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(C.P.S.P.S.)

SCHOOL REGROUPING PROJECT
MASTER PLAN
VOLUME 1 : MAIN REPORT

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ألمقدمـــة

يشتهر اللبنانيون باقبالهم منذ القديم على العلم والمعرفة بشغف كبير و نسبة مميزة ومتنامية. واثر الحرب العالمية الأولى انتظم التحصيل العلمي في قطاع حكومي الى جانب القطاع الخاص، وراح يزدهر ويصيب رواجا مشهودا وشمولية متزايدة بحيث راحت المدارس تنتشر في اصقاع البلاد بسهولة كبيرة وبترحيب من الاهلين حماسي.

وما لبثت الدولة ان وعت دورها المميز ومسؤوليتها الراجحة في هذا القطاع، فراحت، خاصة بعد الاستقلال، تستجيب بسهولة نسبية لمطالبات المواطنين فتنشئ المدارس بأعداد متزايدة وتعمل اجمالا في وحي من اجبارية وشمولية التعليم وانطلاقا من كونها هي المسؤول الاول عن تأمين العلم، تحثها باستمرار الضغوط الشعبية والمراجعات السياسية، بحيث ازدهر قطاع التعليم الرسمي بشكل مدهش بعد العام ١٩٤٣.

غير ان قطار الازدهار والنمو انطلق مسرعا قبل اي تخطيط، مستبقا كل استراتيجية او برنامج عمل، فكانت تدفعه روح الفروسية الابوية غالبا والاستجابة العشوائية مرارا، مما اثار، الى جانب الترحيب، مشاكل متعددة ومتنوعة وحادة وتسبب بشكاوى عارمة من الاهلين والادارة على حد سواء. وقد تمحورت هذه الشكاوى في أواخر الخمسينات وخلال الستينات حول ما يلي خاصة مما ابتلي به القطاع التعليمي الرسمي:

١ – سوء في التوزيع الجغرافي للمدارس.

٢ – تقصير المدارس المتوافرة عن تلبية حاجات وطلبات الدساكر حيث هي قائمة.

٣ – قلة المدارس الرسمية والمؤسسات التعليمية في مناطق معينة.

٤ – عدم ملاءمة الموقع لعدد كبير من المدارس.

– عدم كفاية التجهيزات والمساحات لاغلب المدارس التي كانت تقوم في دور معدة للسكن اصلا ومستأجرة من الدولة.

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وعت الدولة هذه المشاكل فأوعزت اعتبارا من العام ١٩٦٨ باجراء دراسات جدية حول الوضع التعليمي الرسمي والخاص في جميع أنحاء البلاد. وقد جاءت الدراسات دقيقة وشاملة ومبنية على معطيات احصائية، وخلصت الى مقترحات مسندة اتفق على رصفها تحت عنوان "تجميع المدارس الرسمية". اعتمدت الدولة هذا المشروع، وأقرت بجدواه بعثات اليونسكو والبنك الدولي للانماء والتعمير، كما وافق البنك الدولي على تمويل بناء وتجهيز مجموعة اولى من مدارس المشروع. وبالواقع طرحت الدولة على التلزيم صفقة لانشاء وتجهيز ٦٣ مدرسة ابتدائية ومتوسطة في الربع الاول من العام ١٩٧٥ وقد رسا الالتزام مؤقتا على جهة معينة ورفع الملف الى مجلس الوزراء لتصديق الصفقة. سوى ان الاحداث الحربية المؤلمة حالت دون ان يتخذ مجلس الوزراء قراره فألحدت الصفقة.

وبفعل الاعمال الحربية التي تتالت في البلاد منذ العام ١٩٧٥، منى القطاع التعليمي الرسمي باعاقات جسيمة وأضرار اضافية تلامس الكارثة في بعض الحالات. فاحتلت مدارس، وتهدم غيرها، وأقفر سواها، وتشتت أكثر المعلمين، وسلبت او تلفت أغلب التجهيزات، وزر الفرز الطائفي قرنه، وتعهد التعليم، حيث امكن ذلك، مدرسون غير كفوئين ولا هم مواظبون الخ...الخ...، فاضحى الوضع اليوم اسوأ مما كان عليه عشية العام ١٩٧٥ عندما استنهضت الهمم افضلها والقدرات اعظمها لوضع التعليم الرسمي في المستوى العلمي والعالمي الذي يعينه على بلوغ الاهداف المحددة له. وللدلالة على حرج الوضع الحالي المتمادي حتى بعد توقف الاعمال الحربية، نورد ملاحظة احصائية واحدة:

كان القطاع الرسمي عشية العام ١٩٧٥ يغطي ٤٠٪ من عدد التلامذة في المراحل ما قبل الجامعية، وكان القطاع الخاص آنذاك يغطي الرصيد اي ٦٠٪ . أما اليوم فان نصيب القطاع الرسمي تدنى الى نسبة تتراوح ما بين ٢٠٪ و. ٣٠ %

وخلال الحقبة التي شهدت في لبنان تراجع وتقهقر التعليم الرسمي وغياب التوجيه عنه وحرمانه مما يساعده على اعداد رجال لمستقبل يتجدد ويتبدل بسرعة المفاجآت، تتلاحق وترصد المستجدات وترسى الضوابط والثوابت كأن يعتبر الانفاق على التربية والتعليم توظيفا مثمرا ومميزا في مجال تنشيط الاقتصاد الوطني. وكذلك اتفق العالم المتحضر في هذه الاثناء على ان تنظيم التعليم وتفريعه الى اختصاصات ومهارات وتوسيع دائرته لتشمل التعليم المستمر واعادة التأهيل، انما تقتضيه التطورات الحديثة الاجتماعية والديموغرافية والمادية وتستوجبه بالتالي حتمية مواجهة الاثقال الاجتماعية والاقتصادية الضاغطة. فعلى العلم ان يأتي في محتوى واشكال وانماط واساليب تجعله يسهم على السواء ان في رفع المستوى الشخصي للفرد وان في تلبية حاجات المجتمع وان في تنشيط او توجيه الاقتصاد والعمل. وهكذا اتسعت الهوة اليوم بين ما نحن عليه وما تقتضي التحديات أن نكون فيه.

وبالاضافة الى وجوب لحاقنا بالعالم بسرعة تعوض عن الجمود الذي فرضته علينا سنوات الحرب، فان في بلادنا اسبابا اضافية وخاصة به تجعل من النهوض بالتعليم الرسمي واجبا ملحا جدا وذا افضلية مطلقة:

١ - ذلك ان كلفة التعليم الخاص المتنامي والمزدهر يوما عن يوم مرتفعة جدا وهي ترهق اكثر فأكثر اولياء التلامذة بما لا طاقة لاكثريتهم الساحقة على تحمله.

٢ - كما ان المدرسة الرسمية مكان مختار للتنشئة الوطنية وللتعارف ولاعادة الوحدة بين فصائل الاجيال الطالعة التي باعدت الحرب بينها الى حد الفصم.

٣ - هذا وان طلب العلم تسبب بهجرة الارياف ومواطن الاهلين الى حيث المدارس ذات المستوى اللائق، وهي تتجمع اليوم عمليا في المدن او الدساكر الكبرى. ولبنان بأمس الحاجة الى مساعدة مواطنيه على البقاء في قراهم وبلداتهم كي يسهموا في انعاش الريف ويوفروا على المدائن او ما هو في حكمها المشاكل الاجتماعية والسكنية والانسانية والكلفة المالية الثقيلة مما يقتضيه النزوح السكاني الكبير الى هذه المدائن المتورمة.

٤ - ولا بأس اذا لاحظنا حسنة اضافية للمدرسة الرسمية المشيدة اصولا في المركز المناسب. فهي، بعديد تلامذتها ومدرسيها وبحاجاتها الى الصيانة، تنعش اقتصاد محيطها وترفع من مستوى مهاراته وانشطته.

ان ما تقدم من أسباب موجزة يجعل تنظيم التعليم في لبنان اليوم يتسم بالاولوية الملحة والمفيدة. وكي يكون التنظيم علميا يفي بالغاية المرجوة، يجب ان يتم في الاطر العامة الآتية:

١ - ضبط احصائي لعدد التلامذة كي تتحدد الحاجة الى المدارس بضوء الارقام الصحيحة مع احتساب تطورها المستقبلي، وتبعا للمعطيات الجغرافية ولوسائل المواصلات.

٢ - تركيز المدارس في امكنة الاستقطاب المناسبة، فيوضع مخطط توجيهي يشمل كل أنحاء البلاد.

٣ - درس ووضع مخطط ونظام لنقل التلامذة الى المدرسة حيث يكون ذلك ضروريا. وهذا ما يساعد على تجنب انشاء المدارس المحلية الصغيرة التي لا فائدة منها سوى قربها من التلميذ. لقد آن الاوان لان يتشبه القطاع التعليمي الرسمي بالقطاع التعليمي الخاص في هذا المجال فيعتمد شبكة نقل م-هلة لايصال التلامذة الى المدرسة. اما توزيع كلفة النقل فيتم درسها عند الاقتضاء.

٤ - ايلاء التعليم المهني واعتباره معادلا وموازيا للتعليم الاكاديمي، بحيث يكون الهدف الوصول، بعد حقبة يتم تحديدها، الى توزيع التلامذة بشكل متوازن بين التعليم الاكاديمي والتعليم المهني. كما ويدرس في حينه المستوى الذي عنده يتم الافتراق. انما هذا النهج يستدعي نشاطا اعلاميا وتوجيهيا موثوقا يسعى الى ازالة الازدراء بالمهارات التقنية وبالمهن اليدوية.

٥ - اعتماد خيار "المدرسة الشاملة" اي التي تضم التعليمين الاكاديمي والمهني في بناء واحد ومساحة واحدة وعلى مستوى علمي وتعاملي واحد.

٦ - استخراج المدارس القائمة حاليا والتي تتوافق مع المخطط المعتمد، والعمل عند الحاجة على ترميمها وتجهيزها ورفعها الى المستوى والتنوع المقررين. اما المدارس الفائضة او التي لا جدوى منها فتحذف وينقل تلامذتها ومعلموها الى مركز الاستقطاب المناسب. وكذلك القول عن دور المعلمين.

٧ - وضع نموذج وحدوي لكل نوع من المدارس وتقدير الكلفة اللازمة التي تشملها الخطة.

كانت في العالم

٨ - تحديد دور المعلمين الضرورية واعتبار انشائها وتنميتها متلازما ومتزامنا مع بناء المدارس، بحيث يكون التخريج منها كافيا لتوفير معلمين لتلامذة المدارس التي ستفتتح.

٩ - وختاما، يجب بالطبع برمجة صفقات الترميم والتجهيز والانشاء، اي وضع الاولويات. ان هذه البرمجة عمل سياسي بالنهاية. انما واذا سئلنا رأينا، فنرى ان تراعى المناطق بالتساوي كي يكون النهوض لفائدة الجميع في آن وكي يشهد المواطنون كلهم و معا لهذا العمل الجبار والاساسي.

2

INTRODUCTION, BACKGROUND & TERMS OF REFERENCE

2.1 - INTRODUCTION

This study was commissioned by the C.D.R. in order to prepare an overall Master Plan, feasibility study, implementation proposals, design criteria and design standards for the future development of the Public pre-university general education system in Lebanon.

This document presents the Consultant's main findings based on a presently adopted set of basic assumptions. These have evolved significantly from those adopted at the beginning of this Study following discussions with members of the World Bank Education Mission to Lebanon under the leadership of Mr. H. Sederlof, and in the light of comments received from members of the Board of Educators which was formed by the C.D.R. in February 1994 for the purpose of this Study as well as following repeated testing and fine-tuning throughout the life-span of the Project. The final set of basic assumptions is presented below.

The objectives contained in the Terms of Reference document formed the basis for the work undertaken for this Project. The primary aim is to produce a Master Plan for the Lebanese School Regrouping Project to rationalize a development strategy for the pre-university educational system in the country and maximize its functional potential, taking into consideration all constraints and opportunities vis-a-vis prevailing demographic, social, economic, educational and "political" parameters. The said Master Plan consists of a composite document containing a series of plans, development proposals, design criteria, phasing and implementation proposals, supported by a narrative report. This document shall act as the main controlling mechanism for the physical distribution, design, development, short and long range planning for the Project as a whole.

Existing conditions and demographic characteristics of the Country are largely expected to dictate the potential, scope and nature of the overall Master Plan. An important aspect of the Project, therefore, is to fully assess prevailing provisions in terms of available facilities as well as the geographic distribution of populations.

Design criteria and requirements for the future educational facilities are included as well as a series of architectural design briefs for use in separate follow-on detailed design and implementation projects.

To undertake this Project we have therefore perceived and met the requirements for a multi-disciplinary scientific and engineering approach with a specialist bias towards facility and analytical planning and design of educational facilities. Our methodology and project organization reflect this approach.

2.2 - BACKGROUND AND TERMS OF REFERENCE

Expenditure for education and schooling has always been regarded in developed societies as a major and important element of investment in the national economy with many positive multiplier effects on all other sectors of the national economy and at many levels. This is particularly true of the Lebanon

where the educational sector has and still witness many problems and shortcomings especially following 17 years of devastating war.

From the start, at the turn of the 19th century, it was the private education sector which took the lead whereas, and for reasons too many to mention here, the public sector always lacked behind. This disparity between the private and public educational sectors was further compounded through the war years, as a result of which many of the existing public education facilities were completely or partially destroyed. Furthermore, the war resulted in an unbalanced status-quo vis-a-vis the geographic distribution of populations in the country and the corresponding distribution of facilities.

In support of the above, statistical figures indicate that whilst the public schooling sector provided for about 40% of the total pre-university educational demand in the country before the war, its contribution shrank to between 20 and 30 per cent of total demand. Furthermore, these figures show the un-equitable distribution of public sector provisions: the Greater Beirut area, for example, includes only 20% of the total number of public schooling seats, whereas it contains over 40% of the total population of the country. Similar examples are found in a number of other regions of the country.

Whilst, at present, the private educational sector is to some extent, filling the gap left by the shortcomings of the public sector, the provision of public education has acquired a major importance and has become a prime necessity, both from the social and economic points of views, especially after the drastic and rapid decline in the national per capita income of recent years. As a result, a good quality, at least semi-free public school has become, in addition to its major role in national unification and integration, a crucial socio-economic necessity in order to relieve the average citizen of some of the pressures of daily life. Alternatively, we can expect a rapid increase in the numbers of uneducated youth and, as a result, a decline in the quality of the future labor force with all what this implies in terms of negative repercussions on the national economy.

On the other hand, a school building program on a national scale, in addition to above benefits, shall have an important beneficial effect on the national economic activity in terms of generation of economic activity and employment. In addition, new school building can be used as a means for upgrading and encouraging regional and rural growth and development.

With the above in mind, this study aimed at achieving two main objectives:

1 - To upgrade the current public education sector. This is to be achieved in two ways :

  i - Improve the quality of facilities in terms of school buildings and their fittings. We see this objective to be of major importance in order to overcome the stereotype attitude prevailing in this country vis-a-vis the public school which is often regarded as inferior to that of the private sector. Only by up-lifting the image of the public school can we expect the public education sector to attract an increasing proportion of the schooling population.

  ii - Increase the level of provision in terms of total number of seats available in the public sector for a greater portion of the population. Again this objective acquires a significant importance in view of the unbalanced status-quo vis-a-vis the geographic distribution of population in the country and the corresponding distribution of facilities.

2 - To achieve an equitable distribution of schooling facilities amongst Caza and their sub-areas irrespective of private sector provision. The reason for this latter qualification is that we believe that we cannot compare paying private sector provision with free public sector schools. Added to this are the problems associated with any attempt at quantifying "actual need" for public schools, namely the issue of "latent need" -i.e. how many of those who are currently paying for this education can actually afford it. The problematic nature of this issue is further compounded by the lack of reliable statistics in this country relative to socio-economic conditions such as income, family size, etc. For phasing purposes, an attempt have been made, however, to assess actual need using proxi-indicators for average income based on prevailing land-uses and sources of employment as well as available private sector provision.

Accordingly, and taking into consideration all constraints and opportunities vis-a-vis prevailing and anticipated economic and political parameters, and in close coordination with Government adopted policies and commitments namely those embodied in the "Horizon 2000" plan (an overall policy framework adopted by the current Government for national development

over the coming decade), two quantitative goals were elaborated for the purpose of this study :

i - Achieve an overall capacity of 600,000 students in the public education sector by the year 2005, and

ii - In view of the prevailing and near future anticipated fiscal situation in the country, attempt to achieve future provisions with an average gross area per student of between 4.5 and 5 sq. meters.

Adoption of these two goals implies the following general qualifications :

1 - By the year 2005 the public education sector would not only have more than doubled its overall capacity from the current 240,000 school seats to 600,000, but some 140,000 existing seats in over 800 existing but unfit schools (based on an exhaustive field survey of all existing schools) would also have been replaced by new schools.

2 - Attempting to achieve future provisions with an average of 4.5 to 5 sq. meters per student necessarily implies a bias towards larger, more space efficient schools.

Finally, and in order to achieve the above goals and objectives, a set of basic assumptions and planning parameters were adopted for the purpose of this study. These are listed on the following pages.

2.3 - BASIC ASSUMPTIONS

Public School Population Target (Year 2005): 600,000 students
500,000 in new schools
100,000 in upgraded retained existing schools

Total Population Estimate (Year 2005) : 5,100,000

Estimated Schooling Demand (Year 2005) : 1,300,000

Level of Provision Target : 40 %

Estimated Level of Drop-Out :
Elementary : 0 %
Complementary : 10 %
Secondary : 40 %

Average Area/Student Target : 4 to 5 sq. meters

Cost Target :
325 $/sq.m. (New schools construction)
200 $/student (New schools furnishing)
250 $/student (Existing schools upgrading)

Maximum Travel Distance to School :
Elementary : 10 minutes
Complementary : 15 minutes
Secondary : 30 minutes

Study Unit :
Caza
Caza sub-areas

Ultimate Provision Level : Equity between Caza relative to population
(Irrespective of private sector supply)

Phasing :
Phase 1 - Priority (2 years)
(Around 100,000 new students according to estimate of need and priority)
Phase 2 - Parity between Caza (2 years)
(Around 100,000 new students)
Phase 3 - Satisfaction level (3 years)
(Around 150,000 new students thus achieving a total capacity 500,000 students by 2002 with partial phasing-out of existing unfit schools)
Phase 4 - Ultimate level (3 years)
(Total capacity of 600,000 students by 2005 with complete phasing-out of existing rented schools)

Other assumptions :

- That vocational education should be treated on equal grounds as academic education aiming at reaching an optimum distribution of future numbers of students amongst both types of education.
- Adopt the "Comprehensive School" approach, whereby both para-technical and academic education are provided equally in the same school.
- Adopt the "Unified School" approach, whereby elementary, complementary and secondary teaching are provided in the same complex while retaining independent administrations.

- Only state owned existing facilities are to be comprehensively rehabilitated and retained in the program of future facilities. The remaining existing facilities should ultimately be phased out.
- Teacher Training centers shall form an integral part of the future facilities program.
- Future facilities are to be provided in the form of four sizes of schools according to local demand.
- Each and every locality or group of localities with a total population exceeding 2,500 should have at least one pre-elementary/elementary school.
- Each and every locality or group of localities with a total population exceeding 4,000 should have at least one complementary school.
- Each and every locality or group of localities with a total population exceeding 6,500 should have at least one secondary school.
- Each "Strategic Area" within each caza should, if demand justifies, have at least one comprehensive school.
- Each caza should have at least one teacher training center.

2.4 - PLANNING FACTORS

Average Growth Rate :	**2.3%**
1995 Population :	**4,075,000**
2002 Population :	**4,748,000**
2005 Population :	**5,089,000**
Pre-Elementary schooling population :	**1.15% of total**
Elementary schooling population :	**13.75% of total**
Complementary schooling population :	**7.75% of total**
Secondary schooling population :	**3.71% of total**
School sizes :	**Small = 210 students**
	(280 students Complementary)
	Medium = 420 students
	Large = 840 students
	Extra Large = 1260 students

Gross Area Per Student

CYCLE	SCHOOL SIZE			
	Small	Medium	Large	X'Large
Elementary	6.69	4.87	3.78	3.49
Complementary	5.75	4.91	4.09	3.82
Secondary	7.05	4.98	4.09	3.82

Plot Size

Nb. of Students	PLOT SIZE	
	Minimum	Maximum
Up to 280	3,000	5,000
Up to 700	7,000	10,000
Up to 1260	12,000	15,000
Each Additional 210	1,800	2,400

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iv - **Mr. G. TAHER**, Advisor to the Prime Minister, for his kind support and sound advise.

v - **The 1983 "School Regrouping Project" Team**, whose initial Study formed the sound base for this Project.

vi - **The World Bank Education Mission** under the leadership of **Mr. H. SEDERLOF** who contributed significantly towards the fine-tuning of the Study.

vii - Members of the Panel of Educators which was formed following a presentation meeting held at the C.D.R. in February 1994 concerning the methodology, basic assumptions and planning parameters adopted for the Project, especially those who contributed effectively, namely:

- **His Excellency Dr. N. MAALOUF**, Mohafez of Beirut
- **Dr. M. BASHUR**, Head of Education dept, AUB
- **Dr. A. YOUNIS**, C.E.R.D.
- **Mr. A. W. SHMAITILLI**
- **Dr. K. ABOU RJEILY**

viii - Area Representatives and other educational responsibles from the Ministry of Education with whom a series of seminars was held over a period of three weeks in order to confirm demand and enrollment, existing facilities conditions and characteristics, catchment area delineation and designation of strategic centers, socio-economic characteristics of local communities and special cases. Namely:

- **Mr. S. EL MOHTAR**, Head of Dept
- **Miss N. SHEHAB**
- **Mr. M. SAIKALI**, Head of Section, Bekaa
- **Dr. R. SAADEH**, Head of Section, South
- **Mr. W. DENNAWI**, Head of Section, North
- **Mr. G. ASTOUN**, Head of Section, Mt Lebanon
- **Mr. H. DAHER**, General Supervisor, Mt Lebanon
- **Mr. R. EL LAHAM**, Area Resp. Aaley
- **Mr. A. EL KHATIB**, Area Resp. Baabda
- **Mr. H. ISSA**, Area Resp. Baabda
- **Mr. A. DABAJI**, Area Resp. Baabda

- **Miss A. BOUTROS**, Area Resp. Baabda
- **Mr. F. SROUR**, Area Resp. Jbail
- **Mr. G. ZIADEH**, Area Resp. Kesrouan
- **Mr. A. ZARAZIR**, Area Resp. Metn
- **Mr. S. NASR**, Area Resp. Shouf
- **Mr. G. FOUAZ**, Area Resp. Shouf
- **Mr. W. AL TANNIR**, Head of Section, Beirut
- **Mr. N. EL JAMMAL**, Head of Dept, Secondary Education

ix - From the Center of Educational Research and Development C.E.R.D.:

- **Dr. G. MURR**, President
- **Dr. Y. SADER**
- **Dr. M. YAGHI**
- **Mr. G. YOUNAN**

for their cooperation and assistance.

4

EXECUTIVE SUMMARY

NATIONAL SUMMARY

LEBANON

Average Growth Rate :	**2.3%**
2002 Population :	**4,747,839**
2005 Population :	**5,088,860**
Pre-Elementary schooling population :	**1.15% of total**
Elementary schooling population :	**13.75% of total**
Complementary schooling population :	**7.75% of total**
Secondary schooling population :	**3.71% of total**

1 - POPULATION ESTIMATES

MOHAFAZAT	YEAR	
	2002	2005
BEIRUT	641,323	650,260
MOUNT LEBANON	1,569,070	1,653,750
NORTH LEBANON	1,032,456	1,126,350
SOUTH LEBANON	891,481	991,670
BEKAA	613,509	666,830
TOTAL	4,747,839	5,088,860

2 - SCHOOLING POPULATION

MOHAFAZAT	ESTIMATED TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					EXISTING PUBLIC CAPACITY(State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BEIRUT	4,940	59,270	34,830	19,200	**118,240**	0/11,160	0/9,160	0/5,450	**0/25,770**
MOUNT LEBANON	18,500	221,950	121,980	60,410	**422,840**	6,570/26,350	6,640/21,630	2,100/10,400	**15,310/58,380**
NORTH LEBANON	14,020	168,250	96,250	46,850	**325,370**	7,790/43,510	4,190/16,760	840/6,100	**12,820/66,370**
SOUTH LEBANON	12,790	153,470	86,580	38,050	**290,890**	20,470/25,730	8,750/13,350	2,010/4,840	**31,230/43,920**
BEKAA	8,060	96,780	54,540	24,100	**183,480**	12,240/19,490	5,670/8,920	1,220/2,460	**19,130/30,870**
TOTAL	58,310	699,720	394,180	188,610	1,340,820	47,070/126,240	25,250/69,820	6,170/29,250	78,490/225,310

NATIONAL SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS BY 2002 & 2005

MOHAFAZAT	EXISTING CAPACITY (To be retained after upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR							
					BY THE YEAR 2002				BY THE YEAR 2005			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BEIRUT					12,180	8,820	6,300	**27,300**	17,640	15,120	7,560	**40,320**
MOUNT LEBANON	16,800	2,660	2,730	**22,190**	52,920	46,480	21,000	**120,400**	76,020	63,140	25,410	**164,570**
NORTH LEBANON	16,380	4,620	210	**21,210**	43,890	36,540	14,070	**94,500**	63,630	50,400	17,850	**131,880**
SOUTH LEBANON	43,050	8,540	1,890	**53,480**	26,880	30,520	11,970	**69,370**	38,430	41,020	13,440	**92,890**
BEKAA	20,370	5,600	1,470	**27,440**	18,690	20,020	7,770	**46,480**	27,090	23,240	8,400	**58,730**
TOTAL	**96,600**	**21,420**	**6,300**	**124,320**	**154,560**	**142,380**	**61,110**	**358,050**	**222,810**	**192,920**	**72,660**	**488,390**

4.A - ADDITIONAL NUMBER OF SCHOOLS REQUIRED BY 2002

MOHAFAZAT	TOTAL NUMBER OF SCHOOLS														
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
BEIRUT			4	7	**11**		1	4	4	**9**		3	3	2	**8**
MOUNT LEBANON	84	22	10	14	**130**	88	24	5	6	**123**	40	14	5	2	**61**
NORTH LEBANON	73	34	8	6	**121**	57	25	6	4	**92**	21	19	2		**42**
SOUTH LEBANON	42	14	13	1	**70**	58	32	1		**91**	39	9			**48**
BEKAA	51	9	2	2	**64**	46	6	4	1	**57**	19	5	2		**26**
TOTAL	**250**	**79**	**37**	**30**	**396**	**249**	**88**	**20**	**15**	**372**	**119**	**50**	**12**	**4**	**185**

4.B - ADDITIONAL NUMBER OF SCHOOLS REQUIRED BY 2005

MOHAFAZAT	TOTAL NUMBER OF SCHOOLS														
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
BEIRUT		1	10	7	**18**		2	8	6	**16**		4	4	2	**10**
MOUNT LEBANON	126	31	12	21	**190**	116	33	8	8	**165**	43	18	6	3	**70**
NORTH LEBANON	103	40	12	12	**167**	72	28	10	8	**118**	23	23	4		**50**
SOUTH LEBANON	49	20	19	3	**91**	76	41	3		**120**	42	11			**53**
BEKAA	73	13	3	3	**92**	53	9	4	1	**67**	22	5	2		**29**
TOTAL	**351**	**105**	**56**	**46**	**558**	**317**	**113**	**33**	**23**	**486**	**130**	**61**	**16**	**5**	**212**

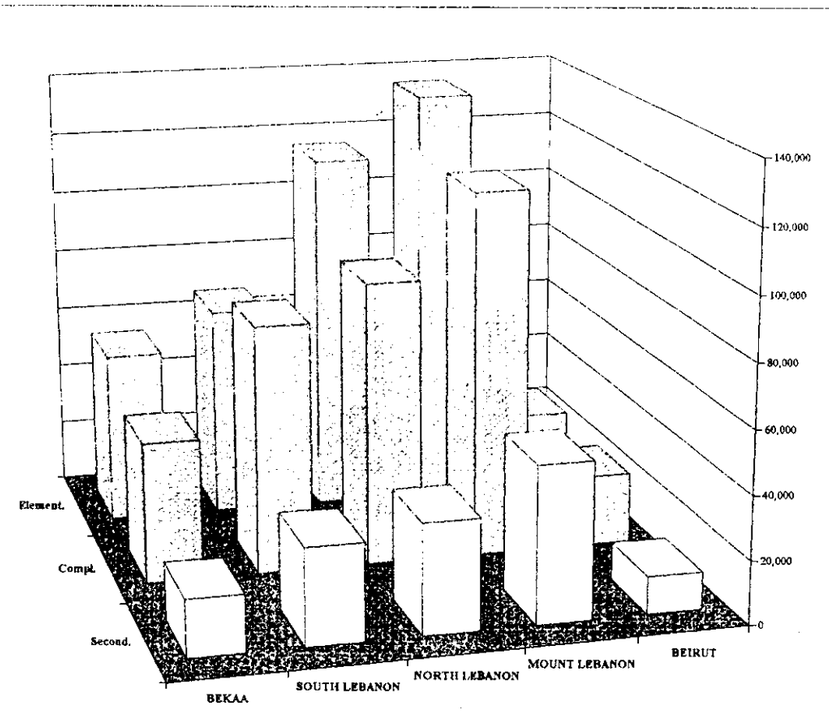
NATIONAL SUMMARY (cont.)

5.A - BUDGET (2002)

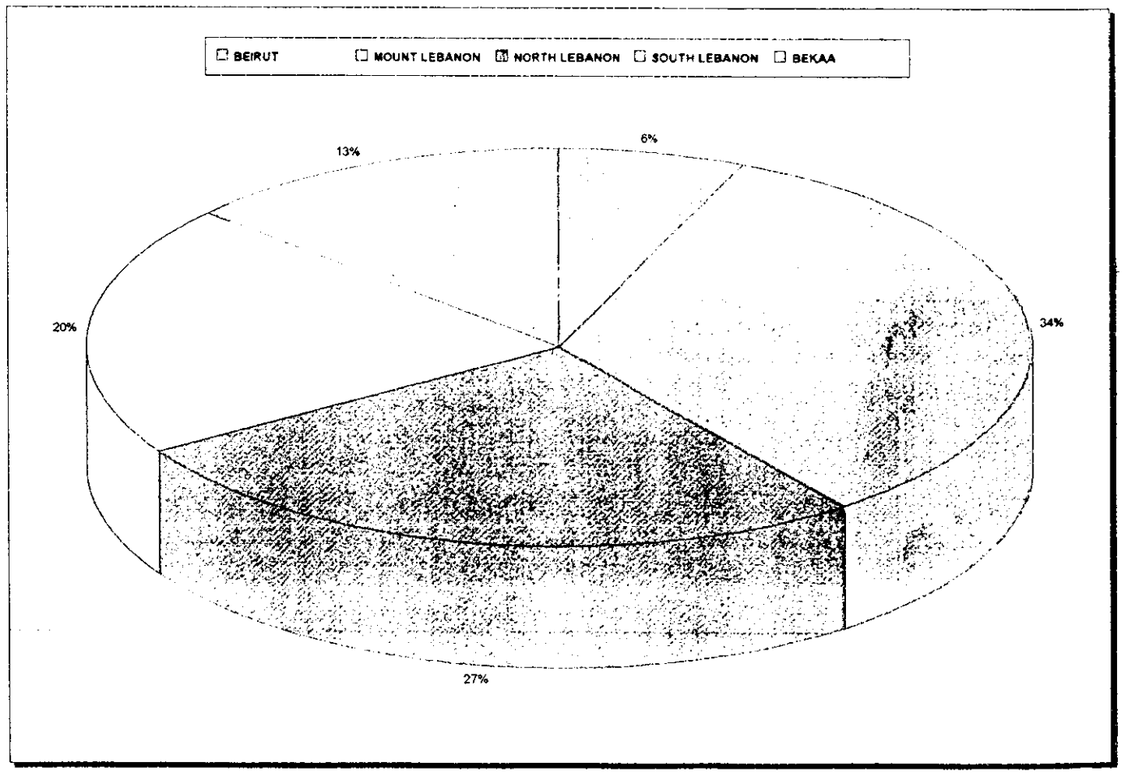
MOHAFAZAT	NEW SCHOOLS							TOTAL NEW (Incl. Eng.) (1000's$)	UPGRADING (Retained Sch.) (1000's $)	OVERALL TOTAL (1000's $)
	SQUARE METERS				TOTAL COST IN $ (1000's)					
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
BEIRUT	43,523	35,098	26,226	**104,847**	16,581	13,171	9,783	**41,512**		**41,512**
MOUNT LEBANON	256,354	237,390	115,299	**609,043**	93,899	86,448	41,672	**233,120**	**4,462**	**237,582**
NORTH LEBANON	223,897	183,319	77,667	**484,883**	81,544	66,887	28,056	**185,311**	**4,265**	**189,576**
SOUTH LEBANON	133,332	162,901	76,535	**372,768**	48,709	59,047	27,268	**141,775**	**10,755**	**152,529**
BEKAA	105,179	105,055	45,451	**255,685**	37,921	38,147	16,326	**97,013**	**5,518**	**102,531**
TOTAL	**762,285**	**723,763**	**341,178**	**1,827,226**	**278,654**	**263,699**	**123,105**	**698,731**	**25,000**	**723,731**

5.B - BUDGET (2005)

MOHAFAZAT	NEW SCHOOLS							TOTAL NEW (Incl. Eng.) (1000's$)	UPGRADING (Retained Sch.) (1000's $)	OVERALL TOTAL (1000's $)
	SQUARE METERS				TOTAL COST IN $ (1000's)					
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
BEIRUT	64,638	60,558	31,755	**156,951**	24,535	22,705	11,832	**62,027**		**62,027**
MOUNT LEBANON	370,905	321,021	136,357	**828,283**	135,748	116,960	49,398	**317,211**	**4,462**	**321,674**
NORTH LEBANON	317,415	246,707	95,865	**659,987**	115,886	90,260	34,726	**252,915**	**4,265**	**257,180**
SOUTH LEBANON	183,308	217,346	85,155	**485,810**	67,261	78,842	30,363	**185,289**	**10,755**	**196,044**
BEKAA	151,831	122,521	49,892	**324,244**	54,763	44,467	17,895	**122,982**	**5,518**	**128,500**
TOTAL	**1,088,098**	**968,154**	**399,024**	**2,455,275**	**398,194**	**353,234**	**144,215**	**940,424**	**25,000**	**965,424**

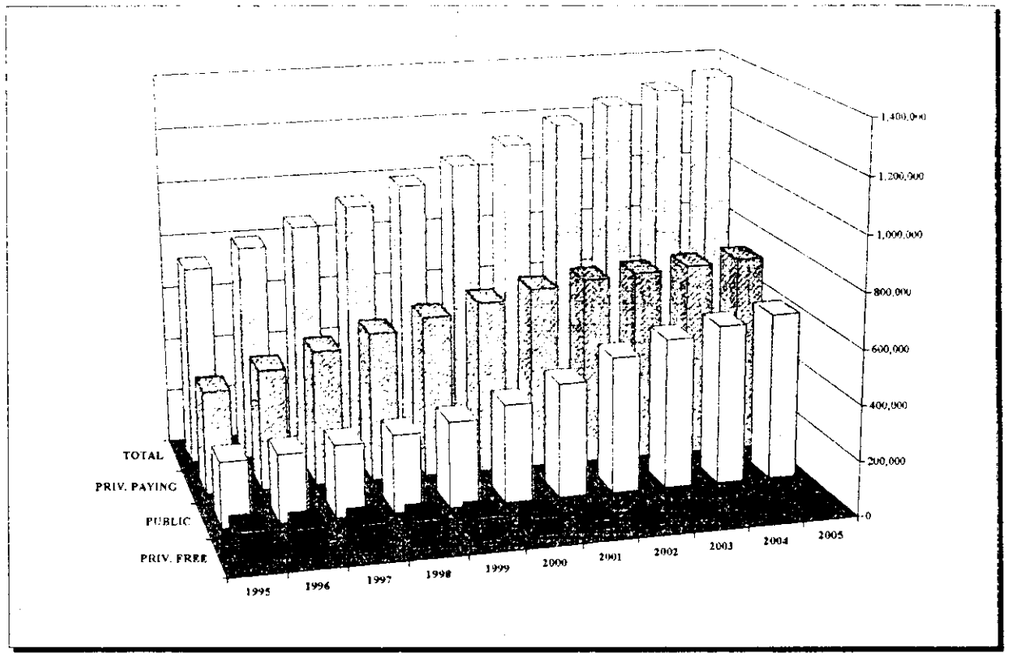


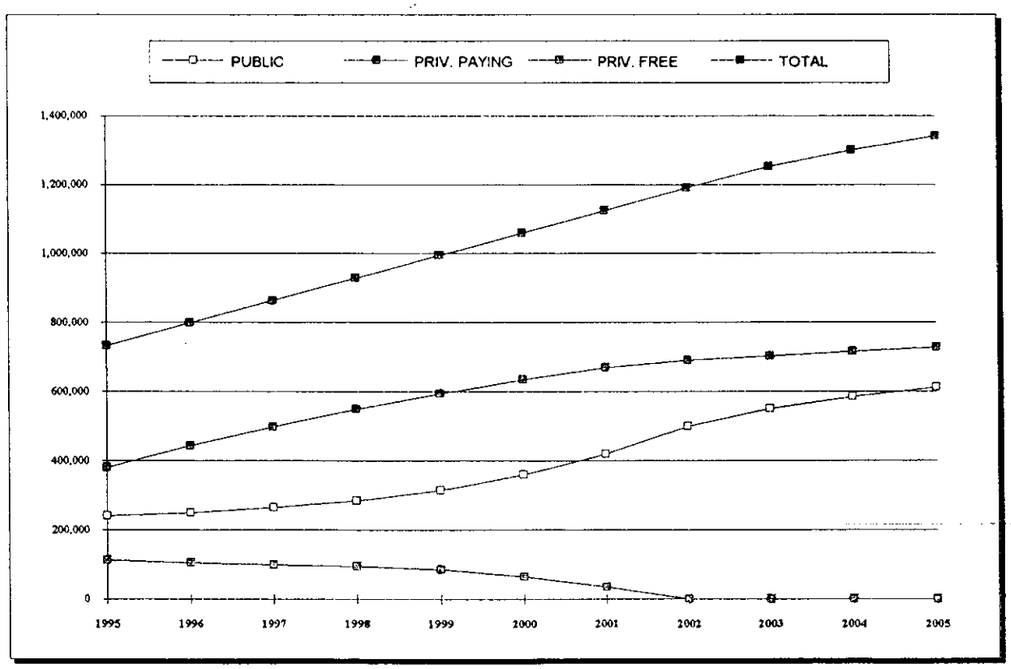
TOTAL COST IN 1000's $ (2005)



OVERALL TOTAL DISTRIBUTION (%) (2005)

NATIONAL SUMMARY (cont.)



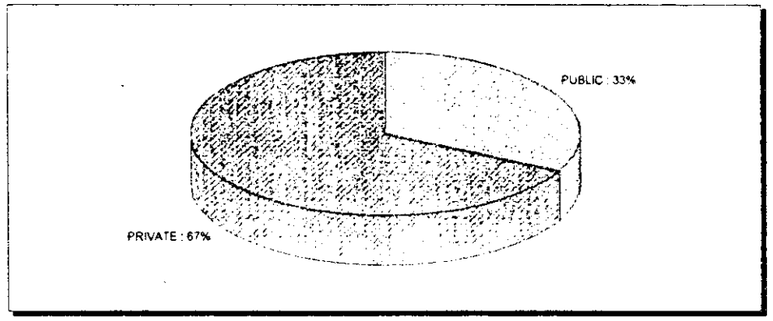


NUMERIC DISTRIBUTION

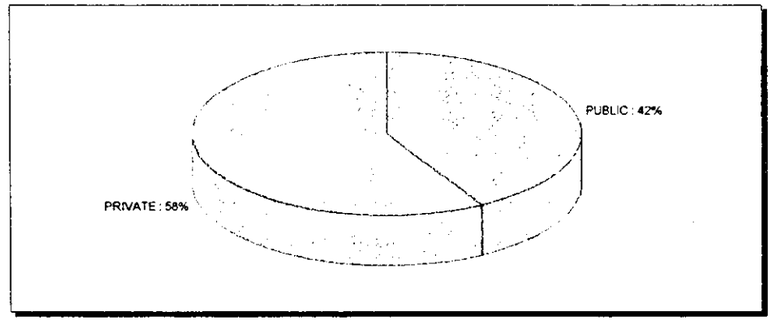
6 - SCHOOLING POPULATION GROWTH 1995-2005

SECTOR	EXISTING	2002	2005
PUBLIC	239,866	500,000	612,710
PRIVATE	493,362	690,000	728,290
TOTAL	**733,228**	**1,190,000**	**1,341,000**

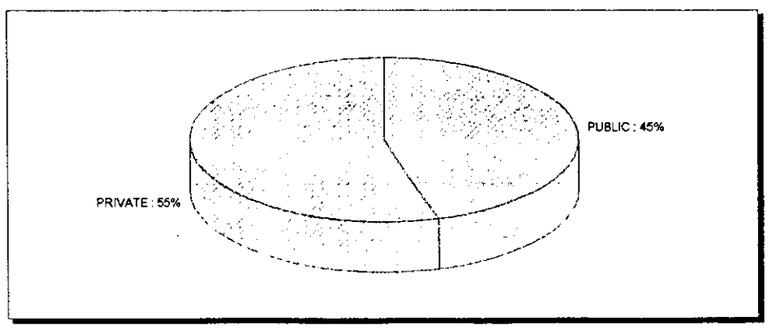
PERCENTILE DISTRIBUTION



EXISTING



YEAR 2002



YEAR 2005

VITAL STATISTICS

Public School Population (Year 2005) : 612,710 students
488,390 in new schools
124,320 in upgraded retained existing schools

Average Travel Distance to School : (by bus)
Elementary 5 minutes
Complementary 10 minutes
Secondary 20 minutes

Ultimate Provision Level : Equity between Caza relative to population
(Irrespective of private sector supply)

School sizes : Small = 210 students
(280 students Complementary)
Medium = 420 students
Large = 840 students
Extra Large = 1260 students

Gross Area Per Student Sq.M.

CYCLE	SCHOOL SIZE			
	Small	Medium	Large	X'Large
Elementary	6.69	4.87	3.78	3.49
Complementary	5.75	4.91	4.09	3.82
Secondary	7.05	4.98	4.09	3.82

Average gross area per student : 5.03 sq. meters (average)

Costing parameters : 325 $/sq. meters construction
200 $/student furnishing (average)
250 $/student existing school upgrading

Total Number of New Schools : 1,256 in 677 localities

Available Land Used : 239 out of a total of 273 plots available catering for 442 schools
(21 localities have dual land provision)
(13 localities with available land already have enough schools)

5

METHODOLOGY

5.1 - INTRODUCTION

As part of this study, the Consultants have collected, reviewed and supplemented their data base, namely through the undertaking of 3 surveys. These were:

i - 10% sample of existing schools,

ii - 5% sample of existing localities,

iii - A comprehensive survey of all existing land available to the Ministry for the purpose of future school facilities

In addition, the Consultants have reviewed a number of previous studies and reports which were deemed relevant to the Project. These included:

- Rehabilitation of Public Schools, C.D.R., 1993
- 1975 School Guide, C.E.R.D., 1976
- 1981 School Guide, C.E.R.D., 1982
- School Regrouping Project, Ministry of Education and Ministry for Planning, 1972
- Schooling Needs Report, Hariri Foundation, 1990
- Development Needs Study, Hariri Foundation, 1986
- 1986 Demographic Survey, Hariri Foundation, 1986
- R. Kasparian 1992 Displaced Population Study, LAVAL/USJ, 1992
- Bechtel/Dar Al Handasah Demographic Study, C.D.R., 1992
- N.E.R.P. Housing Assessment - C.D.R., 1993
- HORIZON 2000, C.D.R., 1992
- Man Power Study, Team International, 1986
- Land-Use Survey, F.A.O., 1990

The aim was to secure all the information requisite to the successful completion of the Project.

In essence we have collected, established and digitized all pertinent data on such matters as existing schools; school buildings and their status; demographic and other related information; catchment areas; enrollments; available land for future expansion, and policy issues affecting the education system.

The basic methodology adopted for this Study is outlined diagrammatically in Figure 5.1 and described in detail in the following sections.

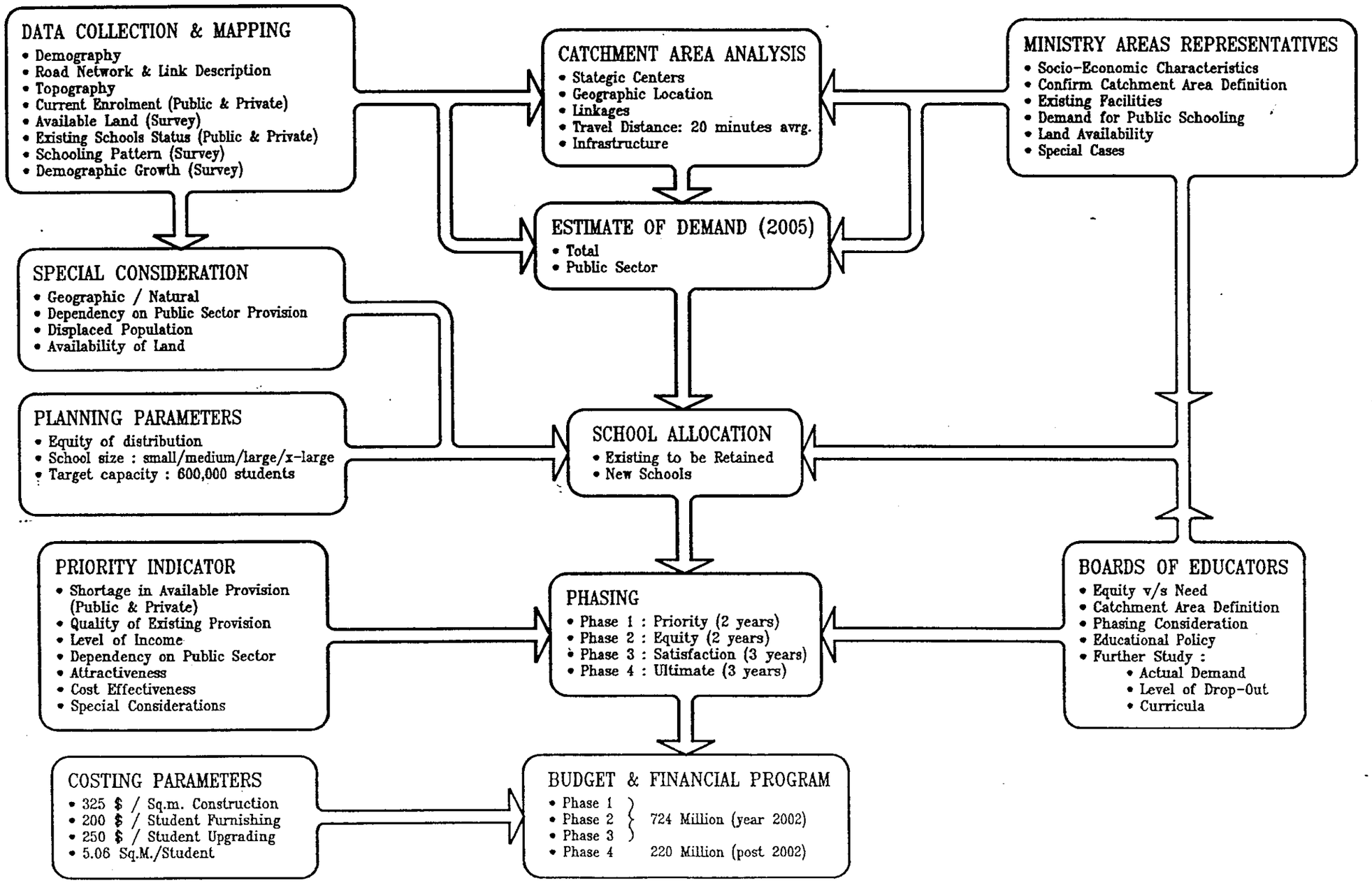
The basic Study unit for the Project was the Caza. Accordingly, for each and every Caza the following procedure was applied:

5.2 - SURVEYS

5.2.1 - Survey 1 : Catchment Area

The aim of this survey was to collect "School Journey Length" data (i.e. the typical length of journeys undertaken by students and staff to and from

FIGURE 5.1 : SRP METHODOLOGY & CRITERIA



school) in order to establish typical "School Catchment Area" for each Caza and, where applicable, for different geographic locations within each Caza (e.g. coastal, central and upper mountain areas).

For this purpose, a 10% survey of all existing schools was undertaken. The selected sample of schools was taken at random but was equally distributed amongst all Caza (i.e. 5 or 6 schools for each Caza) covered different regions within the Caza (e.g. coastal, central and upper regions) and included at least one elementary, one complementary, and one secondary school from each Caza.

In addition to data on journey lengths by mode of transport undertaken by students and staff, the survey also collected data on students and staff numbers as well as subjective information concerning traffic conditions at the school in question and attitudes towards the likely provision of a future public transport facility for the school.

5.2.2 - Survey 2 : Demographic Data Survey

The aim of this survey was to collect "Control " data concerning the demographic situation in order to assist in the manipulation and treatment of the various demographic studies and statistical sources available for the purpose of this Study.

Accordingly, a 5% survey of all existing localities (i.e. towns, villages, etc.) was undertaken. The numbers obtained for the size of population were based on the testimonies of at least 2 prominent figures in each locality (i.e. Moukhtar, Schoolmaster, Community Clergyman, etc.). The sample of localities was taken at random but was proportionally distributed between all the Caza and covered different regions within each Caza. Finally, the survey concentrated on smaller localities rather than big townships since responses from the former tend to be more accurate.

5.2.3 - Survey 3 : Available Land

The purpose of this survey was to investigate the availability of land for future school expansion. As such, a systematic survey was undertaken of all plots of lands available to the Ministry of Education in all the Caza for the purpose of future school building.

The survey collected data concerning, but not necessarily limited to, the following:

- Plot number, location and address
- Location map
- Area
- Topography (Contour map), if available
- Available amenities:
  - Road access
  - Water supply
  - Electricity
  - Sewerage
- Building regulations relevant to location area
- Neighboring land-uses

5.3 - BASE DATA COLLECTION, MAPPING AND DIGITIZATION

Based on available and collected information, the Consultants proceeded at building their data base as follows.

5.3.1 - Demography

Our demographic data analysis was based on the results from 6 different studies and statistical sources that have treated the population of the country at one stage during recent years. Eventually, one of these studies was dropped since its results were deemed identical to one of the others. The remaining 5 studies are:

- Bechtel / Dar Al Handasah (1991)
- Al Hariri Foundation (1990)

- Laval / U.S.J. (1992)
- Abi Farah / U.L.(1991)
- N.E.R.P.(1993)

Using the data collected in Survey 2 as well as statistical information from various sources, an analytical appraisal process was undertaken and resulted in the application of various correction factors and appropriate estimates for annual growth rates for each Caza so as to produce estimates of population numbers for the years 2002 and 2005 respectively. This stage culminated in the mapping and digitization of all localities (over 2300 towns and villages) and their population.

5.3.2 - Transport Network and Link Descriptions

Similarly, the road network for each Caza was mapped and digitized. To this base, network link description data was associated namely distances and average journey speed.

From the above set of data, a computer modeling exercise was initiated using a specialized simulation program so as to link each and every locality within each Caza through the shortest journey path, thus producing a "Minimum Inter locality Journey Length" matrix for each Caza.

5.3.3 - Existing Facilities

In addition, all pertinent data relating to existing schools, both in the private and public sectors, were mapped. Statistical information for 1975, 1982 and 1993 were used for this purpose in an attempt to assess actual capacities of existing schools in both sectors and for each of the elementary, complementary and secondary cycles. Additional information mapped at this stage included:

- Status of existing facilities: i.e. state or non-state owned; physical fitness and potential for upgrading
- Quality of existing facilities: i.e. whether or not existing facilities are adapted for schooling purposes

5.3.4 - Other Informations

Finally, the Consultants culminated this stage of their Study by supplementing their data base with the following informations:

- Available land for future expansion (survey 3)
- Land-use distribution and prevailing sources of employment
- Displaced populations and war damaged areas
- Geographic and other natural and social considerations

5.4 - CATCHMENT AREA ANALYSIS

Within each Caza, a number of localities were designated as "Strategic Centers". Amongst the factors affecting the selection of strategic centers were size of locality and its population; geographic location within the Caza; linkages to surrounding localities; available infrastructure and sustainability of future facilities.

From this data a modeling exercise was initiated so as to link each and every locality within the Caza to at least one strategic center. As such, each Caza was subdivided into a number of sub-areas or "Catchment Areas" depending on number of localities; size and dispersal of populations; travel distances and conditions.

Accordingly, a catchment area is hereby defined for the purpose of this Study as a geographic entity within which it is possible for a student from any locality within that area to commute to any other locality within the same area for schooling purposes. The main factors governing the delimitation of a catchment area are, therefore:

i - Achieve an average traveling distance to school of 15 minutes

ii - Agglomerate as much as possible population numbers in order to promote demand and, therefore, justification for school provision.

Following this exercise, the geographic delineation of catchment areas within each Caza was confirmed through a series of seminars with educational area representatives from the said Caza, taking into account compatibility and other socio-economic considerations.

The subdivision of each Caza into catchment areas as well as the designation of strategic centers are presented on the "Constraints and Opportunities" map of each Caza respectively (see section 9)

5.5 - EXISTING CAPACITY ANALYSIS

Based on the results from the exhaustive field survey of existing public schools, and the mapping of current provisions undertaking for each catchment area, these were assessed for their suitability for retention in the future public education system. The main parameters governing this assessment process were ownership (state or non-state owned); physical fitness; and potential for upgrading. This process indicated that out of the existing total of 1,200 existing public schools only some 380 schools, representing an overall capacity (after upgrading) of 120,000 schooling seats, are deemed fit for retention in the program of future schools.

Again, the results of this analysis were confirmed by local area representatives with special emphasis on:

- Actual capacity
- Quality
- Ownership
- Physical fitness
- Potential for upgrading
- Satellite communities

5.6 - LAND FOR FUTURE EXPANSION

The Consultants undertook a comprehensive survey of all plots of land available to the Government for the purpose of this Project. These were assessed for their size, fitness and characteristics. A total of 273 plots were thus identified and mapped.

Worthwhile mentioning in this respect is that, during the 8 months or so it took to complete this Study, over 20 new plots have been donated by local communities for the purpose of this Project, a significant indicator of the need and appreciation for the public school by local communities.

5.7 - ESTIMATES OF FUTURE SCHOOLING DEMAND

Based on available statistics collected and manipulated in the base data building stage of the Study relating to population, current schooling populations (both in the private and public sectors) and schooling age distribution for each Caza as outlined in sections 5.2 and 5.3 above and assuming:

- An average population growth rate of 2.3% per annum
- An average schooling population growth rate of around 4% per annum
- An average public schooling population growth rate of around 8% per annum
- Estimates of drop-outs averaging 10% of those in the complementary age cycle and 40% of those in the secondary age cycle

and in close collaboration with local area representatives, estimates for schooling demand were prepared for the two horizon years 2002 and 2005 respectively.

These were then allocated to public schools of appropriate sizes taking account of current provisions for each catchment area in accordance with the

basic assumptions and planning parameters adopted for this Study. If the estimated demand within a given catchment area did not justify the provision of a new school (i.e. below half the capacity of the smallest school size), estimated numbers were distributed over adjacent catchment areas while still respecting the maximum schooling journey length limit for each cycle as adopted for this Study.

Special emphasis was made during the school allocation process to special cases. These fall into two categories:

1 - **Geographic special case:** Localities which due to geographic or other natural considerations need to be treated as special cases, e.g. remote isolated villages; villages where commuting is hindered by snow in winter; etc.

2 - **Socio-economic special case:** villages with dislocated population or suffering from excessive war damages and where a new public school can play a stimulating role. Alternatively, localities where dependency on the public school is such that a higher level of provision than that applicable nationally is required.

Again, the role of local area representatives was of significant importance in confirming and endorsing the designation of these special cases.

The school allocation exercise was repeated and tested several times using an iterative process with the aim of achieving the goals and objectives adopted for the Project, namely:

i - A total public sector capacity of around 600,000 students by the year 2005

ii - An average gross area of around 5 sq. meters per student

iii - An equitable or balanced distribution of public sector facilities amongst the different regions and Caza.

5.8 - PHASING

The Consultants perceive the implementation of the Project to be achieved in 4 main phases as follows:

5.8.1 - Phase 1 (2 years): Priority

This first phase shall include in order of priority:

i - Elementary rehabilitation of all existing schools (i.e.: essential improvement to existing facilities to enable them to continue functioning)

ii - Provide for some 100,000 new school seats according to actual need and priority while retaining all existing schools, state and non-state owned.

In order to establish priorities for the allocation of new schools for phase 1 of the Project, the Consultants adopted the following methodology.

In essence, a priority index was developed for each catchment area which reflects actual need for new public schools relative to other catchment areas. For this, a composite index is computed based on the following indicators:

- **Percentile shortage:**

  An index from 0 to 3 reflecting the difference in percentage between estimated demand and currently available capacity, taking into account both public and private sector provision. An index of "0" means that demand is 100% satisfied; "3" means that none of the estimated demand is currently satisfied.

  This index provides an indication of absolute need for schooling provision.

- **Quality of Existing Provision**

  An index from 1 to 3 reflecting a subjective evaluation of the quality of currently available schools again taking into account both private and public sector provision: 1 for good quality provision and 3 for low quality.

  The compilation of this index was based on a number of previous studies, namely:

  - "Rehabilitation of Public Schools", C.D.R., 1993
  - "Private Schools Classification Report", A. El Sharif, 1993

- **Level of Income**

An index from 1 to 3 reflecting a subjective evaluation of the local average level of income for each catchment area, using prevailing land-uses, sources of employment and levels of urbanization as proxi-indicators: 3 for low income areas and 1 for upper income areas.

This index was compiled from:

- "Land-Use Survey", F.A.O., 1990
- "Man-Power Study", Team International, 1986
- "The Lebanese Economy", M. Iskandar and E. Baroudi, 1982

- **Dependency**

An index from 0 to 1 reflecting the degree of dependency of the catchment area on public sector provision: an area where only public sector provision is available shall receive an index of 1; an area where only private sector provision is available shall, on the other hand, receive an index of 0; area with no provisions whatsoever shall also receive an index of 1.

- **Attractiveness**

A subjective indicator of the attractiveness of future public school to a given catchment area, using the availability of donated land as a proxi-indicator: an area with available land shall receive an index of 2; areas with no land shall receive an index of 1.

- **Cost-effectiveness**

An objective evaluation of the cost-effectiveness of providing new schools in a given area taking into account both the cost of provision as well as the number of people who shall benefit from such a provision.

- **Particularity**

An index of 1 or 2 to reflect any special conditions prevailing in a given catchment area such as geographic location, displacement of populations, war damage, etc.: Catchment area with special cases shall receive an index of 2; others shall receive 1.

All these indicators are be compounded for each and every catchment area so as to produce a need and priority index for the allocation of future schools in phase 1: Area with a high index shall be given priority over those with a lower index.

Detailed results are presented in Section 10 of this Report.

5.8.2 - Phase 2 (2 years): Equity

Provide for an additional capacity of around 100,000 new school seats on an equity basis while still maintaining all existing facilities.

Equity is here taken to imply an equitable distribution of public pre-university schooling supply in all areas as based on numbers of students in each and every area and the number of existing seats. The private sector is expected to maintain its share of provision during this phase.

5.8.3 - Phase 3 (3 years): Satisfaction

Around 160,000 new school seats and partial phasing out of existing non-state-owned schools so as to reach an overall Public Sector capacity of around 500,000 students by the year 2002. (360,000 in new schools; 119,000 in existing state-owned schools; 20,000 in existing non-state-owned schools)

6

STUDY LIMITATIONS

6.1 - Through our data collection process it became quite apparent that there is a dearth of up-to-date, reliable statistics. However, there is an increasing awareness, interest and concern within foreign aid agencies such as the World Bank, C.D.R. and current Lebanese Government circles to address this problem. We, nonetheless stress the need for a comprehensive, country- and sector wide survey.

6.2 - The study had to rely heavily on existing statistical sources. Some discrepancies were identified and reconciliations had to be made. This is particularly true with regard to demographies and existing facilities statistical sources.

6.3 - Assessment of actual schooling need which should take into consideration alternative sources of provision, namely the private non-free sector, was not feasible due to the lack of statistical data relevant to the actual cost of such provision and level of income of local communities. In other words, it was not possible to assess how much of those who are paying for their education would actually afford it.

6.4 - Assessment of existing public sector facilities was not very reliable due to lack of statistical data relating to fitness, quality and actual capacity. Instead, the Consultants had to rely on enrollment statistics to assess capacities and on subjective assessment of quality and fitness.

6.5 - Assessment of future schooling demand was hindered by the lack of reliable demographic statistics one the one hand, and by the non-existence of any statistical information concerning drop-outs and through flows, on the other. The Consultants tend to believe that demographic statistics are over inflated and levels of drop-outs under estimated.

6.6 - Finally, a clear-cut educational / administrative policy is yet to be established: should the elementary and complementary cycles be treated as a single "Basic Education" cycle or not. Educational policies and programs should be developed and clearly established to parallel and supplement the School Regrouping Project. Both these points are beyond the scope of this Study but both have significant repercussions on it.

5.8.4 - Phase 4 (3 years): Ultimate

Provide for an additional capacity of around 115,000 new school seats and phasing out of remaining non-state-owned schools.

5.9 - BUDGET REQUIREMENT

From future student numbers reached in the previous sections, gross area figures (sq. m) required to accommodate the said students were computed using the "Planning Parameters" listed in Section 2 above.

These figures were obtained using well established international standards (both Anglo-Saxon and European). Some flexibility may be applied to figures relating to non-academic facilities so as to meet particular local circumstances (i.e. figures relating to administration, ancillary supports, outdoor recreation and other outdoor facilities).

In turn, gross square meter figures were translated into construction cost using 325 Dollars per square meter of built-up area and 200 Dollars per student to cover furnishing costs. The total figures thus obtained represent the estimated gross expenditure to be incurred for the provision of future facilities, including outdoor recreation.

Estimates for rehabilitation were based on estimates of building rehabilitation costs for each existing facility as well as an additional expenditure of 25 Million Dollars US to cover refurnishing and upgrading.

7

MAJOR FINDINGS

What follows is a summary synthesis of major findings which have emerged from this Study.

7.1 - GENERAL

7.1.1 - The Project as a whole is deemed ambitious, especially when considering the extensive amount of restructuring, revitalizing, and reorganizing of the management of the Public Sector that should accompany such a Project. Nonetheless, there is a general consensus as to the importance of the Project because of the increasing role the Public Sector is called upon to play for an ever growing sector of the population in view of the increasing cost of private education and the decline of the general standard of living. In effect, it is suggested that the Public Sector should be able to compete with at least 80% of existing Private Sector facilities.

7.1.2 - Whilst an "equitable" distribution of facilities relative to population numbers is a sound assumption, special consideration had to be given to rural and deprived areas in phase 1. Also, a number of special cases had to be designated and catered for as such. Furthermore, the implementation of the equity principle should be tested between phases in the light of effective demand.

7.1.3 - The designation of the "Caza" as the main study unit offered several practical drawbacks. Accordingly, catchment areas had to be determined on the basis of prevailing practices and patterns and were not restricted to Caza boundaries.

7.1.4 - Whereas teacher training provision on a Caza basis offers some merits, it cannot be justified from the practical point of view and was, therefore, restricted to the Mohafazat level.

7.1.5 - Finally, demographic statistics did not seem to be very reliable. Nonetheless, and in the absence of a comprehensive survey, these cannot be contested.

7.2 - ENROLLMENTS, DROP-OUTS AND THROUGH-FLOW

Through our base data collection process, it became quite apparent that the public education sector had been suffering from serious shortcomings over the last decade or so. Collected statistics clearly indicate a steady decline in enrollments over previous years. The falling into disrepute of existing facilities in particular and education standards in general were advanced as the main reasons for this decline.

Similarly, the same statistical sources tend to suggest that the level of drop-out is much higher than anticipated, both in absolute and relative terms. The total schooling population has declined from around 810,000 students in both the private and public sectors in 1986, to less than 735,000 in 1993. Furthermore, analysis of our data base indicate that in many areas the decline in through-flow between the elementary and secondary cycles exceeds 60%.

7.3 - QUALITY OF EXISTING FACILITIES

Available and collected data relating to the physical fitness and quality of existing public schools indicate that out of a total of around 1,200 schools, only some 500 may be classified as adapted, good quality facilities. Furthermore, the same analysis revealed that around 80% of the unfit schools are rented, non-state-owned schools. It is estimated that over 60% of the total public sector student population is accommodated in below-standard facilities.

7.4 - TRAVEL DISTANCES AND PATTERNS TO SCHOOL

Analysis of results from our field survey of existing facilities indicate that the average journey length currently undertaken by students to and from schools ranges from around 10 minutes for the elementary school, up to 25 minutes for the secondary school exceeding in many instances over twice these limits respectively.

These figures compare to an average journey length of less than 5 minutes for the elementary school and less than 20 minutes for the secondary school according to the future school distribution proposed by this Study, with a maximum journey length of 10, 15 and 30 minutes for the elementary, complementary and secondary school respectively. These figures are based on the assumption that all students having to travel beyond their locality for schooling purposes do so by car or bus.

As far as prevailing modes of transport are concerned, our survey indicate that 85% of those who travel to school beyond their locality do so by car.

7.5 - DEMAND FOR PUBLIC SCHOOLS

If we take the plots of land donated by local communities for the purpose of new school building as an indicator of the subjective demand for the public school, our comprehensive survey of such land currently available to the Ministry of Education indicate a total of 273 plots of land donated by 252 individual local communities with 21 of these communities donating two plots rather than only one.

The future school program proposed by this study anticipates the utilization of only 239 of these plots, catering for 442 new schools out of a total of 1256 expected for the year 2005, with 21 local communities having dual land provision and 13 already having enough schools.

Finally, our analysis indicates that out of a total of 232 local catchment area identified in this study, 60 have no private schools whatsoever and depend, therefore, solely on public sector provision.

7.6- SPECIAL CASES

As mentioned in section 7.1.2 above, the study designated a number of local communities as special cases and treated them as such vis a vis the allocation of future schools.

Accordingly, a total of 106 such cases were identified: 25 of these for socio-economic considerations and 81 for geographic and natural considerations (refer back to section 5.7 of this document for further elaboration on this issue).

7.7 CAPACITY OF EXISTING FACILITIES

Assessment of actual capacity for existing schools proved very problematic in view of the dearth of reliable data concerning this issue. This is particularly true if one considers the fact, outlined in Section 7.1 above, that enrollments in public schools are declining for many subjective reasons and do not reflect, therefore, the actual capacity of a given school.

An attempt was made to overcome this problem by evaluating enrollment figures relative to several previous years in order to assess actual public school capacities. Accordingly, statistical records for 1974-1975, 1981-1982 and 1993-1994 were compiled and analyzed. Existing public sector capacity is thus estimated at around 303,000 schooling seats, as opposed to 240,000 students currently enrolled in the public sector.

8

RECOMMENDATIONS

8.1 - Mapping of private sector provision is crucial especially for determining priorities, keeping in mind the Study's adopted assumption that the ultimate public sector provision shall not be affected by the availability of the private sector.

Most important in this respect is the question of quality of such provision and its cost relative to local average level of income. A serious effort should be made, therefore, to assess, through field research, both these points.

8.2 - A project of such a magnitude requires more than 4 phases with allowance for assessment, revisions and updating between phases. A solution would be to subdivide each of the main phases into overlapping sub phases with monitoring and feedback from each preceding sub-phase.

8.3 - Demographic statistics do not seem to be very reliable. Nonetheless, and in the absence of a comprehensive survey, these cannot be contested.

We, however stress the need and urgency for a comprehensive country-wide demographic survey.

8.4 - Detailed field surveys should be undertaken to assess actual demand for education in general and public schools in particular.

Also crucial in this respect, is to assess the actual capacity of existing public sector facilities and draw firm conclusions as to their potential for upgrading.

8.5 - Level of drop-out in general, and in the complementary and secondary cycles, in particular, should be established more accurately through the undertaking of sample surveys. Conclusions should also be drawn regarding the reasons for it.

8.6 - Educational policies and programs should be developed and clearly established to parallel and supplement the School Regrouping Project.

In essence, the Consultants strongly recommend, and in accordance with comments and suggestions received from the panel of educators, to supplement their Study through the undertaking of an extensive field survey in order to accurately assess demand for education, needs for public sector provisions and actual drop-outs. In such a way, and while phase 1 is being implemented, the results of the survey can then be used to assess the subsequent phasing program and correct it if deemed necessary. Parallel to this, a serious effort should be made at developing and clearly establishing a future educational policy and program.

9

RESULTS & SCHOOL PROGRAM

What follows is a summary of results on a Mohafazat basis. Volume 2 of the Report Presents a detailed listing and mapping of results on a Caza basis. In addition, Volume 3 offers a breakdown of results on a catchment area basis.

CAZA SUMMARY

MOHAFAZAT : BEIRUT

Average Growth Rate :	0.46%
2002 Population :	641,323
2005 Population :	650,260
Pre-Elementary schooling population :	0.76% of total
Elementary schooling population :	9.11% of total
Complementary schooling population :	5.36% of total
Secondary schooling population :	2.95% of total

1 - POPULATION ESTIMATES

STRATEGIC AREA	YEAR	
	2002	2005
Mar Elias East	85,272	86,460
Mar Elias West	89,759	91,010
Mazraa	101,427	102,840
Ras Beirut	155,286	157,450
Tarik El Jdideh	108,607	110,120
Wata	20,642	20,930
Ashrafyeh	43,543	44,150
Jemmayzeh	24,173	24,510
Sioufi	12,614	12,790
TOTAL	641,323	650,260

2 - SCHOOLING POPULATION

STRATEGIC AREA	TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					PUBLIC (State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
Mar Elias East.	657	7,880	4,631	2,553	**15,721**	0/2,680	0/1,300	0/350	0/4,330
Mar Elias West	691	8,295	4,874	2,688	**16,548**	0/800	0/1,400	0/400	0/2,600
Mazraa	781	9,373	5,508	3,037	**18,700**	0/1,750	0/1,150	0/650	0/3,550
Ras Beirut	1,196	14,351	8,433	4,650	**28,629**	0/1,850	0/1,200	0/1,600	0/4,650
Tarik El Jdideh	836	10,037	5,898	3,252	**20,023**	0/2,100	0/1,550	0/950	0/4,600
Wata	159	1,908	1,121	618	**3,806**	0/1,600	0/1,250	0/600	0/3,450
Ashrafyeh	335	4,024	2,365	1,304	**8,028**	0/270	0/1,150	0/900	0/2,320
Jemmayzeh	186	2,234	1,313	724	**4,457**	0/110	0/160		0/270
Sioufi	97	1,166	685	378	**2,326**				
TOTAL	4,939	59,269	34,827	19,203	118,238	0/11,160	0/9,160	0/5,450	0/25,770

CAZA SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS IN 2005

STRATEGIC AREA	EXISTING CAPACITY (To be Retained After Upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
Mar Elias East					2,520	2,100	840	**5,460**
Mar Elias West					1,680	1,680	840	**4,200**
Mazraa					2,100	2,100	1,260	**5,460**
Ras Beirut					2,940	2,520	1,260	**6,720**
Tarik El Jdideh					2,940	2,520	1,680	**7,140**
Wata					1,260	840	420	**2,520**
Ashrafyeh					1,260	1,260	420	**2,940**
Jemmayzeh					2,100	1,260	420	**3,780**
Sioufi					840	840	420	**2,100**
TOTAL					17,640	15,120	7,560	40,320

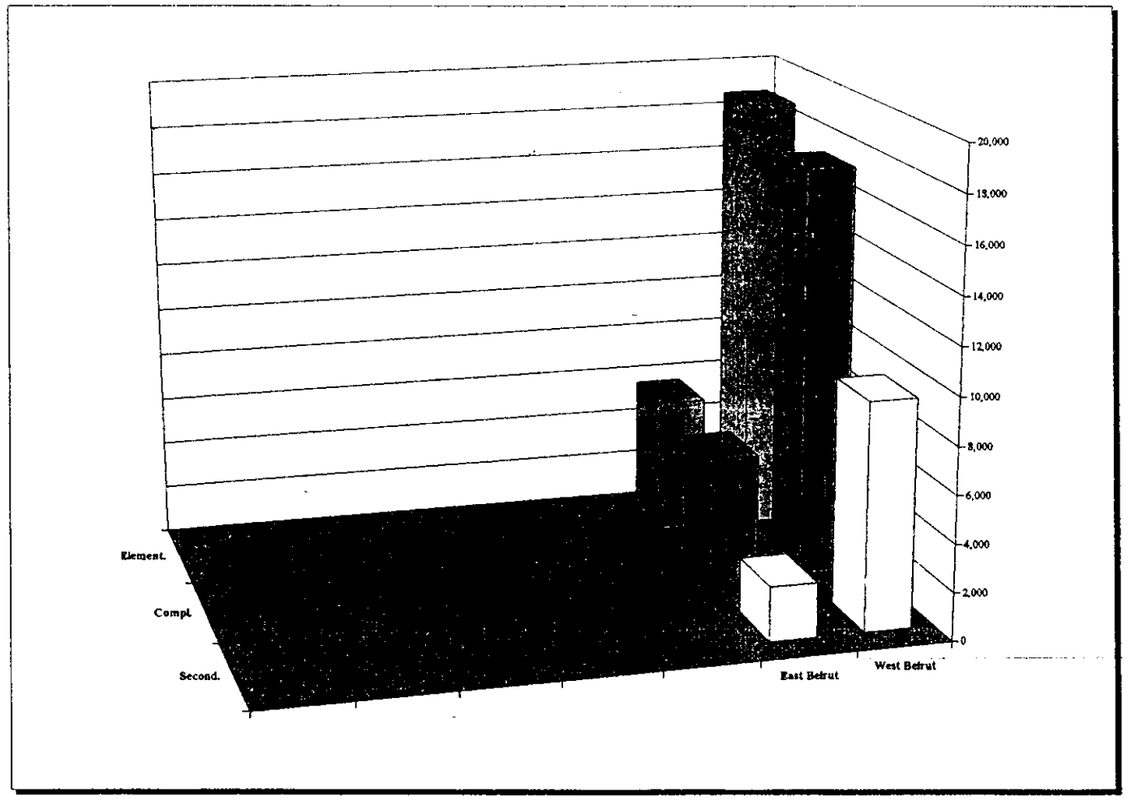
4 - ADDITIONAL NUMBER OF SCHOOLS REQUIRED IN 2005

STRATEGIC AREA	TOTAL NUMBER OF SCHOOLS													
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
Mar Elias East		1	1	1	3			1	1	2			1		1
Mar Elias West			2		2			2		2			1		1
Mazraa			1	1	2			1	1	2				1	1
Ras Beirut			2	1	3				2	2				1	1
Tarik El Jdideh			2	1	3				2	2			2		2
Wata				1	1			1		1		1			1
Ashrafyeh				1	1		1	1		2		1			1
Jemmayzeh			1	1	2		1	1		2		1			1
Sioufi			1		1			1		1		1			1
TOTAL		1	10	7	18		2	8	6	16		4	4	2	10

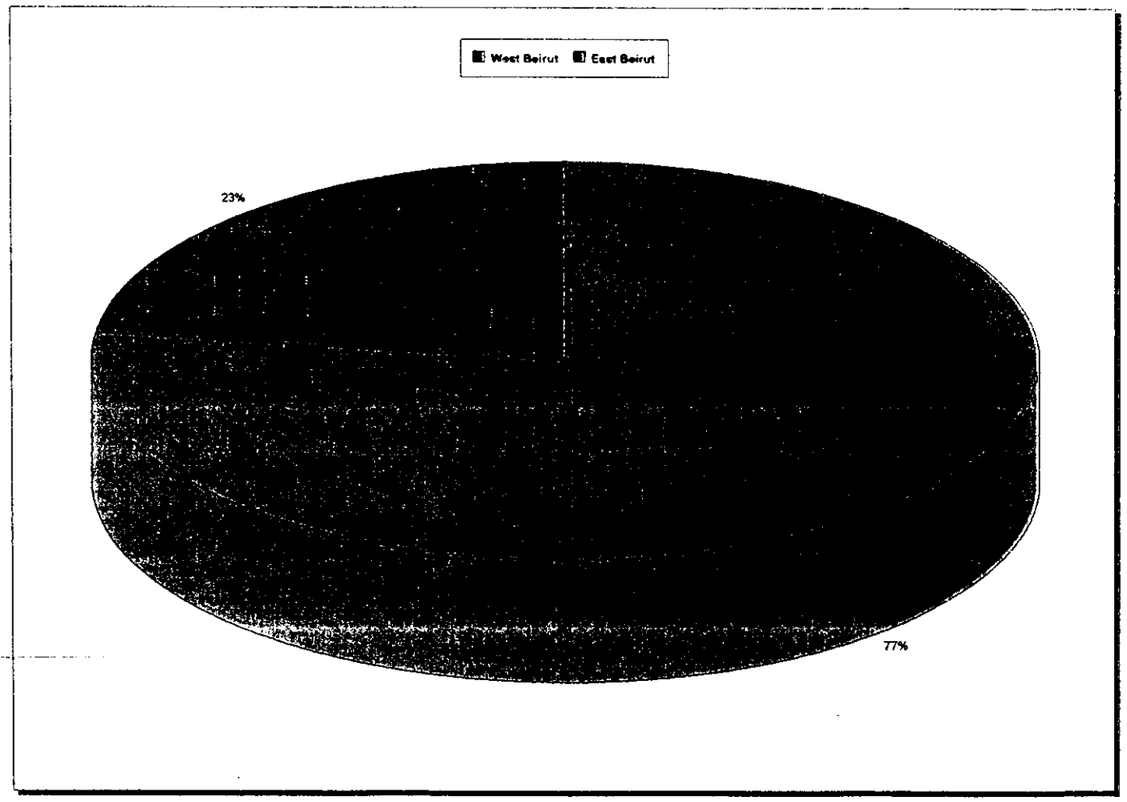
MOHAFAZAT SUMMARY (cont.)

5 - BUDGET

STRATEGIC AREA	NEW SCHOOLS									
	SQUARE METERS				TOTAL COST IN $ (1000's)			TOTAL NEW (1000's$)	ENG. COST (1000's $)	OVERALL TOT. (1000's $)
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
West Beirut	49,479	46,113	25,486	**121,077**	18,769	17,339	9,543	**45,650**	**2,283**	**47,933**
East Beirut	15,159	14,445	6,269	**35,873**	5,767	5,367	2,289	**13,423**	**671**	**14,094**
TOTAL	**64,638**	**60,558**	**31,755**	**156,951**	**24,535**	**22,705**	**11,832**	**59,073**	**2,954**	**62,027**



TOTAL COST IN $ (1000's)



OVERALL TOTAL DISTRIBUTION (%)

MOHAFAZAT SUMMARY

MOHAFAZAT : BEKAA

Average Growth Rate :	2.82%
2002 Population :	613,509
2005 Population :	666,830
Pre-Elementary schooling population :	1.21% of total
Elementary schooling population :	14.51% of total
Complementary schooling population :	8.18% of total
Secondary schooling population :	3.61% of total

1 - POPULATION ESTIMATES

STRATEGIC AREA	YEAR	
	2002	2005
BAALBAK	239,669	260,570
HERMEL	52,832	57,690
RASHAYA	49,692	54,320
WEST BEKAA	91,662	99,610
ZAHLEH	179,654	194,640
TOTAL	613,509	666,830

2 - SCHOOLING POPULATION

STRATEGIC AREA	TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					PUBLIC (State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BAALBAK	3,100	37,195	20,714	9,193	**70,202**	5,060/8,510	2,210/3,680	330/740	**7,600/12,930**
HERMEL	687	8,238	4,869	2,053	**15,847**	1,090/2,030	270/300	0/90	**1,360/2,420**
RASHAYA	707	8,484	4,823	2,124	**16,137**	2,320/2,130	540/640	0/190	**2,860/2,960**
WEST BEKAA	1,290	15,477	8,715	3,876	**29,358**	2,060/3,480	1,600/1,360	890/150	**4,550/4,990**
ZAHLEH	2,282	27,382	15,419	6,857	**51,939**	1,710/3,340	1,050/2,940	0/1,290	**2,760/7,570**
TOTAL	8,065	96,777	54,540	24,103	183,484	12,240/19,490	5,670/8,920	1,220/2,460	19,130/30,870

MOHAFAZAT SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS IN 2005

STRATEGIC AREA	EXISTING CAPACITY (To be Retained After Upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BAALBAK	7,560	3,080	210	**10,850**	10,920	7,840	3,360	**22,120**
HERMEL	2,310	280		**2,590**	2,310	2,800	630	**5,740**
RASHAYA	2,940	560		**3,500**	1,470	3,080	420	**4,970**
WEST BEKAA	3,990	840	1,050	**5,880**	3,360	3,500	1,050	**7,910**
ZAHLEH	3,570	840	210	**4,620**	9,030	6,020	2,940	**17,990**
TOTAL	20,370	5,600	1,470	27,440	27,090	23,240	8,400	58,730

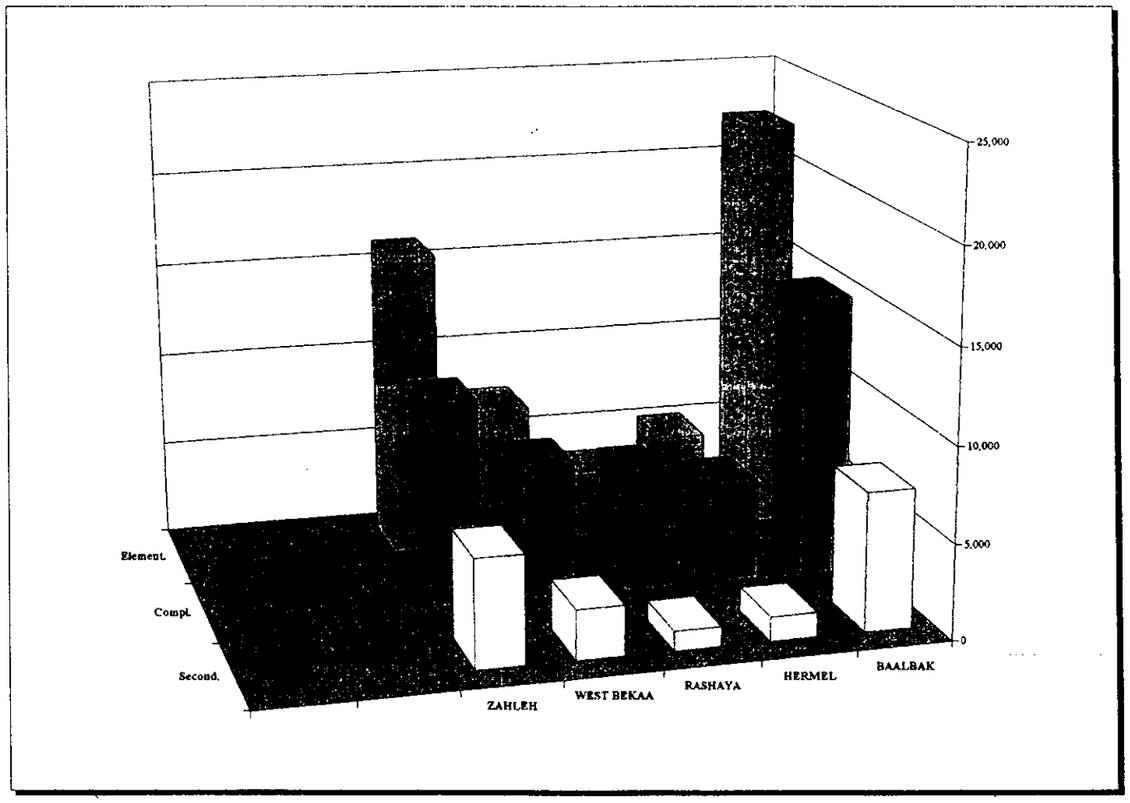
4 - ADDITIONAL NUMBER OF SCHOOLS REQUIRED IN 2005

STRATEGIC AREA	TOTAL NUMBER OF SCHOOLS														
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
BAALBAK	30	6	1	1	**38**	16	5		1	**22**	10	1	1		12
HERMEL	9	1			**10**	7		1		**8**	1	1			2
RASHAYA	7				**7**	11				**11**	2				2
WEST BEKAA	12	2			**14**	11	1			**12**	5				5
ZAHLEH	15	4	2	2	**23**	8	3	3		**14**	4	3	1		8
TOTAL	73	13	3	3	92	53	9	4	1	67	22	5	2		29

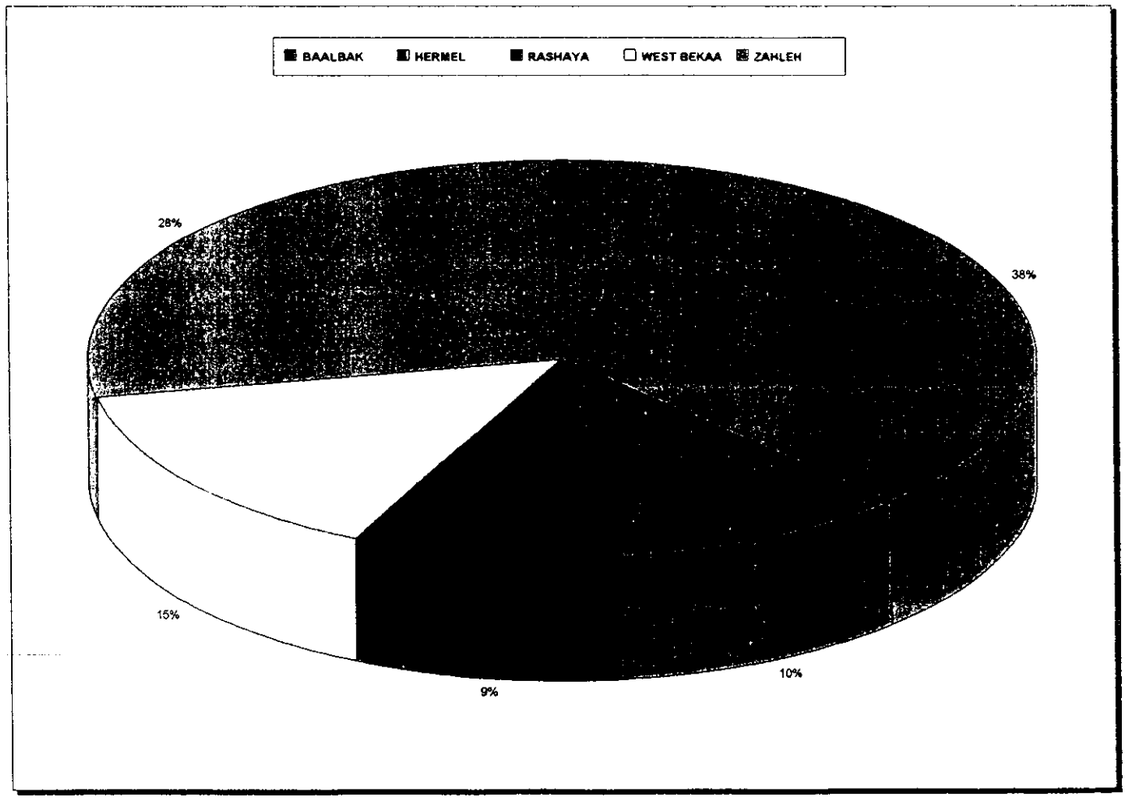
MOHAFAZAT SUMMARY (cont.)

5 - BUDGET

STRATEGIC AREA	NEW SCHOOLS									
	SQUARE METERS				TOTAL COST IN $ (1000's)			TOTAL NEW (1000'sS)	ENG. COST (1000's $)	OVERALL TOT. (1000's $)
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
BAALBAK	61,977	40,910	20,331	**123,218**	22,326	14,864	7,280	**44,470**	**2,223**	**46,693**
HERMEL	14,682	14,715	3,570	**32,967**	5,234	5,342	1,286	**11,862**	**593**	**12,455**
RASHAYA	9,828	17,719	2,960	**30,507**	3,488	6,375	1,046	**10,909**	**545**	**11,454**
WEST BEKAA	20,940	19,782	7,401	**48,124**	7,478	7,129	2,615	**17,222**	**861**	**18,083**
ZAHLEH	44,404	29,395	15,629	**89,428**	16,237	10,757	5,667	**32,662**	**1,633**	**34,295**
TOTAL	**151,831**	**122,521**	**49,892**	**324,244**	**54,763**	**44,467**	**17,895**	**117,125**	**5,856**	**122,982**



TOTAL COST IN $ (1000's)



OVERALL TOTAL DISTRIBUTION (%)

MOHAFAZAT SUMMARY

MOHAFAZAT : MOUNT LEBANON

Average Growth Rate :	**1.77%**
2002 Population :	**1,569,070**
2005 Population :	**1,653,750**
Pre-Elementary schooling population :	**1.12% of total**
Elementary schooling population :	**13.42% of total**
Complementary schooling population :	**7.38% of total**
Secondary schooling population :	**3.65% of total**

1 - POPULATION ESTIMATES

STRATEGIC AREA	YEAR	
	2002	2005
AALEY	178,086	187,630
BAABDA	446,810	470,700
JBAIL	115,080	121,170
KESERWAN	185,572	195,400
MATEN	411,637	434,730
SHOUF	231,885	244,120
TOTAL	1,569,070	1,653,750

2 - SCHOOLING POPULATION

STRATEGIC AREA	TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					PUBLIC (State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
AALEY	2,065	24,779	13,535	6,621	**47,000**	2,000/4,540	1,650/2,680	720/870	**4,370/8,090**
BAABDA	4,965	59,577	32,881	16,309	**113,732**	970/6,000	1,340/8,080	230/4,380	**2,540/18,460**
JBAIL	1,407	16,889	9,008	4,407	**31,712**	520/2,190	630/1,270	0/830	**1,150/4,290**
KESERWAN	2,016	24,186	13,633	6,855	**46,689**	150/1,430	320/1,310	220/500	**690/3,240**
MATEN	4,815	57,782	32,569	16,265	**111,430**	430/4,270	390/4,030	140/2,530	**960/10,830**
SHOUF	3,228	38,736	20,352	9,951	72,267	2,500/7,920	2,310/4,260	790/1,290	**5,600/13,470**
TOTAL	18,496	221,949	121,978	60,408	422,831	6,570/26,350	6,640/21,630	2,100/10,400	15,310/58,380

MOHAFAZAT SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS IN 2005

STRATEGIC AREA	EXISTING CAPACITY (To be Retained After Upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
AALEY	4,200	700	210	**5,110**	7,350	6,300	2,730	**16,380**
BAABDA	3,360	1,120	420	**4,900**	24,570	16,520	8,190	**49,280**
JBAIL	1,260	280		**1,540**	6,300	5,600	1,890	**13,790**
KESERWAN	420	280	210	**910**	8,190	6,720	2,310	**17,220**
MATEN	1,050		210	**1,260**	18,900	13,580	7,560	**40,040**
SHOUF	6,510	280	1,680	**8,470**	10,710	14,420	2,730	**27,860**
TOTAL	16,800	2,660	2,730	22,190	76,020	63,140	25,410	164,570

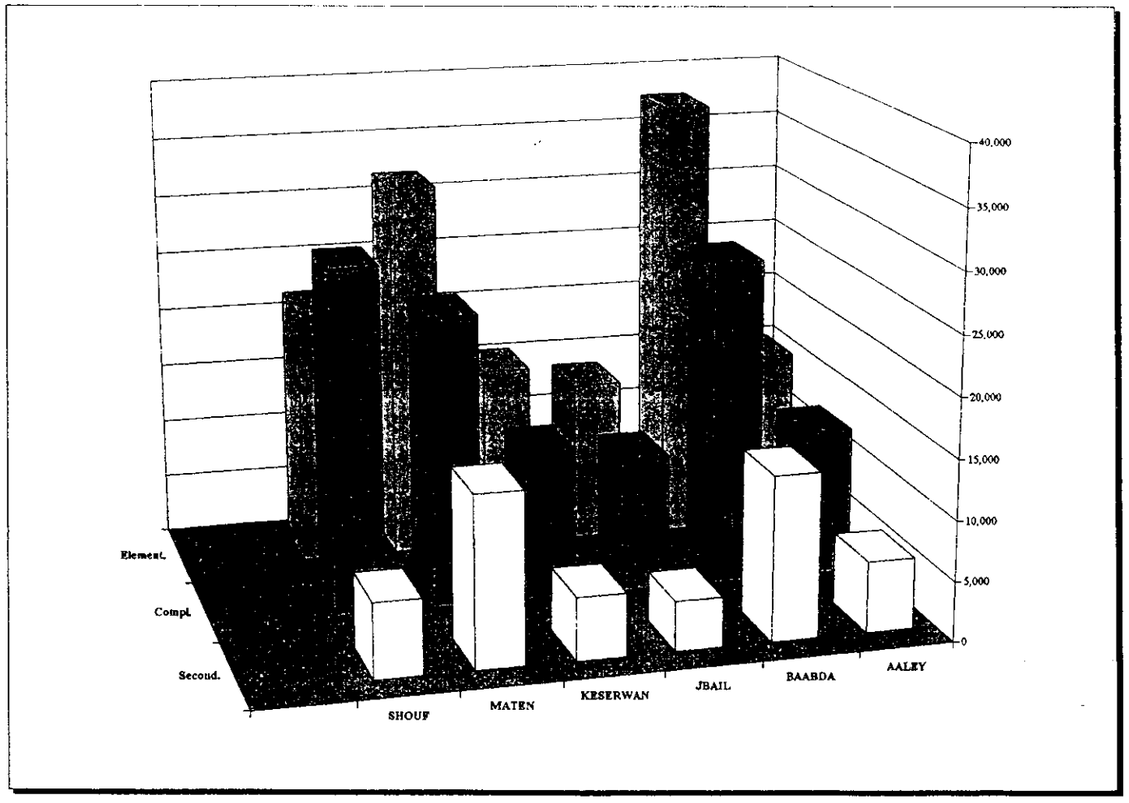
4 - ADDITIONAL NUMBER OF SCHOOLS REQUIRED IN 2005

STRATEGIC AREA	TOTAL NUMBER OF SCHOOLS													
	ELEMENTARY					COMPLEMENTARY					SECONDARY			
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
AALEY	19	6	1		**26**	15	5			**20**	7	3			**10**
BAABDA	19	4		15	**38**	17	2	4	6	**29**	5	4	2	3	**14**
JBAIL	20	5			**25**	17	2			**19**	5	2			**7**
KESERWAN	17	3	4		**24**	12	4	2		**18**	7	2			**9**
MATEN	22	8	4	6	**40**	17	11	2	2	**32**	10	5	4		**19**
SHOUF	29	5	3		**37**	38	9			**47**	9	2			**11**
TOTAL	126	31	12	21	190	116	33	8	8	165	43	18	6	3	70

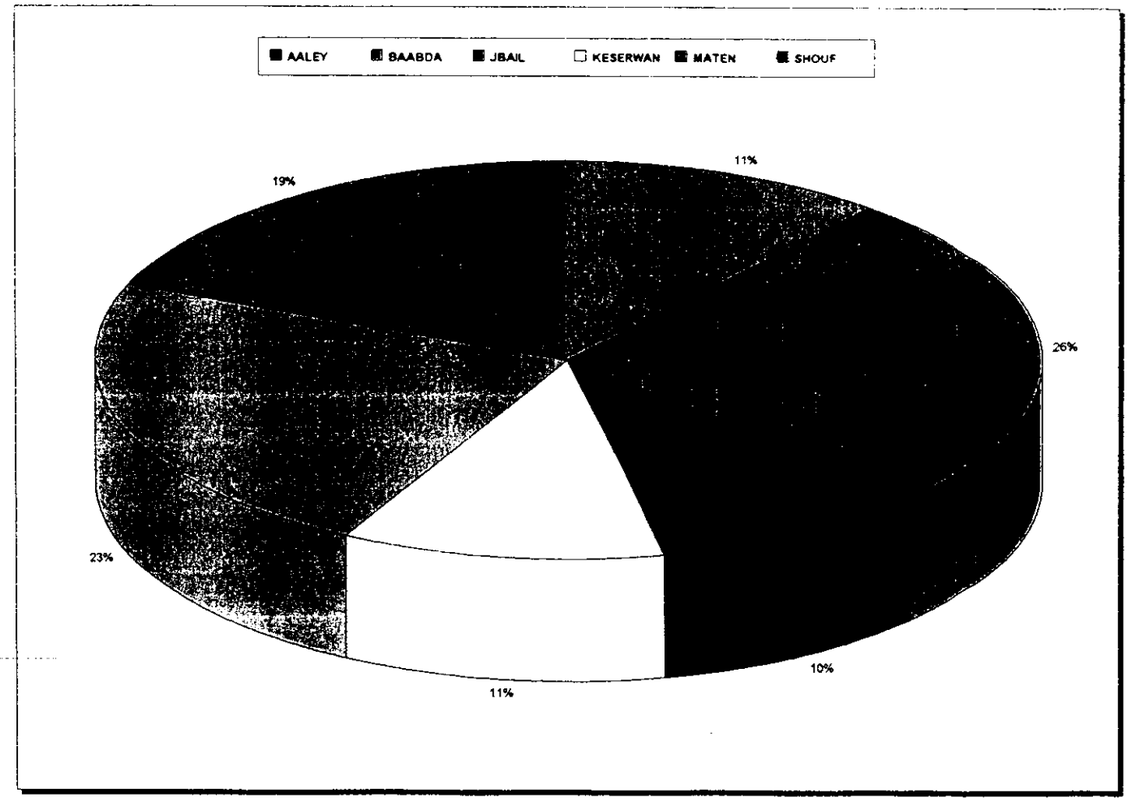
MOHAFAZAT SUMMARY (cont.)

5 - BUDGET

STRATEGIC AREA	NEW SCHOOLS									
	SQUARE METERS				TOTAL COST IN $ (1000's)			TOTAL NEW (1000's$)	ENG. COST (1000's $)	OVERALL TOT. (1000's $)
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
AALEY	42,131	34,480	16,631	**93,242**	15,163	12,466	5,951	**33,580**	**1,679**	**35,259**
BAABDA	100,883	74,184	37,097	**212,164**	37,701	27,414	13,694	**78,809**	**3,940**	**82,750**
JBAIL	38,311	31,511	11,580	**81,402**	13,711	11,361	4,142	**29,214**	**1,461**	**30,674**
KESERWAN	42,719	34,463	14,541	**91,722**	15,522	12,544	5,188	**33,254**	**1,663**	**34,916**
MATEN	86,379	66,601	39,008	**191,987**	31,853	24,361	14,190	**70,404**	**3,520**	**73,924**
SHOUF	60,481	79,783	17,501	**157,765**	21,798	28,813	6,234	**56,846**	**2,842**	**59,688**
TOTAL	**370,905**	**321,021**	**136,357**	**828,283**	**135,748**	**116,960**	**49,398**	**302,106**	**15,105**	**317,211**



TOTAL COST IN $ (1000's)



OVERALL TOTAL DISTRIBUTION (%)

MOHAFAZAT SUMMARY

MOHAFAZAT : NORTH LEBANON

Average Growth Rate :	**2.94%**
2002 Population :	**1,032,456**
2005 Population :	**1,126,350**
Pre-Elementary schooling population :	**1.24% of total**
Elementary schooling population :	**14.94% of total**
Complementary schooling population :	**8.55% of total**
Secondary schooling population :	**4.16% of total**

1 - POPULATION ESTIMATES

STRATEGIC AREA	YEAR	
	2002	2005
AAKKAR	302,469	329,700
BATROUN	65,765	71,890
BESHARRI	32,805	35,640
KOURA	104,813	114,050
TRIPOLI	456,741	498,630
ZGHARTA	69,863	76,440
TOTAL	1,032,456	1,126,350

2 - SCHOOLING POPULATION

STRATEGIC AREA	TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					PUBLIC (State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
AAKKAR	4,511	54,128	31,806	17,537	**107,982**	4,040/15,410	1,390/4,090	0/1,760	**5,430/21,260**
BATROUN	886	10,629	5,783	2,860	**20,158**	270/2,020	180/1,380	0/710	**450/4,110**
BESHARRI	471	5,655	3,063	1,505	**10,695**	0/1,100	0/700	0/230	**0/2,030**
KOURA	1,239	14,870	8,651	4,100	**28,861**	1,080/1,580	980/820	420/330	**2,480/2,730**
TRIPOLI	6,027	72,328	40,918	17,977	**137,250**	1,790/21,040	1,250/8,610	0/3,070	**3,040/32,720**
ZGHARTA	887	10,641	6,030	2,873	**20,430**	610/2,360	390/1,160	420/0	**1,420/3,520**
TOTAL	14,021	168,251	96,251	46,853	325,376	7,790/43,510	4,190/16,760	840/6,100	12,820/66,370

MOHAFAZAT SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS IN 2005

STRATEGIC AREA	EXISTING CAPACITY (To be Retained After Upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
AAKKAR	10,290	1,120		**11,410**	21,630	18,900	4,410	**44,940**
BATROUN	630	560		**1,190**	4,200	2,520	1,470	**8,190**
BESHARRI					2,520	1,820	630	**4,970**
KOURA	1,680	1,120		**2,800**	5,250	3,500	1,890	**10,640**
TRIPOLI	2,730	1,260		**3,990**	25,830	21,000	8,610	**55,440**
ZGHARTA	1,050	560	210	**1,820**	4,200	2,660	840	**7,700**
TOTAL	16,380	4,620	210	21,210	63,630	50,400	17,850	131,880

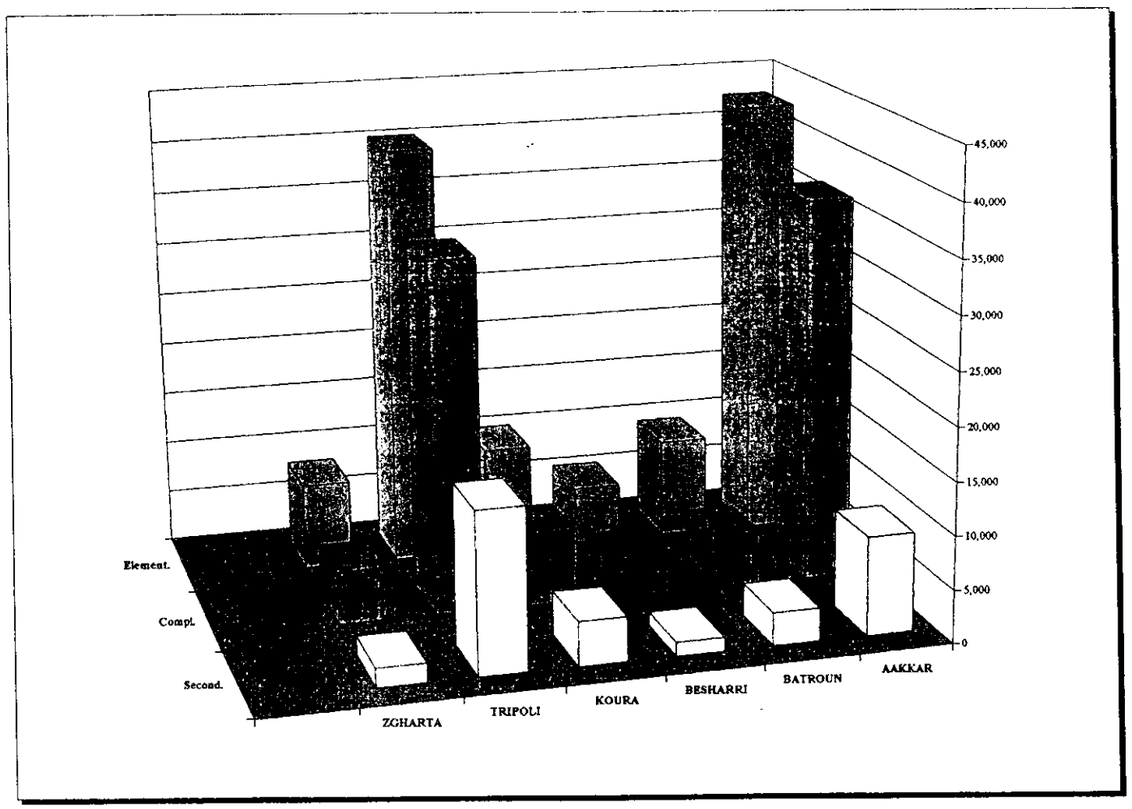
4 - ADDITIONAL NUMBER OF SCHOOLS REQUIRED IN 2005

STRATEGIC AREA	TOTAL NUMBER OF SCHOOLS													
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
AAKKAR	41	23	4		**68**	39	15	2		**56**	9	6			**15**
BATROUN	16	2			**18**	6	2			**8**	3	2			**5**
BESHARRI	8	2			**10**	5	1			**6**	1	1			**2**
KOURA	11	3	2		**16**	8	3			**11**	5	2			**7**
TRIPOLI	17	8	6	11	**42**	9	6	7	8	**30**	3	11	4		**18**
ZGHARTA	10	2		1	**13**	5	1	1		**7**	2	1			**3**
TOTAL	103	40	12	12	167	72	28	10	8	118	23	23	4		50

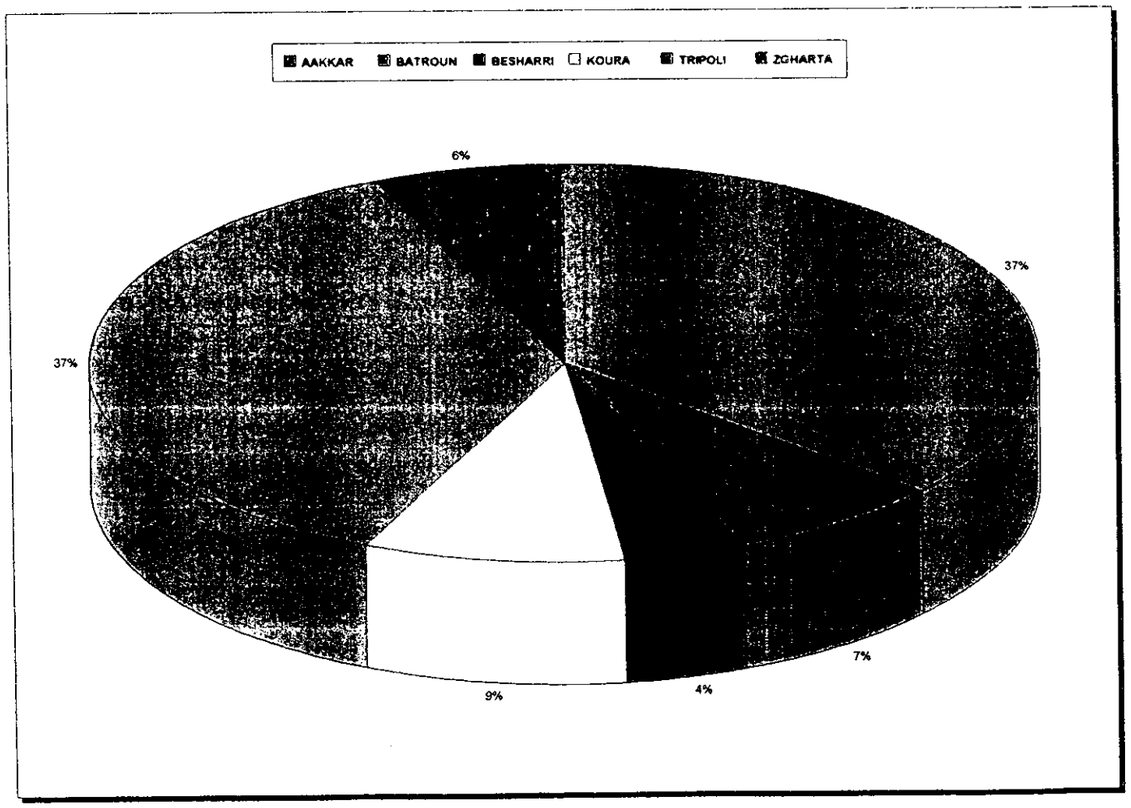
MOHAFAZAT SUMMARY (cont.)

5 - BUDGET

STRATEGIC AREA	NEW SCHOOLS							TOTAL NEW (1000's$)	ENG. COST (1000's $)	OVERALL TOT. (1000's $)
	SQUARE METERS				TOTAL COST IN $ (1000's)					
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
AAKKAR	117,339	100,654	25,860	**243,853**	42,461	36,492	9,287	**88,240**	**4,412**	**92,652**
BATROUN	26,556	13,792	8,620	**48,968**	9,471	4,986	3,096	**17,553**	**878**	**18,430**
BESHARRI	15,324	10,118	3,570	**29,012**	5,484	3,652	1,286	**10,423**	**521**	**10,944**
KOURA	27,939	19,077	11,580	**58,596**	10,130	6,900	4,142	**21,172**	**1,059**	**22,230**
TRIPOLI	107,723	89,509	41,185	**238,416**	40,176	33,290	15,107	**88,573**	**4,429**	**93,002**
ZGHARTA	22,534	13,557	5,050	**41,141**	8,164	4,938	1,809	**14,911**	**746**	**15,656**
TOTAL	**317,415**	**246,707**	**95,865**	**659,987**	**115,886**	**90,260**	**34,726**	**240,872**	**12,044**	**252,915**



TOTAL COST IN $ (1000's)



OVERALL TOTAL DISTRIBUTION (%)

MOHAFAZAT SUMMARY

MOHAFAZAT : SOUTH LEBANON

Average Growth Rate :	**3.61%**
2002 Population :	**891,481**
2005Population :	**991,670**
Pre-Elementary schooling population :	**1.29% of total**
Elementary schooling population :	**15.48% of total**
Complementary schooling population :	**8.73% of total**
Secondary schooling population :	**3.84% of total**

1 - POPULATION ESTIMATES

STRATEGIC AREA	YEAR	
	2002	2005
BINT JBAIL	92,067	102,710
HASBAYA	36,919	40,700
JEZZINE	42,750	47,980
MARJEEYOUN	62,288	68,920
NABATYEH	155,907	173,260
SAIDA	257,382	286,700
TYRE	244,168	271,400
TOTAL	891,481	991,670

2 - SCHOOLING POPULATION

STRATEGIC AREA	TOTAL NUMBER OF STUDENTS								
	TOTAL DEMAND (2005)					PUBLIC (State/Non-State Owned)			
	Pre-Elem.	Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BINT JBAIL	1,400	16,799	9,258	3,995	**31,452**	2,950/3,520	1,660/1,280	0/1,650	**4,610/6,450**
HASBAYA	558	6,702	3,693	1,594	**12,547**	1,140/1,880	400/730	160/0	**1,700/2,610**
JEZZINE	547	6,567	3,782	1,693	**12,589**	960/630	520/420	580/310	**2,060/1,360**
MARJEEYOUN	939	11,272	6,212	2,680	**21,103**	3,450/1,120	1,470/290	170/0	**5,090/1,410**
NABATYEH	2,465	29,575	16,298	7,033	**55,370**	4,160/3,690	1,560/3,090	0/770	**5,720/7,550**
SAIDA	3,571	42,854	25,461	11,609	**83,496**	3,230/5,890	1,810/4,520	770/1,660	**5,810/12,070**
TYRE	3,308	39,702	21,879	9,441	**74,330**	4,580/9,000	1,330/3,020	330/450	**6,240/12,470**
TOTAL	12,789	153,471	86,582	38,045	290,887	20,470/25,730	8,750/13,350	2,010/4,840	31,230/43,920

MOHAFAZAT SUMMARY (cont.)

3 - PUBLIC SCHOOL STUDENTS IN 2005

STRATEGIC AREA	EXISTING CAPACITY (To be Retained After Upgrading)				ADDITIONAL CAPACITY TO BE PROVIDED FOR			
	Pre-Elem./Element.	Compl.	Second.	TOTAL	Pre-Elem./Element.	Compl.	Second.	TOTAL
BINT JBAIL	5,460	1,120	420	**7,000**	4,200	4,060	1,260	**9,520**
HASBAYA	3,990	700		**4,690**	1,050	1,960	630	**3,640**
JEZZINE	3,360	280	420	**4,060**	2,100	1,260	420	**3,780**
MARJEEYOUN	3,990	560		**4,550**	2,100	2,940	1,470	**6,510**
NABATYEH	8,610	3,500	420	**12,530**	5,250	7,280	2,730	**15,260**
SAIDA	7,980	1,540	210	**9,730**	13,860	11,340	3,780	**28,980**
TYRE	9,660	840	420	**10,920**	9,870	12,180	3,150	**25,200**
TOTAL	**43,050**	**8,540**	**1,890**	**53,480**	**38,430**	**41,020**	**13,440**	**92,890**

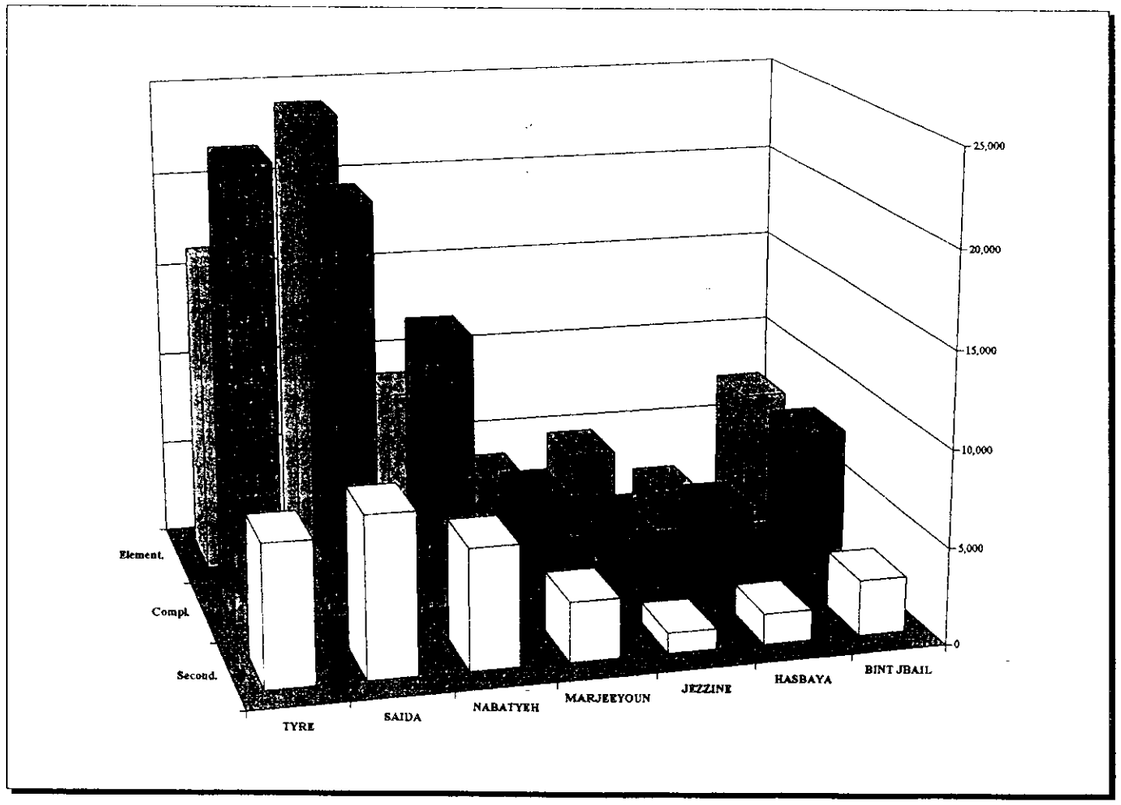
4 - ADDITIONAL NUMBER OF SCHOOLS REQUIRED IN 2005

STRATEGIC AREA	TOTAL NUMBER OF SCHOOLS														
	ELEMENTARY					COMPLEMENTARY					SECONDARY				
	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL	SMALL	MEDIUM	LARGE	X'LARGE	TOTAL
BINT JBAIL	4	4	2		10	7	5			12	4	1			5
HASBAYA	3	1			4	7				7	3				3
JEZZINE	8	1			9	3	1			4	2				2
MARJEEYOUN	2	2	1		5	3	5			8	3	2			5
NABATYEH	5	2	4		11	14	8			22	9	2			11
SAIDA	18	6	6	2	32	18	11	2		31	10	4			14
TYRE	9	4	6	1	20	24	11	1		36	11	2			13
TOTAL	49	20	19	3	91	76	41	3		120	42	11			53

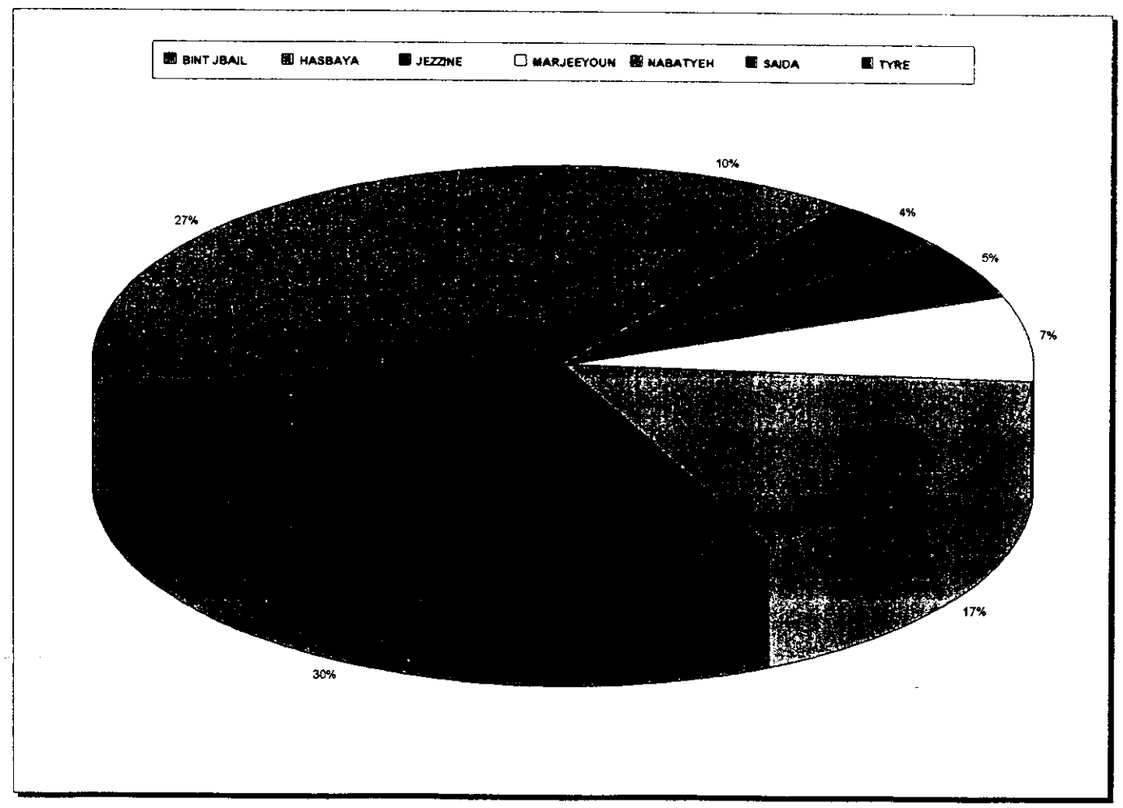
MOHAFAZAT SUMMARY (cont.)

5 - BUDGET

STRATEGIC AREA	NEW SCHOOLS									
	SQUARE METERS				TOTAL COST IN $ (1000's)			TOTAL NEW (1000's$)	ENG. COST (1000's $)	OVERALL TOT. (1000's $)
	Element.	Compl.	Second.	TOTAL	Element.	Compl.	Second.			
BINT JBAIL	20,157	21,594	8,011	**49,761**	7,391	7,830	2,855	**18,076**	**904**	**18,980**
HASBAYA	6,258	11,276	4,441	**21,974**	2,244	4,057	1,569	**7,870**	**393**	**8,263**
JEZZINE	13,278	6,896	2,960	**23,135**	4,735	2,493	1,046	**8,275**	**414**	**8,688**
MARJEEYOUN	10,079	15,150	8,620	**33,849**	3,696	5,512	3,096	**12,303**	**615**	**12,918**
NABATYEH	23,825	39,060	17,501	**80,386**	8,793	14,151	6,234	**29,177**	**1,459**	**30,636**
SAIDA	65,421	58,573	23,161	**147,154**	24,034	21,304	8,283	**53,621**	**2,681**	**56,302**
TYRE	44,291	64,798	20,462	**129,551**	16,369	23,495	7,280	**47,144**	**2,357**	**49,501**
TOTAL	**183,308**	**217,346**	**85,155**	**485,810**	**67,261**	**78,842**	**30,363**	**176,466**	**8,823**	**185,289**



TOTAL COST IN $ (1000's)



OVERALL TOTAL DISTRIBUTION (%)

10

PHASING AND FINANCIAL PROGRAM

According to the methodology detailed in Section 5.8 of this Report, the aim of the phasing program may be summarized as follows:

10.1 - PHASE 1 (2 YEARS): PRIORITY

i - Up-grading of existing retained schools.
It is estimated that some 120,000 students shall ultimately be catered for in such schools.

ii - Provide some 100,000 new school seats according to the priority index presented below and detailed in Volume 2 of this Report.

10.2 - PHASE 2 (2 YEARS): EQUITY

Provide for an additional capacity of around 100,000 new students so as to achieve equity between Caza while still retaining all existing facilities.

10.3 - PHASE 3 (3 YEARS): SATISFACTION

An additional capacity of around 160,000 students so as to reach a total capacity of around 500,000 students by the year 2002:

- 360,000 students in new schools
- 120,000 students in existing retained schools
- 20,000 students in existing, so far retained schools

10.4 - PHASE 4 (3 YEARS): ULTIMATE

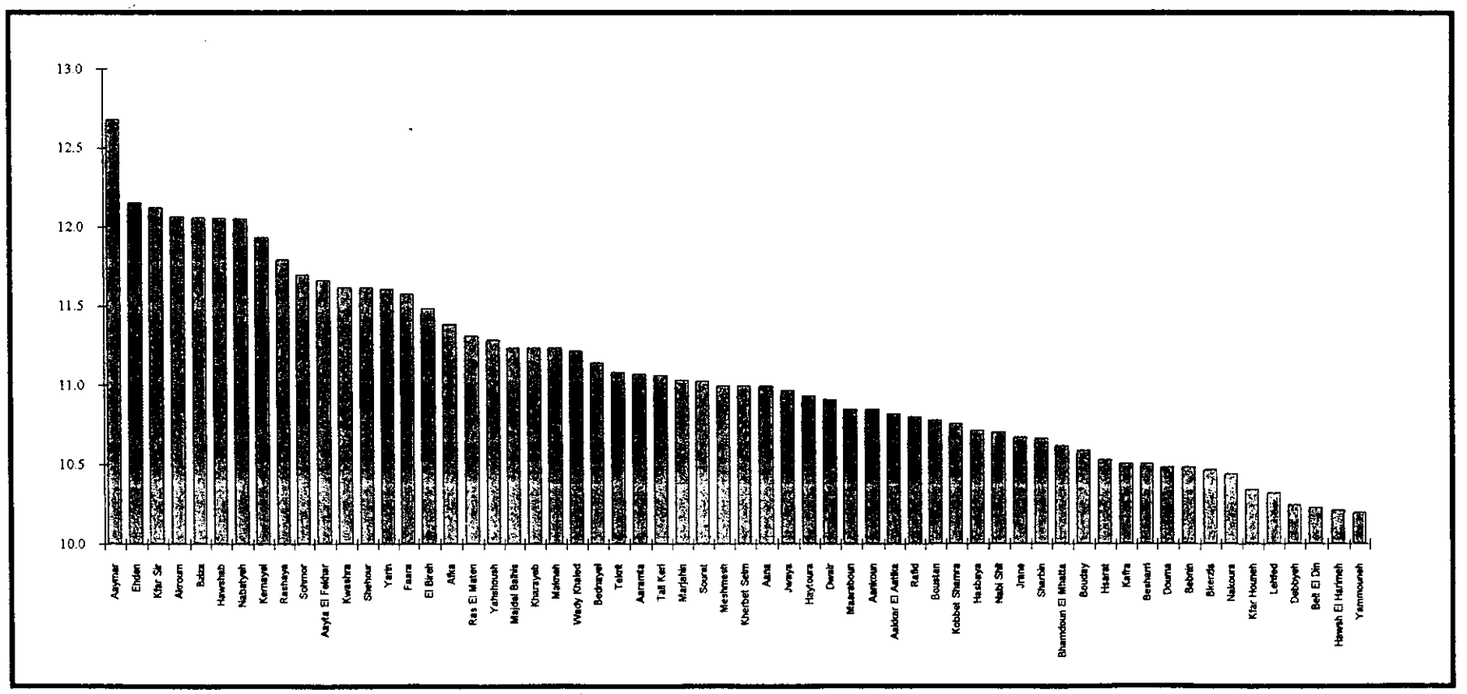
Achieve a total capacity of 600,000 students in the public sector by the year 2005, completely phasing-out non state owned existing schools.

NEED & PRIORITY INDEX

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
1	Aaymar	TRIPOLI	12.68
2	Ehden	ZGHARTA	12.15
3	Kfar Sir	NABATYEH	12.12
4	Akroum	AAKAR	12.07
5	Bziza	KOURA	12.06
6	Hawshab	AAKAR	12.06
7	Nabatyeh	NABATYEH	12.05
8	Kernayel	BAABDA	11.93
9	Rashaya	RASHAYA	11.79
10	Sohmor	WEST BEKAA	11.70
11	Aayta El Fekhar	RASHAYA	11.66
12	Kwashra	AAKAR	11.62
13	Shehour	TYRE	11.62
14	Yarin	TYRE	11.61
15	Faara	HERMEL	11.58
16	El Bireh	AAKAR	11.49
17	Afka	JBAIL	11.38
18	Ras El Maten	BAABDA	11.31
19	Yahshoush	KESERWAN	11.29
20	Majdel Balhis	RASHAYA	11.24

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
21	Kharayeb	SAIDA	11.24
22	Makneh	BAALBAK	11.24
23	Wady Khaled	AAKAR	11.22
24	Bednayel	BAALBAK	11.14
25	Tekrit	AAKAR	11.08
26	Aaramta	JEZZINE	11.08
27	Tall Keri	AAKAR	11.07
28	Marjahin	HERMEL	11.04
29	Sourat	BATROUN	11.03
30	Meshmesh	AAKAR	11.00
31	Kherbet Selm	BINT JBAIL	11.00
32	Aana	WEST BEKAA	10.99
33	Jwaya	TYRE	10.97
34	Haytoura	JEZZINE	10.93
35	Dwair	NABATYEH	10.91
36	Maaraboun	BAALBAK	10.85
37	Aankoun	SAIDA	10.85
38	Aakkar El Aatika	AAKAR	10.82
39	Rafid	RASHAYA	10.80
40	Boustan	HERMEL	10.78

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
41	Kobbet Shamra	AAKAR	10.76
42	Hasbaya	HASBAYA	10.72
43	Nabi Shit	BAALBAK	10.71
44	Jrane	BATROUN	10.67
45	Sharbin	HERMEL	10.67
46	Bhamdoun El Mhatta	AALEY	10.62
47	Bouday	BAALBAK	10.59
48	Hsarat	JBAIL	10.53
49	Kafra	BINT JBAIL	10.51
50	Besharri	BESHARRI	10.51
51	Douma	BATROUN	10.49
52	Bebnin	AAKAR	10.49
53	Bkerzla	AAKAR	10.47
54	Nakoura	TYRE	10.44
55	Kfar Houneh	JEZZINE	10.34
56	Lehfed	JBAIL	10.32
57	Debbyeh	SHOUF	10.25
58	Beit El Din	SHOUF	10.23
59	Hawsh El Harimeh	WEST BEKAA	10.21
60	Yammouneh	BAALBAK	10.20

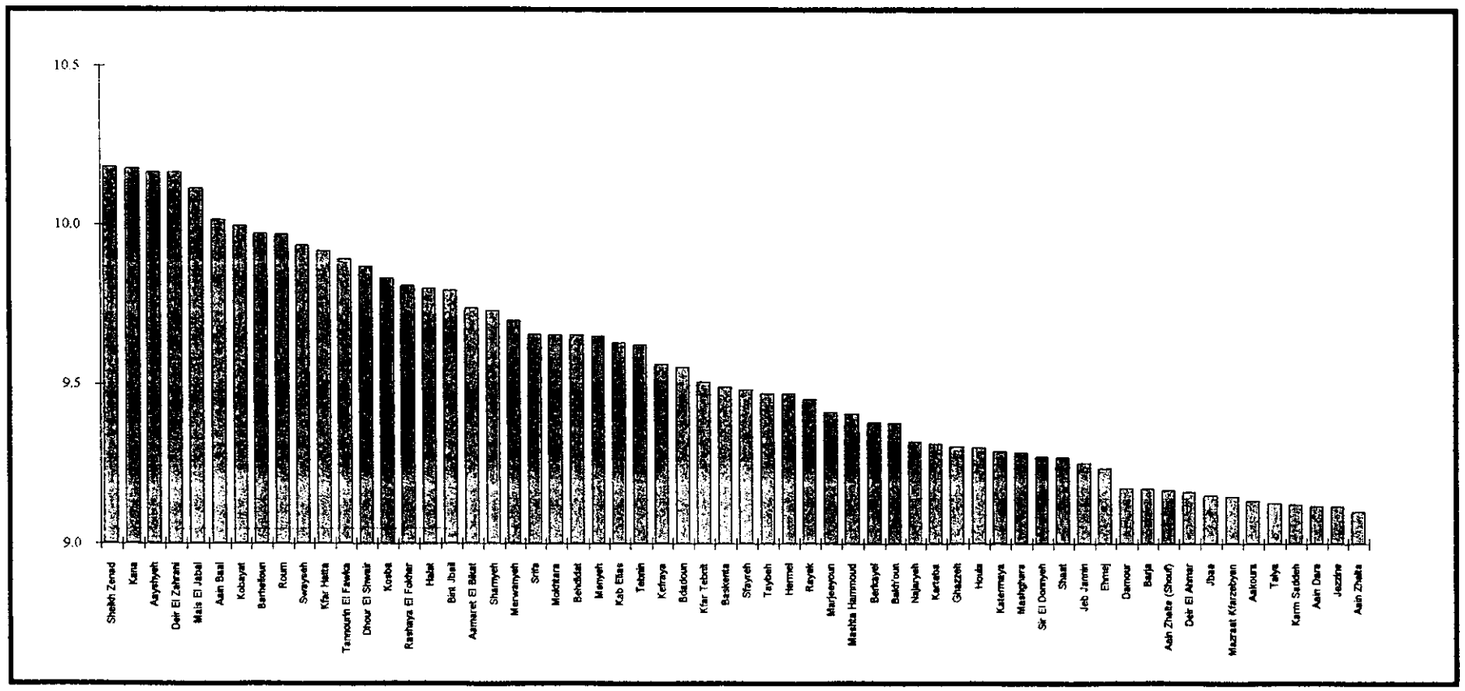


NEED & PRIORITY INDEX - Continued

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
61	Sheikh Zenad	AAKAR	10.18
62	Kana	TYRE	10.18
63	Aayshyeh	JEZZINE	10.17
64	Deir El Zahrani	NABATYEH	10.16
65	Mais El Jabal	MARJEEYOUN	10.11
66	Aain Baal	TYRE	10.02
67	Kobayat	AAKAR	10.00
68	Barhelioun	BESHARRI	9.97
69	Roum	JEZZINE	9.97
70	Swayseh	AAKAR	9.94
71	Kfar Hatta	SAIDA	9.92
72	Tannourin El Fawka	BATROUN	9.89
73	Dhour El Shwair	MATEN	9.87
74	Kosba	KOURA	9.83
75	Rashaya El Fokhar	HASBAYA	9.81
76	Halat	JBAIL	9.80
77	Bint Jbail	BINT JBAIL	9.79
78	Aamaret El Bikat	AAKAR	9.74
79	Sharnyeh	TYRE	9.73
80	Merwanyeh	SAIDA	9.70

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
81	Srifa	TYRE	9.66
82	Mokhtara	SHOUF	9.65
83	Behdidat	JBAIL	9.65
84	Menyeh	TRIPOLI	9.65
85	Kab Elias	ZAHLEH	9.63
86	Tebnin	BINT JBAIL	9.62
87	Kefraya	KOURA	9.56
88	Bdadoun	AALEY	9.55
89	Kfar Tebnit	NABATYEH	9.51
90	Baskenta	MATEN	9.49
91	Sfayreh	TRIPOLI	9.48
92	Taybeh	MARJEEYOUN	9.47
93	Hermel	HERMEL	9.47
94	Rayak	ZAHLEH	9.45
95	Marjeeyoun	MARJEEYOUN	9.41
96	Mashta Hammoud	AAKAR	9.41
97	Berkayel	AAKAR	9.38
98	Bakh'oun	TRIPOLI	9.38
99	Najaryeh	SAIDA	9.32
100	Kartaba	JBAIL	9.31

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
101	Ghazzeh	WEST BEKAA	9.31
102	Houla	MARJEEYOUN	9.30
103	Katermaya	SHOUF	9.29
104	Mashghara	WEST BEKAA	9.29
105	Sir El Donnyeh	TRIPOLI	9.27
106	Shaat	BAALBAK	9.27
107	Jeb Jannin	WEST BEKAA	9.25
108	Ehmej	JBAIL	9.24
109	Damour	SHOUF	9.18
110	Barja	SHOUF	9.17
111	Aain Zhalta (Shouf)	AALEY	9.17
112	Deir El Ahmar	BAALBAK	9.16
113	Jbaa	NABATYEH	9.15
114	Mazraat Kfarzebyan	KESERWAN	9.15
115	Aakoura	JBAIL	9.14
116	Talya	BAALBAK	9.13
117	Karm Saddeh	ZGHARTA	9.13
118	Aain Dara	AALEY	9.12
119	Jezzine	JEZZINE	9.12
120	Aain Zhalta	SHOUF	9.10

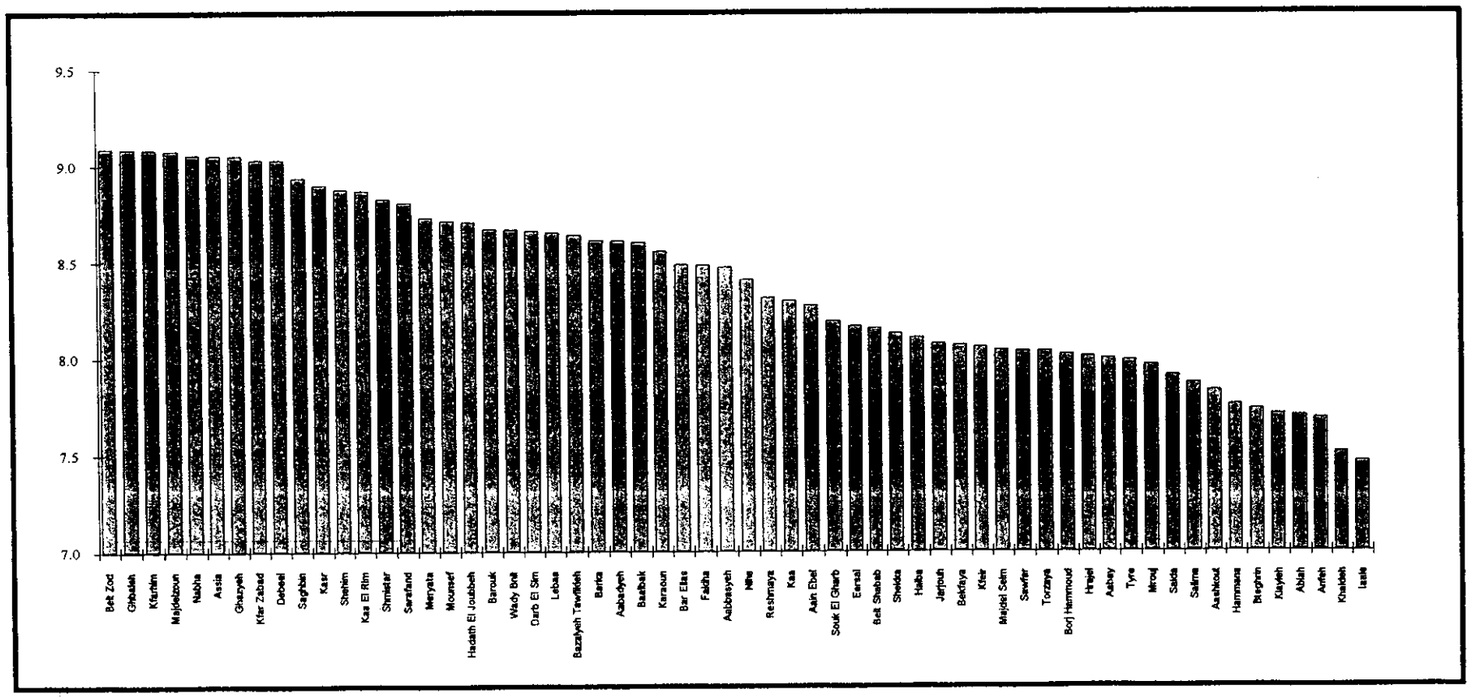


NEED & PRIORITY INDEX - Continued

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
121	Beit Zod	TRIPOLI	9.09
122	Ghbaleh	KESERWAN	9.09
123	Kfarhim	SHOUF	9.08
124	Majdelzoun	TYRE	9.08
125	Nabha	BAALBAK	9.06
126	Assia	BATROUN	9.05
127	Ghazyeh	SAIDA	9.05
128	Kfar Zabad	ZAHLEH	9.03
129	Debeel	TRIPOLI	9.03
130	Saghbin	WEST BEKAA	8.94
131	Kasr	HERMEL	8.90
132	Shehim	SHOUF	8.88
133	Kaa El Rim	ZAHLEH	8.87
134	Shmistar	BAALBAK	8.83
135	Sarafand	SAIDA	8.81
136	Meryata	ZGHARTA	8.73
137	Mounsef	JBAIL	8.71
138	Hadath El Joubbeh	BESHARRI	8.70
139	Barouk	SHOUF	8.67
140	Wady Bnit	HERMEL	8.67

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
141	Darb El Sim	SAIDA	8.66
142	Lebaa	JEZZINE	8.65
143	Bazalyeh Tawfikieh	BAALBAK	8.64
144	Barka	BAALBAK	8.61
145	Aabadyeh	BAABDA	8.61
146	Baalbak	BAALBAK	8.60
147	Karaoun	WEST BEKAA	8.55
148	Bar Elias	ZAHLEH	8.48
149	Fakiha	BAALBAK	8.48
150	Aabbasyeh	TYRE	8.47
151	Niha	SHOUF	8.41
152	Reshmaya	AALEY	8.31
153	Kaa	BAALBAK	8.30
154	Aain Ebel	BINT JBAIL	8.27
155	Souk El Gharb	AALEY	8.19
156	Eersal	BAALBAK	8.17
157	Beit Shabab	MATEN	8.15
158	Shekka	BATROUN	8.13
159	Halba	AAKAR	8.10
160	Jarjouh	NABATYEH	8.07

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
161	Bekfaya	MATEN	8.07
162	Kfeir	HASBAYA	8.06
163	Majdel Selm	MARJEEYOUN	8.04
164	Sawfar	AALEY	8.04
165	Torzaya	JBAIL	8.03
166	Borj Hammoud	MATEN	8.02
167	Hrajel	KESERWAN	8.01
168	Aabay	AALEY	8.00
169	Tyre	TYRE	7.99
170	Mrouj	MATEN	7.96
171	Saida	SAIDA	7.91
172	Salima	BAABDA	7.87
173	Aashkout	KESERWAN	7.83
174	Hammana	BAABDA	7.76
175	Bteghrin	MATEN	7.73
176	Klayleh	TYRE	7.71
177	Ablah	ZAHLEH	7.70
178	Anfeh	KOURA	7.69
179	Khaldeh	AALEY	7.51
180	Iaale	ZGHARTA	7.46

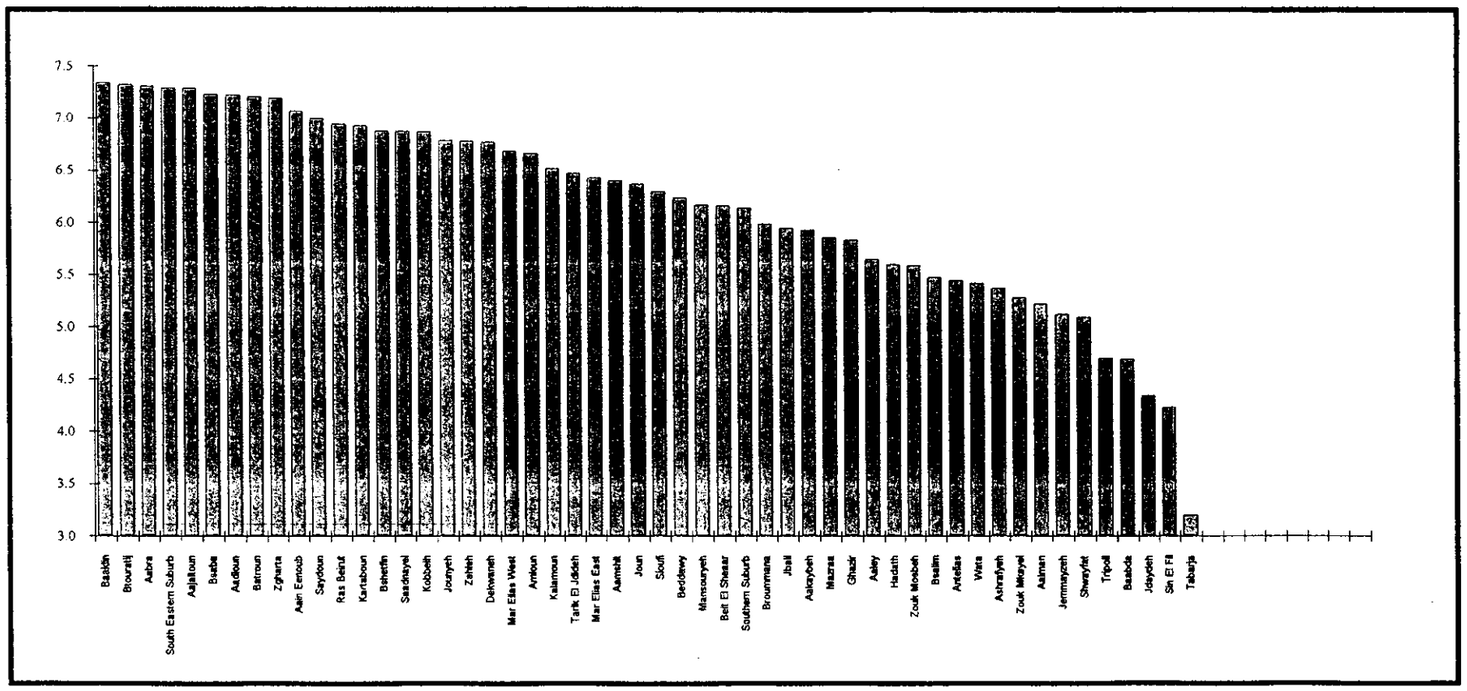


NEED & PRIORITY INDEX - Continued

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
181	Baaklin	SHOUF	7.34
182	Btouratij	KOURA	7.32
183	Aabra	SAIDA	7.31
184	South Eastern Suburb	BAABDA	7.29
185	Aajaltoun	KESERWAN	7.29
186	Bsaba	SHOUF	7.23
187	Aadloun	SAIDA	7.22
188	Batroun	BATROUN	7.21
189	Zgharta	ZGHARTA	7.19
190	Aain Eenoub	AALEY	7.07
191	Saydoun	JEZZINE	7.00
192	Ras Beirut	BEIRUT WEST	6.94
193	Kartaboun	JBAIL	6.93
194	Bshetfin	SHOUF	6.88
195	Saadnayel	ZAHLEH	6.88
196	Kobbeih	BAABDA	6.87
197	Jounyeh	KESERWAN	6.79
198	Zahleh	ZAHLEH	6.78
199	Dekwaneh	MATEN	6.77
200	Mar Elias West	BEIRUT WEST	6.68

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
201	Amioun	KOURA	6.66
202	Kalamoun	TRIPOLI	6.52
203	Tarik El Jdideh	BEIRUT WEST	6.47
204	Mar Elias East	BEIRUT WEST	6.43
205	Aamshit	JBAIL	6.40
206	Joun	SHOUF	6.37
207	Sioufi	BEIRUT EAST	6.30
208	Beddawy	TRIPOLI	6.24
209	Mansouryeh	MATEN	6.17
210	Beit El Sheaar	MATEN	6.16
211	Southern Suburb	BAABDA	6.14
212	Broummana	MATEN	5.99
213	Jbail	JBAIL	5.95
214	Aakaybeh	KESERWAN	5.93
215	Mazraa	BEIRUT WEST	5.86
216	Ghazir	KESERWAN	5.83
217	Aaley	AALEY	5.65
218	Hadath	BAABDA	5.60
219	Zouk Mosbeh	KESERWAN	5.59
220	Bsalim	MATEN	5.47

RANK	CATCH. AREA	CAZA	PRIORITY INDICATOR
221	Antelias	MATEN	5.45
222	Wata	BEIRUT WEST	5.42
223	Ashrafyeh	BEIRUT EAST	5.37
224	Zouk Mkayel	KESERWAN	5.28
225	Aalman	SHOUF	5.22
226	Jemmayzeh	BEIRUT EAST	5.12
227	Shwayfat	AALEY	5.09
228	Tripoli	TRIPOLI	4.70
229	Baabda	BAABDA	4.69
230	Jdaydeh	MATEN	4.35
231	Sin El Fil	MATEN	4.23
232	Tabarja	KESERWAN	3.20



PHASE 1 : PRIORITY (2 YEARS)

NEW SCHOOL PROGRAM (Listed by Priority)

RANK	LOCALITY	CATCH AREA	CAZA	PRIORITY INDEX	FUTURE SCHOOLS												TOTAL	BUDGET ($) INCL. 5% ENG. COST
					ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS					
					Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
1	Aaymar	Aaymar	TRIPOLI	12.68	1				1								2	1,131,701
2	Toula	Ehden	ZGHARTA	12.15	1												1	523,215
3	Kfar Sir	Kfar Sir	NABATYEH	12.12						1			1				2	1,341,622
4	Kfartoun (Akroum)	Akroum	AAKAR	12.07		1											1	786,466
5	Bziza	Bziza	KOURA	12.06	1												1	523,215
6	Majdel	Bziza	KOURA	12.06	1												1	523,215
7	Tall Aabbas Gharbi	Hawshab	AAKAR	12.06		1				1							2	1,578,869
8	Mayfadoun	Nabatyeh	NABATYEH	12.05					1								1	608,486
9	Nabatyeh	Nabatyeh	NABATYEH	12.05			2			1				1			4	4,115,567
10	Bzebdin	Kernayel	BAABDA	11.93	1				1								2	1,131,701
11	Kernayel	Kernayel	BAABDA	11.93					1				1				2	1,157,704
12	Tarshish	Kernayel	BAABDA	11.93	1												1	523,215
13	Bkifa	Rashaya	RASHAYA	11.79					1								1	608,486
14	Rashaya	Rashaya	RASHAYA	11.79					1				1				2	1,157,704
15	Kalya	Sohmor	WEST BEKAA	11.70	1												1	523,215
16	Yohmor	Sohmor	WEST BEKAA	11.70	1				1								2	1,131,701
17	Yanta	Aayta El Fekhar	RASHAYA	11.66	1				1								2	1,131,701
18	Menjez	Kwashra	AAKAR	11.62									1				1	549,218
19	Shehour	Shehour	TYRE	11.62					1								1	608,486
20	Teir Felsyeh	Shehour	TYRE	11.62	1				1								2	1,131,701
21	Yarin	Yarin	TYRE	11.61					1								1	608,486
22	Faara	Faara	HERMEL	11.58	1												1	523,215
23	El Bireh	El Bireh	AAKAR	11.49		1				1			1				3	2,128,088
24	Lasa	Afka	JBAIL	11.38	1				1								2	1,131,701
25	Ksaybeh	Ras El Maten	BAABDA	11.31	1												1	523,215
26	Ras El Maten	Ras El Maten	BAABDA	11.31					1				1				2	1,157,704
27	Yahshoush	Yahshoush	KESERWAN	11.29	1				1								2	1,131,701
28	Hawsh El Kanaabeh	Majdel Balhis	RASHAYA	11.24	1												1	523,215
29	Kharayeb	Kharayeb	SAIDA	11.24						1							1	792,404
30	Zraryeh	Kharayeb	SAIDA	11.24										1			1	801,310
31	Makneh	Makneh	BAALBAK	11.24					1								1	608,486
32	Younin	Makneh	BAALBAK	11.24	1												1	523,215
33	Knayseh (Aamayer)	Wady Khaled	AAKAR	11.22		1			1								2	1,394,951
34	Wady Khaled	Wady Khaled	AAKAR	11.22		1				1				1			3	2,380,179
35	Bednayel	Bednayel	BAALBAK	11.14						1			1				2	1,341,622
36	Tekrit	Tekrit	AAKAR	11.08						1				1			2	1,593,714
37	Aaramta	Aaramta	JEZZINE	11.08					1				1				2	1,157,704
38	Mlikh	Aaramta	JEZZINE	11.08	1												1	523,215
39	Sojod	Aaramta	JEZZINE	11.08	1												1	523,215
40	Tall Meeyan	Tall Keri	AAKAR	11.07		1				1			1				3	2,128,088
41	Marjahin	Marjahin	HERMEL	11.04	1												1	523,215
42	Boksmaya	Sourat	BATROUN	11.03	1												1	523,215
43	Sourat	Sourat	BATROUN	11.03	1												1	523,215
44	Fnaydek	Meshmesh	AAKAR	11.00		1				1			1				3	2,128,088
45	Hrar	Meshmesh	AAKAR	11.00	1				1								2	1,131,701
46	Kherbet Selm	Kherbet Selm	BINT JBAIL	11.00					1								1	608,486
47	Aana	Aana	WEST BEKAA	10.99					1								1	608,486
48	Mansoura	Aana	WEST BEKAA	10.99	1												1	523,215
49	Bazouryeh	Jwaya	TYRE	10.97			1			1			1				3	2,602,548
50	Shehabyeh	Jwaya	TYRE	10.97						1			1				2	1,341,622
51	Haytoura	Haytoura	JEZZINE	10.93	1												1	523,215
52	Ansar	Dwair	NABATYEH	10.91						1			1				2	1,341,622
53	Dwair	Dwair	NABATYEH	10.91					1				1				2	1,157,704
54	Maaraboun	Maaraboun	BAALBAK	10.85	1				1								2	1,131,701
55	Aankoun	Aankoun	SAIDA	10.85		1			1				1				3	1,944,170

PHASE 1 : PRIORITY (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Priority)

RANK	LOCALITY	CATCH AREA	CAZA	PRIORITY INDEX	FUTURE SCHOOLS												TOTAL	BUDGET ($) INCL. 5% ENG. COST
					ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS					
					Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
56	Bezbina	Aakkar El Aatika	AAKAR	10.82					1								1	608,486
57	Rafid	Rafid	RASHAYA	10.80					1				1				2	1,157,704
58	Boustan	Boustan	HERMEL	10.78	1												1	523,215
59	Fisan	Boustan	HERMEL	10.78	1				1								2	1,131,701
60	Kobbet Shamra	Kobbet Shamra	AAKAR	10.76		1			1								2	1,394,951
61	Aain Kanya	Hasbaya	HASBAYA	10.72					1								1	608,486
62	Shebaa	Hasbaya	HASBAYA	10.72					1				1				2	1,157,704
63	Naby Shit	Nabi Shit	BAALBAK	10.71		1				1			1				3	2,128,088
64	Jrane	Jrane	BATROUN	10.67					1				1				2	1,157,704
65	Sharbin	Sharbin	HERMEL	10.67	1				1								2	1,131,701
66	Zeghrin	Sharbin	HERMEL	10.67	1				1								2	1,131,701
67	Bhamdoun El Mhatta	Bhamdoun El Mhatta	AALEY	10.62		1			1				1				3	1,944,170
68	Btater	Bhamdoun El Mhatta	AALEY	10.62	1				1								2	1,131,701
69	Bouday	Bouday	BAALBAK	10.59	1				1				1				3	1,680,919
70	Saaydeh	Bouday	BAALBAK	10.59	1												1	523,215
71	Bejje	Hsarat	JBAIL	10.53	1				1				1				3	1,680,919
72	Kafra	Kafra	BINT JBAIL	10.51		1			1								2	1,394,951
73	Rashaf	Kafra	BINT JBAIL	10.51	1												1	523,215
74	Ban	Besharri	BESHARRI	10.51	1												1	523,215
75	Besharri	Besharri	BESHARRI	10.51	1	1				1				1			4	2,903,394
76	Douma	Douma	BATROUN	10.49	1				1				1				3	1,680,919
77	Kfarhelda	Douma	BATROUN	10.49	1												1	523,215
78	Bebnin	Bebnin	AAKAR	10.49			1				1			1			3	3,412,298
79	Bkerzla	Bkerzla	AAKAR	10.47		1				1							2	1,578,869
80	Aalma El Shaab	Nakoura	TYRE	10.44					1				1				2	1,157,704
81	Nakoura	Nakoura	TYRE	10.44					1								1	608,486
82	Srireh	Kfar Houneh	JEZZINE	10.34	1												1	523,215
83	Lehfed	Lehfed	JBAIL	10.32		1			1				1				3	1,944,170
84	Tartij	Lehfed	JBAIL	10.32	1				1								2	1,131,701
85	Dahr Aain El Hawr	Debbyeh	SHOUF	10.25	1												1	523,215
86	Debbyeh	Debbyeh	SHOUF	10.25	1				1				1				3	1,680,919
87	Deir El Kamar	Beit El Din	SHOUF	10.23		1			1				1				3	1,944,170
88	Kfarkatra	Beit El Din	SHOUF	10.23					1								1	608,486
89	Marj	Hawsh El Harimeh	WEST BEKAA	10.21		1			1				1				3	1,944,170
90	Aainata	Yammouneh	BAALBAK	10.20	1												1	523,215
91	Sheikh Zenad	Sheikh Zenad	AAKAR	10.18	1				1								2	1,131,701
92	Kana	Kana	TYRE	10.18			1			1			1				3	2,602,548
93	Aayshyeh	Aayshyeh	JEZZINE	10.17	1												1	523,215
94	Deir El Zahrani	Deir El Zahrani	NABATYEH	10.16		1			1				1				3	1,944,170
95	Aain Baal	Aain Baal	TYRE	10.02						1			1				2	1,341,622
96	Smaaiyeh	Aain Baal	TYRE	10.02					1								1	608,486
97	Kobayat	Kobayat	AAKAR	10.00	1		1			1				1			4	3,377,855
98	Barhelioun	Barhelioun	BESHARRI	9.97	1				1								2	1,131,701
99	Anan	Roum	JEZZINE	9.97	1												1	523,215
100	Swayseh	Swayseh	AAKAR	9.94					1				1				2	1,157,704
101	Kfar Hatta	Kfar Hatta	SAIDA	9.92					1				1				2	1,157,704
102	Tannourin El Fawka	Tannourin El Fawka	BATROUN	9.89	1				1				1				3	1,680,919
103	Shwair	Dhour El Shwair	MATEN	9.87	1					1							2	1,315,619
104	Bsorma	Kosba	KOURA	9.83	1												1	523,215
105	Kosba	Kosba	KOURA	9.83		1			1				1				3	1,944,170
106	Halta	Rashaya El Fokhar	HASBAYA	9.81	1												1	523,215
107	Mari	Rashaya El Fokhar	HASBAYA	9.81					1								1	608,486
108	Bir El Hyt	Halat	JBAIL	9.80	1				1								2	1,131,701
109	Aaytaroun	Bint Jbail	BINT JBAIL	9.79						1			1				2	1,341,622
110	Bint Jbail	Bint Jbail	BINT JBAIL	9.79			1			1				1			3	2,854,640

PHASE 1 : PRIORITY (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Priority)

RANK	LOCALITY	CATCH. AREA	CAZA	PRIORITY INDEX	FUTURE SCHOOLS												BUDGET ($) INCL. 5% ENG. COST
					ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL
					Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	
111	Aaboudyeh	Aamaret El Bikat	AAKAR	9.74		1			1								2	1,394,951
112	Maaraka	Sharnyeh	TYRE	9.73			1			1			1				3	2,602,548
113	Babiliyeh	Merwanyeh	SAIDA	9.70			1			1			1				3	2,602,548
114	Merwanyeh	Merwanyeh	SAIDA	9.70						1				1			2	1,593,714
115	Teffahta	Merwanyeh	SAIDA	9.70					1								1	608,486
116	Srifa	Srifa	TYRE	9.66					1				1				2	1,157,704
117	Baadaran	Mokhtara	SHOUF	9.65	1				1								2	1,131,701
118	Maz. El Shouf	Mokhtara	SHOUF	9.65						1							1	792,404
119	Mokhtara	Mokhtara	SHOUF	9.65						1				1			2	1,593,714
120	Menyeh	Menyeh	TRIPOLI	9.65				1			1			1			3	3,917,983
121	Kab Elias	Kab Elias	ZAHLEH	9.63			1				1				1		3	3,961,049
122	Braashit	Tebnin	BINT JBAIL	9.62					1								1	608,486
123	Shakra	Tebnin	BINT JBAIL	9.62		1				1			1				3	2,128,088
124	Tebnin	Tebnin	BINT JBAIL	9.62		1			1				1				3	1,944,170
125	Kefraya	Kefraya	KOURA	9.56	1				1								2	1,131,701
126	Kfarhata	Kefraya	KOURA	9.56									1				1	549,218
127	Bdadoun	Bdadoun	AALEY	9.55					1								1	608,486
128	Kmatyeh	Bdadoun	AALEY	9.55		1			1								2	1,394,951
129	Kfar Tebnit	Kfar Tebnit	NABATYEH	9.51					1				1				2	1,157,704
130	Yohmor	Kfar Tebnit	NABATYEH	9.51					1								1	608,486
131	Zawtar El Sharkiyeh	Kfar Tebnit	NABATYEH	9.51					1								1	608,486
132	Baskenta	Baskenta	MATEN	9.49		1				1				1			2	1,341,622
133	Wady El Karm	Baskenta	MATEN	9.49	1								1				2	1,341,622
134	Beit El Faks	Sfayreh	TRIPOLI	9.48		1				1							1	549,218
135	Btormaz	Sfayreh	TRIPOLI	9.48		1								1			2	1,578,869
136	Sfayreh	Sfayreh	TRIPOLI	9.48		1				1							1	786,466
137	Kfar Kila	Taybeh	MARJEEYOUN	9.47						1				1			3	2,380,179
138	Taybeh	Taybeh	MARJEEYOUN	9.47									1				2	1,341,622
139	Bdita	Hermel	HERMEL	9.47	1				1				1				2	1,341,622
140	Dawra	Hermel	HERMEL	9.47	1				1								2	1,131,701
141	Hermel	Hermel	HERMEL	9.47		1					1			1			3	2,937,837
142	Aali El Nahri	Rayak	ZAHLEH	9.45	1				1								2	1,131,701
143	Rayak	Rayak	ZAHLEH	9.45		1				1				1			3	2,380,179
144	Debbin	Marjeeyoun	MARJEEYOUN	9.41					1								1	608,486
145	Khiam	Marjeeyoun	MARJEEYOUN	9.41			1			1				1			3	2,854,640
146	Marjeeyoun	Marjeeyoun	MARJEEYOUN	9.41						1				1			2	1,593,714
147	Shadra	Mashta Hammoud	AAKAR	9.41		1				1							2	1,578,869
148	Berkayel	Berkayel	AAKAR	9.38	1						1			1			3	2,674,586
149	Jdaydet El Kaytaa	Berkayel	AAKAR	9.38		1			1								2	1,394,951
150	Bakh'oun	Bakh'oun	TRIPOLI	9.38	1	1				1			1				4	2,651,303
151	Msayleh	Najaryeh	SAIDA	9.32	1												1	523,215
152	Najaryeh	Najaryeh	SAIDA	9.32					1								1	608,486
153	Kartaba	Kartaba	JBAIL	9.31		1			1				1				3	1,944,170
154	Ghazzeh	Ghazzeh	WEST BEKAA	9.31	1				1				1				3	1,680,919
155	Manara	Ghazzeh	WEST BEKAA	9.31					1								1	608,486
156	Houla	Houla	MARJEEYOUN	9.30					1								1	608,486
157	Tlousa	Houla	MARJEEYOUN	9.30	1												1	523,215
158	Katermaya	Katermaya	SHOUF	9.29		1			1				1				3	1,944,170
159	Wady El Zineh	Katermaya	SHOUF	9.29	1												1	523,215
160	Aain El Tineh	Mashghara	WEST BEKAA	9.29	1												1	523,215
161	Mashghara	Mashghara	WEST BEKAA	9.29						1			1				2	1,341,622
162	Aasoun	Sir El Donnyeh	TRIPOLI	9.27	1												1	523,215
163	Sir El Donnyeh	Sir El Donnyeh	TRIPOLI	9.27			1			1				1			3	2,854,640
				TOTAL	67	34	12	1	79	39	5		51	18	1		307	208,201,143

PHASE 2 : PARITY BETWEEN CAZA (2 YEARS)

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BAALBAK	Iaat	Baalbak		1			1				1				3	1,944,170
	Majdaloun	Baalbak	1												1	523,215
	Barka	Barka					1								1	608,486
	Bazalyeh Tawfikieh	Bazalyeh Tawfikieh	1												1	523,215
	Shlifa	Boudav	1												1	523,215
	Btedii	Deir El Ahmar	1												1	523,215
	Aain	Fakiha					1				1				2	1,157,704
	Zaboud	Fakiha	1												1	523,215
	Kaa	Kaa	1				1								2	1,131,701
	Nabha	Nabha	1				1				1				3	1,680,919
	Hrabta	Shaat	1												1	523,215
	Shaat	Shaat	1				1								2	1,131,701
	Hadath	Shmistar	1				1								2	1,131,701
	Hizzin	Talya	1												1	523,215
HERMEL	Kasr	Kasr	1				1				1			-	3	1,680,919
RASHAYA	Aayta El Fekhar	Aayta El Fekhar	1												1	523,215
	Deir El Aashaer	Aayta El Fekhar					1								1	608,486
	Kfar Meshki	Majdel Balhis	1				1								2	1,131,701
	Kfar Danis	Rafid					1								1	608,486
	Kherbet Rouha	Rafid	1				1								2	1,131,701
	Aain Aata	Rashaya					1								1	608,486
	Kfar Kouk	Rashaya					1								1	608,486
WEST BEKAA	Hawsh El Harimeh	Hawsh El Harimeh					1								1	608,486
	Kherbet Kanafar	Saghbin	1				1								2	1,131,701
	Lebbaya	Sohmor	1												1	523,215
ZAHLEH	Ferzol	Ablah	1												1	523,215
	Bar Elias	Bar Elias		1											1	786,466
	Majdel Aanjar	Bar Elias	1				1								2	1,131,701
	Hzirta	Kaa El Rim	1												1	523,215
	Kaa El Rim	Kaa El Rim					1								1	608,486
	Kfar Zabad	Kfar Zabad	1				1				1				3	1,680,919
	Haret El Fikany	Ravak	1												1	523,215
	Maallaka	Zahleh					1				1				2	1,157,704
AALEY	Aabay	Aabay	1					1			1				3	1,864,837
	Dakoun	Aabay	1												1	523,215
	Kfarmatta	Aabay	1				1								2	1,131,701
	Silfaya	Aabay	1												1	523,215
	Aain Dara	Aain Dara	1												1	523,215
	Aain Eenoub	Aain Eenoub	1												1	523,215
	Baysour	Aain Eenoub						1			1				2	1,341,622
	Kayfoun	Aain Eenoub	1				1								2	1,131,701
	Mansouryeh	Bhamdoun El Mhatta	1												1	523,215
	Aaramoun	Khaldeh		1				1			1				3	2,128,088
	Reshmaya	Reshmaya	1				1				1				3	1,680,919
	Bedghan	Sawfar	1												1	523,215
	Majdel Baana	Sawfar					1				1				2	1,157,704
	Sharoun	Sawfar					1								1	608,486
	Souk El Gharb	Souk El Gharb					1								1	608,486
BAABDA	Aabadyeh	Aabadyeh	1				1				1				3	1,680,919
	Baaleshmay	Aabadyeh		1			1								2	1,394,951
	Btekhnay	Hammana	1				1								2	1,131,701
	Hammana	Hammana	1				1								2	1,131,701
	Kfarselwan	Kernayel					1								1	608,486
	Salima	Salima	1				1								2	1,131,701
	Haret Hreik	Southern Suburb				3				2				1	6	11,027,496

PHASE 2 : PARITY BETWEEN CAZA (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BAABDA (Cont.)	Shyah	Southern Suburb				2				1			1		4	6,792,505
JBAIL	Aakoura	Aakoura	1				1								2	1,131,701
	Kohmoz	Afka	1												1	523,215
	Kfarmashoun	Behdidat	1				1								2	1,131,701
	Ehmej	Ehmej					1								1	608,486
	Hsarat	Hsarat	1				1								2	1,131,701
	Maad	Mounsef	1				1				1				3	1,680,919
	Aalmat	Torzaya					1				1				2	1,157,704
KESERWAN	Aajaltoun	Aajaltoun		1				1			1				3	2,128,088
	Aakaybeh	Aakaybeh	1												1	523,215
	Aashkout	Aashkout		1				1			1				3	2,128,088
	Raashin	Aashkout	1												1	523,215
	Ghazir	Ghazir	1				1								2	1,131,701
	Shahtoul	Ghazir	1				1								2	1,131,701
	Ghbaleh	Ghbaleh	1				1				1				3	1,680,919
	Maaysra	Ghbaleh	1												1	523,215
	Hrajel	Hrajel	1				1								2	1,131,701
	Mazraat Kfarzebyan	Mazraat Kfarzebyan	1				1				1				3	1,680,919
	Zouk Mosbeh	Zouk Mosbeh		1			1				1				3	1,944,170
MATEN	Mazraat Yashouh	Beit El Sheaar	1				1					1			3	1,933,011
	Beit Shabab	Beit Shabab		1			1				1				3	1,944,170
	Bekfaya	Bekfaya		1			1					1			3	2,196,261
	Hemlaya	Bekfaya	1				1								2	1,131,701
	Beit Mery	Broummana	1				1				1				3	1,680,919
	Bteghrin	Bteghrin	1					1							2	1,315,619
	Dekwaneh	Dekwaneh				1			1				1		3	4,466,734
	Dhour El Shwair	Dhour El Shwair	1				1				1				3	1,680,919
	Mansouryeh	Mansouryeh			1			1							2	2,053,330
	Aaintoura	Mrouj	1				1								2	1,131,701
	Mrouj	Mrouj	1				1				1				3	1,680,919
	Mtein	Mrouj	1				1								2	1,131,701
SHOUF	Aain Zhalta	Aain Zhalta	1				1				1				3	1,680,919
	Majdel El M'oush	Aain Zhalta	1				1								2	1,131,701
	Baaklin	Baaklin			1			1							2	2,053,330
	Brih	Barouk					1								1	608,486
	Bsaba	Bsaba	1												1	523,215
	Maz. El Dahr	Bsaba					1								1	608,486
	Haret El Naameh	Damour					1				1				2	1,157,704
	Joun	Joun					1								1	608,486
	Deir Dourit	Kfarhim	1												1	523,215
	Serjbal	Kfarhim	1												1	523,215
	Bater	Niha	1				1								2	1,131,701
AAKAR	Aakkar El Aatika	Aakkar El Aatika		1				1			1				3	2,128,088
	Shir Hmayrin	Aamaret El Bikat	1				1								2	1,131,701
	Danbo	Bkerzla		1			1				1				3	1,944,170
	Deir Dalloum	Bkerzla	1				1								2	1,131,701
	Kherbet Shar	El Bireh	1				1								2	1,131,701
	Halba	Halba			1			1				1			3	2,854,640
	Sharbila	Hawshab	1												1	523,215
	Aandkat	Kobayat		1			1								2	1,394,951
	Hwaysh	Meshmesh					1								1	608,486
	Aarida	Sheikh Zenad	1												1	523,215
	Deir Jannin	Swayseh	1												1	523,215
	Jebrayel	Tekrit	1												1	523,215
	Karha	Wadv Khaled					1								1	608,486

PHASE 2 : PARITY BETWEEN CAZA (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS												BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	TOTAL	
BATROUN	Assia	Assia	1				1								2	1,131,701
	Daeel	Assia	1												1	523,215
	Toula	Jrane	1				1								2	1,131,701
	Kfarhatna	Sourat	1												1	523,215
BESHARRI	Torza	Barhelioun	1				1								2	1,131,701
	Knat	Hadath El Joubbeh	1												1	523,215
KOURA	Deddeh	Anfeh		1				1			1				3	2,128,088
	Btouratij	Btouratij	1				1				1				3	1,680,919
	Dar Beeshtar	Bziza	1				1								2	1,131,701
TRIPOLI	Izal	Beit Zod	1												1	523,215
	Kfar Habou	Beit Zod		1			1				1				3	1,944,170
	Debeel	Debeel	1				1								2	1,131,701
	Houwara	Debeel	1												1	523,215
	Kalamoun	Kalamoun				1				1		1			3	4,477,142
	Markabta	Menyeh	1												1	523,215
	Rihanyeh	Menyeh	1												1	523,215
	Korsayta	Sfayreh	1												1	523,215
	Nemrin	Sfayreh	1												1	523,215
	Taran	Sfayreh	1				1								2	1,131,701
	Bkaa Safrin	Sir El Donnyeh	1				1								2	1,131,701
	Bkarsouna	Sir El Donnyeh	1												1	523,215
	Hakl El Aazimeh	Sir El Donnyeh	1				1								2	1,131,701
ZGHARTA	Iaale	Iaale					1								1	608,486
	Kfar Zina	Iaale	1				1								2	1,131,701
	Sebeel	Karm Saddeh	1				1				1				3	1,680,919
	Sereel	Karm Saddeh	1												1	523,215
	Aalma	Meryata	1												1	523,215
	Haret El Fouwar	Meryata	1												1	523,215
	Haylan	Meryata	1												1	523,215
	Ardeh	Zgharta	1												1	523,215
	Mejdlaya	Zgharta		1			1								2	1,394,951
BINT JBAIL	Aayta El Shaab	Aain Ebel			1			1							2	2,053,330
	Ramyeh	Aain Ebel	1												1	523,215
	Aaynata	Bint Jbail					1								1	608,486
	Jmayjmeh	Tebnin					1								1	608,486
HASBAYA	Aain Jarfa	Hasbaya	1												1	523,215
	Shwaya	Hasbaya	1												1	523,215
	Kfeir	Kfeir					1				1				2	1,157,704
	Khelwat El Kfeir	Kfeir					1								1	608,486
JEZZINE	Lwayzeh	Aaramta	1												1	523,215
	Jezzine	Jezzine					1								1	608,486
	Lebaa	Lebaa		1				1			1				3	2,128,088
MARJEEYOUN	Toulin	Majdel Selm		1				1							2	1,578,869
	Deir Mimas	Marjeeyoun	1												1	523,215
NABATYEH	Sinay	Dwair	1												1	523,215
	Sarba	Jarjouh	1												1	523,215
	Aain Kana	Jbaa					1								1	608,486
	Kfar Fila	Jbaa	1												1	523,215
	Ksaybeh	Kfar Sir					1								1	608,486
	Jebshit	Nabatyeh						1			1				2	1,341,622
	Kfarremman	Nabatyeh									1				1	549,218
	Kfour	Nabatyeh	1												1	523,215
SAIDA	Aabra	Aabra	1				1								2	1,131,701
	Bnaafoul	Aankoun	1												1	523,215
	Mazraat Aarab El Jall	Aankoun	1												1	523,215

PHASE 2 : PARITY BETWEEN CAZA (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
SAIDA (Cont.)	Zita	Aankoun	1												1	523,215
	Krayeh	Darb El Sim	1				1								2	1,131,701
	Aaktanit	Ghazyeh	1												1	523,215
	Hara	Ghazyeh									1				1	549,218
	Knarit	Ghazyeh	1												1	523,215
	Kfar Melky	Kfar Hatta	1				1								2	1,131,701
	Arzav	Kharayeb	1				1								2	1,131,701
	Matarvet El Shawmar	Kharayeb	1												1	523,215
	Ghassanyeh	Merwanyeh	1												1	523,215
	Kawtharyet El Syad	Merwanyeh	1				1								2	1,131,701
	Bisaryeh	Sarafand		1			1								2	1,394,951
	Saksakyeh	Sarafand						1							1	792,404
TYRE	Aabbasyeh	Aabbasyeh			1			1				1			3	2,854,640
	Aaytit	Jwaya					1								1	608,486
	Baflyeh	Jwaya	1												1	523,215
	Debaal	Jwaya	1												1	523,215
	Mjadel	Jwaya		1			1								2	1,394,951
	Deir Aames	Kana					1								1	608,486
	Saddikin	Kana					1								1	608,486
	Zebkin	Kana					1								1	608,486
	Hennyeh	Klayleh	1												1	523,215
	Majdelzoun	Majdelzoun					1								1	608,486
	Hallousyeh	Shehour	1												1	523,215
		TOTAL	121	19	5	7	100	17	1	4	36	5	2	1	318	208,616,882

PHASE 3 : SATISFACTION LEVEL (3 YEARS)

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BEIRUT EAST	Ashrafyeh	East Beirut				1		1	1			1			4	4,710,387
	Jemmayzeh	East Beirut				1			1			1			3	3,917,983
	Sioufi	East Beirut			1										1	1,260,927
BEIRUT WEST	Mar Elias East	West Beirut				1				1			1		3	5,025,893
	Mar Elias West	West Beirut			1				1				1		3	3,961,049
	Mazraa	West Beirut				1				1				1	3	5,585,052
	Ras Beirut	West Beirut				1				1				1	3	5,585,052
	Tarik El Jdideh	West Beirut			2	1				1			1		5	7,547,747
	Wata	West Beirut				1			1			1			3	3,917,983
BAALBAK	Baalbak	Baalbak				1				1			1		3	5,025,893
	Douris	Baalbak		1											1	786,466
	Hawsh El Rafka	Bednayel	1												1	523,215
	Tamnin El Tahta	Bednayel									1				1	549,218
	Eersal	Eersal										1			1	801,310
	Fakiha	Fakiha						1							1	792,404
	Naby Oosman	Fakiha	1				1								2	1,131,701
	Shmistar	Shmistar		1			1				1				3	1,944,170
	Britel	Talya	1				1				1				3	1,680,919
	Yammouneh	Yammouneh	1												1	523,215
HERMEL	Sahlet El Ma'a	Kasr					1								1	608,486
RASHAYA	Aain Aarab	Rafid	1												1	523,215
WEST BEKAA	Swayry	Hawsh El Harimeh	1				1								2	1,131,701
	Kamed El Lawz	Jeb Jannin					1								1	608,486
	Karaoun	Karaoun					1				1				2	1,157,704
	Saghbin	Saghbin	1												1	523,215
ZAHLEH	Ablah	Ablah					1								1	608,486
	Bar Elias	Bar Elias				1			1			1			3	3,917,983
	Bwarej	Kab Elias	1												1	523,215
	Saadnayel	Saadnayel		1				1			1				3	2,128,088
	Zahleh	Zahleh			1				1			1			3	3,412,298
AALEY	Bshamoun	Aain Eenoub										1			1	801,310
	Aaley	Aaley	1		1			1				1			4	3,377,855
	Bhamdoun El Dayaa	Bhamdoun El Mhatta	1												1	523,215
	Ramlyeh	Reshmaya	1				1								2	1,131,701
	Sawfar	Sawfar		1			1				1				3	1,944,170
	Shwayfat	Shwayfat		1				1				1			3	2,380,179
BAABDA	Baabda	Baabda	1					1			1				3	1,864,837
	Hazmyeh	Baabda	1				1								2	1,131,701
	Hadath	Hadath		1		1			1			1			4	4,704,449
	Kfarshima	Hadath		1			1				1				3	1,944,170
	Kobbeih	Kobbeih	1				1								2	1,131,701
	Aain El Remmaneh	South Eastern Suburb				1			1			1			3	3,917,983
	Borj El Brajneh	Southern Suburb				2				1			1		4	6,792,505
	Ghobayri	Southern Suburb				2				1				1	4	7,351,664
JBAIL	Ghabat	Aakoura	1				1								2	1,131,701
	Aamshit	Aamshit		1			1					1			3	2,196,261
	Nahr Ibrahim	Halat	1												1	523,215
	Jbail	Jbail	1	1				1				1			4	2,903,394
	Fidar	Kartaboun	1				1								2	1,131,701
	Meshmesh	Lehfed	1												1	523,215
KESERWAN	Klayaat	Aajaltoun	1												1	523,215
	Kfour	Ghazir	1												1	523,215
	Mayrouba	Hrajel	1				1								2	1,131,701
	Daraoun	Jounyeh	1				1								2	1,131,701
	Haret Sakhr	Jounyeh			1			1			1				3	2,602,548

PHASE 3 : SATISFACTION LEVEL (3 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
KESERWAN (Cont.)	Sarba	Jounyeh			1				1			1			3	3,412,298
	Bwar	Tabarja	1				1								2	1,131,701
MATEN	Dbayeh	Antelias	1				1				1				3	1,680,919
	Jal El Dib	Antelias			1			1				1			3	2,854,640
	Nabaa	Borj Hammoud				1				1			1		3	5,025,893
	Baabdat	Broummana	1				1				1				3	1,680,919
	Bsalim	Bsalim	1				1								2	1,131,701
	Boshryeh	Jdaydeh			1			1			1				3	2,602,548
	Jdaydeh	Jdaydeh			1			1					1		3	3,403,391
	Sin El Fil	Sin El Fil				1			1			1			3	3,917,983
SHOUF	Bireh	Aain Zhalta	1												1	523,215
	Aalman	Aalman	1				1								2	1,131,701
	Gharifeh	Baaklin					1								1	608,486
	Barja	Barja	1		1		1	1							4	3,185,031
	Jiyeh	Barja		1			1								2	1,394,951
	Barouk	Barouk					1				1				2	1,157,704
	Kfar Nabrakh	Barouk					1								1	608,486
	Werhanyeh	Barouk	1				1								2	1,131,701
	Bshetfin	Bshetfin					1								1	608,486
	Dahr El Maghara	Damour	1												1	523,215
	Damour	Damour	1	1				1			1				4	2,651,303
	Werdanyeh	Katermaya	1				1								2	1,131,701
	Damit	Kfarhim					1								1	608,486
	Jahilyeh	Kfarhim	1				1								2	1,131,701
	Kfarhim	Kfarhim					1				1				2	1,157,704
	Aain Wa Zein	Mokhtara						1							1	792,404
	Khraybeh	Mokhtara					1								1	608,486
	Maaser El Shouf	Mokhtara					1								1	608,486
	Niha	Niha	1				1				1				3	1,680,919
	Shehim	Shehim			1			1				1			3	2,854,640
AAKAR	Tlayl	Aamaret El Bikat					1								1	608,486
	Borj El Aarab	Berkavel		1				1							2	1,578,869
	Majdala	Bkerzla	1				1								2	1,131,701
	Majdel - Bireh	El Bireh	1				1								2	1,131,701
	Aadbel	Halba					1								1	608,486
	Menyara	Halba	1					1			1				3	1,864,837
	Sheikh Mouhammad	Halba	1				1								2	1,131,701
	Rihanyeh	Hawshab	1												1	523,215
	Kobayat Gharbieh	Kobayat	1				1								2	1,131,701
	Kobayat Katlabeh	Kobayat	1				1								2	1,131,701
	Rmah	Kwashra		1			1								2	1,394,951
	Mashta Hammoud	Mashta Hammoud		1			1								2	1,394,951
	Kabiit	Meshmesh	1				1								2	1,131,701
	Meshmesh	Meshmesh			1			1			1				3	2,602,548
	Hekr El Zahiri	Sheikh Zenad	1												1	523,215
	Mashha	Swayseh		1			1								2	1,394,951
	Baino	Tekrit					1								1	608,486
	Beit Mallat	Tekrit					1								1	608,486
BATROUN	Aabrin	Batroun	1												1	523,215
	Batroun	Batroun	1	1				1				1			4	2,903,394
	Hamat	Batroun	1				1								2	1,131,701
	Ras Nhash	Shekka	1												1	523,215
	Shekka	Shekka	1	1				1				1			4	2,903,394
BESHARRI	Bkaakafra	Besharri	1												1	523,215
	Hadshit	Besharri	1				1								2	1,131,701

PHASE 3 : SATISFACTION LEVEL (3 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS												TOTAL	BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS					
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BESHARRI (Cont.)	Hadath El Joubbeh	Hadath El Joubbeh	1				1				1				3	1,680,919
	Hasroun	Hadath El Joubbeh		1			1								2	1,394,951
KOURA	Amioun	Amioun			1			1				1			3	2,854,640
	Bterram	Amioun										1			1	801,310
	Dahr El Aain	Btouratij		1			1								2	1,394,951
	Ajd Aabrin	Kefraya	1												1	523,215
TRIPOLI	Haklit	Bakh'oun	1				1								2	1,131,701
	Beddawy	Beddawy		1	1				1			1			4	4,198,764
	Bhannin	Menyeh					1								1	608,486
	Deir Aammar	Menyeh						1							1	792,404
	Aazmy	Tripoli				1			1			1			3	3,917,983
	Abi Samra	Tripoli				1				1		1			3	4,477,142
	Kobbeh	Tripoli				1				1			1		3	5,025,893
	Madinet El Mina	Tripoli				1				1			1		3	5,025,893
	Zahryeh	Tripoli			1				1			1		-	3	3,412,298
ZGHARTA	Mezyara	Iaale	1				1								2	1,131,701
	Meryata	Meryata		1				1			1				3	2,128,088
BINT JBAIL	Rmeish	Aain Ebel		1			1				1				3	1,944,170
HASBAYA	Mimas	Kfeir					1								1	608,486
JEZZINE	Mjaydel	Lebaa	1												1	523,215
MARJEEYOUN	Majdel Selm	Majdel Selm						1			1				2	1,341,622
NABATYEH	Nmayryeh	Deir El Zahrani	1				1								2	1,131,701
	Aarabsalim	Jarjouh					1				1				2	1,157,704
	Jarjouh	Jarjouh					1								1	608,486
	Jbaa	Jbaa					1				1				2	1,157,704
SAIDA	Maghdousheh	Darb El Sim						1			1				2	1,341,622
	Ghazyeh	Ghazyeh			1			1							2	2,053,330
	Meemaryeh	Ghazyeh	1				1								2	1,131,701
	Saida 2	Saida		1			1				1				3	1,944,170
	Saida 4	Saida		1			1				1				3	1,944,170
	Saida 5	Saida			1			1			1				3	2,602,548
	Saida 7	Saida			1			1			1				3	2,602,548
	Kaakaiiet El Snawbar	Sarafand	1												1	523,215
	Sarafand	Sarafand						1				1			2	1,593,714
TYRE	Toura	Aabbasyeh						1			1				2	1,341,622
	Deir Kanoun El Aain	Aain Baal					1								1	608,486
	Hawsh	Aain Baal	1												1	523,215
	Wady Jailou	Jwaya	1												1	523,215
	Rmadyeh	Kana		1											1	786,466
	Shaavtyeh	Kana		1			1								2	1,394,951
	Klayleh	Klayleh						1			1				2	1,341,622
	Borj El Shmali	Shamyeh						1			1				2	1,341,622
	Barish	Shehour					1								1	608,486
	Tyre	Tyre				1			1			1			3	3,917,983
	TOTAL		62	26	20	22	70	32	14	11	32	27	9	3	328	281,913,177

PHASE 4 : ULTIMATE LEVEL (2 YEARS)

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BEIRUT EAST	Jemmayzeh	East Beirut			1			1							2	2,053,330
	Sioufi	East Beirut							1			1			2	2,151,371
BEIRUT WEST	Mar Elias East	West Beirut		1	1				1						3	3,397,454
	Mar Elias West	West Beirut			1				1						2	2,610,988
	Mazraa	West Beirut			1				1						2	2,610,988
	Ras Beirut	West Beirut			2					1					3	4,431,074
	Tarik El Jdideh	West Beirut								1			1		2	3,259,281
BAALBAK	Baalbak	Baalbak		1				1							2	1,578,869
	Beit Shama	Bednavel	1												1	523,215
	Hellanyeh	Bednavel	1												1	523,215
	Deir El Ahmar	Deir El Ahmar		1			1				1				3	1,944,170
	Eersal	Eersal			1			1							2	2,053,330
	Jdaydeh	Fakiha	1												1	523,215
	Ras Baalbak	Fakiha	1												1	523,215
	Jenta	Nabi Shit	1												1	523,215
	Khravbeh	Nabi Shit	1				1								2	1,131,701
	Sariin El Fawka	Nabi Shit	1												1	523,215
	Rasm El Hadath	Shaat	1												1	523,215
	Kfardan	Shmistar	1												1	523,215
	Taraya	Shmistar					1								1	608,486
	Hawr Taala	Taiya	1												1	523,215
RASHAYA	Aain Harsheh	Rashaya					1								1	608,486
	Beit Lahyeh	Rashaya	1												1	523,215
WEST BEKAA	Seltan Lousi El Tahta	Ghazzeh	1												1	523,215
	Rawda	Hawsh El Harimeh	1												1	523,215
	Jeb Jannin	Jeb Jannin		1											1	786,466
	Lala	Jeb Jannin					1								1	608,486
	Aain Zebdeh	Saghbin	1												1	523,215
	Sohmor	Sohmor									1				1	549,218
ZAHLEH	Jdita	Kab Elias	1												1	523,215
	Mraijat	Kab Elias	1												1	523,215
	Aain Kfar Zabad	Kfar Zabad	1												1	523,215
	Deir El Ghazal	Kfar Zabad	1												1	523,215
	Hawsh Hala	Ravak	1												1	523,215
	Jlala	Saadnayel	1												1	523,215
	Taalabaya	Saadnayel						1							1	792,404
	Hawsh El Oumara	Zahleh		1			1								2	1,394,951
	Hawsh Zeraanyeh	Zahleh	1				1								2	1,131,701
	Karak Nouh	Zahleh	1												1	523,215
	Zahleh	Zahleh				1					1				2	2,315,830
AALEY	Fsakin	Aabay	1												1	523,215
	Aazounyeh	Aain Dara	1												1	523,215
	Aaytat	Aain Eenoub	1												1	523,215
	Mejdlaya	Aain Eenoub		1											1	786,466
	Bsous	Bdadoun	1												1	523,215
	Khaldeh	Khaldeh	1				1								2	1,131,701
	Mesherfeh	Sawfar					1								1	608,486
	Shanay	Sawfar					1								1	608,486
BAABDA	Rwayset El Ballout	Aabadyeh	1												1	523,215
	Kahaleh	Baabda	1												1	523,215
	Louwayzeh	Baabda	1												1	523,215
	Wady Shahrour	Hadath	1				1								2	1,131,701
	Falougha	Hammana	1				1								2	1,131,701
	Khelwat Falougha	Hammana	1												1	523,215
	Fern El Shebbak	South Eastern Suburb	1	1				1							3	2,102,084

PHASE 4 : ULTIMATE LEVEL (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
BAABDA (Cont.)	Aamrousyeh	Southern Suburb	1				1								2	1,131,701
	Ghobayri	Southern Suburb				2				1				1	4	7,351,664
	Laylaki	Southern Suburb				1			1			1			3	3,917,983
	Ouzai	Southern Suburb				1	1		1			1			4	4,526,469
	Tahwitat El Ghadir	Southern Suburb	1				1								2	1,131,701
JBAIL	Hesrayel	Aamshit	1												1	523,215
	Halat	Halat	1				1								2	1,131,701
	Kfar Sala	Jbail	1												1	523,215
	Blat	Kartaboun	1												1	523,215
	Bshelli	Kartaboun	1				1								2	1,131,701
	Kartaboun	Kartaboun		1				1							2	1,578,869
	Torzaya	Torzaya	1												1	523,215
KESERWAN	Ghadir	Jounyeh			1			1			1				3	2,602,548
	Sahel Aalma	Jounyeh	1				1								2	1,131,701
	Bkaatouta	Mazraat Kfarzebyan	1												1	523,215
	Safra	Tabarja	1				1								2	1,131,701
	Zouk Mkayel	Zouk Mkayel			1				1			1			3	3,412,298
MATEN	Antelias	Antelias		1				1				1			3	2,380,179
	Mhaydseh	Bekfayn					1								1	608,486
	Borj Hammoud	Borj Hammoud				2				1			1		4	6,792,505
	Dawra	Borj Hammoud	1												1	523,215
	Nabaa	Borj Hammoud				1									1	1,766,612
	Broummana	Broummana		1				1							2	1,578,869
	Roumyeh	Broummana	1				1								2	1,131,701
	Byakout	Bsalim	1				1								2	1,131,701
	Rabweh	Bsalim	1												1	523,215
	Zalka	Bsalim		1				1			1				3	2,128,088
	Khenshara	Bteghrin	1												1	523,215
	Douwar	Dhour El Shwair	1												1	523,215
	Fanar	Jdaydeh	1				1								2	1,131,701
	Sabtyeh	Jdaydeh	1												1	523,215
	Sad El Boshryeh	Jdaydeh		1			1				1				3	1,944,170
	Aain Saadeh	Mansouryeh	1												1	523,215
	Jesr El Basha	Sin El Fil		1				1							2	1,578,869
SHOUF	Rmaileh	Aalman	1				1								2	1,131,701
	Aainbal	Baaklin	1												1	523,215
	Bekaata	Baaklin	1				1								2	1,131,701
	Baasir	Barja					1								1	608,486
	Haret Baasir	Barja	1												1	523,215
	Batloun	Barouk					1								1	608,486
	Mtolleh	Bsaba	1												1	523,215
	Naameh	Damour		1				1							2	1,578,869
	Berjayn	Debbyeh					1								1	608,486
	Seblin	Katermaya	1												1	523,215
	Kfarfakoud	Kfarhim	1				1								2	1,131,701
	Wady Bnahley	Kfarhim	1												1	523,215
	Aamatour	Mokhtara					1								1	608,486
	Botmeh	Mokhtara	1												1	523,215
	Mresti	Niha	1												1	523,215
	Aanout	Shehim					1								1	608,486
	Dalhoun	Shehim					1								1	608,486
	Daraya	Shehim					1								1	608,486
	Mazboud	Shehim					1								1	608,486
	Zaarourieh	Shehim						1							1	792,404
AAKAR	Aayat	Aakkar El Aatika	1												1	523,215

PHASE 4 : ULTIMATE LEVEL (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
AAKAR (Cont.)	Kaws Aakar	Aakkar El Aatika					1								1	608,486
	Mhammara	Bebnin	1												1	523,215
	Wady El Jamous	Bebnin		1											1	786,466
	Bzal	Berkayel	1												1	523,215
	Korkof	Berkayel					1								1	608,486
	Zouk El Habalsah	Bkerzla	1				1								2	1,131,701
	Kherbet Dawoud	El Bireh	1												1	523,215
	Sindyaneh	El Bireh	1				1								2	1,131,701
	Hakour	Halba	1												1	523,215
	Jdaydet El Joumy	Halba		1			1								2	1,394,951
	Sheikh Taba	Halba	1				1								2	1,131,701
	Zawarib	Halba	1												1	523,215
	Aaydamoun	Kobayat		1				1							2	1,578,869
	Kobayat Dahr El Ballan	Kobayat	1												1	523,215
	Kobayat Ghwaya	Kobayat	1												1	523,215
	Kobayat Martmoura	Kobayat	1												1	523,215
	Mounseh	Kobayat	1												1	523,215
	Klayaat	Kobbet Shamra	1				1								2	1,131,701
	Douseh	Kwashra	1												1	523,215
	Fraydis	Kwashra	1												1	523,215
	Korneh	Meshmesh		1			1								2	1,394,951
	Memnee	Meshmesh	1												1	523,215
	Ballanat El Hisa	Sheikh Zenad	1				1								2	1,131,701
	Beit El Hajj	Swayseh	1												1	523,215
	Tall Bireh	Tall Keri	1				1								2	1,131,701
	Rahbeh	Tekrit	1				1								2	1,131,701
BATROUN	Heri	Shekka	1												1	523,215
	Tannourin El Tahta	Tannourin El Fawka	1												1	523,215
KOURA	Kfar Aaka	Amioun					1								1	608,486
	Kfar Hazir	Amioun					1								1	608,486
	Anfeh	Anfeh			1			1			1				3	2,602,548
	Fii	Anfeh	1												1	523,215
	Batroumin	Btouratij	1												1	523,215
	Ras Maska	Btouratij	1				1								2	1,131,701
	Habboush	Bziza	1												1	523,215
TRIPOLI	Hakr	Menyeh	1												1	523,215
	Makalee	Menyeh		1			1								2	1,394,951
	Nabi Kzayber	Menyeh	1												1	523,215
	Nabi Youshaa	Menyeh		1											1	786,466
	Abi Samra	Tripoli				1				1		1			3	4,477,142
	Aswak	Tripoli				1			1			1			3	3,917,983
	Bab El Raml-Nejmeh	Tripoli			1				1			1			3	3,412,298
	Kobbeh	Tripoli				1				1					2	3,675,832
	Madinet El Mina	Tripoli				1				1					2	3,675,832
	Swayka-Dalu Maghr	Tripoli			1			1			1				3	2,602,548
	Tall	Tripoli				1				1			1		3	5,025,893
	Tebbaneh	Tripoli			1				1				1		3	3,961,049
ZGHARTA	Zgharta	Zgharta	1			1			1			1			4	4,441,198
BINT JBAIL	Aain Ebel	Aain Ebel	1												1	523,215
	Haris	Kafra						1							1	792,404
	Deir Intar	Tebnin	1												1	523,215
HASBAYA	Hasbaya	Hasbaya		1			1				1				3	1,944,170
JEZZINE	Rihan	Aaramta					1								1	608,486
MARJEEYOUN	Souwaneh	Majdel Selm		1			1								2	1,394,951
NABATYEH	Haboush	Deir El Zahrani						1							1	792,404

PHASE 4 : ULTIMATE LEVEL (2 YEARS) - Continued

NEW SCHOOL PROGRAM (Listed by Caza)

CAZA	LOCALITY	CATCH. AREA	FUTURE SCHOOLS													BUDGET ($) INCL. 5% ENG. COST
			ELEMENTARY SCHOOLS				COMPLEMENTARY SCHOOLS				SECONDARY SCHOOLS				TOTAL	
			Small	Medium	Large	X-Large	Small	Medium	Large	X-Large	Small	Medium	Large	X-Large		
NABATYEH (Cont.)	Aadshit	Kfar Sir					1								1	608,486
	Aaba	Nabatyeh		1			1								2	1,394,951
	Harouf	Nabatyeh						1							1	792,404
	Nabatyeh	Nabatyeh			2			2				1			5	4,907,970
SAIDA	Majdelyoun	Aabra	1												1	523,215
	Aadloun	Aadloun									1				1	549,218
	Nassaryeh	Aadloun					1								1	608,486
	Aain El Delb	Darb El Sim	1				1								2	1,131,701
	Tanbourit	Darb El Sim	1												1	523,215
	Ghazyeh	Ghazyeh				1			1			1			3	3,917,983
	Aadousyeh	Najaryeh					1								1	608,486
	Saida 1 Aain El Helweh	Saida				1			1						2	3,116,673
	Saida 3	Saida		1	1		1	1							4	3,448,281
	Saida 6	Saida			1			1							2	2,053,330
	Saida 7	Saida		1			1								2	1,394,951
TYRE	Bedyas	Aabbasyeh					1								1	608,486
	Borj Rahal	Aabbasyeh					1								1	608,486
	Deir Kanoun El Nahr	Aabbasyeh					1								1	608,486
	Jwaya	Jwaya			1			1			1				3	2,602,548
	Biyad	Kana	1												1	523,215
	Jbal El Botm	Kana					1								1	608,486
	Mansouri	Majdelzoun					1								1	608,486
	Teir Debbeh	Shamyeh		1			1								2	1,394,951
	Hmayri	Shehour	1												1	523,215
	Deir Kifa	Srifa					1								1	608,486
	Bergholiyeh	Tyre					1								1	608,486
	Tyre	Tyre			1			1							2	2,053,330
	TOTAL		101	26	19	16	68	25	13	8	11	11	4	1	303	241,693,155

PHASING SUMMARY TABLE

PHASE	NUMBER OF SCHOOLS				NUMBER OF STUDENTS				TOTAL BUDGET
	Elementary	Compl.	Second.	TOTAL	Elementary	Compl.	Second.	TOTAL	
PHASE 1	114	123	70	307	39,690	42,700	19,110	101,500	208,201,143
PHASE 2	152	122	44	318	46,410	41,020	12,600	100,030	208,616,882
PHASE 3	130	127	71	328	68,460	58,660	29,400	156,520	281,913,177
PHASE 4	162	114	27	303	68,250	50,540	11,550	130,340	241,693,155
TOTAL	558	486	212	1,256	222,810	192,920	72,660	488,390	940,424,357

11

FACILITY DESIGN BRIEF

11.1 - GENERAL

11.1.1- Site Selection

The following is a list of basic items for use in the selection of a school site to serve a given community:

i - Present and future environment: Economic, social and housing make-up of community (covered by the Master Plan).

ii - Integration with community planning: Potential housing expansion relative to size, need and location; zoning requirements, limitation or restrictions.

iii - Site characteristics: percent of usability of land for building; recreation and playfields; parking, roads and services.

iv - Utility services available and alternatives.

11.1.2- Site Planning

Using the checklist outline below, site planning should be based on the specifics of the site and surrounding area, the educational program and community relationship.

i - Zoning: Type and restrictions.

ii - Environmental conditions: Noise, vibration and interference; Smoke and smog; Hazardous activities.

iii - Access road characteristics: Type (paved/unpaved); width; Volume (daily average and peaks); Needed v/s planned improvements; Traffic patterns.

iii - Access road characteristics: Type (paved/unpaved); width; Volume (daily average and peaks); Needed v/s planned improvements; Traffic patterns.

iv - Vehicular requirements: Parking; Service; Public transportation.

v - Pedestrian requirements: Circulation; Recreation.

vi - Utilities: Normal requirements; Special requirements.

vii - Miscellaneous: Fire and other safety; Exhibit areas; Community use.

11.1.2.1 - Land-use Planning

Studies should incorporate all the elements and spaces required by the total development program. In addition, any limitations which may be caused by specific site conditions should be noted.

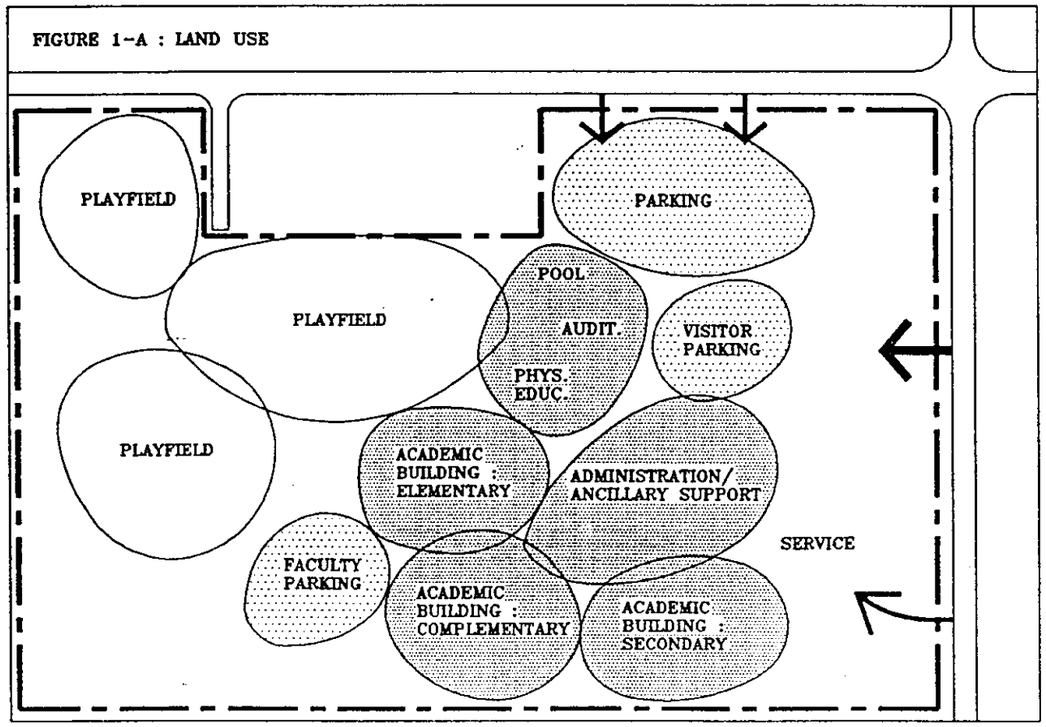
The relationships of all the proposed site elements and spaces to each other and to the site should be given full consideration (see figure 11.1).

11.1.2.2 - Circulation

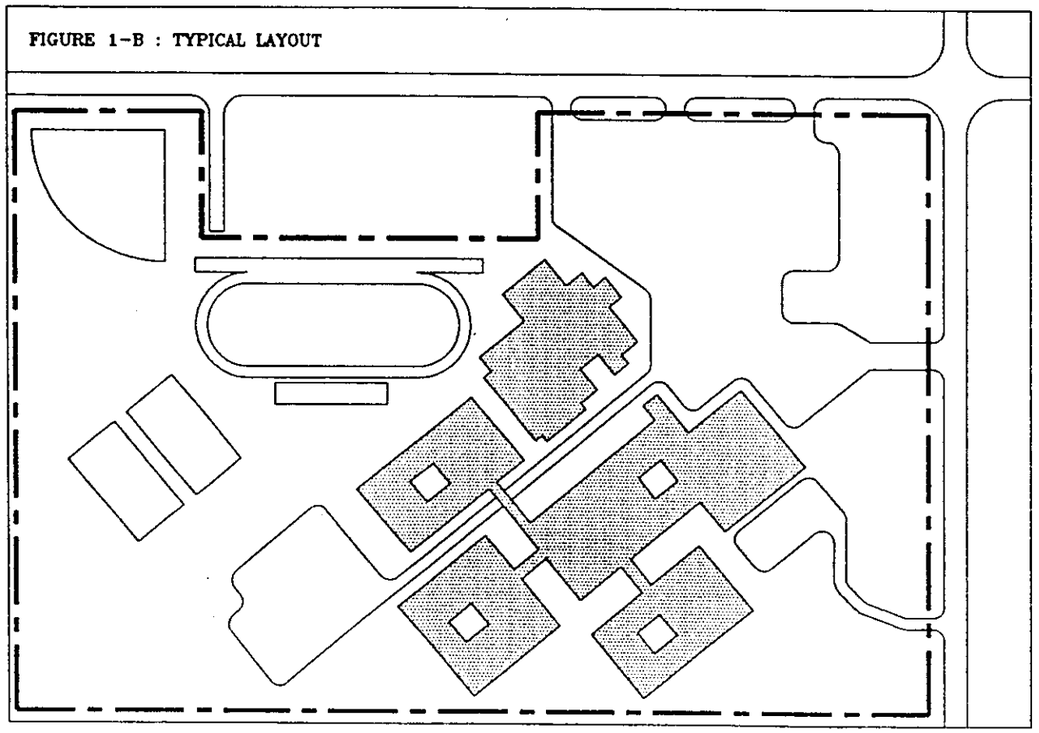
Circulation patterns should preferably be continuous from the points of access at property lines to and through the buildings and must be designated as integrated systems. Safety is important, particularly for lower age groups. For safe and efficient movement, different types of circulation should be separated thus eliminating cross traffic conflict between pedestrians and vehicles. Similarly drop-off facilities for buses and automobiles should be excluded from these drop-

FIGURE 11 : SITE PLANNING

LAND USE



TYPICAL LAYOUT



off areas; if this is not possible, use of service areas should be permitted only at times when students are not present.

The following points should be carefully considered:

i - Differentiate and provide for the three types of automobile traffic normally found on a school site: faculty, student and visitor or parent.

ii - Buses numbers, loading and unloading areas, site access and storage of vehicles. The backing-up of buses should never be necessary.

iii - Service and emergency vehicle access should be permitted as short and direct on approach as possible with adequate maneuvering space. Service access and areas should be separated from other circulation systems.

11.1.2.3 - Parking

There is usually merit in separation of the three types of automobile parking, with the daytime visitor taking precedence over faculty and student. Access to parking facilities and arrangement of parking lanes should minimize conflict between automobile and student through the use of collector walks, pedestrian bridges, etc. Overflow parking areas, intended for school related or community events within the school, may double as paved play areas when properly designed and located.

11.1.2.4 - Recreation Facilities

These criteria for recreation areas such as relation to adjacent property, soil stability and percolation, existing vegetation, existing topography, etc., are important; however, special attention should be given to the need for large open spaces for field games with adjacent existing vegetation to provide shade, oxygen and windbreak.

In dense urban areas, where ordinary open spaces are scarce, such field activities as well as general recreation facilities can be created on air rights, rooftops and terraced slopes. Informal play areas, especially for the younger population (Elementary/Complementary students) can be created in multilevel arrangements conforming to a steep site; this is not possible with field recreation facilities for the contact sports enjoyed by upper grades. Superimposition of layouts and multiuse helps conserve space when land is at a premium.

Other factors to be considered in the planning of recreation facilities include:

i - Optimum orientation for sum and wind control.

ii - Buffer zones between action spaces.

iii - Access from showers, classrooms, parking and buses.

iv - Access from community where multiuse is possible.

v - Flexibility of layout to accommodate future building expansion.

vi - Programming of play for different student age groups.

11.2 - TYPES OF SCHOOLS

Five types of schools are differentiated for the purpose of this study, each with somewhat different design requirements.

11.2.1- The Elementary School (including 2nd year Pre-Elementary)

No of grades (school years) : *6*
Student age : *5-11 years*

Before any calculation of floor-space requirements and capacities can be made, the school system must have an educational policy establishing the optimum capacity of classrooms. For the purpose of this study, we recommend this figure to be set at 40 students per classroom for Elementary schools, which, when used as an average class size may mean that some rooms will exceed this number.

We recommend that when a class goes to 60 students it be divided into two independent sections. It is also advisable in determining the capacity and structure of an elementary school to consider each grade separately so that there will be no single academic facility housing more than one grade.

Typical space programs for different sizes of elementary schools are presented in Table 11.1.

11.2.2- The Complementary School

No of grades (school years) : *4*
Student age : *11-15 years old*

Determining capacity on the complementary and secondary school levels are considerably more complex than on the elementary school level. Capacity on a good complementary school reflects the kind of educational program adopted.

The character of the classroom and the subject are major determinants of classroom size. General education classes may run, as for the elementary school, to 40 or 45 students. Again we recommend that when a class goes beyond that size it be divided into 2 separate sections. Shop classes should not exceed 25 students, including science rooms, homemaking and fine arts. These class sizes may be adjusted from community to community to meet special local conditions.

Table 11.2 presents a typical space program for different sizes of complementary schools.

11.2.3- The Secondary School

No of grades (school years): *3*
Student age: *15-18 years old*

The same basic considerations relevant to the complementary school are applicable here, with more emphasis, however, given to lab facilities. Safety in labs should be given special consideration.

Table 11.3 lists a typical space program for different sizes of secondary schools.

11.2.4- The Unified School

No of grades (school years) : *13*
Student age : *5-18 years old*

The unified school is the agglomeration of all 3 types of schools described in the previous 3 sections. As such, its typical space program is a combination of the programs listed in Tables 1 through 3. Each section (i.e. elementary, complementary and secondary) should, however, be allowed to maintain its separate administration with some sort of centralized hierarchy.

11.2.5- The Comprehensive School

No of grades (school years) : *2x3*
Student age : *15-18 years old*

The comprehensive school is a secondary school which, in addition to the facilities and teaching normally found in the secondary school, also offers some level of vocational education. Its typical space program shall be elaborated at a later stage.

TABLE 11.1 : ELEMENTARY SCHOOL SPACE PROGRAM (Excluding circulation)

FACILITY	SCHOOL SIZE									REMARKS
	(<) 240 STUDENTS			480 STUDENTS			960 STUDENTS (>)			
	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	
A - ACADEMIC										
1 - Classroom	6	56	336	12	56	672	24	56	1344	35 students per unit max./30 average
2 - Seminar Room	2	32	64	4	32	128	4	32	128	Multipurpose teaching space
3 - Labs : Handicrafts	1	80	80	1	80	80	1	80	80	
Arts/Music	1	80	80	2	80	160	2	80	160	
Homecrafts	1	80	80	1	80	80	1	80	80	
B - EDUCATIONAL SUPPORT										
1 - Learning Lab/Computer	1	63	63	1	63	63	2	63	126	
2 - Students Affairs	1	16	16	1	16	16	1	16	16	
3 - Library & Documentation	1	63	63	1	63	63	1	95	95	
C - ADMINISTRATIF										
1 - Central	1	63	63	1	79	79	1	95	95	
3 - Staff Offices	1	32	32	1	48	48	1	63	63	
D - ANCILLARY SUPPORT										
1 - Mult. Purpose	1	136	136	1	136	136	1	159	159	
2 - Catering		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
3 - Indoor Recreation		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
4 - Maintenance	1	16	16	1	16	16	1	16	16	
5 - Concierge	1	16	16	1	16	16	1	16	16	
6 - Others	1	48	48	1	48	48	3	48	144	Toilet, Medical care, etc...
E - OUTDOOR RECREATION										
1 - Covered		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
2 - Open		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
F - OTHER O/D FACILITIES		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
TOTAL			1093			1605			2522	

TABLE 11.2 : COMPLEMENTARY SCHOOL SPACE PROGRAM (Excluding circulation)

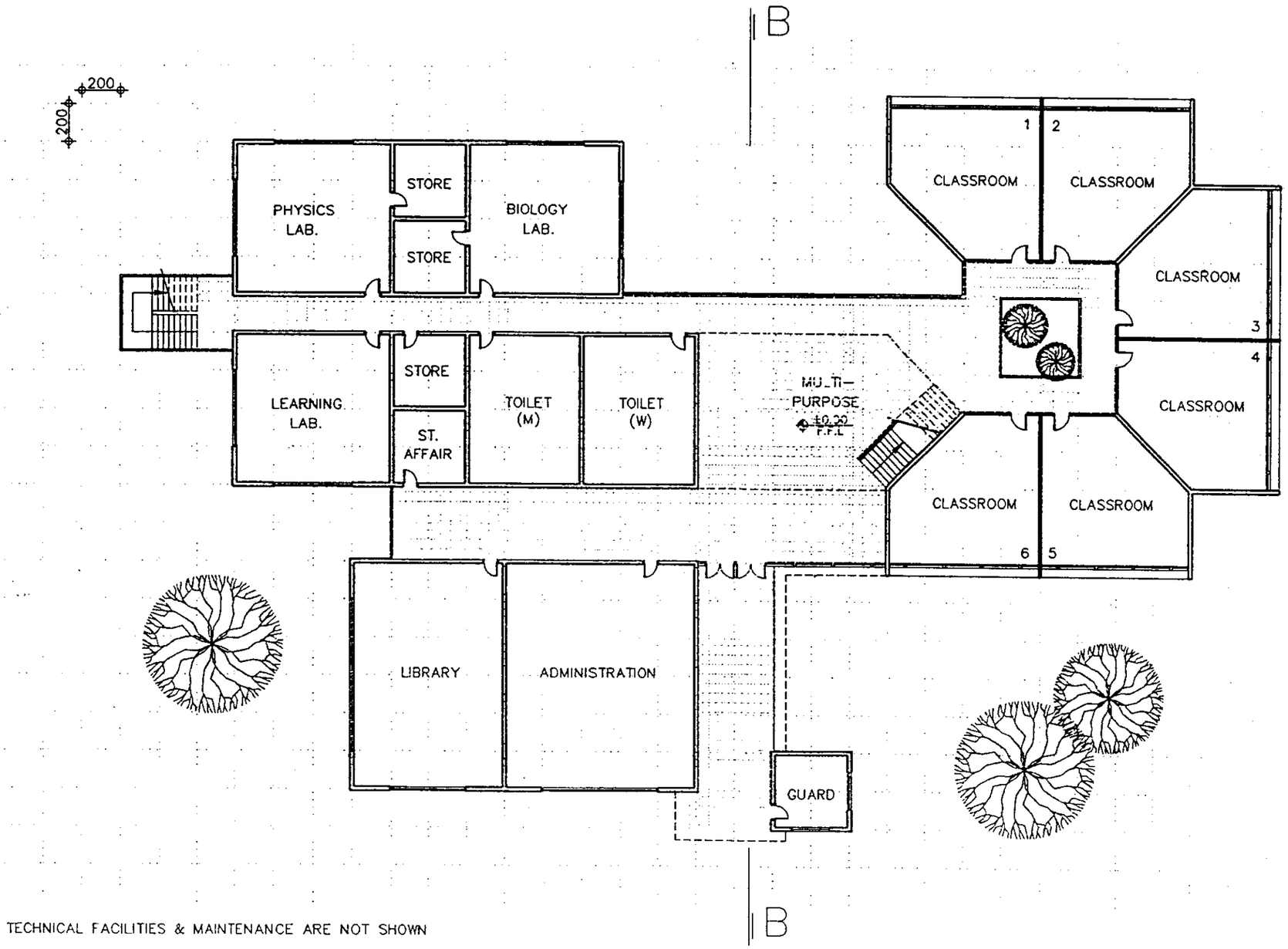
FACILITY	SCHOOL SIZE									REMARKS
	(<) 280 STUDENTS			420 STUDENTS			840 STUDENTS (>)			
	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	
A - ACADEMIC										
1 - Classroom	8	56	448	12	56	672	24	56	1344	35 students per unit max./30 average
2 - Seminar Room	3	32	96	4	32	128	6	32	192	Multipurpose teaching space
3 - Labs : Physics	1	80	80	1	80	80	1	80	80	
Biology	*			*			1	80	80	* =Joint Physics Biology Lab.
Chemistry	1	80	80	1	80	80	1	80	80	
Arts/Music	1	80	80	1	80	80	1	80	80	
Industrial Worksho	1	80	80	1	80	80	1	80	80	
B - EDUCATIONAL SUPPORT										
1 - Learning Lab/Computer	1	63	63	2	63	126	4	63	252	
2 - Students Affairs	1	16	16	1	16	16	1	16	16	
3 - Library & Documentation	1	95	95	1	95	95	1	127	127	
C - ADMINISTRATIF										
1 - Central	1	63	63	1	79	79	1	95	95	
3 - Staff Offices	1	32	32	1	48	48	1	63	63	
D - ANCILLARY SUPPORT										
1 - Mult. Purpose	1	136	136	1	136	136	1	159	159	
2 - Catering		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
3 - Indoor Recreation		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
4 - Maintenance	1	16	16	1	16	16	1	16	16	
5 - Concierge	1	16	16	1	16	16	1	16	16	
6 - Others	1	48	48	1	48	48	3	48	144	Toilet, Medical care, etc...
E - OUTDOOR RECREATION										
1 - Covered		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
2 - Open		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
F - OTHER O/D FACILITIES		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
TOTAL			1349			1700			2824	

TABLE 11.3 : SECONDARY SCHOOL SPACE PROGRAM (Excluding circulation)

FACILITY	SCHOOL SIZE									REMARKS
	(<) 210 STUDENTS			420 STUDENTS			840 STUDENTS (>)			
	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	UNITS Nb.	Sq.M/UNIT	TOTAL	
A - ACADEMIC										
1 - Classroom	6	56	336	12	56	672	24	56	1344	35 students per unit max./30 average
2 - Seminar Room	3	32	96	6	32	192	9	32	288	Multipurpose teaching space
3 - Labs : Physics	1	80	80	1	80	80	1	80	80	
Biology	*			*			1	80	80	* =Joint Physics Biology Lab.
Chemistry	1	80	80	1	80	80	1	80	80	
B - EDUCATIONAL SUPPORT										
1 - Learning Lab/Computer	1	63	63	1	63	63	2	63	126	
2 - Students Affairs	1	16	16	1	16	16	1	16	16	
3 - Library & Documentation	1	95	95	1	127	127	1	159	159	
C - ADMINISTRATIF										
1 - Central	1	63	63	1	79	79	1	95	95	
3 - Staff Offices	1	32	32	1	48	48	1	63	63	
D - ANCILLARY SUPPORT										
1 - Mult. Purpose	1	136	136	1	136	136	1	159	159	
2 - Catering		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
3 - Indoor Recreation		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
4 - Maintenance	1	16	16	1	16	16	1	16	16	
5 - Concierge	1	16	16	1	16	16	1	16	16	
6 - Others	1	48	48	1	48	48	3	48	144	Toilet, Medical care, etc...
E - OUTDOOR RECREATION										
1 - Covered		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
2 - Open		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
F - OTHER O/D FACILITIES		(Opt.)			(Opt.)			(Opt.)		Depending on local conditions
TOTAL			1077			1573			2666	

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT



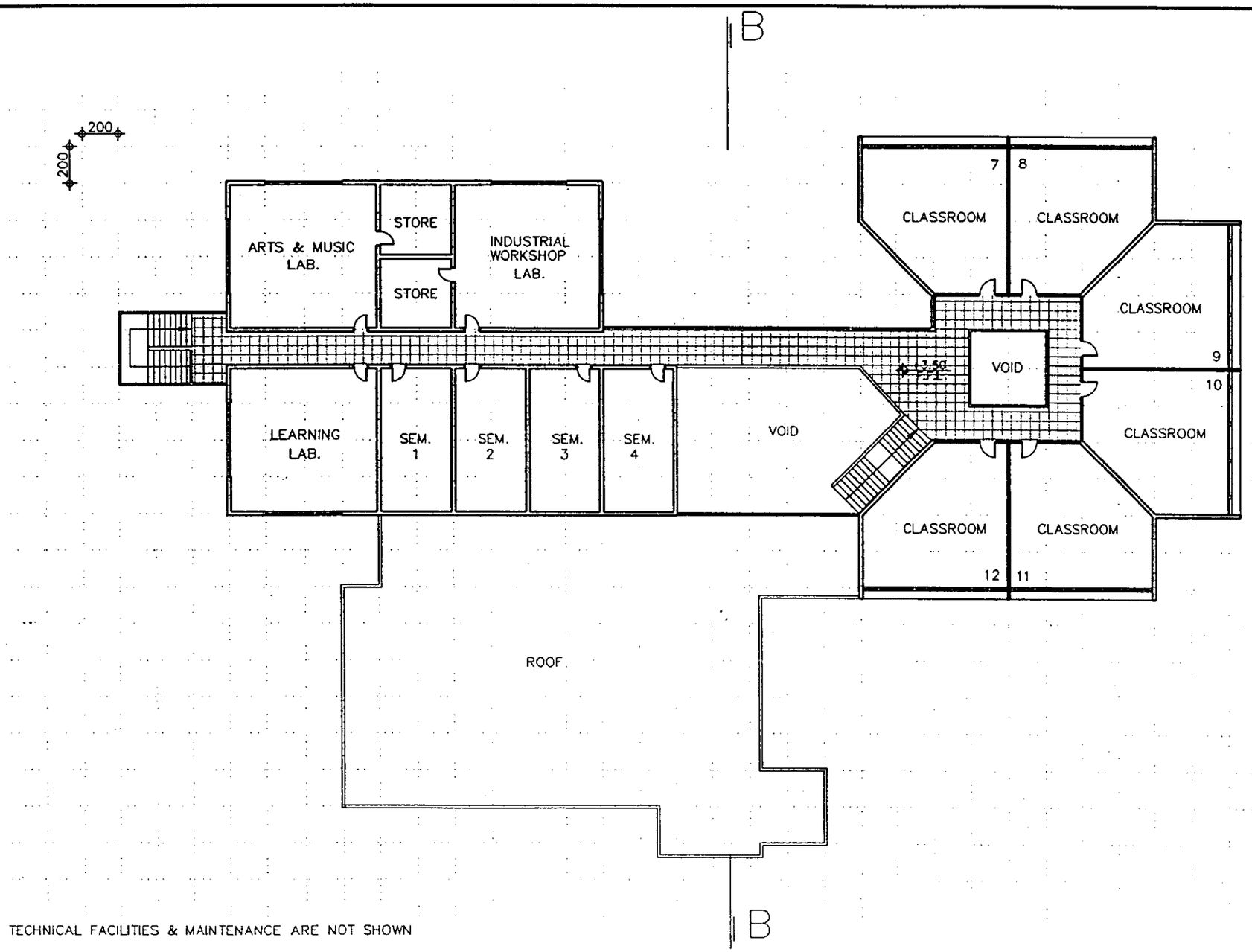
TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

COMPLEMENTARY SCHOOL–420 STUDENTS

GROUND FLOOR SC:1/250

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT



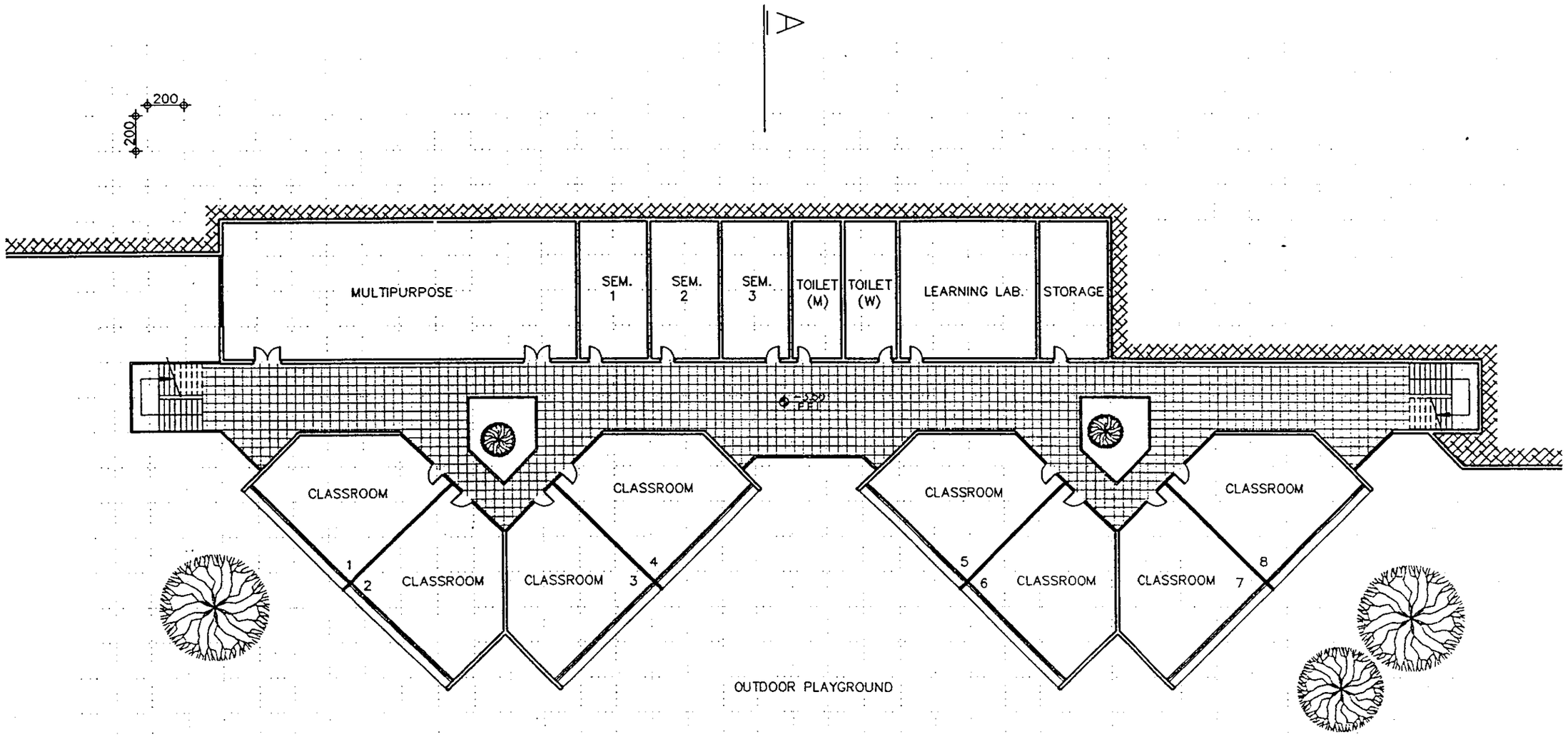
TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

COMPLEMENTARY SCHOOL–420 STUDENTS

FIRST FLOOR SC:1/250

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT



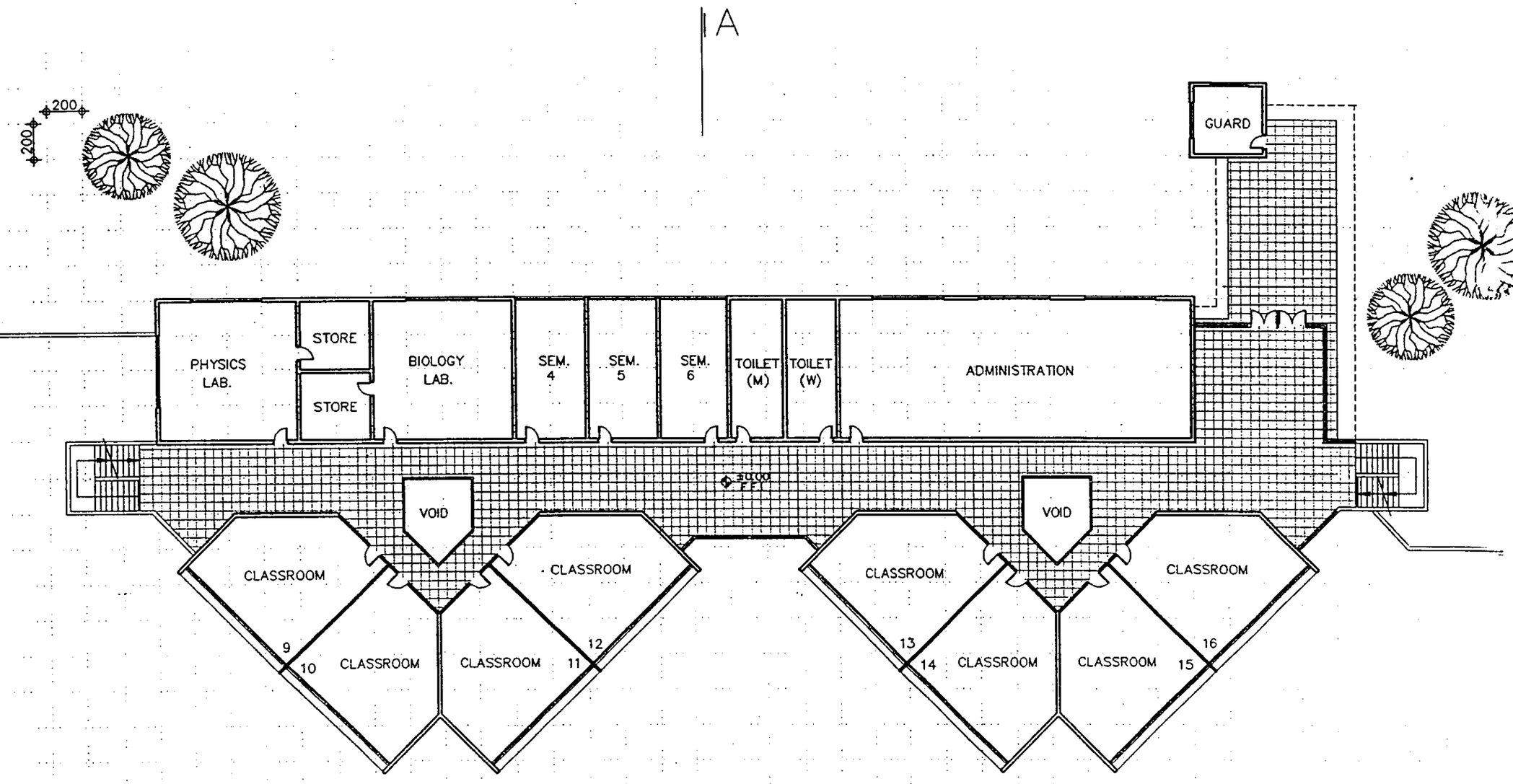
TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

SECONDARY SCHOOL–840 STUDENTS

LOWER GROUND FLOOR SC:1/250

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT



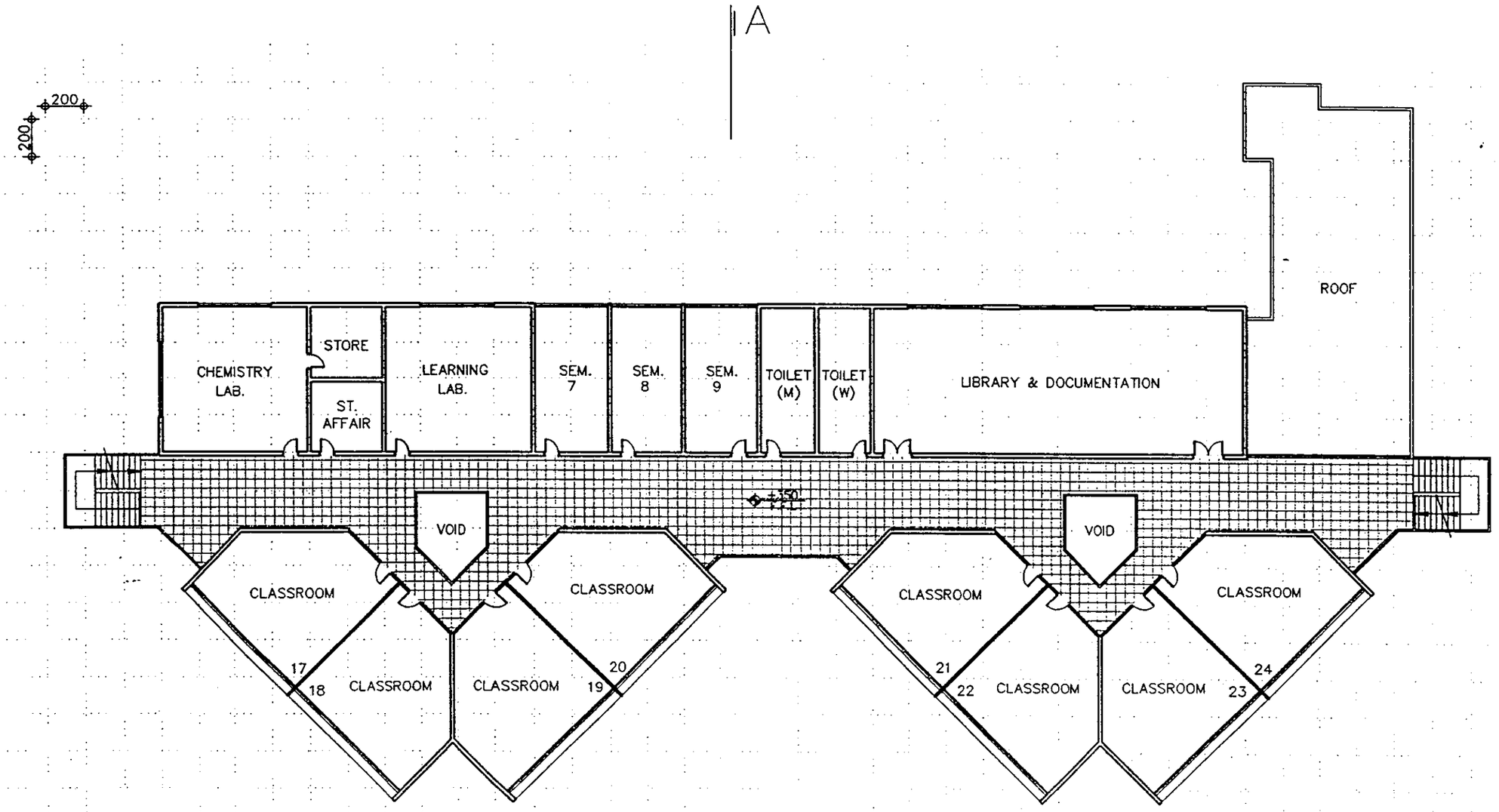
TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

SECONDARY SCHOOL–840 STUDENTS

GROUND FLOOR SC:1/250

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT

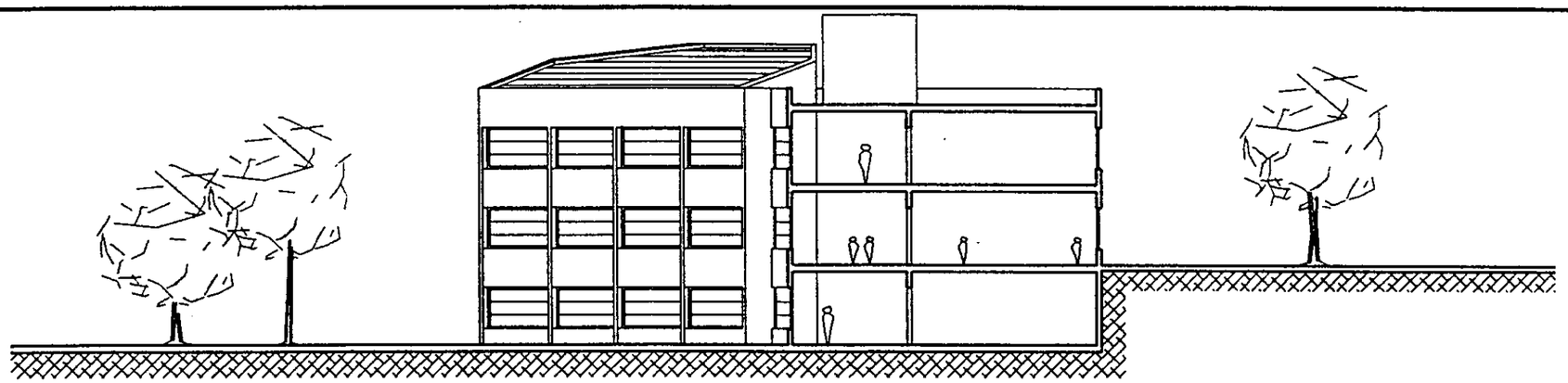


TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

SECONDARY SCHOOL–840 STUDENTS

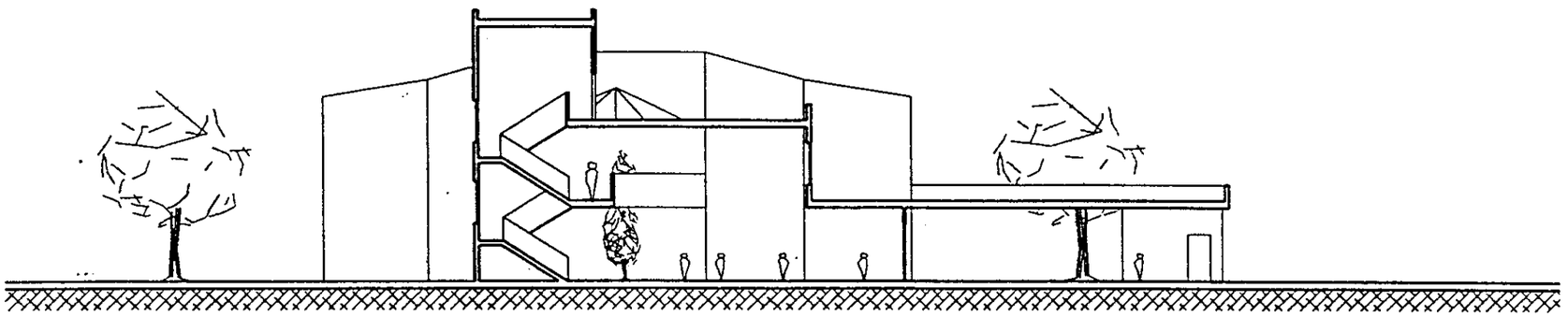
FIRST FLOOR SC:1/250

SCHOOL REGROUPING PROJECT
CROSS SECTIONS



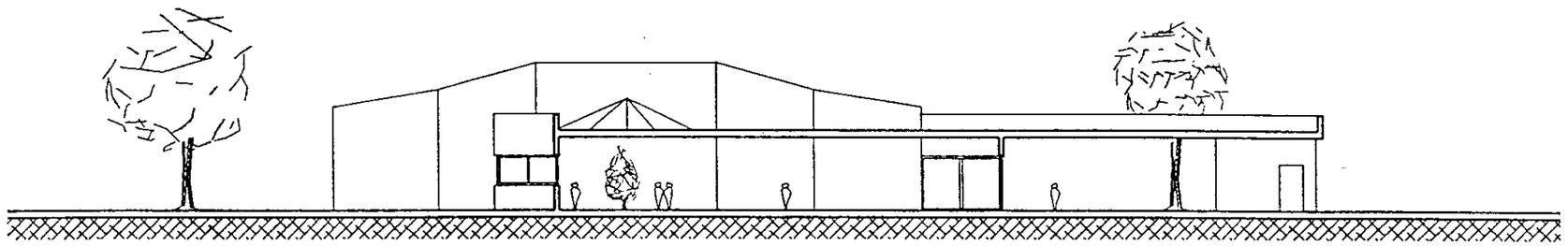
SECONDARY SCHOOL

SECTION A-A SC:1/250



COMPLEMENTARY SCHOOL

SECTION B-B SC:1/250



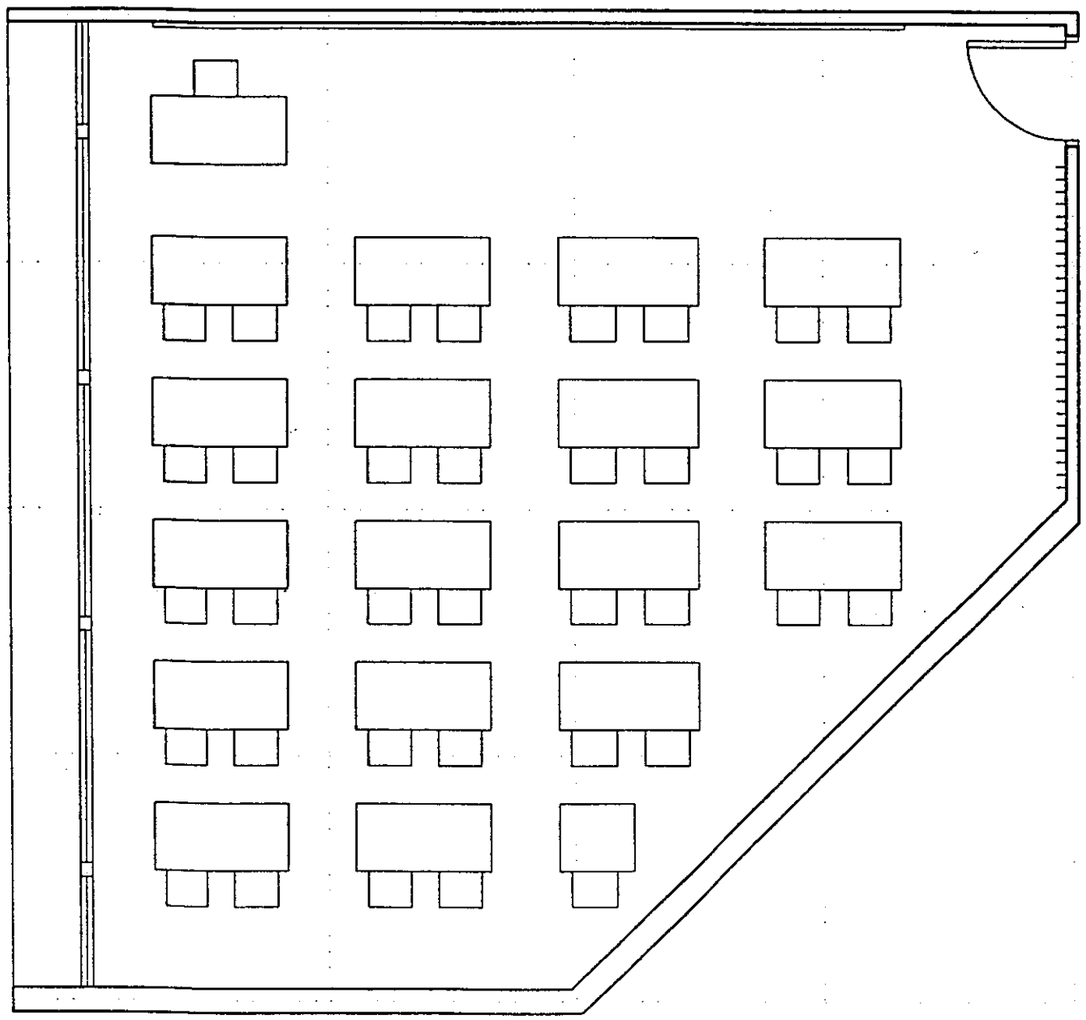
ELEMENTARY SCHOOL

SECTION C-C SC:1/250

TECHNICAL FACILITIES & MAINTENANCE ARE NOT SHOWN

SCHOOL REGROUPING PROJECT

TYPICAL LAYOUT



TYPICAL CLASSROOM – 35 STUDENTS

SCALE 1:50

12

COMMUNAL TRANSPORT APPRAISAL

12.1 - GENERAL

School are major traffic generators and as such they may have a significant impact on their immediate community and transport network. This is particularly true when dealing with large schools as shall be the case in most of the urban areas covered by this study.

Even in rural areas, where school sizes are relatively small, the traffic impact of the proposed schools on their immediate community remains extensive due to the centralization factor implied by the "regrouping" of schools.

This latter factor (i.e. the centralization or regrouping of schools) implies a further impact which warrants special consideration in this respect: By virtue of the regrouping of schools, travel distances to be undertaken by students increase. This factor shall have significant implications especially in rural areas where means of transport, other than walking, may not be available. In effect, our field survey indicated, in this respect, that in many rural areas, students have to walk for over half an hour (and sometimes over an hour) to get to and from school.

All of these factors necessitate a careful consideration of transport issues when dealing with the future provision of schools. We propose two measures to be adopted for the purpose of this study in this respect:

i - The provision of a communal transport scheme
ii - The adoption of a staggered arrival system

Both proposals are elaborated underneath.

12.2 - COMMUNAL TRANSPORT

The scheme proposes the provision of a "semi-free" communal transport service for those students who shall need to travel beyond their immediate community to get to school. It is estimated that the vast majority of students who are served by schools within their local community shall be able to get to their school within a walking distance of less than 15 minutes. Accordingly, the scheme anticipates that, a total of 120,000 of the student population shall fall within this category, taking into account all public sector schools both new and existing retained.

As such, and assuming an average capacity of 40 student per vehicle, the anticipated fleet size required for each Caza is presented in Table 12.2

Table 12.1 presents a breakdown of cost (both capital and operating costs) per unit (i.e. bus). Table 12.2 provides an estimate of fleet size and cost for the scheme per Caza. The study assumes an average journey length of 6 Km.

12.3 - ALTERNATIVE CONCEPT

Alternatively, communal transport services can be subcontracted to the private sector in which case, and assuming a discount rate of 8% per annum and an average life span per vehicle of 20 years, the estimated leasing cost per month is presented in the end column of table 12.2

Accordingly, the average monthly cost per student for leasing of communal transport services, including operating cost, is estimated at around 40$.

12.4 - STAGGERED ARRIVAL HOURS

This scheme simply proposes that the arrival of students at school be staggered so as to minimize traffic congestion on the one hand and pedestrian/vehicular conflict on the other. Similar schemes adopted in the United Kingdom have proved very successful in achieving both these objectives. A typical scheme can be as follows:

i - Start teaching at 8.30 rather than 8.00 so as to allow traffic generated by journeys to work to subside first.

ii - Students traveling by private transport (other than walking) should arrive before 8.00

iii - Buses and pedestrians should arrive at schools between 8.00 and 8.30

Republic of Lebanon
Office of the Minister of State for Administrative Reform
Center for Public Sector Projects and Studies
(C.P.S.P.S.)

الجمهورية اللبنانية
مكتب وزير الدولة لشؤون التنمية الإدارية
مركز مشاريع ودراسات القطاع العام

COMMUNAL TRANSPORT SCHEME

TABLE 12.1 : UNIT COST BREAKDOWN

ITEM	COST ($)
BUS (40 Students)	40,000
DRIVER	250*
FUEL	160*
MAINTENANCE	20*
INSURANCE	100*

** = COST PER MONTH*

Operating Cost per Student per Month ($) : 13.3

Leasing Cost per Student per Month ($) : 39.2
(Including Operating Cost)

TABLE 12.2 : CAZA ASSESSMENT OF TRANSPORTATION NEED

CAZA	ELEMENTARY	COMPLEMENTARY	SECONDARY	TOTAL	NUMBER OF BUSES	CAPITAL COST ($)	OPERATING COST ($) PER MONTH	LEASING COST PER MONTH
BEKAA								
BAALBAK	2,260	2,710	2,030	7,000	175	7,000,000	92,750	181,259
HERMEL	1,060	950	780	2,790	70	2,800,000	37,100	72,504
RASHAYA	800	990	880	2,670	67	2,680,000	35,510	69,396
WEST BEKAA	500	840	860	2,200	55	2,200,000	29,150	56,967
ZAHLEH	1,190	1,630	1,390	4,210	106	4,240,000	56,180	109,791
MOUNT LEBANON								
AALEY	990	1,540	1,530	4,060	102	4,080,000	54,060	105,648
BAABDA	1,070	770	920	2,760	69	2,760,000	36,570	71,468
JBAIL	3,470	2,220	1,550	7,240	181	7,240,000	95,930	187,474
KESERWAN	2,610	1,620	1,070	5,300	133	5,320,000	70,490	137,757
MATEN	4,930	3,220	2,490	10,640	266	10,640,000	140,980	275,514
SHOUF	2,450	2,290	3,090	7,830	196	7,840,000	103,880	203,011
NORTH LEBANON								
AAKKAR	5,680	5,660	5,770	17,110	428	17,120,000	226,840	443,309
BATROUN	2,110	1,300	730	4,140	104	4,160,000	55,120	107,720
BESHARRI	760	550	500	1,810	46	1,840,000	24,380	47,645
KOURA	1,540	1,270	950	3,760	94	3,760,000	49,820	97,362
TRIPOLI	1,970	2,190	1,410	5,570	140	5,600,000	74,200	145,008
ZGHARTA	1,250	990	700	2,940	74	2,960,000	39,220	76,647
SOUTH LEBANON								
BINT JBAIL	1,010	2,300	1,400	4,710	118	4,720,000	62,540	122,221
HASBAYA	420	670	590	1,680	42	1,680,000	22,260	43,502
JEZZINE	1,520	1,440	750	3,710	93	3,720,000	49,290	96,326
MARJEEYOUN	1,320	1,200	660	3,180	80	3,200,000	42,400	82,861
NABATYEH	700	980	1,540	3,220	81	3,240,000	42,930	83,897
SAIDA	1,210	1,830	1,990	5,030	126	5,040,000	66,780	130,507
TYRE	1,110	1,960	2,140	5,210	131	5,240,000	69,430	135,686
TOTAL	**41,930**	**41,120**	**35,720**	**118,770**	**2,977**	**119,080,000**	**1,577,810**	**3,083,482**