School Infrastructure Planning



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Trinidad and Tobago



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Where are we? Who are we?

- The country of Trinidad and Tobago comprises the two Southernmost islands of the Caribbean
- Population I.3 million, (96% Trinidad, 4% Tobago)
- The population growth rate is 0.27 percent per annum.
- Our population is a mixture of East Indians 40.3%, Africans 39.5%, Mixed Race 18.4%, Chinese 1.2%, Euro-Trinidadians 1.2%, Syrian/Lebanese 1.2 %
- The official language is English

Our school system – Overview

Level	Age	Enrolled No. Public Schools			No.
		Population	Government	Gov't Assisted*	Private Schools
ECCE	3-4	32,323	90	122	677
Primary	5-11	140,831	150	327	56
Secondary	12-16/18	86,835	91	43	40
Tertiary	18+	60,901	7	-	60

• *20 Denominational Boards

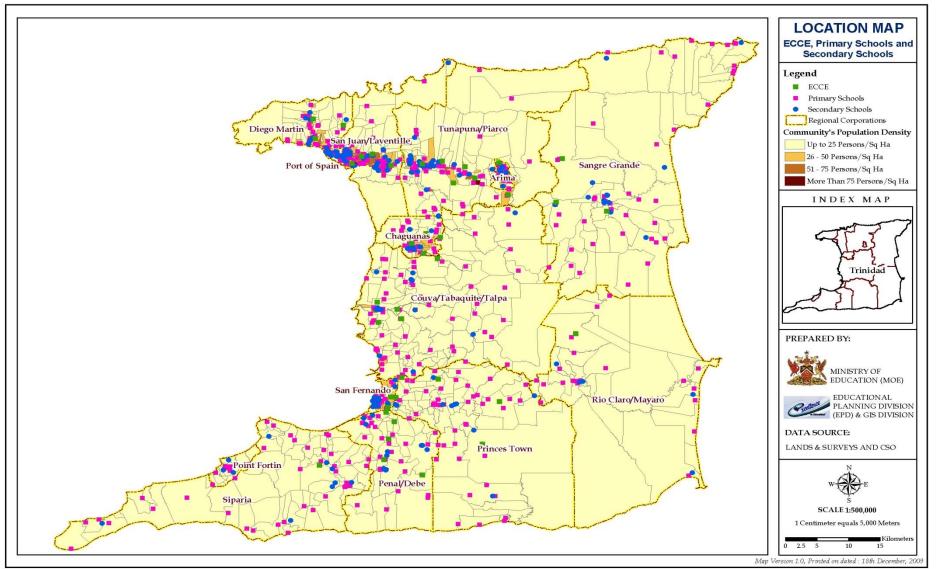
Class Size:

- Secondary 35
- Primary 30;
- ECCE 15 per teacher

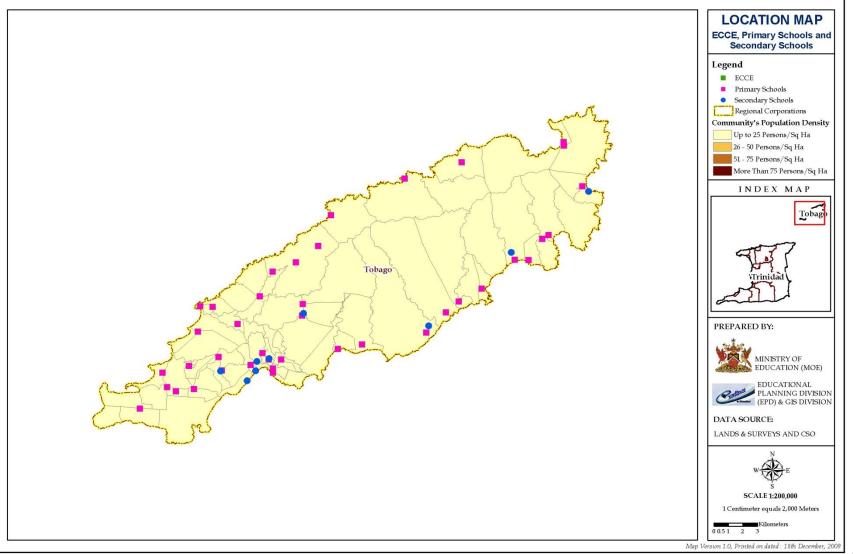
Space per student

ECCE 2.1 m²; Primary 1.25m²; Secondary 1.5 m²

Distribution of Schools in Trinidad



Distribution of Schools in Tobago



Triggers for Current Infrastructure Needs

- Educational reform requiring infrastructural changes
 - Social programmes (eg School Nutrition)
 - Curriculum based reforms
 - Professional development
 - Push toward universal quality ECCE

Demographic Issues

- Population reductions leading to conversion of rooms, followed by population increases
- Internal Migration

• Economic Changes

 Spiralling cost of construction has coupled with the global economic downturn leading to a reduction in the spending power of the Government

Triggers for current Infrastructure needs

Social Changes

- Gang warfare manifested through community polarization
- Parent perception/ freedom of choice
- Centralization of workforce
- Immigration

Age of Plant

- 60 % Primary > 50 years old
- 36% Secondary > 50 years old

Steps in the School Infrastructure Planning Process

- Identification of need by the Board or by MOE
 EFPPD, EPD, ECCE, SSMD
- Site Identification
- Costing
- Cabinet Approval
- Inclusion in Draft Estimates by Min. Planning
- To EFCL for the remaining activities from Tendering to Outfitting
- Stakeholder consultation may take place at the site selection and design stages

Considerations for Planning School Infrastructure - Site Identification

- Replacement Schools:
 - Demographic population, capacity
 - Geographic plot size, other factors
 - Denominational Boards
- New schools:
 - Acreage
 - Topography
 - Drainage
 - Nodality
 - Demographics

- Accessibility
- Services
- Status of ownership
- Community Concerns
- BNI (IDB ECCE)

Considerations for Planning School Infrastructure - Architects Brief

- Curricular requirements/ delivery
- Best Practice
- Adaptability & Flexibility
- Organization & Management: noise, weather, access, pest control
- Safety & Security
- Sustainability and environmental design
- Access and inclusion requirements
- Gross and net area standards (Spatial)
- Community usage

Approval and Funding

Approval must be sought from the Cabinet for the MOE Construction Programme

 Inclusion of the schools in the Draft Estimates of Expenditure Ministry of Finance is a signal that the individual project can commence

- Despite the above readiness will dictate start-up of construction
- These steps must be followed even if there is international funding
- Foreign loans come with additional requirements pre and post construction



Annual Allocation for Construction

	Level	2013/14 \$TT Mn	2014/15 \$TT Mn	2015/16 \$TTMn
E	CCE	24.00	109.04	110.00
P	rimary	415.69	327.43	145.20
S	econdary	259.27	179.27	130.00

Management of Construction Role of the Education Facilities Co. Ltd. **Tendering** - bidding procedure to engage the services of consultants (architects and engineers) to prepare the plans and budget for the project; and Award Designs - Some stakeholders internal to the MoE are consulted before designs are finalized • Currently schools are designed as follows: • ECCE - Prototypes Primary - Design /Build Secondary – 2 Bidding processes for Designs and

Construction

Management of Construction

Role of the Education Facilities Co. Ltd.

- Construction Services
- Project Management
- Outfitting
- Getting Statutory Approvals

(e.g. engineering, structural designs, drainage) from various agencies (Town and Country Planning, MoH, WASA, TTEC,).

Current Projects at varying stages of construction

Level	Projects at varying	Projects to continue this
	stages	year
ECCE (MOE)	47	9
ECCE (former	26	13
IDB		
Primary	54	10
Secondary	13	I
(Construction)		
Secondary	12	
(Blocks)		

Issues affecting Scheduling, Rationalization and Completion of Construction Projects

- Financial
- Political
- Socio Political
- Geographical

Areas for improvement re: Construction

- Project Scheduling
- Stakeholder Engagement
- Timeliness Projects may take several years to complete:
 - Approval, Land Acquisition, Construction
- Cost
 - ECCE (\$10-14 Mn);
 - Primary (\$20-75Mn)
 - Secondary (\$120-200Mn)
- Project Management

Maintenance & Repairs

- Affected mainly by the age of the plant and wear and tear
- Projects addressed on the basis of need
- No organised maintenance programme
- Funds allocated in Block Votes per school level, not school by school.
- The EFCL is also responsible for tendering, award and project management for Maintenance & Repairs

Old Hall Type School with Blackboard Dividers





New Primary Classroom







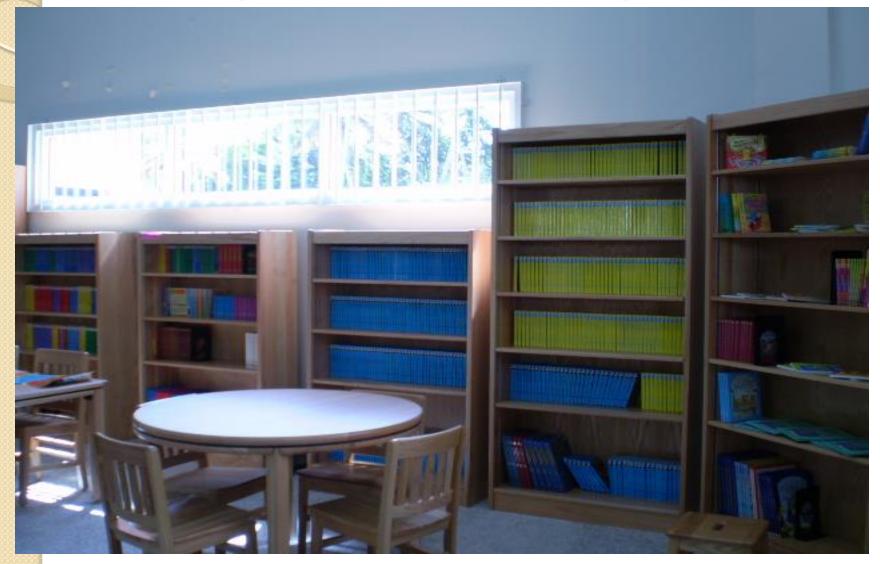
ECCE Kitchen Area – Learn Through Play



MOE New Schools Supplement

• See Supplement for pictures <u>MOE New</u> <u>Schools Supplement (web version) lisa.pdf</u>

Library in New Primary School



Dedicated space for the National Instrument



Students at the formal opening of their new school



Their new school



Refurbished School

