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INTRODUCTION

The Government of the Republic of Trinidad and Tobago's (GORTT) stated policy objective is to regularise the tenure of farmers on state agricultural land, with the exception of those farmers in breach of environmental and planning guidelines. Unoccupied parcels of State agricultural land are being distributed to legitimate applicants in a transparent manner, as outlined in the *New Administration and Distribution Policy for Land* (1991). The process of distribution / regularisation over the past three years has been extremely slow, despite this strong political commitment.

In order to speed-up the process of distribution/regularisation the Government agreed to implement an Accelerated Land Distribution Programme (ALDP). The objective of the ALDP is to distribute a total of 4,000 hectares of State owned land to private farmers by December 2000. Under the ALDP staff are being employed on contract to work within the various agencies involved in the regularisation / distribution of State agricultural land. It has been recognised, however, that the procedures to regularise / distribute State agricultural land are cumbersome and arcane and that, even with the additional human resources, it was unlikely that the GORTT would meet its objectives. The GORTT, therefore, established a Multi-Disciplinary Committee to investigate the current process and recommend reforms.

In addition to the ALDP, the GORTT also intends to implement a much bigger regularisation / distribution programme, totalling 15,000 parcels of State agricultural land, under the proposed Agricultural Sector Investment Programme (ASIP). The Multi-Disciplinary Committee was, therefore, also asked to devise the procedures and a budget to be used under the proposed ASIP. These procedures and budget will be used in negotiations with the Inter American Development Bank to determine the exact activities to be conducted under the ASIP.

The detailed Scope of Work for the Multi-Disciplinary Committee was as follows:

- a) Examine the current mechanisms for regularising the tenure and issuing Standard Agricultural Leases to farmers on State owned land.
- b) Suggest new procedures to ensure that future regularisation takes place in a timely and cost efficient manner under both ALDP and ASIP. The procedure must be one that is operable under the resources given under ALDP and ASIP and must be in line with the existing legislation.
- c) Detail additional investments in terms of resources, technology and other capital inputs that are required under ASIP in order to make the procedure more efficient.
- d) Produce detailed budgets and time tables that clearly indicate how the procedures represent significant savings in terms of time and money.
- e) Identify any legislative changes that may help to further reduce the time taken and the cost of regularisation, along with the methodologies needed to make changes to the existing legislation.
- f) Identify any potential threats to the success of the current programme, including the issue of farmers' ability to pay the fees associated with executing a Standard Agricultural Lease.

Ernst and Young was hired to assist the Multi-Disciplinary Committee in achieving the above objectives and specifically to produce, in conjunction with the Multi-Disciplinary Committee, the budgets and the manuals detailing the new procedures.

Volume one of the final report details the following:

- the methodology used by Ernst & Young and the Multi-Disciplinary Committee to devise the new procedures,
- the three budgets called for in the Terms of Reference (current situation, ALDP and ASIP),
- descriptions of the improvements made to the existing procedures ('design concepts'),
- details of further investments and improvements that could be made under the ASIP to further accelerate the process, and
- a brief description of some of the possible constraints to the successful implementation of the ALDP and proposed ASIP regularisation / distribution activities.

Volume two of the final report contains detailed manuals outlining the procedures to be used in the implementation of both the ALDP and the proposed ASIP.

METHODOLOGY

The methodology used to facilitate this exercise was Ernst & Young's Accelerated Process Improvement approach. The traditional Process Improvement approach was tailored to satisfy the requirements of the engagement, specifically the time frames to complete the exercise. The Accelerated Process Improvement focuses on eliminating the "non-value added" activities and tasks from the existing procedures.

The detailed steps of the Accelerated Process Improvement methodology used in this exercise are as follows:

- a) Determine the outline process of distributing/ regularising tenancy.
- b) Determine the detailed steps (activities) of distributing / regularising tenancy.
- c) Determine the customer requirements of the process.
- d) Conduct a Value Analysis on the Process.
- e) Redesign the Process.

Determine the outline process of distributing/ regularising tenancy

The Multi Disciplinary Committee agreed that the process of distributing / regularising tenancy can be broken down into the following categories (Processes).



Each of these categories (Processes) were further broken down into Sub-Processes. These Sub Processes can be represented in one flow in the following 17 steps as follows (the numbering above relates to the break down from the above processes):



Determine the detailed steps (activities) of distributing/ regularising tenancy

The detailed steps for each of the sub-processes were documented using Ernst & Young's model in excel for mapping processes. Some processes were excluded from this mapping as follows:

- 2.0 "Prepare Land" was not mapped as this considered the physical activity to prepare the infrastructure before distribution/ regularisation. The process was considered not strictly necessary to the overall regularisation/ distribution process and was not mapped. The fact that 66% of the leases involve the regularisation of tenure for existing agricultural squatters negates the need for preparing the land before distribution. It should be noted, however, that providing the infrastructure works increases the value of the agricultural land and hence the lease rents.
- 3.1 "Contract Surveyors" and 3.3 "Pay Surveyors" were not mapped adequately and as such were excluded from further analysis and design. These two processes are guided by the State's procurement and financial procedures. In the short term (ALDP's procedures) it was felt that this aspect could not be changed significantly. ASIP's procedures have eliminated the need for these two sub processes by contracting Land Surveyors to conduct the entire exercise at the beginning of the programme.

An Example of a process map can be seen below.



The information gathered when mapping the sub processes of the Agricultural Parcel Regularisation / Distribution process was:

- 1. Title of person performing the activity.
- 2. The time taken to perform each activity in minutes (a day was considered 360 minutes i.e. 6 hours). The estimates of the time required to complete an activity were made by members of the Committee. A detailed time and motion study was not conducted to get the precise figure for each activity. A conservative estimate of the processing time was assumed whenever no information regarding time were forthcoming. These estimates were made by comparing information already collected in other processes.
- 3. The activities and the sequence of their performance.
- 4. The number of times these activities were required to be conducted for the programme of works (ALDP or ASIP). Most of the activity drivers were considered to be either derivatives of the numbers of blocks of land or number parcels of lands to be distributed/ regularised.
- 5. The details (tasks) of how each activity was conducted.
- 6. The inputs required for each activity.
- 7. The outputs from each activity.
- 8. The Cycle Time of each activity where cycle time is greater than 1 day. This is not shown on the example of the Process map seen above. Cycle Time is defined as the total elapsed time from the start of one activity to the start of the next activity.

Determine the customer requirements of the process

The Multi-Disciplinary Committee determined that there were two main customers of the Agricultural Parcel Regularisation/ Distribution process: the landlord (the State) and the farmer. The Committee defined each customer requirement as follows:

Customer	Requirements						
Landlord (State)	• Distribution of good title						
	• Clearly defined SAL agreement for all leased lands						
	• Suitable tenants (comply with lease)						
	• Collect distribution fees in timely manner						
	Distribute (and regularise) land quickly and						
	effectively						
Farmer	• Security of tenure						
	• Possession of land in a timely manner						
	• Economic size parcel						
	• Adequate infrastructure services						
	• Reasonable rent						

Conduct a Value Analysis on the process

Value Analysis is principally used to determine opportunities to improve process flows by evaluating each activity within a process from the customer's point of view. Value Analysis is based on using the end customer as the reference point for the value-added/non-value-added determination. For each process the main customer was determined, then each activity in the sub-process was evaluated by asking the questions, "Does this activity add value to the end customer?" or "Is the customer willing to pay for this activity?" Value Analysis develops a list of activities or sub-processes that do not add value to the end customer and should be considered for elimination or improvement.

The Value Test used by the Committee was as follows:



Redesign the Process

The process was re-designed by eliminating "Non-Value Added" activities and "Business-Value Added" activities. This was done by brainstorming "Design Concepts" which can be applied to the process and eliminate the steps that were not required to meet the customers' requirements. The results were documented in the form of procedures arising out of the process maps.

THE EXISTING PROCESS & BUDGET

The existing process is extremely slow. The overall cycle time for the regularisation/ distribution programme, as mapped by the members of the Committee, is as follows:

Sub Process	Cycle time
	(days)
Identify Lands	23
Establish Tenure Status	56
Prepare Block Report	38
Survey Lands	141
Approve Surveys	52
Assess Rental Value	69
Short list Potential Tenants	76
Verify Occupancy	55
Approve Distribution	29
Calculate Fees	65
Acceptance of Parcel	31
Prepare Leases	235
Execute and Register Leases	10
Distribution of Leases	-
	880

Most of the processes listed above run concurrently and, therefore, the total elapsed time required to distribute a single block of land given the current procedures is in excess of two years. It should be noted that the estimates of the cycle times were made with current incumbents in the existing jobs. These individuals have other work that they are also responsible for and thus the cycle times for the existing process may be unusually high.

Preparing a lease at the Chief State Solicitor's Office takes an elapsed time of 235 days. This extremely large figure is mainly due to the estimate of 210 days to get the results of the title search from the Red House. This sub process occurs at the end of the process and adds almost one year to the overall cycle time. Identify Lands, Establish Tenure Status and Prepare Block Report occurs before the start of the Government's fiscal year and is done for a number of blocks of land at the same time.

The budget established to transfer the 4,000 hectares of agricultural land under the ALDP is approximately TT\$4.9 Million. The bulk of this budget is established for Human Resources (TT\$4.7 Million or 98% of the Budget). The Human Resources are to be hired on short-term individual contracts and placed within the respective agencies involved in the distribution of the agricultural lands.

A deficiency of the existing budget is that it does not allocate sufficient funds for expenditures such as rental of office accommodations, furniture for the offices, advertisements for the land distribution programme and sundry expenditures for the programme (Expert Panel meetings, maintenance and repairs of Government vehicles). The original justification of this was that the individual agencies would find accommodation for the new staff. This, however, has proved to be problematic and has delayed the implementation of the ALDP.

The budget has included a figure of \$60,000 for "Consumables", presumably for recurring costs of the programme. For a programme of this size and nature, the sufficiency of this figure for Consumables is questionable.

	GROSS SALARY	NUMBER OF OFFICES	LENGTH OF TENURE	TOTAL COST
SALARY COST				
Valuations Division				
Valuations Assistant	7,176	2	24	344,448
Registrar General Office				
Clerical Officer	4,338	1	24	104,112
Chief State Solicitor				
Attorney	9,300	2	24	446,400
Conveyance Clerk	5,648	2	24	271,123
Title Clerk	4,187	2	24	200,966
Registration Clerk	3,826	1	24	91,814
Registry Clerk	3,253	1	24	78,077
Typist	3,166	2	24	151,949
Messenger	2,886	1	24	69,264
Land and Surveys Division				
Land Surveyor	18,900	2	12	453,600
Land Inspector	5,497	2	24	263,866
Administrative Assistant	6,326	1	24	151,834
Senior Lands Clerk	4,338	3	24	312,336
Clerk Typist	3,166	1	24	75,974
Land Administration Division				
Programme Coordinator	9,300	1	24	223,200
Land Officer	6,871	9	24	1,484,179
TOTAL SALARY COSTS				4,723,142
COMPUTERS				60,000
PHOTOCOPIERS				7,500
OFFICE PARTITIONING				20,000
CONSUMABLES				60,000
BUDGET FOR REGULARISATION	DISTRIBUT	ION PROGR	AMME	4,870,642

A Breakdown of the estimated budget for the ALDP is as follows:

The budget for the salary costs include a 20% gratuity for all persons engaged as contract staff in the programme and a \$900 travel allowance for the travelling officers. The travelling officers are the Valuations Assistants, Valuations Division; the Clerical Officer, Registrar General Office; the Attorneys and the Conveyance Clerks, Chief State Solicitor; the Land Surveyors and Land Inspectors, Lands and Surveys Division; and the Programme Co-ordinator and Land Officers, Land Administration Division.

REVISED BUDGET (ALDP UNCHANGED PROCESS)

The process activity maps generated by the Committee members for the existing regularisation/ distribution process contain information critical to the number of staff required in the re-designed process. These process activity maps contain the following critical pieces of information: the activities for regularisation / distribution, an estimate of the length of time each activity should take and an estimate of the number of transactions in the ALDP. The extension of how long each activity takes by the number of transactions for the ALDP provides an estimate of the total effort required per activity.

Based on the process maps the effort required to complete the regularisation/ distribution of the agriculture parcels without any changes to the existing procedures are as follows:

Ministry Of Agriculture, Lands and Marine	TOTAL HOURS	PEOPLE	
Resources	REQUIRED	MONTHS	
District Lands Officer	4,455	44.5	
County Officer	2,073	20.7	
Correspondence Clerk	10	0.1	
Agricultural Officer	3,949	39.5	
Typist	185	1.8	
Director Land Administration	96	1.0	
Public Relations Department	56	0.6	
Panel (6 Persons)	6,240	62.4	
Regional Lands Officer	168	1.7	
Administrative Officer	126	1.3	
Permanent Secretary	19	0.2	
Minister	37	0.4	

ands & Survey Division		
Correspondence Clerk	473	4.7
Title Clerk	691	6.9
Registration & Vault Clerk	534	5.3
Plan Movement Clerk Red House	82	0.8
Geodetic computer	1,008	10.1
Surveyor/ Check Staff	1,680	16.8
Plan Movement Clerk (Head Office)	26	0.3
Supervisor of surveys	63	0.6
Director of Surveys	35	0.3
Director's Secretary	19	0.2
Draftsman	56	0.6
Drawing Office Supervisor	28	0.3
Supervisor Lands	689	6.9
Surveyors	21,840	218.4
Draftsmen	7,056	70.6
Survey Order Clerk	14	0.1
Lands Officer	1,242	12.4
Memorandum Clerk	281	2.8
Typist	14	0.1
Registry Clerk	281	2.8
General Clerks	450	4.5
Cashier	225	2.3
Bills and Notations Clerk	2,025	20.3
aluations Division		
Commissioner of Valuations	38	0.4
Assistant Commissioner of Valuation	159	1.6

Valuations Division (Continued)	TOTAL HOURS	PEOPLE	
	REQUIRED	MONTHS	
Officer in Charge	201	2.0	
Valuations Assistant	788	7.9	
Correspondence Clerk	9	0.1	
Typist	5	0.0	
Dispatcher	5	0.0	
Chief State Solicitors Office			
Correspondence Clerk	1,778	17.8	
Conveyance Clerk	665	6.6	
Chief State Solicitor	270	2.7	
Attorney	1,134	11.3	
Title Clerk	672	3.4	
Typist	234	2.3	
Cashier	675	6.8	
Voucher Clerk	900	9.0	
Registration Clerk	450	4.5	
Messenger	225	2.3	
	64,431	644.0	

The process activity maps show that the total number of hours required to regularise/ distribute the 56 blocks of land, representing approximately 4,673 hectares, requires at least 64,431 hours. These hours are represented in person months by dividing the requirement by 100 hours. Therefore, in order to complete this first phase of regularisation/ distribution 44 months of time from Land Officers are required. By extension, given that the programme is required to be completed within two years (24 months) at least 2 District Land Officers are required to be working full time on the project.

Matching the existing requirements for personnel to the persons that are budgeted to be hired, the following picture emerges as seen in the table below.

- 1. The person months required are estimated based on effort required to complete the total ALDP project as it is currently structured.
- 2. Salary cost were taken as budgeted for positions to be contracted. The other position's salary costs were assumed to be \$4,000 per month with the exception of the External Land Surveyor whose salary was assumed to be \$18,900 in line with the Internal Surveyor to be hired. The budgeted salary for the position of the Distribution Coordinator was assumed under the Agricultural Officer.

	Person	Salary	Estimated	Budgeted	\$	Over-	Not
	months		Expenditure	person	Budgeted	Budgeted	Budgeted
	required			months			
Ministry of Agriculture,							
Lands and Marine							
Resources							
Agricultural Officer	39	6,871	271,313	96	717,912	446,599	
District Lands Officer	45	6,871	306,089	72	494,712	188,623	
County Officer	21	6,871	142,424	72	494,712	352,288	
Correspondence Clerk	0	4,000	397				397
Typist	2	4,000	7,383				7,383
Director Land	1	4,000	3,833				3,833
Administration							
Public Relations Department	1	4,000	2,240				2,240
Panel (6 Persons)	62	4,000	249,600				249,600
Regional Lands Officer	2	4,000	6,720				6,720
Administrative Officer	1	4,000	5,040				5,040
Permanent Secretary	0	4,000	747				747
Minister	0	4,000	1,493				1,493

	Person	Salary	Estimated	Budgeted	\$	Over-	Not
	months		Expenditure	person	Budgeted	Budgeted	Budgeted
	required			months			
Lands & Surveys Division							
Correspondence Clerk	5	6,332	29,971	24	151,968	121,997	
Bills and Notations Clerk	20	4,338	87,845	72	312,336	224,492	
State Lands Inspectors	12	5,497	68,254	48	263,856	195,602	
Geodetic computer	10	18,900	190,512	12	226,800	36,288	
Surveyor/ Check Staff	17	18,900	317,520	12	226,800	(90,720)	
General Clerks	5	3,161	14,225	24	75,864	61,640	
Title Clerk	7	4,000	27,627				27,627
Registration & Vault Clerk	5	4,000	21,360				21,360
Plan Movement Clerk Red	1	4,000	3,285				3,285
House							
Plan Movement Clerk (Head	0	4,000	1,045				1,045
Office)							
Supervisor of surveys	1	4,000	2,539				2,539
Director of Surveys	0	4,000	1,381				1,381
Director Secretary	0	4,000	747				747
Draftsman	1	4,000	2,240				2,240
Drawing Office Supervisor	0	4,000	1,120				1,120
Supervisor Lands	7	4,000	27,560				27,560
External Surveyors	218	18,900	4,127,760				4,127,760
External Draftsmen	71	4,000	282,240				282,240
Survey Order Clerk	0	4,000	560				560
Memorandum Clerk	3	4,000	11,240				11,240
Typist	0	4,000	560				560
Registry Clerk	3	4,000	11,240				11,240
Cashier	2	4,000	9,000				9,000
Valuations Division							
Valuations Assistant	8	7,176	56,535	48	344,448	287,913	
Commissioner of Valuations	0	4,000	1,531				1,531
Assistant Commissioner of	2	4,000	6,344				6,344
Valuations							

	Person	Salary	Estimated	Budgeted	\$	Over-	Not
	months		Expenditure	person	Budgeted	Budgeted	Budgeted
	required			months			
Officer in Charge	2	4,000	8,027				8,027
Correspondence Clerk	0	4,000	373				373
Typist	0	4,000	187				187
Dispatcher	0	4,000	187				187
Chief State Solicitors Office							
Attorney	11	9,300	105,493	48	446,400	340,907	
Conveyance Clerk	7	5,649	37,539	48	271,152	233,613	
Title Clerk	7	4,187	28,137	48	200,976	186,908	
Typist	2	3,266	7,653	48	156,768	149,115	
Registration Clerk	5	3,826	17,217	24	91,824	74,607	
Messenger	2	2,886	6,494	24	69,264	62,771	
Correspondence Clerk	18	2,711	48,188	24	65,064	16,876	
Chief State Solicitor	3	4,000	10,800				10,800
Cashier	7	4,000	27,000				27,000
Voucher Clerk	9	4,000	36,000				36,000
	641		6,634,815	744	4,610,856	2,875,447	4,899,405

Clearly, the positions budgeted to be hired specifically for the ALDP will be under utilised in the present programme (compare budgeted person months with the person months required). In fact the ALDP has hired 744 people months worth of effort for key positions, these positions require only 233 people months making these positions under-utilised by an average of 59%. The single notable exception is the Internal Land Surveyors hired to do the jobs of the Geodetic Computer and the Surveyor Check Staff.

In addition, the positions that were included to be hired were not comprehensive as it did not include the increased work load on the existing positions in the regularisation/ distribution

process. The Panel of six experts, for example, required to decide on the suitability of applicants for both regularisation and distribution will take significant time in the current process to regularise/ distribute the 56 blocks of land.

A conservative estimate of the cost of the effort (salary) required for the regularisation/ distribution of the land is approximately TT\$6.6 million dollars inclusive of the cost of the survey, excluding any site works required. There are approximately, 2,700 parcels of land (4,673 hectares) to be distributed under the ALDP. The average salary cost per parcel is approximately \$2,457 per parcel or \$1,420 per hectare. This budget excludes any other costs of the regularisation/ distribution.

DESIGN CONCEPTS TO IMPROVE THE ALDP

The major "design concepts" which the Committee and Ernst & Young used to update the existing procedures of the ALDP are as follows:

Use of SALIS

The State Agriculture Land Information System (SALIS) will be used to identify lands that can be distributed/regularised as well as to identify the existing tenants to be regularised. This eliminates the need for Land Officers to visit the site before regularisation/distribution. The data on soil type will be updated on SALIS so that the best land use can be determined for the existing data.

Perform Title Search "up-front".

The title search will be conducted by a Title Clerk in the Lands and Surveys Division before the land is surveyed or valued. This Title Search will be forwarded and relied on by the Attorneys at the Chief State Solicitor's Office during the Conveyancing process. The reliance on the Title Search is possible once the time frame between the search and conveyance is not unduly long.

Outline approval from Town and Country Planning Division, Ministry of Housing and Settlements.

Based on the information contained in SALIS, outline approval and the general guidelines for subdivision of the land will be sought from the Town and Country Planning Division near the beginning of the process. This outline approval and the general guidelines will allow the final approval to be granted faster.

Valuation Request assigned directly to identified individuals.

Valuations for the ALDP will be done by two Valuations Assistants in the Valuations Division, Ministry of Finance. These persons will be identified in correspondence to the Valuations Division, thus ensuring that the correspondence can be routed directly to these individuals, eliminating the need for the Commissioner to assign the correspondence.

Valuation of Block to run concurrently with the survey of the land.

Once the Title Search is completed, the process of establishing the rental value will be initiated. This reduces significantly, the overall Cycle Time to distribute the parcel of land. Currently the valuation of the land is done after the survey of the block of land is completed.

Officer In Charge review for consistency.

The Officer in Charge will review the Valuations Report for consistency, and the value of the property will be taken as seen. The Officer in Charge will only need to make limited site visits.

External Surveyor responsible for obtaining Town & Country Planning Division's final approval.

The Surveyor's contract will state his/ her responsibility for getting final approval from the Town and Country Planning Division (TCPD). The TCPD has given the assurance that they will expedite the approval of the sub-divisions of the agricultural land under this programme.

Lands and Surveys Division no longer responsible for initiating the Valuation of the agricultural land

This process will be initiated the same time Lands and Surveys Division is informed that the land is to be surveyed. The Distribution Co-ordinator from the Ministry of Agriculture, Land and Marine Resources is responsible for the overall distribution and will be responsible for initiating both processes.

Cabinet no longer needs to approve the tenancy list for regularisation.

The policy for regularisation and distribution will be approved beforehand by Cabinet. In the case of parcels already occupied by eligible farmers, Cabinet will be asked to simply note the names of the lessees to be regularised. In .case of unoccupied parcels to be distributed, Cabinet will be asked to approve the names of the selected tenants.

Formal process of interviewing before regularising is excluded.

The farmers to be regularised do not require a formal interview, however they do have to submit a proper programme of development for the land. This programme of development must be in accordance with the Ministry of Agriculture, Lands and Marine Resources proposal for the block. The Ministry of Agriculture, Lands and Marine Resources will host a meeting in the community to inform all tenants to be regularised of the procedures and provide advice on their programme of development.

Standard Agricultural Lease computerised.

The Standard Agricultural Lease will be computerised in its standard format, only allowing modifications for the lessee specific details. This will also be done for the affidavits that must be signed for all leases.

ESTIMATED BUDGET (ALDP CHANGED PROCESS)

Detailed new procedures for the ALDP are outlined in volume 2 of the report. Based on the new process, the estimate of the effort required to regularise / distribute the blocks of land under the ALDP is 456 person months broken down as follows:

	Person months required	Salary	Estimated Expenditure	Budgeted person months	\$ Budgeted
Ministry Of Agriculture, Lands and Marine Resources					
District Lands Officer	5.8	6,871	40,113	72	494,712
County Officer	18.1	6,871	124,365	72	494,712
Agricultural Officer	28.9	6,871	198,563	72	494,712
Distribution Coordinator	16.7	9,300	155,527	24	223,200
Correspondence Clerk	0.0	4,000	187		
Typist	-	4,000	-		
Director Land Administration	13.0	4,000	51,867		
Public Relations Department	0.6	4,000	2,240		
Panel (6 Persons)	37.1	4,000	148,320		
Regional Lands Officer	1.7	4,000	6,720		
Administrative Officer	-	4,000	-		
Permanent Secretary	-	4,000	-		
Minister	2.3	4,000	9,000		
Lands & Survey Division					
Correspondence Clerk	2.3	6,332	14,247	24	151,968
Bills and Notations Clerk	6.8	4,338	29,282	72	312,336
Lands Officer	-	5,497	-	48	263,856
Geodetic computer	10.1	18,900	190,512	12	226,800
Surveyor/ Check Staff	16.8	18,900	317,520	12	226,800
General Clerks	-	3,161	-	24	75,864
Title Clerk	6.9	4,000	27,627		
Registration & Vault Clerk	1.3	4,000	5,040		
Plan Movement Clerk Red House	0.4	4,000	1,493		
Senior Administrative Officer	5.2	4,000	20,987		
Supervisor of surveys	0.7	4,000	2,613		
Director of Surveys	1.2	4,000	4,720		
Director Secretary	0.2	4,000	747		
Draftsman	0.3	4,000	1,120		
Drawing Office Supervisor	0.3	4,000	1,120		

	Person months required	Salary	Estimated Expenditure	Budgeted person months	\$ Budgeted
Supervisor Lands	1.0	4,000	3,973		
Surveyors	188.2	18,900	3,556,224		
Draftsmen	3.4	4,000	13,440		
Survey Order Clerk	-	4,000	-		
Memorandum Clerk	0.6	4,000	2,240		
Typist	0.0	3,266	152		
Registry Clerk	9.6	4,000	38,240		
Cashier	-	4,000	-		
Valuations Division					
Valuations Assistant	9.6	7,176	64,572	48	344,448
Commissioner of Valuations	-	4,000	-		
Assistant Commissioner of Valuation	1.2		4,964		
Officer in Charge	0.9	4,000	3,547		
Correspondence Clerk	0.1	4,000	373		
Typist	0.0	4,000	187		
Dispatcher	0.0	4,000	187		
Chief State Solicitors Office					
Attorney	13.5	9,300	125,550	48	446,400
Conveyance Clerk	15.8	5,649	88,972	48	271,152
Title Clerk	-	4,187	-	48	200,976
Typist	-	3,266	-	48	156,768
Registration Clerk	18.0	3,826	68,868	24	91,824
Messenger	-	2,886	-	24	69,264
Correspondence Clerk	2.3	2,711	6,100	24	65,064
Chief State Solicitor	-	4,000	-		
Cashier	7.0	4,000	27,000		
Voucher Clerk	9.0	4,000	36,000		
	456		5,394,517		4,610,856

The number of people months required to regularise/ distribute the blocks of land under the redesigned ALDP procedures is 456 compared with 641 people months under the current procedures.

The ALDP requires the following personnel in order to distribute/regularise the 56 blocks of agricultural land in the programme. Note that fewer people are required than have been approved by Cabinet for the ALDP.

	GROSS SALARY	NUMBER OF OFFICES	LENGTH OF TENURE	TOTAL COST
SALARY COST				
Valuations Division				
Valuations Assistant	7,176	1	12	86,112
Chief State Solicitor				
Attorney	9,300	1	24	223,200
Conveyance Clerk	5,648	1	24	135,552
Registration Clerk	3,826	1	24	91,824
Land and Surveys Division				
Land Surveyor	18,900	2	24	907,200
Administrative Assistant	6,326	1	24	151,824
Senior Lands Clerk	4,338	2	24	208,224
Title Clerk	4,187	1	12	50,244
Land Administration Division				
Programme Coordinator	9,300	1	24	223,200
Land Officer	6,871	4	24	659,616
TOTAL		15		2,736,996

Notes:

- 1. The search for the title and the valuation of the properties can both be done within a year without holding back the process. The valuation of agricultural property should not change drastically within a year and a valuation aged between six months to one year should suffice and provide a reasonable estimate of the rent payable.
- 2. The current estimates of time taken to perform the checks on the surveys done by contractors requires two persons for a longer period than one year, as originally budgeted in the ALDP.

The computation of the budget under the redesigned process as per the previous budget is TT\$2.7 Million or TT\$1,014 per parcel. Other pertinent running costs that must be included are as follows:

EXPENDITURE	\$
Consumables (assumed to be \$10,000 per month)	240,000
Advertisement Cost (56 Blocks advertised in 3 newspapers	470,400
for three days at \$700 per day, in addition to the	
advertisement of the distributed/ regularised land 56 blocks	
in 3 newspapers for one day each)	
Computers	60,000
Photocopiers	7,500
Officer Partitioning	20,000
	797,900

This adds \$295 per parcel to the overall total of distributing/regularising the blocks. The total cost under the ALDP is \$1,309. No account has been taken for rent of property and the External Surveyors cost has been excluded. The estimated cost to survey the blocks of land would add approximately \$1,322 per parcel of land (External Land Surveying and Draftsmen cost).

The cycle time (total elapsed time) to distribute the land under the ALDP has been reduced to the following figures:

Sub Process	Cycle time
	(days)
Identify Lands	10
Survey Lands	102
Approve Surveys	49
Assess Rental Value	62
Short list Potential Tenants	62
Verify Occupancy	20
Calculate Fees	51
Acceptance of Parcel	12
Prepare Leases	2
Execute and Register Leases	10
Distribution of Leases	-
	379

Using the same cycle times to conduct work, except where activities were eliminated or work flows changed, the overall cycle time to regularise/ distribute the state agricultural lands totals 379 days an overall reduction of 57%. Under the new procedures for the ALDP, processes are projected to happen at the same time. The main example of this parallel processing is that valuation of the land is to be done at the same time the surveying is being undertaken. This means that the overall cycle time will be 317 days as the 62 days for the valuation is subsumed within the 102 days to survey the land.

It should be noted again that the cycle times used are those which currently exist, these will be reduced substantially where there are persons hired specifically to expedite the particular task. The persons hired specifically for the ALDP will complete the tasks faster.

Under the re-designed process flow of work will look like this:



DESIGN CONCEPTS TO IMPROVE THE PROPOSED ASIP.

Further improvements to the ALDP procedure can be made under the proposed ASIP. The "design concepts" used to update the procedures are as follows:

One Survey Firm contracted to conduct all surveys

One survey firm will be hired to conduct all of the surveys, using a mix of new Global Positioning System and more traditional cadastral survey techniques. This Internal Surveyor firm will replace the need to hire External Surveyors to subdivide each block. All activities the External Surveyors were doing will now be done by this Survey Firm. This is estimated to cut the cost of surveying the blocks of land by half.

Create a separate head for the Agricultural Land Distribution/Regularisation

The fees that are payable by the lessee to complete the transaction are known in advance. The total sum payable is made under the Agricultural Head and Sub-Head and then the transfers of the revenue to the various other Government Departments can be made at the Ministry of Agriculture, Lands and Marine Resources. The unit at the Ministry should be given limited powers to prepare cheques for the other Government Units when the transactions fall due.

ESTIMATED BUDGET (ASIP)

The ASIP component for regularisation/distribution has approximately 333 blocks of land to be dealt with in 5 years. Compared with the ALDP the ASIP component consists of six times as many parcels of land and hence six times the amount of work in only two and a half times the time-frame for the ALDP. As a result, the effort requirements for the ASIP will be as follows:

	Person months required	Salary	Estimated Expenditure	Budgeted person months	\$ Budgeted
Ministry Of Agriculture, Lands					
and Marine Resources					
Panel (3 Persons)	209.9	4,000	,	240	960,000
Distribution Coordinator	94.7	9,300		120	1,116,000
Agricultural Officer	165.8	6,871	1,139,408	180	1,236,780
County Officer	82.5	6,871	566,743	120	824,520
Director Land Administration	73.6	4,000		120	480,000
District Lands Officer	34.4	6,871	236,149	60	412,260
Correspondence Clerk	0.3	4,000			
Typist	-	4,000			
Public Relations Department	3.3	4,000			
Regional Lands Officer	10.0	4,000	39,960		
Administrative Officer	-	4,000	-		
Permanent Secretary	-	4,000	-		
Minister	12.5	4,000	50,000		
Lands & Survey Division					
Correspondence Clerk	12.5	6,332	79,150		
Survey Firm	569.4	18,900	10,762,227	600	11,340,000
Geodetic computer	15.5	18,900	293,706		
Surveyor/ Check Staff	25.0	18,900	472,028	60	1,134,000
Senior Administrative Officer	29.4	6,326	186,237	60	379,560
General Clerks	-	3,161	-		
Bills and Notations Clerk	37.5	4,338	162,675	60	260,280
Title Clerk	41.1	4,187	171,960	60	251,220
Draftsmen	10.0	4,000	39,960		
Registry Clerk	53.3	4,000	213,320	60	240,000
Lands Officer	-	5,497	-		
Registration & Vault Clerk	7.5	4,000	29,970		
Plan Movement Clerk Red House	2.2	4,000	8,880		
Supervisor of surveys	3.9	4,000	15,540		
Director of Surveys	6.7	4,000	26,660		
Director Secretary	1.1	4,000			
Draftsman	1.7	4,000	6,660		
Drawing Office Supervisor	1.7	4,000	6,660		

	Person months required	Salary	Estimated Expenditure	Budgeted person months	\$ Budgeted
Supervisor Lands	5.6	4,000	22,220		
Survey Order Clerk	-	4,000	-		
Memorandum Clerk	3.3	4,000	13,320		
Typist	0.3	3,266	906		
Cashier	-	4,000	-		
Valuations Division					
Valuations Assistant	53.3	7,176	382,612	60	430,560
Commissioner of Valuations	-	4,000	-		
Assistant Commissioner of Valuation					
Officer in Charge	5.3	4,000	21,090		
Correspondence Clerk	0.6	4,000	2,220		
Typist	0.3	4,000	1,110		
Dispatcher	0.3	4,000	1,110		
Chief State Solicitors Office					
Attorney	75.0	9,300	697,500	120	1,116,000
Conveyance Clerk	87.5	5,649	,	120	677,880
Registration Clerk	100.0	3,826		120	459,120
Title Clerk		4,187			,
Typist	-	3,266			
Messenger	-	2,886			
Correspondence Clerk	12.5	2,711			
Chief State Solicitor	_	4,000			
Cashier	-	4,000			
Voucher Clerk	-	4,000			
	1,858		18,630,112		21,318,180

The total estimated cost is to regularise/ distribute the blocks under the ASIP regularisation/distribution programme is \$21.3Million. There are approximately 15,000 parcels of land to be distributed at a salary cost of \$1,421 per parcel. The other costs that are imputed in the programme are:

EXPENDITURE	\$
Consumables (assumed to be \$10,000 per month)	600,000
Advertisement Cost (333 Blocks advertised in 3	699,300
newspapers for three days at \$700 per day, in addition to	
the advertisement of the distributed/ regularised land 333	
blocks in 3 newspapers for one day each)	
Computers	60,000
Photocopiers	7,500
	1,366,800

This equates to an additional \$91 per parcel. The total estimated cost per parcel regularised/ distributed is \$1,512.

MAJOR CONSTRAINTS TO THE SUCCESS OF THE ALDP AND ASIP TENURE REGULARISATION ACTIVITIES.

During its deliberations on new procedures for regularisation and distribution of State Agricultural Land, the Committee identified a large number of issues of concern that will not be addressed by the implementation of these procedures. While addressing these issues was beyond the mandate of the Committee, they are raised here as they could prove to be significant constraints on the success of the Programme and the sustainability of investments. Cabinet is advised that these issues of concern are not confined simply to agricultural land, but are pertinent to all State land and, in many cases, also to non-State land.

Land management institutions

One of the major topics of discussion at every meeting of the Committee was the need to ensure that proper land/estate management is introduced immediately. The Government must not delay the introduction of proper land/estate management on the basis that regularisation/ distribution is necessary before proper management can be introduced. Indeed, regularisation must be considered as one facet of effective management, not an independent activity. Without proper land management it is highly likely the current situation (high rates delinquency in paying rents and numerous breeches of the covenants under leases) will continue unaltered. Given this reality, some members of the Committee are strongly opposed to the distribution of any land currently unoccupied until the issue of land/estate management has been addressed. If we are to ensure the long-term sustainability of the current investment in regularisation/distribution, the whole issue of management of State land needs to be addressed immediately.

It is the opinion of the Committee that proper land management may be aided by the creation of Land Management entity, as is envisaged under the Agricultural Sector Reform Programme Land Use policy and Administration Component. However, any new institutional arrangement will not solve the problems of land management without the addition of well-qualified staff. While the Committee recognises that creating a Land Management entity is a difficult and time consuming task it also notes that a number of smaller changes to organisational structures could be made which would assist the process of managing State land. For example, A. A. Wijetunga's report entitled *Ministry of Agriculture, Land and Marine Resources: Institutional Analysis and Administration Reform* (October 1998) recommended the re-structuring of the land management function within the Ministry of Agriculture, Land and Marine Resources to give the Land Administration Division the necessary human resources to carry out its responsibilities. The Committee supports the recommendation made by Mr Wijetunga.

Human resources

The Accelerated Land Distribution Programme and the proposed regularisation activities under the Agricultural Sector Investment Programme are to be conducted primarily by staff employed on short-term contracts. These contract staff have to work alongside public servants in existing posts. In this situation there is always a potential for conflict between contract staff and the permanent public servants, especially given the perception (sometimes erroneous) that contract staff are better remunerated that public servants. This potential for friction needs to be managed, but should not prove to be an insurmountable problem.

A far more serious problem, in the opinion of the Committee, is the large number of vacant posts within the public service. In the Valuation Division, for example, the relationship between the establishment and actual filled professional posts is thus:

Post	Establishment	Posts occupied
Commissioner of Valuations	1	1
Assistant Commissioner of	4	3
Valuations		
Valuers	9	0
Valuation Assistant II	42	23
Valuation Assistant I	50	0

The Committee recognises that, given advances in technology and methodology, not all of the established posts in all of the land administration agencies necessarily need to be filled in order to ensure the effective management of State land. Nevertheless the large number of unfilled posts is an area of concern that needs to be addressed.

One of the most important issues with respect to human resources needed for effective management of State lands is the issue of training. At present there are no comprehensive training courses in land/estate management available in the University of the West Indies, nor technical courses available through NIHERST or other national tertiary institutions. The Committee understands that the UWI has initiatives in place to develop new training courses in areas such as land administration and natural resource management. UWI should be encouraged to develop these new training courses in close collaboration with the relevant Government agencies, to ensure that the training and qualifications provided meet current and future needs. As the land administration function of Government is spread across a number of different Ministries, training needs in this area are not being addressed in a strategic manner.

While the courses being developed by UWI may help with the shortage of trained professional and technical staff in the general area of land management in the long-term, it will be necessary to send individuals for professional training outside of the Caribbean in the short to medium-term.

Technology (Land Information Systems)

One of the most crucial areas of management of State land is the issue of managing information. In this context a functioning land information system is necessary for the proper management of State land. A land information system does not have to be a sophisticated technological system: it does not even have to be computerised. There must, however, be a mechanism by which different agencies can ensure they can access each other's information about a particular parcel of land. This involves, first and foremost, the use of one unique signifier for any parcel of land. At present different agencies use different reference numbers to refer to the same parcel of land. A functioning land information system also needs to a mechanism to ensure that information is constantly updated.

Admirable foresight on the part of the designers of the State Agricultural Land Information System (SALIS) means that this system includes a number of different agency's reference numbers for each parcel in the system. This means that it will be relatively easy to integrate SALIS into other information systems.

The Cabinet Committee originally mandated with the responsibility of developing a national land and geographic information system has been suspended pending the formation of a new Working Group, under the auspices of the Interim National Physical Planning Commission. The Committee understands that this new Working Group has been approved by Cabinet, but efforts need to be made to ensure that it is activated and fulfils its functions. To be effective this Working Group must consider issues beyond simply the manipulation, processing storage, retrival and sharing of information, having regard to the benefits of computerisation. In addition to these narrow technology-driven issues, the Working Group should emphasise matters that provide benefits in the short-term, including:

- A common set of symbols and criteria for describing real estate.
- A lead agency, such as the Lands and Surveys Division.

- Official co-ordinate.
- A mechanism for the lead agency to ascribe Unique Parcel Reference Numbers (UPRNs).
- Mechanisms for keeping land information up to date.

CONCLUSION

The staff complement to be hired under the ALDP for the purpose of regularising/ distributing the agricultural lands for all intents and purposes seem to be surplus to requirements to achieve the targets of the Programme. However, the Programme is late and perhaps the acquisition of the surplus staff may get the process moving faster. The Distribution Co-ordinator and Director of Land Administration Division should be careful not to hire staff if the purpose of so doing does not accelerate the distribution/ regularisation programme.

Under the proposed ASIP procedures, as with the ALDP procedures, the largest complement of person months required is for Land Surveyors. If leases were given to farmers without first conducting a survey the entire process would be much faster. This, however, is contrary to current Government policy. A particular effort should, therefore, be made to find mechanisms for speeding up the process of surveying the land prior to regularisation/distribution. Experience in other countries, such as Belize, has indicated that the use of Global Positioning System techniques (in conjunction with more traditional surveying methods) can significantly accelerate the time taken to undertake a survey, and hence significantly reduce the overall cost.

The overall cost calculated to distribute the parcels of agricultural land under the proposed ASIP procedures is conservatively estimated at \$1,512 per parcel. This cost per parcel will fall substantially if the person hired specifically for the process work faster than their current counterparts. This should be expected as the new contracted employees will be working solely on the regularisation/ distribution process and throughputs will be significantly faster.