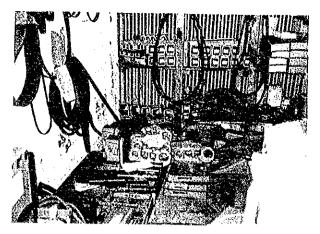


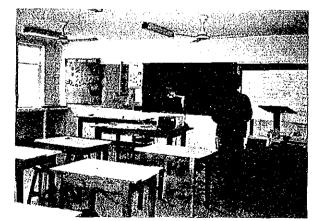
A view of parts storage house



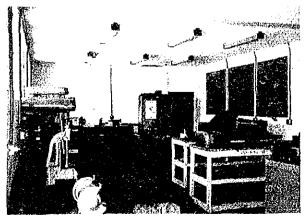
Spare parts storage



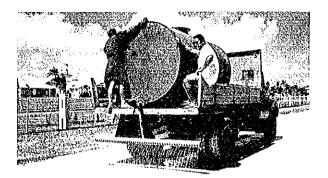
Spare parts storage



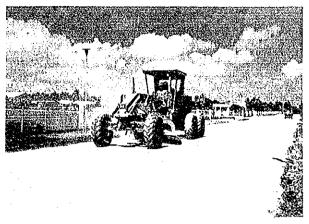
Training center (lecture room)



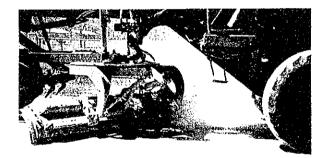
Training center (practice room)



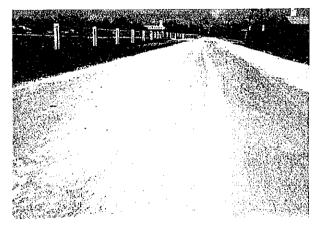
Sprinkling water



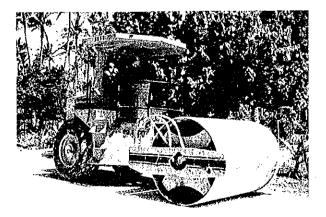
Surface grading



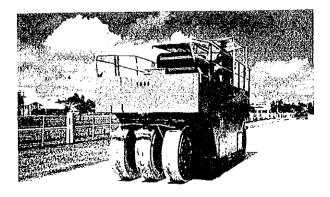
Surface grading



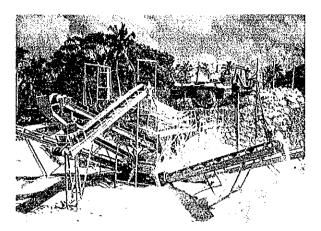
Surface after grading



Vibration roller (for primary compaction)



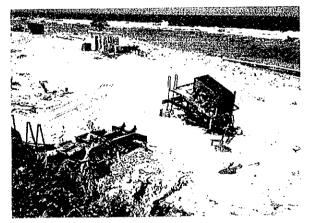
Pneumatic tire roller (for secondary compaction)



Crushing and screening plant



A bulldozer being used in the plant



Crushing and screening plant damage by a hurricane



Crushing and screening plant damage by a hurricane



Proposed site for new crushing and screening plant

· ·

·

# APPENDIX 6

PROCEDURES

OF

ENVIRONMENTAL IMPACT ASSESSMENT

#### 1. ENVIRONMENTAL IMPACTS ASSESSMENT

#### 1.1 Environmental Impacts Assessment in Japan

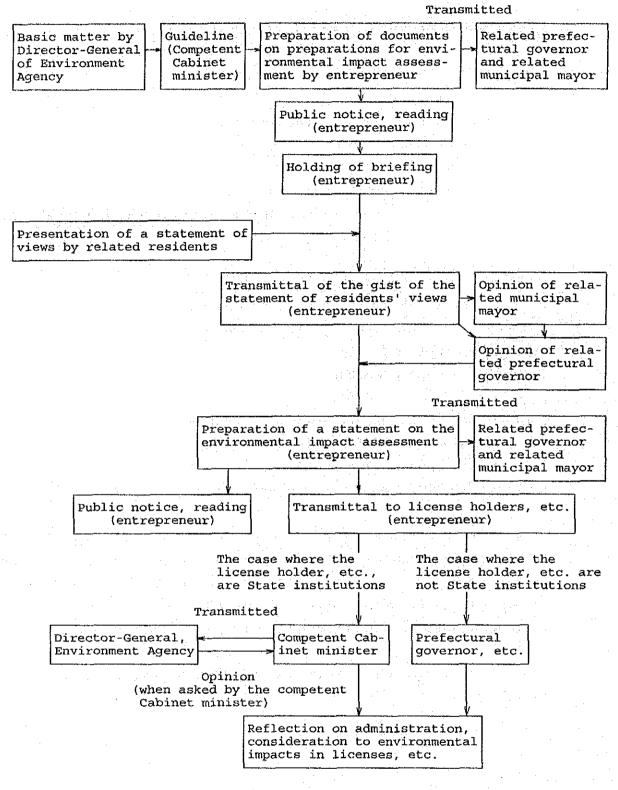
The environmental impacts assessment is designed to make full surveys, prediction and assessment in advance on possible environmental impacts which may arise from the execution of projects, release the findings and listen to the views of community residents and so forth so that environmental conservation measures may be implemented to the full. It is an effective means to prevent environmental pollution.

In Japan, the environmental impacts assessment has been performed under the Public Waters Reclamation Law and other individual laws, administrative guidance by ministries and agencies, ordinances and operating procedures of local governments, etc., since the Cabinet approved "On the Environmental Conservation Measures Relating to Public Works" in June 1972.

Furthermore, the Cabinet approved "Implementation of Environmental Impact Assessment" in August 1984 and formulated the "Outline for the Implementation of Environmental Impact Assessment" as a uniform rule or large-scale projects in which the State would be involved.

In summary, the applicable projects include those which are large scale and likely to produce significant impacts, provided that they are those which are conducted by the State or in which it is involved, such as in permitting. They include spatial development projects, such as roads, dams, railways, airports, land reclamation, inning and land zoning adjustment projects.

A summary of procedures taken by project-undertakers is given below: (Figure-1)





- (A) In regard to the impacts that are brought about by the projects, project-undertakers shall make prior surveys, estimate and assess in accordance with the guideline formulated upon consultation between the concerned ministers and the Director-General of the Environment Agency. They shall then come out with a preparatory draft environmental impacts statement (hereinafter referred to as "draft EIS").
- (B) Project-undertakers shall serve public notice on, and send out the draft EIS and shall hold briefings.
- (C) Project-undertakers shall strive to understand the views of residents in the relevant areas on the draft EIS. They shall call on the governor of the affected prefectures to express their views after listening to the views of the mayors of the related municipalities.
- (D) After listening to those views, project-undertakers shall review the descriptions contained in the draft EIS, prepare a final environmental impacts statement (hereinafter referred to as "final EIS"), serve public notice on, and distribute the statement.

It is stipulated that administrative agencies shall take account of environmental impacts on the final EIS in the licensing of subject projects and other cases. It is also stimulated that the competent minister shall listen to the views of the Director-General of the Environment Agency, if deemed necessary.

In 1991, there were 68 assessments of environmental impacts for which the procedures were completed in accordance with the afore-mentioned outline (Table-1).

# Table-1 Breakdown of Environmental Impact Assessments Made According to Cabinet Decisions

(1991)

Roads	Dams	Air ports	Reclamation	Surface development	Total
59	1	1	2	5	68
(138)	(6)	(4)	(14)	(14)	(176)

Remarks: The figures in parentheses represent the aggregates as of the end of 1991

(1992)
--------

Roads Da	ams Air	ports Recla		Surface velopment	Total
13 (151)	1 (7) (	1	2 (16)	6 (20)	23 (199)

Remarks: The figures in parentheses represent the aggregates as of the end of 1992

#### 1.2 Environmental Impacts Assessment Under Individual Laws

The outline of the assessments of environmental impacts made in fiscal 1991 under the Port and Harbor Law and the Public Waters Reclamation Law, among others, is given below:

(A) Port and Harbor Plans

The port and harbor plans formulated under the Port and Harbor Law are essential for the development, utilization and conservation of ports and harbors. In preparation of these plans, environmental impacts are assessed. In fiscal 1991, the port and harbor plans formulated for Kinugaura, Chiba and other ports were adjusted based on their impact statement.

#### (B) Reclamation of Public Waters

It is stipulated that possible impacts on the environment shall be checked in advance to the licensing of reclamation under the Public Waters Reclamation Law. For reclamation in excess of 50 hectares and reclamation in need of special consideration to environmental conservation, it is stipulated that the competent minister must listen to the views of the Director General of the Environment Agency. In fiscal 1991, reclamation at Nagoya and other ports was studied and the Director General of the Environment Agency set forth his views.

(C) Location of Power Generation Plants

For the location of power generation plants, environmental impacts are assessed under the administrative guidance of the Ministry of International Trade and Industry, and studies are also made on environmental conservation during the course of deliberations at the Electric Sources Development Council. In fiscal 1991, the programs for the Katsuno River Power Generation Plant etc. were modified based on impact statement.

- (D) Others
  - a. City Planning for Urbanization Promotion Areas As regards city planning for urbanization promotion areas under the City Planning Law, it is stipulated that the views of the Director-General of the Environment Agency shall be sought in advance.
  - b. In formulating basic concepts and implementing projects under the Comprehensive Resort Areas Development Law, it is stipulated that studies shall be made in a perspective of environmental conservation, depending on the substance, and that the compete minister shall discuss with the Director General of the Environment Agency in approving of the basic concepts. Necessary adjustments were made to the basic concepts of five prefectures in fiscal 1991.

#### **1.3** Environmental Impact Assessment in Local Government

Local governments also have the environmental impacts assessment system, underordinances or general plants (Table-2).

#### Table-2 ENACTMENT OF ORDINANCES AND OUTLINES ON ENVIRONMENTAL ASSESSMENTS

Local Government	Ordinance/outline	Enacted
Hokkaido Tokyo Kanagawa Prefecture	Ordinance for Environmental Impact Assessments in Hokkaido Ordinance for Environmental Impact Assessments in Tokyo Ordinance for Environmental Impact Assessments in Kanagawa	January 1979 October 1981 July 1981
Kawasaki City	Prefectures Ordinance Relating to Environmental Impact Assessments in Kawasaki City	July 1982
Miyagi Prefecture	Outline of Guidance on Environmental Impact Assessments Related to Pollution Prevention and Natural Environment	May 1982
Fukushima Prefecture	Conservation Outline of Environmental Impact Assessments in Fukushima	July 1991
Ibaraki Prefecture	Prefecture Outline of Environmental Impact Assessments in Ibaraki Prefecture	October 1983
Tochigi Prefecture	Outline of Environmental Impact Assessments in Tochigi Prefecture	April 1991
Gunma Prefecture	Outline of Environmental Impact Assessments in Gunma Prefecture	October 1991
Saitama Prefecture	Outline of Guidance on Environmental Impact Assessments in Saitama Prefecture	June 1981
Chiba Prefecture	Outline of Guidance on Implementation of Environmental Impact Assessments in Chiba Prefecture	June 1981
Niigata Prefecture	Outline of Environmental Impact Assessments in Niigata Prefecture	August 1991
Toyama Prefecture	Outline of Environmental Impact Assessments in Toyama Prefecture	October 1990
Yamanashi Prefecture		December 199
Nagano Prefecture	Dutline of Guidance on Environmental Impact Assessments in Nagano Prefecture	April 1984
Aichi Prefecture	Outline of Environmental Impact Assessments in Aichi Prefecture	October 1986
Mie Prefecture	Outline of Guidance on Implementation of Environmental Impact Assessments	April 1979
Shiga Prefecture	Outline of Environmental Impact Assessments in Shiga Prefecture	March 1981
Kyoto Prefecture	Outline of Environmental Impact Assessments in Kyoto Prefecture	September 198
Osaka Prefecture	Outline of Environmental Impact Assessments in Osaka Prefecture	April 1984
Hyogo Prefecture	Outline of Procedure for Environmental Assessments for Development Projects, Etc.	April 1979
Tottori Prefecture	Outline of Environmental Impact Assessments in Tottori Prefecture	February 1997
Shimane Prefecture	Outline of Environmental Impact Assessments in Shimane	August 1991
Okayama Prefecture	Prefecture Outline of Guidance on Environmental Impact Assessments for	January 1979
Hiroshima Prefecture	Environment Conservation Outline of Guidance on Environmental Impact Assessments for	April 1979
Yamaguchi Prefecture	Environment Conservation Outline of Guidance on Environmental Impact Assessments in	October 1990
Kagawa Prefecture	Yamaguchi Prefecture Outline on Implementation of Environmental Impact	March 1984
Kochi Prefecture	Assessments in Kagawa Prefecture Outline of Guidance on Environmental Impact Assessments,	October 1989
Fukuoka Prefecture	Etc., in Kochi Prefecture Outline of Environment Conservation Measures for Development	April 1973
Nagasaki Prefecture	Projects Outline of Guidance on Clerical Work Environmental Impact	August 1980
Kagoshima Prefecture	Assessments in Nagasaki Prefecture Outline of Environmental Impact Assessments in Kagoshima Profesture	April 1991
Okinawa Prefecture	Prefecture Basic Technological Guideline on Environmental Impact	June 1977
Yokohama City	Assessments Guideline for Guidance on Environmental Impact Assessments in Vokohame City	April 1980
Nagoya City	in Yokohama City Outline of Guidance on Environmental Impact Assessments in Mangura City	April 1979
Kobe City	Nagoya City Outline on Environmental Impact Assessment in Kobe City	July 1978

#### 2. STATUS OF ENVIRONMENTAL IMPACTS ASSESSMENT IN TONGA:

A summary of current status of EIA in Tonga is described below:

#### 2.1 The Ministry of Lands, Survey & Natural Resources Reports:

"Tonga is now involved in extensive development and many stresses are being put on her natural resources. Development projects must follow a rational and organised programme where environmental effects are considered through Environmental Impact Assessment (E.I.A).

Sustainable development and conservation are the key to the continued wellbeing of Tonga. The establishment of Marine terrestrial and historic parks is timely and essential before irreparable damage occurs and priceless natural resources are lost forever. Tonga needs to make further legislative commitments to secure its future and needs to continue in its educational efforts stimulating environmental awareness within the country."

2.2 The Ministry has the Overall National Objectives:

"Ensure that the land and natural resources of the kingdom are managed and utilised in such a manner [that] the ecology and environment are not destroyed for future generations."

To this avail, the Natural Resources Sector has established the following sections within the ministry whose objectives follow suit as conservation oriented:

Environment Planning, Geology and Energy.

2.3 The Environment Planning Section is responsible for the development of comprehensive environmental legislation, sustainable development of public lands and the promotion of conservation. The section is responsible for protecting natural resources from pollution and setting aside areas as national parks and reserves. This section utilises the methods of Environmental Impact Assessment (E.I.A.) and aims to create an atmosphere of understanding and awareness of the inherent responsibility of safeguarding the environment. Surveys and research studies are conducted periodically to identify hazards to Tonga's resources. A biweekly radio programme in conservation and annual Environmental Awareness Week (celebrated each June) are two of the yearly programmes in environmental education coordinated by this section.

#### 2.4 The Ministry Reports on EIA:

"One of the basic ideas for sustainable development is the understanding that the environment and development are co-dependent. As Tonga tries to improve the socio-economic status of its people, it cannot disregard environmental implications. Achieving a positive socio-economic change without compromising the country's ecological systems is a fundamental premise of Environmental Impact Assessment (EIA).

Practical guidelines on this measure involve an initial study; to be completed for major development prospects within the kingdom. Recommendations integrating environmental concerns and ecological constraints are offered. Experts within different discipline or sectors of the government are consulted."

The Cabinet decision on Environmental Impact (February 1985) states:

1. The Ministry of Lands, Survey and Natural Resources in cooperation with other appropriate ministries to prepare a draft EIA prior to the final approval of any new physical development projects.

- 2. The draft EIA to be available to be reviewed by the proposed project developer(s), appropriate government ministries and the general public.
- 3. All appropriate comments and changes....are to be incorporated into a final EIA and submitted to Cabinet for a decision.
- 4. Project approval may be subject to conditions to be observed in order to mitigate any probable adverse impact on the environment, public health and welfare. These conditions to be incorporated into final EIA.
- 5. Possible project alternatives are to be provided if the proposed project is determined through EIA review process as detrimental and hazardous to the Environment and public health and welfare.

Currently, an investigation is being conducted on how to best adapt EIA in the South Pacific. The researcher (Uniou F. Samani presenting doctoral thesis is attached to the Ministry of Lands, Survey and Natural Resources) seeks specifically to:

- 1. identify relevant characteristics in South Pacific societies;
- 2. evaluate EIA procedures currently existing in the region;
- 3. and formulate an EIA model for the region.

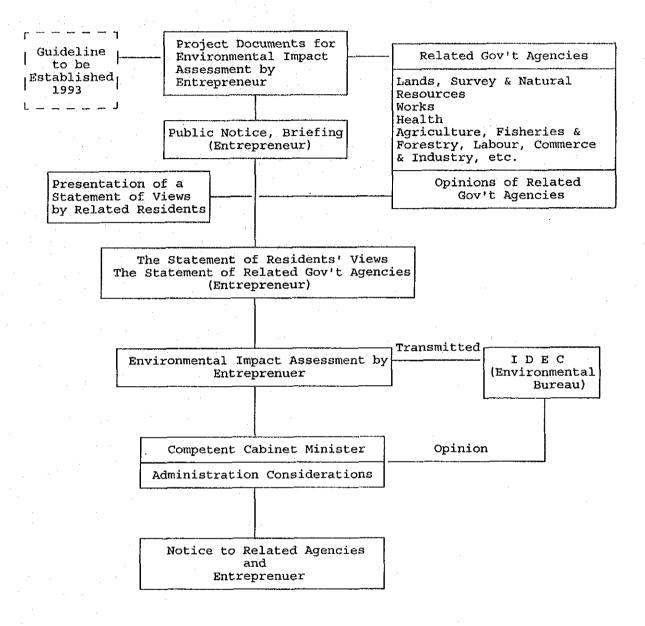
The Study started in 1989 is to be completed by 1991."

#### 3. PRELIMINARY IDEA OF PROCEDURES ON EIA IN TONGA

Tonga should decide what kind of legislation on EIA would be suitable for this country.

And it will especially be considered under the socio-economic Conditions and environmental situation of Tonga.

A preliminary flow chart of procedures on EIA is shown in Figure-2.



Remarks: IDEC means Inter-Departmental Environmental Committee.

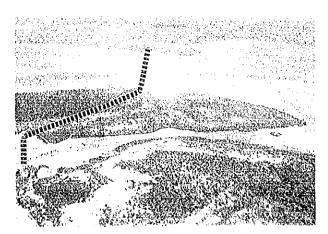
# Figure-2 FLOW OF PROCEDURES IN IMPLEMENTING ENVIRONMENTAL IMPACT ASSESSMENT, THE KINGDOM OF TONGA

## APPENDIX 7

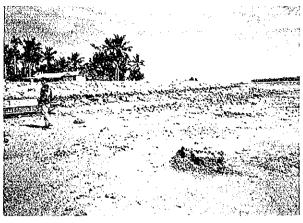
PHOTOGRAPHS

OF

FANGA'UTA LAGOON AND ITS ENVIRONS



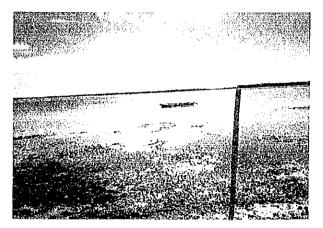
A view showing causeway Route 1, the center part is Nukunukumotu Island and the right part is the Lagoon.



Beginning point of causeway Route 1.



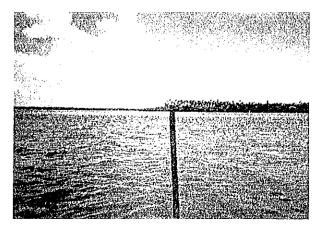
Proposed Bridge site between the beginning point and Nukunukumotu Island along causeway Route 1.



Between Nukuleka and Nukunukumotu Island along causeway Route 1.



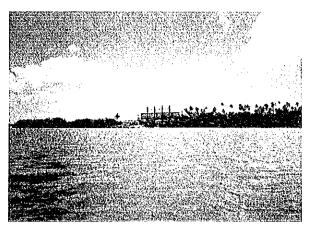
A distant view of Nukunukumotu Island from Makaunga diverging point.



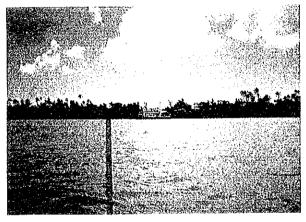
A distant view of the Lagoon and Nukunuku Island along causeway Route 1.



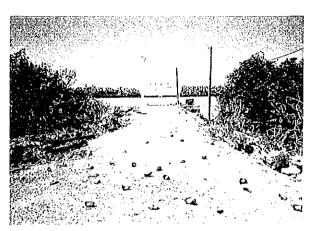
Condition of mud sedimentation at landing area of Captain Cook.



Power Station



Fanga Kakau Lagoon near the power station.



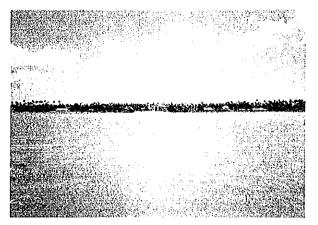
Fanga Kakau Lagoon near the power station.



Mud sedimentation at landing area of Captain Cook.



Near Longoteme, Mu'a branch



Developing southern area of Nuku'alofa along the by-pass.



Near Nuku'alofa by-pass.



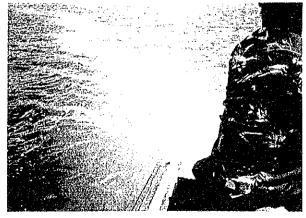
Pollution near Flaveluloto (Fanga'uta Lagoon).



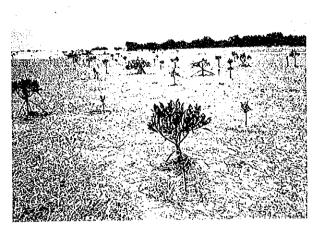
Pollution near Flaveluloto (Stay of Scum).



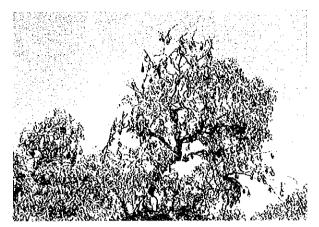
Pollution near Flaveluloto and Mangrove condition.



Churning of mud sediment by screw of boat at Fanga'uta Lagoon.



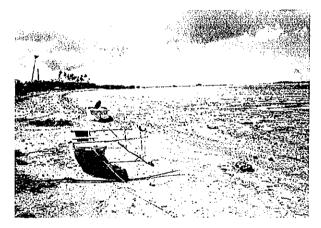
Young mangrove at low tide.



Flittermouse group taking shelter in Mango tree.



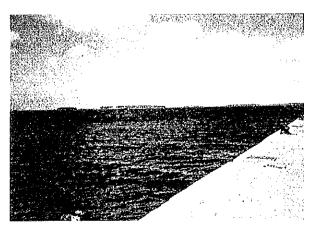
Sea walls.



Shoreline {The open sea, at low tide}.



Mangrove and Palm near Fanga'uta Lagoon.



Queen Salofe Wharf.

### APPENDIX 8

### FUTURE ROAD PROJECTS

in **IN** in the second s

TONGATAPU

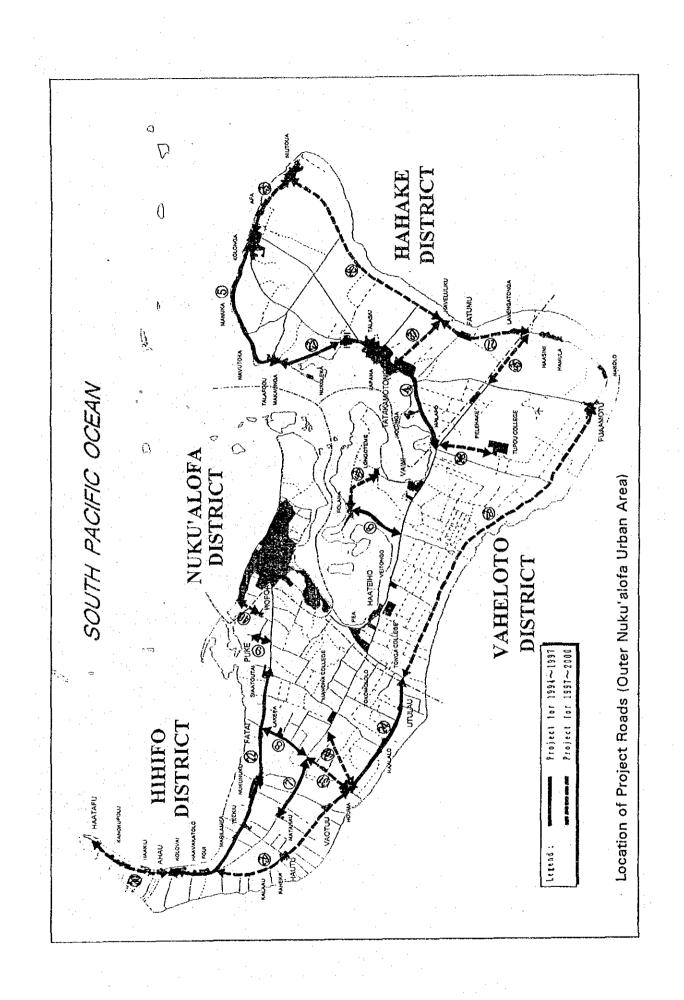
ROAD PROJECTS IN TONGATAPU FOR 1994 - 1997

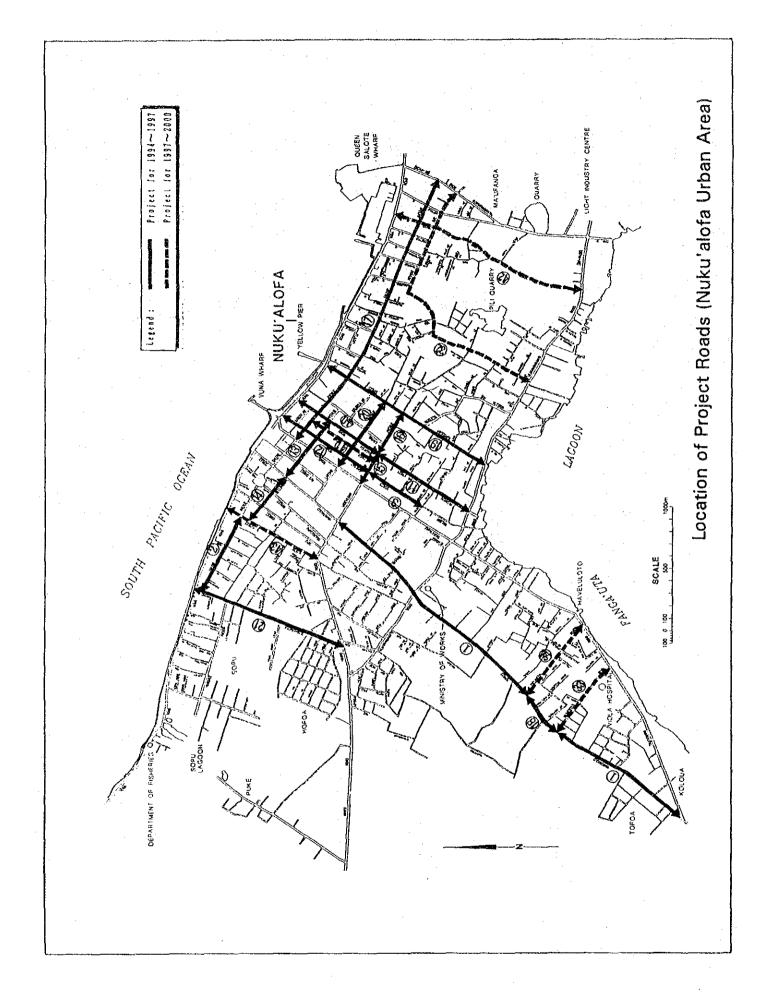
	Ref.		Length	Major	Estimated S	Source	Funding	Π	Implementation	cation	Schedul	le	
	No.	road vane	(Km)	Works	Cost (T\$) o	of Fund s	Status	1994 19	995 <b>19</b> 36	1997	1998 IS	999 20	000
	н -	Vahankolo Road	3.7	R C S	295,000	Local	TBR			· · · ·		· · · ·	
	2	Salote Road	0.75	R К С	60,000	Local	ТВК	: 				<u> </u>	
	<u>м</u>	Railway Road	1.0	R & C	80,000	Local	TBR	• •		· · · ·			
	4	Malopo/Hoi Road	7.0	R & C	560,000	ADB	ND		<b>-</b>				
	Ϋ́	Makaunga/Kolonga Road	7.0	R R C	560,000	ADB	ND						
	ο ·	Nualei/Folaha Road	2.7	CO & C	216,000	ADB	N	Τ			:		
	~	Holoipepe/Matahau Road	2.5	CO R CO CO	200,000	ADB	ND	<u> </u>	•	· · ·			
	00	Holoipepe/Fatai Road	2.5	со к СО	200,000	ADB	ß	•	<u>.</u>		• •	<u></u>	<u> </u>
	ø.	Hihifo/Puke Road	1.0	с 8 00	80,000	ADB	N						, in i - n n,
8	10	Fatafehi Road	0.8	<b>R, D &amp; C</b>	320,000	ADB	ND		- <u> </u>	-	ł.,		
- 1	н Т	Fatafehi Road	0.8	К С	96,000	ADB	N						
	12	Railway Road	0.8	บ เช ศ	200,000	ADB	ND		<u></u>				
-	13	Wellington Road	0.8	R, K & C	200,000	ADB	z				1		
	14	Wellington Road	0.6	ы К С З	60,000	ADB	N						
. *	12	Mateialona Road	0.3	ж К	30,000	ADB	Ъ						
	16	Mateialona Road	0 - 4	с ж	40,000	ADB	B						:
	17	Salote Road	2.5	к С К	250,000	ADB	Ъ						<u>.</u>
	18	Vahaakolo Road	0.5	к К	50,000	ADB	ND	- <u>-</u>					
	19	Tupoulahi Road	ហ ក	ы К С	150,000	ADB	35			1			
	20	Laifone Road	0.6	ы К С К	72,000	ADB	ŝ						
	21	Suniaakaveka Road	н н	к С	130,000	ADB	ß		· .		-		
	22	Siaatoutai/Kolovai Road	11.3	RS	270,000	AIDAB	S Ы						
	23	Hoi/Makaunga Road	с. С.	RS	84,000	AIDAB	ы СЧ						
	24	Fonongahina/Houma Road	ບ ທ	RS	134,000	AIDAB	S L					<u></u>	
						-				-			]

8 — 1

Ref.		L	TTH Major	Estimated Sc	ource	Funding		Implementation		Schedule	
No.	Road Name	(WX)	syrow.	Cost (T\$)	ਰ	l,,	1994 1995	5 1996		98 1999	2000
25	Kolonga/Niutoua Road	3.8	RS	190,000	ß						
26	Nuitoua/Haveluliku Road	9.7	CO & CO	1,370,000	ß		<u>.</u>				 ; •
	Haveluliku/Lavengatonga Road	4.2	C S CO	590,000	ß		· ·			T	
. co	Fuaamotu/Fonongahina Road	15.3	с 8 00	2,160,000	В						
5	Houma/Foui Road	7.4	RS	370,000	ß						
0	Kolovai/Haatafu Road	ະນ ເ	RS	175,000	ß						
rł	Holoipepe/Houma Road	2.5	R & C	1,353,000	ß		<u>a</u>		1		
2	Hekoni Avenue	2.5	ບ ຈ ເວ	353,000	ß		:				
33	Niumeitolu Road	0.7	R R C A	98,700	ß				1		
4	Fielakepo Road	0.7	R & C	98,700	ß				T		
ហ	Pelehake/Lavengatonga Road	н. .н	ນ ຮ ດ	437,000	ß	· · · · · · · · · · · · · · · · · · ·					
G	Tupou College Road	2.7	CO 8 CO	381,000	ß						
2	Tatakamotonga/Haveluliku Road	н Ю	с к СО	437,000	ß					 	
38	Folaha/Longoteme Road	2.2	CO & C	310,200	ß					_ <b> </b>	- 7-
39	Liahona/Houma Road	2.7	CO EC CO	380,700	ß		• .		<u> </u>		
40	Hofoa/Sopu Road	0	CO, D & C	200,000	B	• :					
े स्	Unga Road	0.6	2 2 3 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	84,600	ß						1
42	Haamoko Road	ъ. Ч	CO & C	211,500	ß	 	<u> </u>				
4.0	Albert Street	0.8	ъ s C S	112,800	ß	- 54 - 4 - - 12 - 2	•			<u> </u>	:
		-						:			: .
	Legend: CSCCRCR Cal	Reconstruction Construction Reseal Chip Seal Drainage Locally Funde	Reconstruction Construction Reseal Chip Seal Drainage ocally Funded		ADB AIDAB UDAB LER UD C N N UD C N N D C N D A D A D A D A D A D B A D B A D B A D B A D B A D B A D B A D D A B D A D D A D D A D D A D D A D D A D A	Asian Developm Australian Gran To be requested Under Negotiati Fund Sought Undecided	Asian Development Bank Loan Australian Grant Fund To be requested Under Negotlation Fund Sought Undecided	t Bank L	a		

ROAD PROJECTS IN TONGATAPU FOR 1997 - 2000





# APPENDIX 9

COST TO BE SHOULDERED BY THE KINGDOM OF TONGA

### Customs Clearance Fee (1/2)

(Unit : US\$)

Item		Q'ty	Unit	Unit Cost	Amount
Motor Grader	Equipment	2	Unit	557.67	1,115.34
more than 115 HP	Spare parts	2	Set	38.28	76.56
Backhoe Excavator	Equipment	: 1	Unit	302.85	302.85
more than 84 HP	Spare parts	1	Set	17.40	17.40
Wheel Loader	Equipment	1	Unit	675.03	675.03
more than 170 HP	Spare parts	1	Set	43.50	43.50
Dump Truck	Equipment	3	Unit	407.33	1,221.99
8 ton	Spare parts	3	Set	18.79	56.37
Dump Truck	Equipment	1	Unit	147.99	147.99
2 ton	Spare parts	1	Set	8.35	8.35
Cargo Truck	Equipment	1	Unit	428.21	428.21
4 ton	Spare parts	1	Set	13.92	13.92
Nater Tank Truck	Equipment	1	Unit	430.30	430.30
more than 180 HP	Spare parts	1	Set	25.06	25.06
Pick-up Truck	Equipment	1	Unit	117.54	117.54
1 ton	Spare parts	1	Set	5.22	5.22
Iydraulic Breaker	Equipment	1	Unit	21.75	21.75
more than 700 kg	Spare parts	1	Set	0	0
Pneumatic Hand Breaker	Equipment	2	Unit	4.35	8.70
more than 7 kg	Spare parts	2	Set	0	0
Crushing and Screening	Equipment	1	Unit	1,313.70	1,313.70
Plant	Spare parts	1	Set	52.20	52.20
more than 50 t/h	Tools	1	Set	13.05	13.05
Vibration Roller	Equipment	1	Unit	258.56	258.56
more than 95 HP	Spare parts	1	Set	15.66	15.66
Vibration Roller	Equipment	1	Unit	12.96	12.96
more than 5.9 HP	Spare parts	1	Set	0	0
Plate Compactor	Equipment	2	Unit	3.48	6.96
more than 70 kg	Spare parts	2	Set	0	0

### Customs Clearance Fee (2/2)

			1		
Amount	Unit Cost	Unit	Q't		Item
90.48	45.24	Unit	2	Equipment	Chip Spreader
13.92	6.96	Set	2	Spare parts	Spreading Width more than 2,300 mm
438.48	438.48	Unit	1	Equipment	Asphalt Distributor
19.14	19.14	Set	1	Spare parts	more than 160 lit
30.45	30.45	Unit	1	Equipment	Asphalt Sprayer
5.22	5.22	Set	1	Spare parts	Bitumen Tank Cap. more than 200 lit
2.18	2.18	Unit	1	Equipment	Asphalt Burner
0.26	0.26	Set	1	Spare parts	Tank Cap. more than 35 lit
3.48	3.48	Unit	1	Equipment	Concrete Cutter
0	0	Set	1	Spare parts	more than 5 HP
40.89	40.89	Unit	1	Equipment	Air Compressor Free Air
5.22	5.22	Set	1	Spare parts	Delivery more than 2.4 m <sup>3</sup> /min
7,038.89		Unit	26		Total
¥758,000					US\$1 = ¥107.81

# Inland Transportation (1/2)

[Unit : US\$]

	· · · · · · · · · · · · · · · · · · ·		r	r1	lUnit : U
Item		Q'ty	Unit	Unit Cost	Amount
Motor Grader	Equipment	2	Unit	65.22	130.44
more than 115 HP	Spare parts	2	Set	18.88	37.76
Backhoe Excavator	Equipment	: 1	Unit	109.11	109.11
more than 84 HP	Spare parts	1	Set	8.58	8.58
Wheel Loader	Equipment	1	Unit	65.22	65.22
more than 170 HP	Spare parts	. 1	Set	21.45	21.45
Dump Truck	Equipment	3	Unit	65.22	195.60
8 ton	Spare parts	3	Set	9.27	27.8
Dump Truck	Equipment	1	Unit	65.22	65.2
- 2 ton	Spare parts	: 1	Set	4.12	4.1:
Cargo Truck	Equipment	1	Unit	65.22	65.2
4 ton	Spare parts	1	Set	6.86	6.86
Water Tank Truck	Equipment	1	Unit	65.22	65.2
more than 180 HP	Spare parts	1	Set	12.36	12.30
Pick-up Truck	Equipment	1	Unit	65.22	65.22
1 ton	Spare parts	1	Set	2.57	2.5
Hydraulic Breaker	Equipment	1	Unit	10.73	10.73
more than 700 kg	Spare parts	1	Set	0	0
Pneumatic Hand Breaker	Equipment	2	Unit	2.15	4.30
more than 7 kg	Spare parts	2	Set	0	0
Crushing and Screening	Equipment	1	Unit	647.79	647.75
Plant	Spare parts	1	Set	25.74	25.74
more than 50 t/h	Tools	1	Set	6.44	6.44
Vibration Roller	Equipment	1	Unit	75.00	75.00
more than 95 HP	Spare parts	1	Set	7.22	7.23
Vibration Roller	Equipment	1	Unit	6.39	6.35
more than 5.9 HP	Spare parts	1	Set	0	0
Plate Compactor	Equipment	2	Unit	1.72	3.44
more than 70 kg	Spare parts		Set	0	0
more chair / v kg	Parc Parcs	L	L	l	_ 

### Inland Transportation (2/2)

[Unit : US\$]

Item		Q'ty	Unit	Unit Cost	Amount
Chip Spreader	Equipment	2	Unit	22.31	44.62
Spreading Width more than 2,300 mm	Spare parts	2	Set	3.43	6.86
Asphalt Distributor	Equipment	1	Unit	65.22	65.22
more than 160 lit	Spare parts	1	Set	9.44	9.44
Asphalt Sprader	Equipment	1	Unit	15.02	15.02
Bitumen Tank Cap. more than 200 lit	Spare parts	1	Set	2.57	2.57
Asphalt Burner	Equipment	1	Unit	1.07	1.07
Tank Cap. more than 35 lit	Spare parts	1	Set	0.13	0.13
Concrete Cutter	Equipment	1	Unit	1.72	1.72
more than 5 HP	Spare parts	<u> </u>	Set	0	0
Air Compressor Free Air	Equipment	1	Unit	20.16	20.16
Delivery more than 2.4 m <sup>3</sup> /min	Spare parts	1	Set	2.57	2.57
Total		26	Unit		1,839.25
US\$1 = ¥107.81					¥198,000

Compensation for coconut trees	375 pcs. x T\$15.00 = T\$5,62
Clearing	3,000 m² x T\$2.50/m² = T\$7,50
Grubbing	$3,000 \text{ m}^2 \text{ x } \text{T}\$1.00/\text{m}^2 = \text{T}\$3,000 \text{ m}^2$
Surface preparation	3,000 m² x T\$1.00/m² = T\$3,00
	T\$19,12

Acquisition of Lot for Crushing and Screening Plant and Its Clearing

