures, as has the Canadian government under a bilateral aid program. More recently it was reported that the Indonesian government had asked Australia to grant special assistance to Irian Jaya with the aim of speeding up development and thereby minimising tensions with wealthier Papua New Guinea.⁹

The main goals of the provincial and central governments have been

⁸ See the discussion in chapter 3 of the vocational training centre at Jayapura and in chapter 8 of the Hamadi timber project.

⁹ Michael Richardson, 'Australia asked to help Irian Jaya', *Financial Review*, 8 March 1973, p. 1; also Chris Manning, 'Case against Irian Jaya aid', *Canberra Times*, 2 June 1973.

Table 16 Fundwi Development Program: Projects and Budget allocations

Project	Budget allocations						
	United Nations (\$000) ^a					Counterpart (Rp.m.)	
	Total	Ex- perts	Fellow- ships	Equip- ment	Sub- contracts	Total esti- mated cost (cash & kind)	Cash disburse- ments (DIP 1969-72)
Infrastructure							
Air transportation: ^b provision of 3 Twin Otter aircraft, equipment, repair of existing aircraft and general assistance	4399 ^c	301	95	2616	—	7141	1790
Coastal and river transportation: provision of coasters, motor barges and service vehicles; repair of ships, slipways and ports	5899	550	53	3203	1152	2777	1310
Land transportation: equipment for rehabilitation of Jayapura-Sentani road, passenger buses and trucks provided for towns, equipment for rehabilitation of workshops	1404	278	24	890	—	1481	576
Electricity: rehabilitation of diesel power stations in major towns	1138	77	31	546	133	122	113
Telecommunications: main work in rehabilitation of Jakarta telephone and telegraph systems and repairs elsewhere	1281	267	25	414	—	733	230
Meteorology: rehabilitation of existing meteorological stations and establishment of 2 agricultural meteorological stations	203	27	—	93	7.6	212	— ^d
Primary Industry							
Forestry: (i) main efforts in establishment of sawmill at Hamadi near Jayapura and minor research on copal and resin resources; (ii) research into prospect of forest industries in Irian Jaya and forestry projects in Warsamson Valley for Irian Jaya Forest Industries Development Corp.; rest of project abandoned and funds allocated to other projects	1148	67	23	471	267	307	189
Marine fisheries: research into tuna and skipjack resources, assistance in setting up pole and line fishing enterprise and finance for building and equipment for fishing school at Sorong	1669	150	12	167	1159	239	113
Inland fisheries: management and demonstration at government hatcheries, provision of fish for Lake Sentani and inland lakes and rivers	184	76	—	83	—	90	62

^a Includes reallocation of \$2,747,000 at program review, July 1971.

^b An additional \$175,000 and \$80,000 was granted by the Canadian and British governments.

^c \$1 million from Review meeting in 1971 not yet allocated to different uses.

^d Included in Air Communication allocation.

Source: Fundwi, Jayapura, 1972.

Table 16 Fundwi Development Program: Projects and Budget allocations (continued)

Project	Budget allocations						
	United Nations (\$000)					Counterpart (Rp.m.)	
	Total	Ex- perts	Fellow- ships	Equip- ment	Sub- contracts	Total esti- mated cost (cash & kind)	Cash disburse- ments (DIP 1969-72)
Primary Industry (continued)							
Agriculture: seed trials and distribution, technical reports (soil market surveys)	585	229	54	201	5	326	105
Animal husbandry: rehabilitation and expansion of veterinary, quarantine and slaughter facilities	281	109	33	98	—	—	64
Asmat handicrafts: stimulation of traditional carvings through organising purchases and markets for Asmat art	131	84	2.6	4	—	—	5
Brick and tile manufacture: courses and feasibility studies on brick and tile manufacture to replace imported sources of building materials	58	58	—	—	—	—	—
Refrigerator and cold storage: survey of possibility of refrigeration and cold storage fish	0.8	0.8	—	—	—	—	—
Human resources							
Industrial vocational training centre: vocational training centres with modern equipment in Jayapura and Manokwari	1561	800	42	457	—	278	298
Education planning and administration: advice on educational planning to administration	183	116	—	4	—	—	—
School building and model schools: model school at Wamena	42	31	—	49	—	9	—
Teacher training and technical and secondary education: construction of new teachers' college, provision of audio visual aids and improvement of curricula	610	230	89.6	208	—	448	244
University: provision of books and equipment and assistance to anthropology institute	236	—	—	50	152	20	21
Highlands education: advice on approach to education in the highlands	65	48	—	8	—	—	—
Other							
Community development: courses and teaching materials for community development programs	105	72	7	11	—	—	—
Health: equipment and campaigns against malaria, improvement of public health, nursing education and training; control programs and public health advice	615	72	79	321	—	335	186
Public administration: fellowships to development administrators	5	—	5	—	—	—	—
Irian Jaya Joint Development Corporation	4000	—	—	—	—	1660	—

stated frequently, so it is possible to make some assessment of the efficiency of policies. The governments have aimed at integration of the province into the wider Indonesian economy, at 'raising' the modes and standard of living of the Irian-born to those of other Indonesians and at increasing provincial economic activity and the province's contribution to national economic development.¹⁰ These goals have been attended by the broader objectives of spreading national ideology and language and extending Indonesian administration within the province.

The general economic reforms in the late 1960s, including removal of public utility, transport and consumer goods subsidies, made a major contribution towards more efficient resource allocation. But the rice subsidy remains a very large drain on the budget. The subsidy causes provincial resources to be allocated inefficiently: high cost rice is substituted for low cost foodstuffs and rice production is discouraged in the few locations where it is economically feasible. The subsidy's welfare effects are skewed against the Irian-born, whose taste for rice is less well developed. Abolition of the rice subsidy would yield large economic benefits even if compensating public service salary increases were required. Abolition of the subsidy would make migration to Irian Jaya less attractive, but subsidised consumption at a new location seems an inefficient way of raising the welfare of poor persons from other provinces.

It is difficult to quarrel with the emphasis of the major development programs. Improvement in transport and communications was necessary merely to provide access to information required for more sophisticated planning. Rehabilitation of the communications infrastructure was also a prior requirement for any village development effort. Investment has been concentrated on restoration of former Dutch facilities. However, it is now clear that the old transport and communications structures are not always suited to the very new economy that is developing and a new approach is required. Communications have improved sufficiently to allow effective expenditure on village welfare. But villagers' incomes have fallen in many areas, despite Indonesian aims, and projects contributing directly to village welfare have received low priority in allocation of funds. These and other important planning questions will be discussed further.

¹⁰ See especially Direktorat Irian Barat, *Irian Jaya Development Plan*, Jakarta, 1967, pp. 1-16; Acub Zainal, *Operation Koteka - the community development of the inland areas of Irian Jaya, 1971/73*, Jayapura, 1971; and *Nota Keuangan dan Rantjangan Anggaran Pendapatan dan Belandja Propinsi Irian Barat 1972/73* [Financial Note and West Irian Budget 1972/73], Jayapura, 1972.

6 Transport, Communications and Trade

Fundamental technological factors constrain the growth of incomes in Irian Jaya. The development problem in Irian Jaya is dominated by the small scale of human settlements and the high cost of small-scale transport and communications. The division of labour depends on the extent of the market and trade between scattered villages requires long walks over difficult terrain for a small enlargement of the market.

A new division of labour has become possible with the establishment of links with the world market. Once a few beachheads of the international economy were established, short-distance trade with the ports could link adjacent, coastal villages into the world system. But where inland villages are separated from the ports by mountains and rivers the small scale of potential trade has made the cost of land transport prohibitive. Rivers in Irian Jaya, unlike Kalimantan, can play only a limited role in linking inland areas to the coast. Economies of scale are less important in transport by aircraft, but unit air transport costs are high, so that isolated villages can participate in the national and international economy only through trade in high-value-to-weight commodities.

Improvement in village welfare is possible without trade where services and high-value commodities are made available by gifts from outside the village. Where external aid supports a commitment to social and economic change, transport and communications must play a key role in the process. Costs are high and efficient supply of these services is a major planning problem.

Communications for administration

Extensive air and telecommunications networks are crucial to effective government administration in Irian Jaya. Indonesian policy has given high priority to development of the infrastructure that is necessary to support province-wide administration. The focus has been on restoration of the telecommunications and transport systems that existed in colonial times but deteriorated in the first seven years of Indonesian administration.