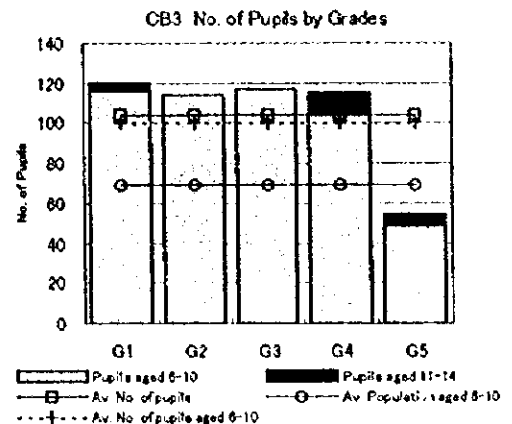


Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	32.63	No. of Pupils	520
Population (heads)	1,504	No. of Teachers	25
Density (h/km <sup>2</sup> )	46.1		
Average Family Size	4.30	Net Enrollment Ratio	144%
Ethnic Minorities	100%	Average Dropout Ratio	3%
Major Ethnic Groups	Tay(40%)	Average Repetition Ratio	17%
	Nung(30%)	Pupils over Age 11	4%
	Dao(20%)	Female Pupils	53.0%



**Description of Commune**

- The commune is located 20 km from the provincial capital in the eastern part of Nguyen Binh District.
- The area is predominantly occupied by steep mountain land. A national road traverses from east to west and hamlets are scattered along this road. The mountain area has a low population density with poor transport conditions.
- There is a settlement (Na Noi Hamlet) in the southwestern part of the commune and there is a road link to this settlement, indicating relatively good transport conditions compared to other areas.
- The dominant ethnic groups are Tay and Nung.

**State of School Management**

- The commune has a main school and two satellite schools. The main school is currently a combined primary and secondary school and relocation of the secondary school is planned. No satellite school pupil attends the main school which has a single catchment area with the longest distance of some 4 km. Some pupils come from a neighbouring commune and cross the school boundary.
- The subject satellite school (Na Bao) is of a similar scale to the main school and functions as a quasi-main school, receiving Grade 5 pupils from the other satellite school.

**Efficiency of Education**

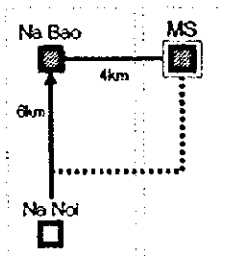
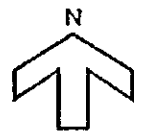
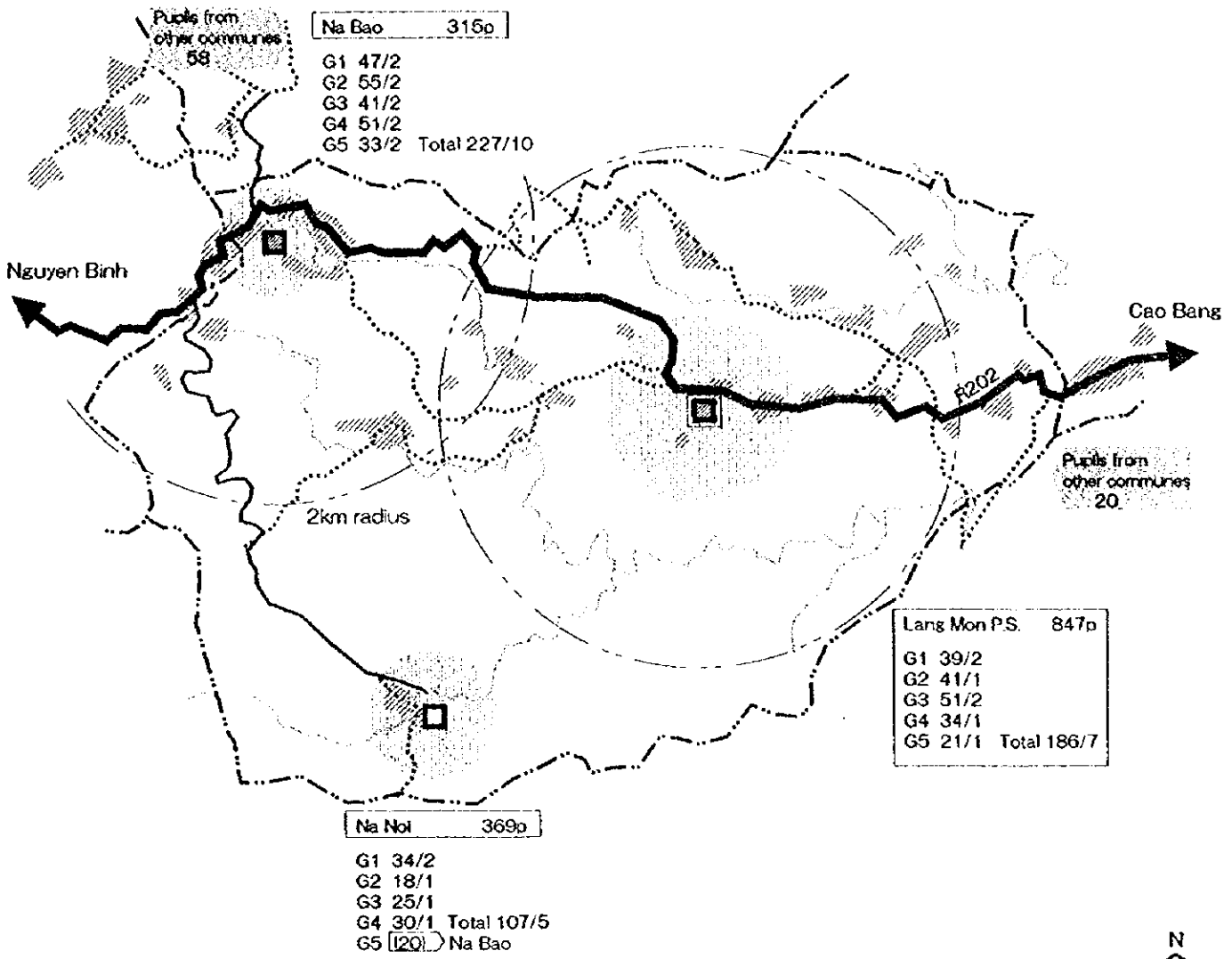
- The enrollment ratio is high and the drop-out ratio is low. Most enrolled children are of standard school age (6 - 10 years old).
- The number of pupils substantially declines in Grade 5 but levels off in other grades.
- Improvement of the promotion ratio for Grade 4 pupils is a major task.

**Site Conditions**

- The main school has temporary classrooms made of bricks or a wooden structure with earth walls but both types of buildings are deteriorated.
- The subject satellite school has only temporary classrooms with a wooden structure and bamboo walls. As part of the premises have different ground levels or are sloping, some ground preparation work will be necessary. Part of the access road is only passable on foot.

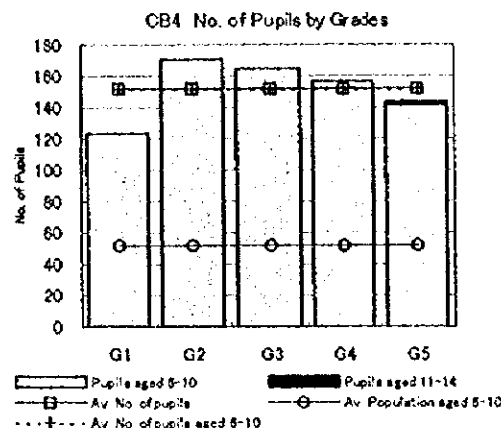
**Planning Concepts**

- The highly deteriorated facilities of the main school are in urgent need of improvement by means of replacement.
- The subject satellite school boasts a similar size to the main school and is already functioning as a quasi-main school. Urgent replacement of the deteriorated buildings is a pressing task to improve the teaching facilities.



Name of school	Pop. in catchment area (p)
Grade (G)	No. of pupils/classes
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
= Main roads	
= Roads for car traffic	
..... Footpaths	
~~~~~ Rivers	
////// Hamlets	
■	Main school Pop. in catchment area
■	Requested satellite school
□	Other satellite schools
	100 heads

Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	1.21	No. of Pupils	758
Population (heads)	3,538	No. of Teachers	30
Density (h/km <sup>2</sup> )	2,924		
Average Family Size	3.71	Net Enrollment Ratio	302%
Ethnic Minorities	60%	Average Dropout Ratio	4%
Major Ethnic Groups	Tay(50%)	Average Repetition Ratio	9%
	Kinh(40%)	Pupils over Age 11	0%
	Nung	Female Pupils	53.0%



**Description of Commune**

- The commune is the capital of Hoa An District and is located 20 km from the provincial capital.
- A national road runs through a small town which has been entirely urbanized. The population density is extremely high and the number of pupils is expected to increase by 43% in five years time.

**State of School Management**

- The commune has one main school and one satellite school. These two schools complement each other because of their geographical proximity. Grade 5 pupils attend the satellite school and the remainder attend the main school. The number of pupils from neighbouring communes is extremely high, accounting for half of the total number of pupils.
- The subject satellite school used to be a main school but was temporarily closed because of the war against China. Its improvement to a main school under the Project has been requested.
- The existing main school is currently a combined primary and secondary school and its transformation to a new satellite school with improved facilities by splitting the present premises has been requested.

**Efficiency of Education**

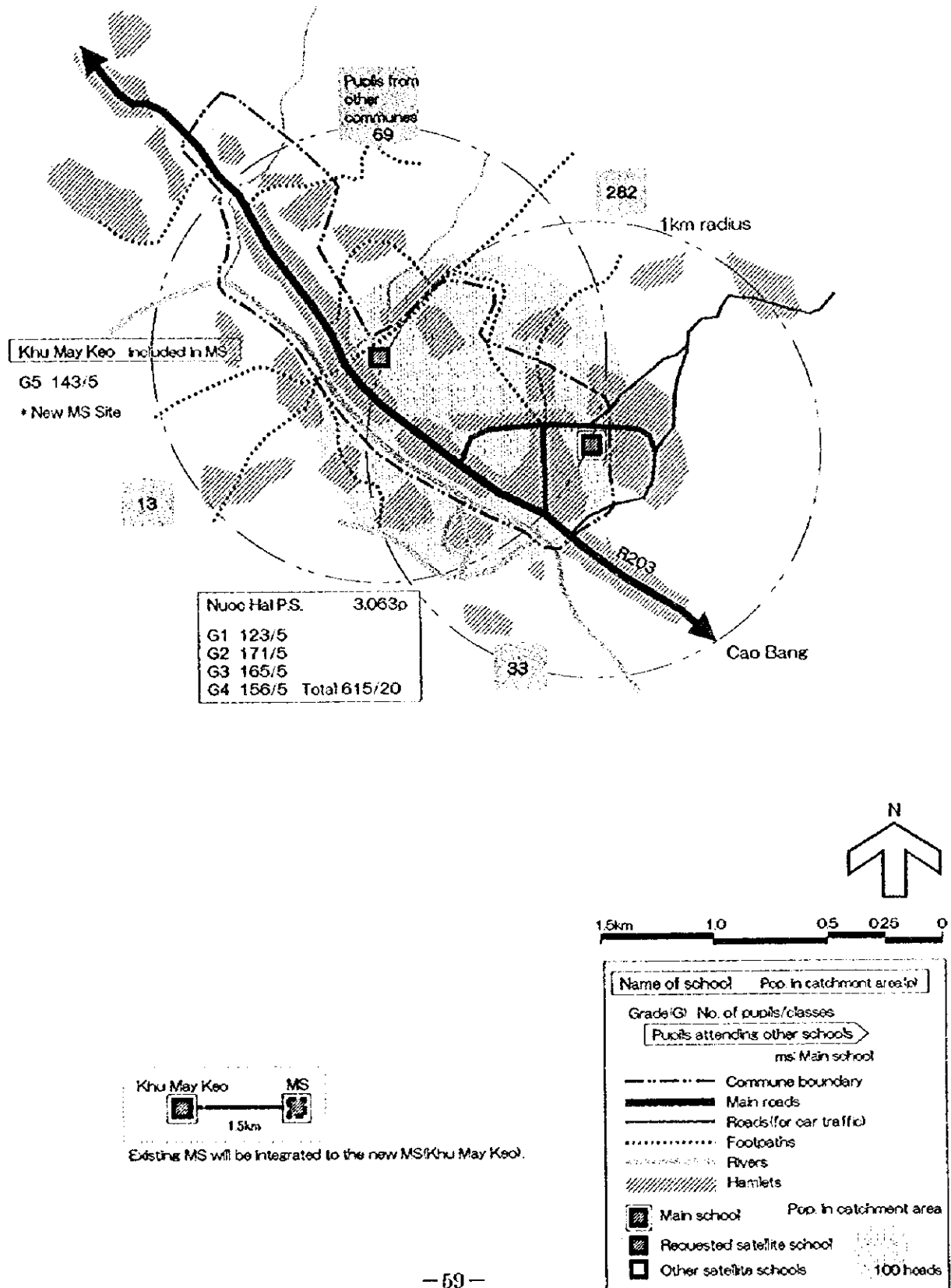
- Almost all of the enrolled pupils are standard school age children (6 - 10 years old) and the number of pupils is fairly level for all grades.
- Such educational indices as the enrollment ratio and drop-out ratio indicate the excellent internal efficiency of the schools.
- The slightly lower number of Grade 1 pupils than other grades can be attributed to the relatively high number of pupils in Grade 2 upwards from neighbouring communes.

**Site Conditions**

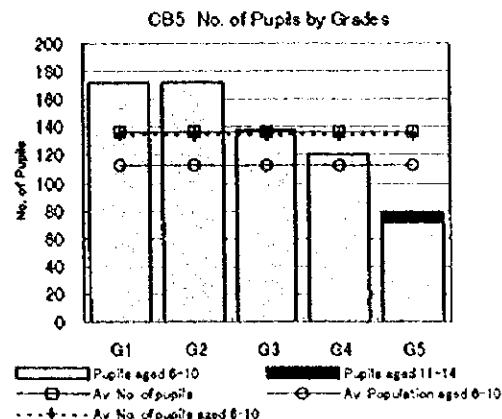
- The new main school site is the existing satellite school site where a new classroom building which was constructed in 1998 is located. Minor ground preparation work will be required to eradicate the different ground levels at the site.

**Planning Concepts**

- In view of the current state of school management, concentration of the required facilities at the new main school appears more efficient.
- The new main school will have a classroom shortage following the above concentration, making extension of the school facilities at the new main school site necessary.



Commune		School (Total of main/satellite schools)	
Area (k.nf)	24.79	No. of Pupils	680
Population (heads)	6,903	No. of Teachers	29
Density (h/k.nf)	278.5		
Average Family Size	3.92	Net Enrollment Ratio	119%
Ethnic Minorities	na	Average Dropout Ratio	9%
Major Ethnic Groups	Tay(70%)	Average Repetition Ratio	3%
	Nung	Pupils over Age 11	1%
	Kinh	Female Pupils	41.2%



**Description of Commune**

- The commune is adjacent to T.T. Nuoc Hai, the capital of Hoa An District, and is 20 km from the provincial capital.
- A national road passes through the southwestern part of the commune and hamlets are scattered along this road. The mountain area extends towards the northeast of the national road. The central and northern parts of the commune comprise steep mountain land with poor transport access.

**State of School Management**

- The commune has a main school and two satellite schools. The main school is currently a combined primary and secondary school and separation of the primary school by means of splitting the present premises has been requested.
- The subject satellite school (Tan Hong) is an incomplete school which teaches upto Grade 3. Higher grade pupils of this school attend either the main school or a primary school (constructed by French aid) in a neighbouring commune. The other satellite school is also an incomplete school and higher grade pupils attend the main school.
- The northwestern part of the commune is cut off from the catchment area of the main school by a river and many pupils attend the main school of the neighbouring town (T.T. Nuoc Hai), crossing the school boundary. The number of pupils crossing the school boundary accounts for 40% of the total number of pupils.

**Efficiency of Education**

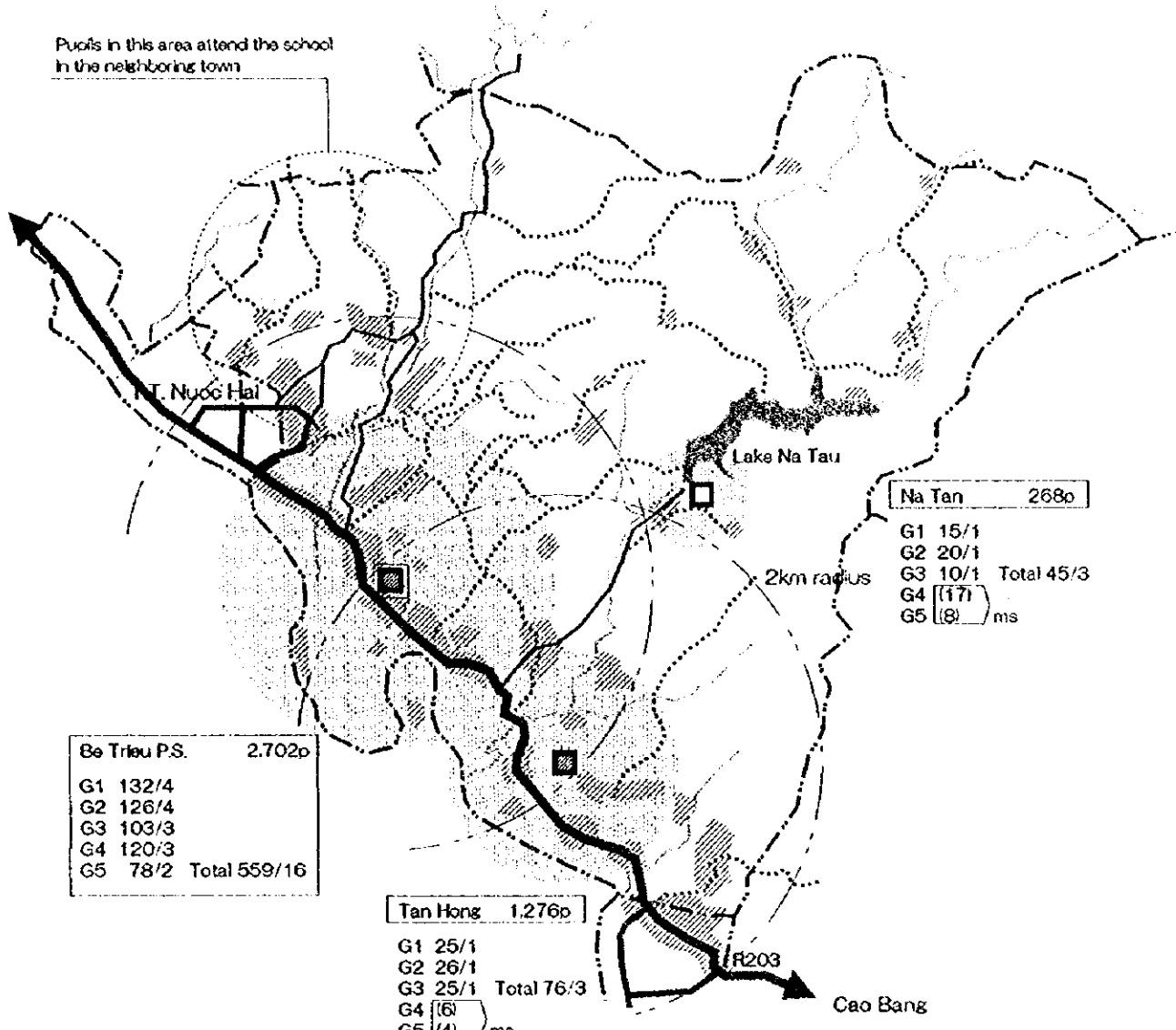
- The existence of many pupils crossing the school boundary results in a nominal net enrollment ratio of more than 100%. However, the ratio of female pupils suggests that there are unenrolled children.
- The number of pupils declines in the higher grades. Almost all of the pupils are standard school age children (6 - 10 years old). The number of pupils appears to level off throughout all grades when the pupils which attend schools in neighbouring communes is taken into consideration.
- Rectification of the gender gap and further improvement of the internal efficiency are the two main tasks.

**Site Conditions**

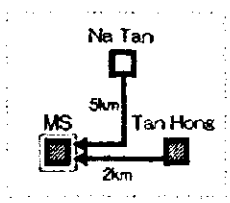
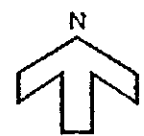
- The main school has brick classroom buildings, most of which are deteriorated. Even though the site has different ground levels, ground preparation work will be unnecessary.
- The subject satellite school also has deteriorated brick classroom buildings.

**Planning Concepts**

- The main school is a large school and the severe deterioration of its facilities makes their urgent replacement necessary.
- As the subject satellite school is within walking distance of the main school, the introduction of facilities for higher grade pupils at the main school will be more efficient.

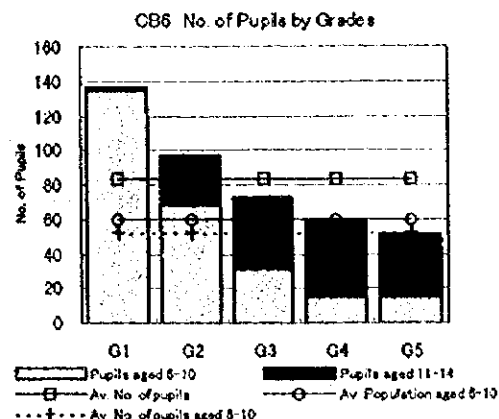


Pupils to the neighboring school 35



Name of school	Pup. in catchment area (p)
Grade/G/ No. of pupils/classes	
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
== Main roads	
— Roads (for car traffic)	
..... Footpaths	
~~~~~ Rivers	
//// Hamlets	
■ Main school	Pup. in catchment area
▨ Requested satellite school	
□ Other satellite schools	100 heads

Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	28.75	No. of Pupils	417
Population (heads)	3,062	No. of Teachers	17
Density (h/km <sup>2</sup> )	106.5		
Average Family Size	4.53	Net Enrollment Ratio	105%
Ethnic Minorities	100%	Average Dropout Ratio	1%
Major Ethnic Groups	Tay(50%)	Average Repetition Ratio	24%
	Nung(40%)	Pupils over Age 11	34%
	H'mong(10%)	Female Pupils	54.3%
Population in the school area; 2,241			



**Description of Commune**

- The commune is the capital of the Tra Linh District and is 30 km from the provincial capital.
- A national road runs north to south through the central part of the commune and hamlets are concentrated along this road. The central and southern parts are steep mountain areas with poor transport access.
- The dominant ethnic groups are Tay and Nung.

**State of School Management**

- The commune has two main schools. The northwestern part of the commune is the catchment area of the subject main school which has one satellite school. The main school is large with more than 300 pupils. At present, it is a combined primary and secondary school and the separation of these schools by means of splitting the premises has been requested.
- The subject satellite school (Lung Han) is an incomplete school which only teaches upto Grade 3 and no pupils from this satellite school attend the main school. Because of the war against China, the school was temporarily closed and was restored upto Grade 3 this year. It is planned to introduce a Grade 4 class next year.

**Efficiency of Education**

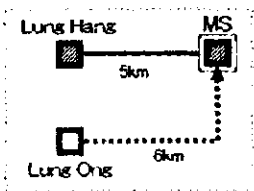
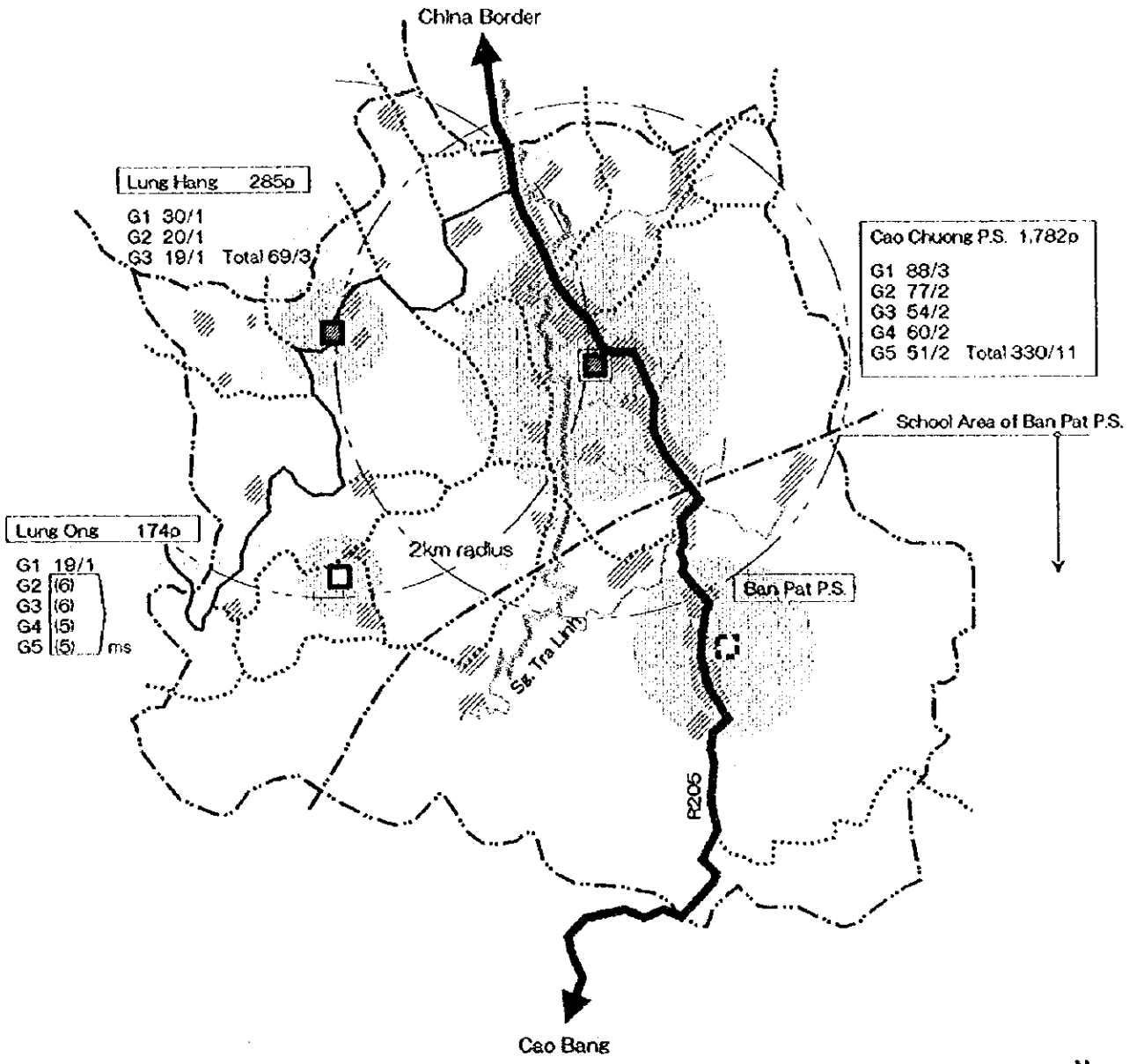
- While the enrollment ratio is high, many pupils of standard school age are concentrated in the lower grades.
- The ratio of over-aged pupils is relatively high even in the lower grades, suggesting a high initial enrollment age and many repeaters.
- Improvement of the promotion ratio to improve the internal efficiency is an important task.

**Site Conditions**

- The school has brick classroom buildings which are considerably deteriorated. Although the site has uneven ground and dipped areas, ground preparation work will be unnecessary.
- The subject satellite school has a temporary wooden classroom building with earth walls. There is a table-like small hill at the centre of the site. Coupled with the uneven ground levels, major ground preparation work will be required.

**Planning Concepts**

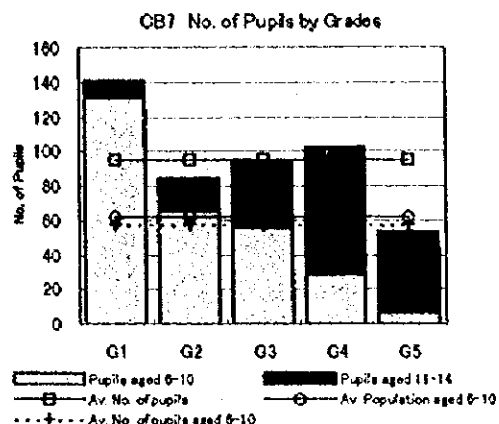
- The main school is large but its facilities are severely deteriorated, making urgent improvement through replacement necessary.
- The subject satellite school is very small. As it is located within walking distance of the main school, the introduction of facilities for higher grade pupils at the main school will be more efficient.



Name of school	Pop. in catchment area/p
Grade/G/ No. of pupils/classes	
Pupils attending other schools	
ms: Main school	
----- Commune boundary	
———— Main roads	
———— Roads (for car traffic)	
..... Footpaths	
~~~~~ Rivers	
////// Hamlets	
■ Main school	Pop. in catchment area
■ Requested satellite school	
□ Other satellite schools	100 heads



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	23.42	No. of Pupils	473
Population (heads)	2,445	No. of Teachers	22
Density (h/km <sup>2</sup> )	104.4		
Average Family Size	5.07	Net Enrollment Ratio	102%
Ethnic Minorities	100%	Average Dropout Ratio	12%
Major Ethnic Groups	Tay(50%)	Average Repetition Ratio	14%
	Nung(40%)	Pupils over Age 11	39%
	H'mong(10%)	Female Pupils	46.1%



**Description of Commune**

- The commune is located 30 km from the provincial capital in the northern part of Tra Linh District.
- A provincial road meanders from east to west through the mountain area which predominantly occupies the commune area. Hamlets are concentrated along this road. Those in the mountain area suffer from poor transport access.

**State of School Management**

- The commune has a main school and two satellite schools. The main school is large and is currently a combined primary and secondary school. Separation of the primary and secondary school by means of splitting the premises has been requested.
- The two satellite schools are both incomplete and teach upto Grade 3. Higher grade pupils attend the main school.

**Efficiency of Education**

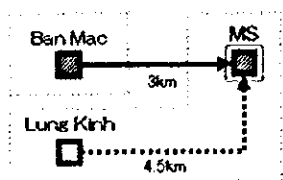
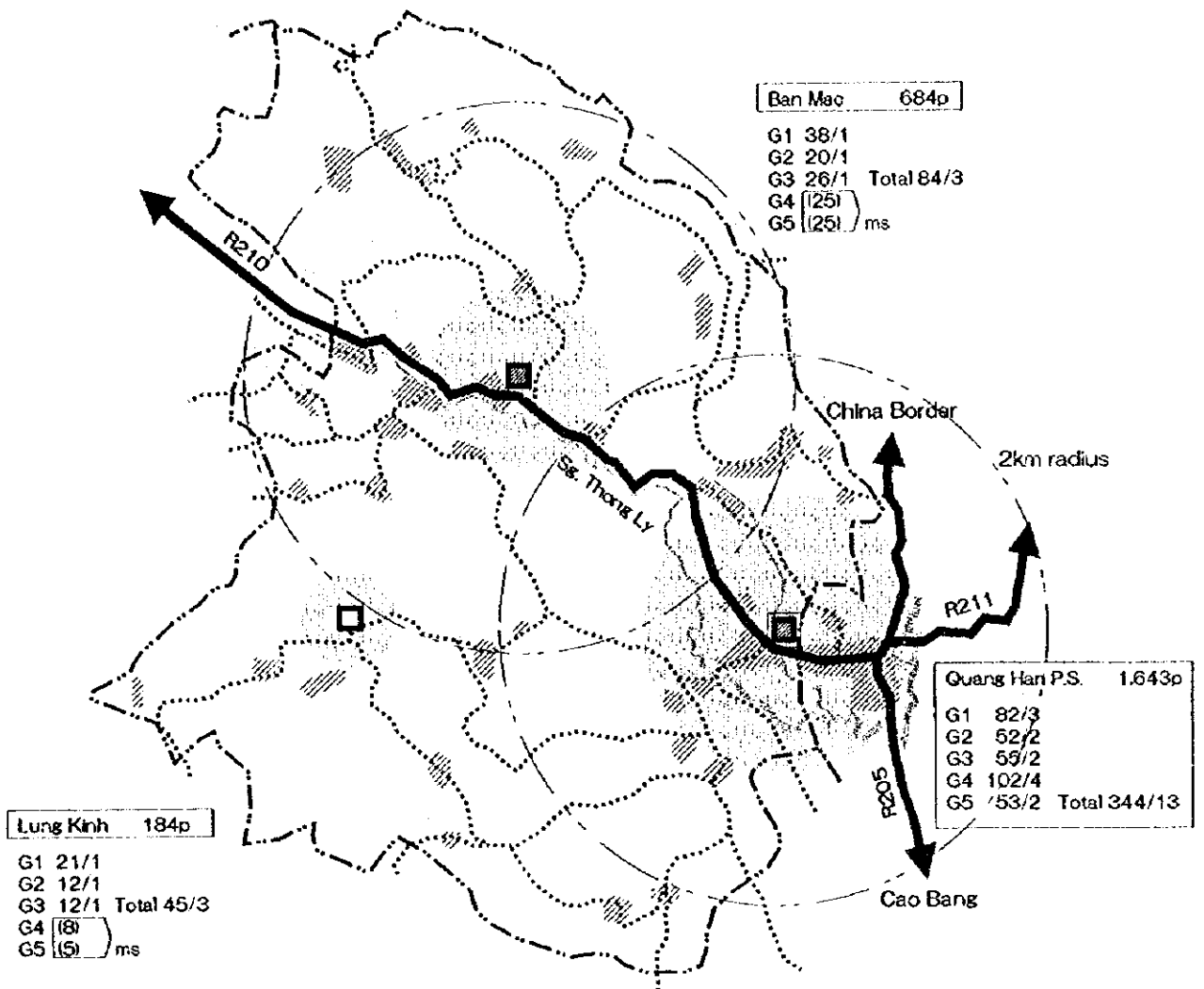
- While the enrollment ratio is high, both the drop-out ratio and repetition ratio are also relatively high.
- The ratio of over-aged pupils is extremely high, suggesting initial enrollment at a high age and many repeaters.
- Improvement of the promotion ratio to improve the internal efficiency is an important task.

**Site Conditions**

- The main school has classroom buildings made of either bricks or a wooden structure with earth walls. However, all of the buildings are quite old. In addition, accommodation facilities for teachers are also available. Even though the ground is uneven, ground preparation work will be unnecessary.
- The subject satellite school site is long and narrow and has a temporary wooden classroom building with earth walls.

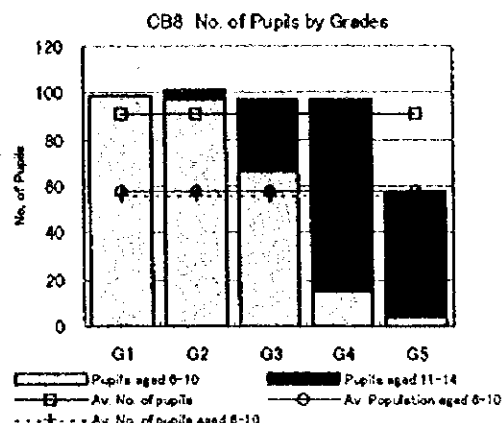
**Planning Concepts**

- The facilities of the large main school are highly deteriorated, making their urgent improvement through replacement necessary.
- The temporary building of the subject satellite school requires urgent replacement. Its improvement and extension to become a complete school is expected to improve the internal efficiency.



Name of school	Pop. in catchment area/p
Grade/G/ No. of pupils/classes	
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
— Main roads	
— Roads (for car traffic)	
... Footpaths	
~ Rivers	
// Hamlets	
■ Main school	Pop. in catchment area
■ Requested satellite school	100 heads
□ Other satellite schools	

Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	12.84	No. of Pupils	452
Population (heads)	2,083	No. of Teachers	17
Density (h/km <sup>2</sup> )	162.2		
Average Family Size	5.38	Net Enrollment Ratio	100%
Ethnic Minorities	100%	Average Dropout Ratio	3%
Major Ethnic Groups	Nung(100%)	Average Repetition Ratio	22.5%
		Pupils over Age 11	36%
		Female Pupils	49.8%



**Description of Commune**

- The commune is adjacent to the capital of Quang Hoa District and is located 35 km from the provincial capital.
- Small limestone hills are scattered on flat land.
- The geographical area of the commune is long in the east-west direction and a national road also runs from east to west. The local population is scattered on the flat land and the transport access is relatively good in general.
- The entire population consists of Nung people.

**State of School Management**

- The commune has a main school and one satellite school. The main school is large and is currently a combined primary and secondary school. Separation and relocation of the primary school to an adjacent new site has been requested.
- The satellite school teaches only Grade 1 and pupils in Grade 2 through Grade 4 attend the main school. Even Grade 2 pupils walk a distance of 3 - 4 km.

**Efficiency of Education**

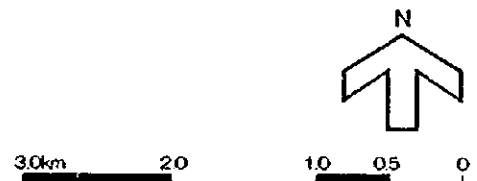
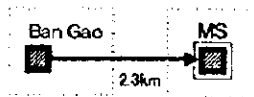
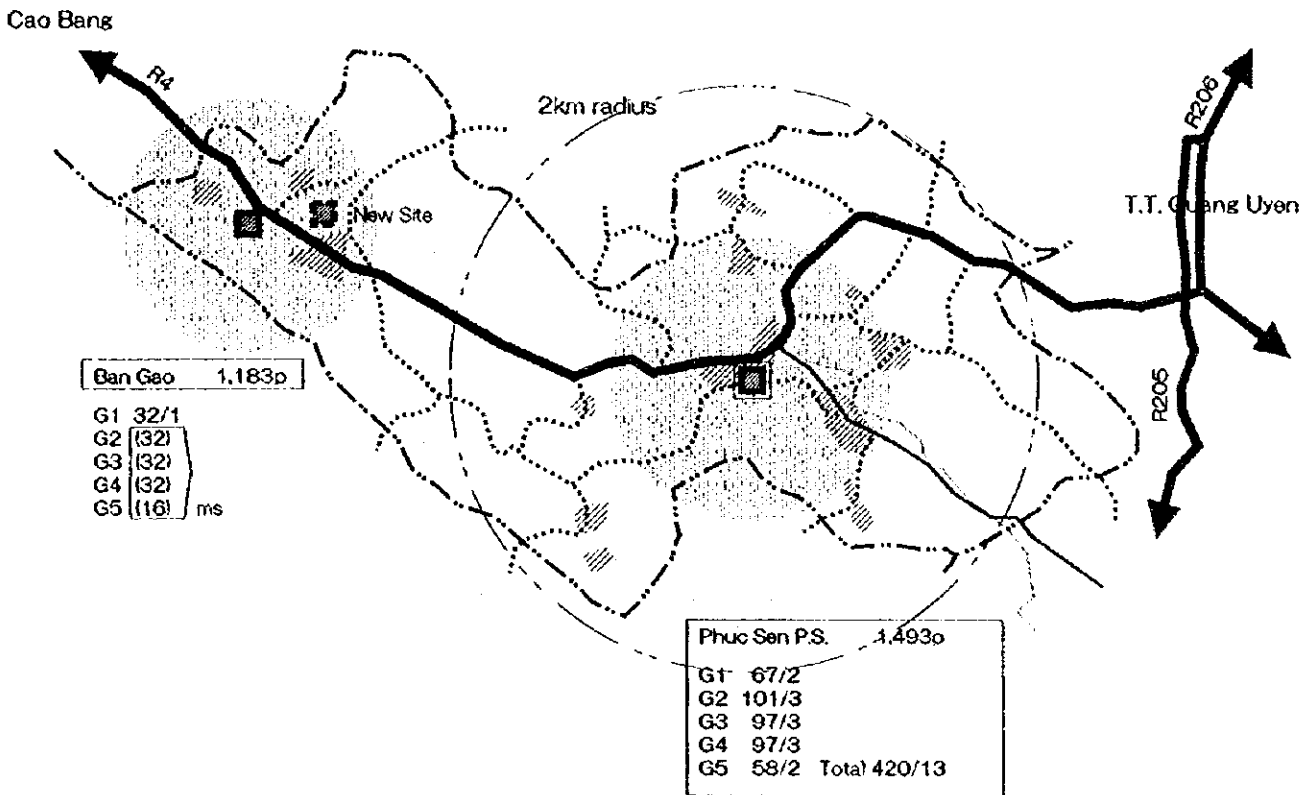
- The enrollment ratio is high and the drop-out ratio is low.
- While the number of pupils upto Grade 4 is fairly level, it sharply declines in Grade 5. The high ratio of over-aged pupils in higher grades indicates a high level of repeaters.
- Improvement of the promotion ratio to improve the internal efficiency is a major task.

**Site Conditions**

- The planned new site for the main school is generally flat even though there are some dipped areas. Outcrops of rocks are observed in many places.
- The subject satellite school currently uses borrowed classrooms and its relocation to a new site has been requested.

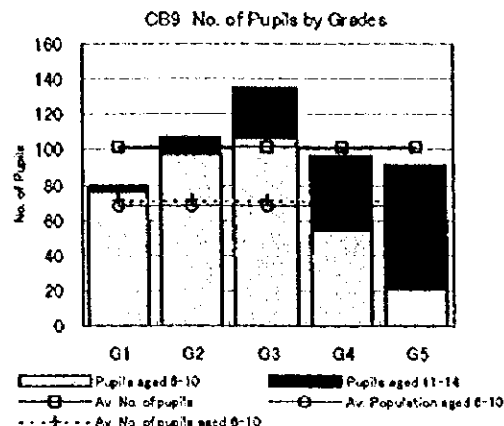
**Planning Concepts**

- The facilities of the large main school are deteriorated and also quantitatively insufficient. The improvement and extension are required by means of separation and relocation.
- In regard to the subject satellite school, improvement of its facilities will be attempted by means of constructing new facilities at the relocated new site and extending the school as a complete school teaching all grades.



Name of school	Pop. in catchment area/p
Grade/G/ No. of pupils/classes	
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
— Main roads	
— Roads for car traffic	
..... Footpaths	
~~~~~ Rivers	
//// Hamlets	
■ Main school	Pop. in catchment area
■ Requested satellite school	
□ Other satellite schools	100 heads

Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	31.33	No. of Pupils	509
Population (heads)	3,676	No. of Teachers	24
Density (h/km <sup>2</sup> )	117.3		
Average Family Size	5.86	Net Enrollment Ratio	105%
Ethnic Minorities	100%	Average Dropout Ratio	3%
Major Ethnic Groups	Nung(50%)	Average Repetition Ratio	13%
	Tay(50%)	Pupils over Age 11	30%
		Female Pupils	51.0%



**Description of Commune**

- The commune is adjacent to the capital of Quang Hoa District and is 45 km from the provincial capital.
- National roads crisscross-cross the commune. Small limestone hills are scattered on flat land. The local population is scattered on this flat land and the transport access is relatively good.
- Nung people and Tay people account for 50% each of the population.

**State of School Management**

- The commune has two main schools. The northern part of the commune is the catchment area of the subject school which has one satellite school of a similar size to the main school. Both the subject main school and its satellite school are independently run with a wide catchment area of a some 4 km radius.
- A proportion of the pupils (approximately 30%) come from a neighbouring commune across the school border.

**Efficiency of Education**

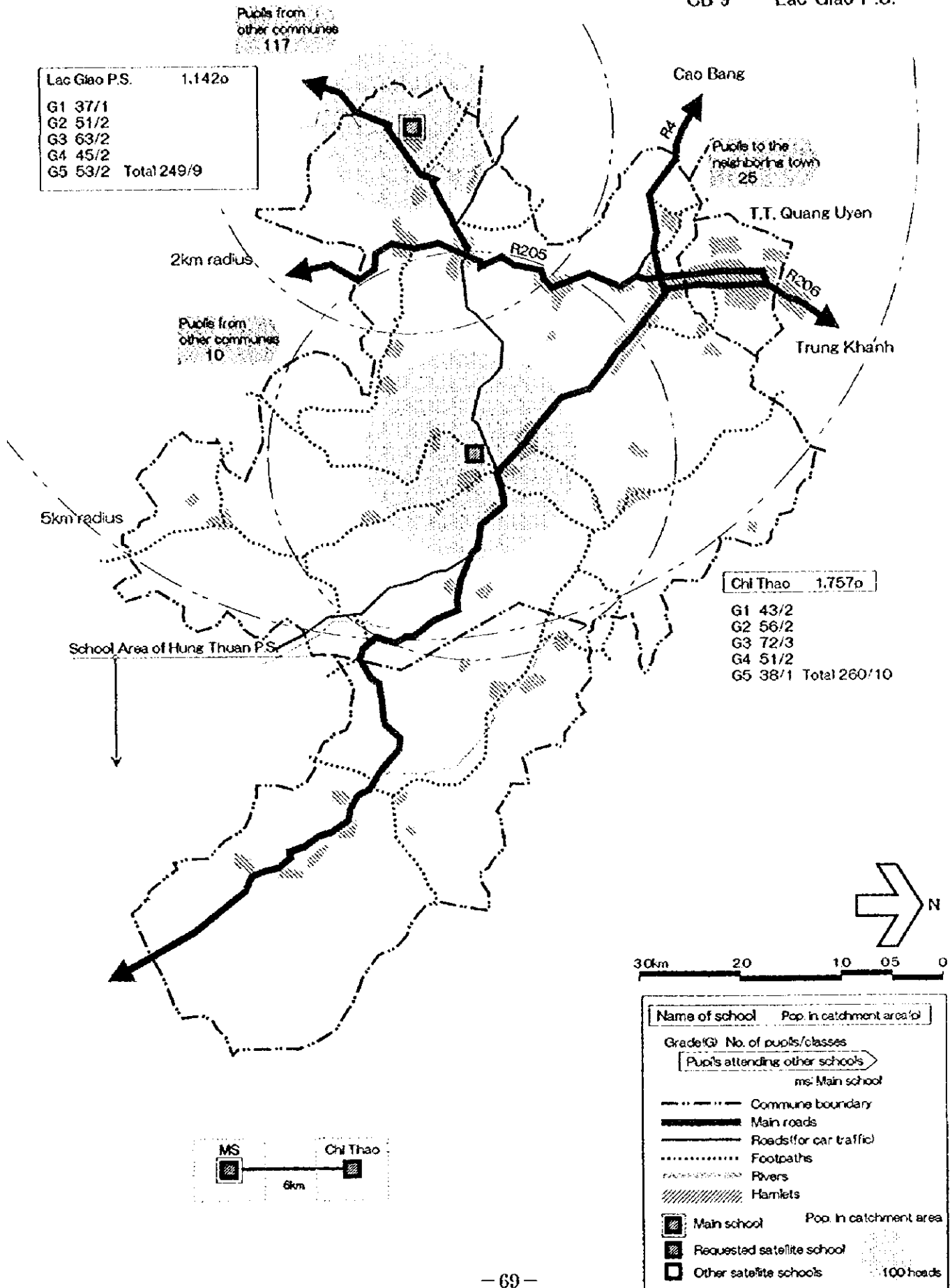
- The enrollment ratio is high and the drop-out ratio is low. Because of the inflow of higher grade pupils from the neighbouring commune, the number of pupils increases from Grade 1 to Grade 3. The ratio of over-aged pupils in the higher grades is high, suggesting a late enrollment age and many repeaters.
- Improvement of the promotion ratio to improve the internal efficiency poses an important task.

**Site Conditions**

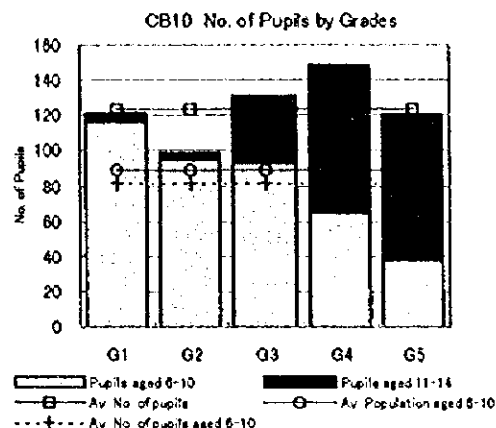
- All of the classroom buildings of the main school are temporary wooden structures with earth walls. As the ground is flat, ground preparation work will be unnecessary.
- All of the classroom buildings of the subject satellite school are similar to those of the main school. The ground is also flat and ground preparation work will be unnecessary.

**Planning Concepts**

- The facilities of the main school are highly deteriorated and their urgent improvement through replacement is necessary.
- The subject satellite school covers a wide area and its size rivals that of the main school. The facilities are deteriorated and their urgent improvement is necessary.



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	13.68	No. of Pupils	618
Population (heads)	2,109	No. of Teachers	28
Density (h/km <sup>2</sup> )	154.2		
Average Family Size	4.66	Net Enrollment Ratio	91%
Ethnic Minorities	100%	Average Dropout Ratio	3%
Major Ethnic Groups	Tay(60%)	Average Repetition Ratio	14.7%
	Nung(40%)	Pupils over Age 11	34%
	Kinh	Female Pupils	52.1%



**Description of Commune**

- The commune is located 50 km from the provincial capital in the southern part of Trung Khanh District.
- A national road traverses the central part of the commune and hamlets are dotted along this road. Small limestone hills are scattered on flat land. The local population is scattered on this flat land and the transport access is relatively good.
- Tay people and Nung people are the dominant ethnic groups.

**State of School Management**

- There is one main school and one satellite school. The main school is large with more than 500 pupils. The satellite school is incomplete and teaches up to Grade 4. Grade 5 pupils attend the main school.
- Nearly 40% of the total number of pupils come from a neighbouring commune.

**Efficiency of Education**

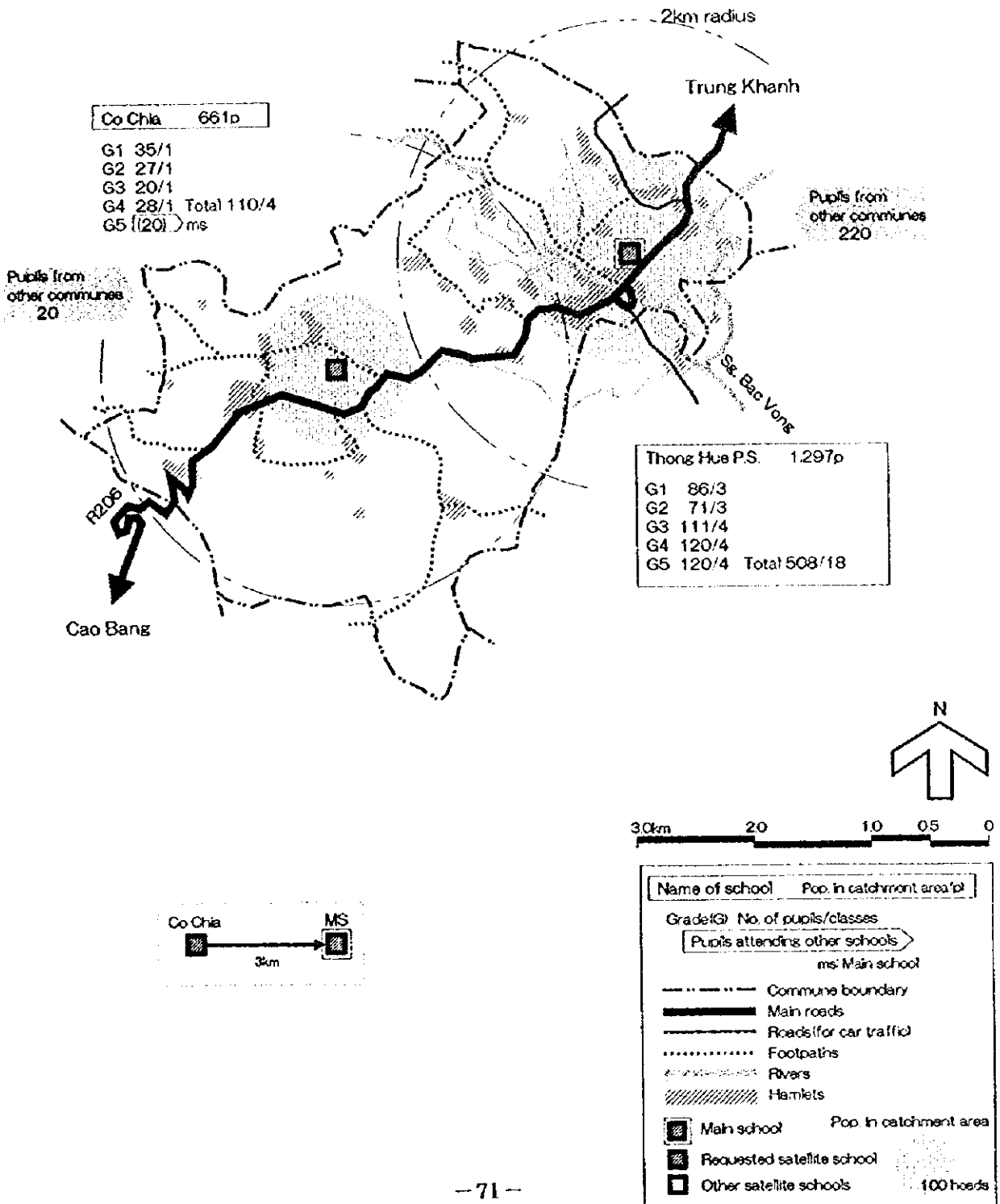
- While the enrollment ratio is high, there are some children who are not enrolled at school. The drop-out ratio is low.
- The ratio of over-aged pupils is high in the higher grades and the number of pupils in the higher grades is also high, suggesting late enrollment and many repeaters.
- Further improvement of the enrollment ratio and improvement of the promotion ratio pose important tasks.

**Site Conditions**

- Most of the brick or stone masonry classrooms buildings of the main school are severely deteriorated. Accommodation facilities for teachers are also provided on the premises.
- The subject satellite school has a new brick classroom building which was constructed in 1998.

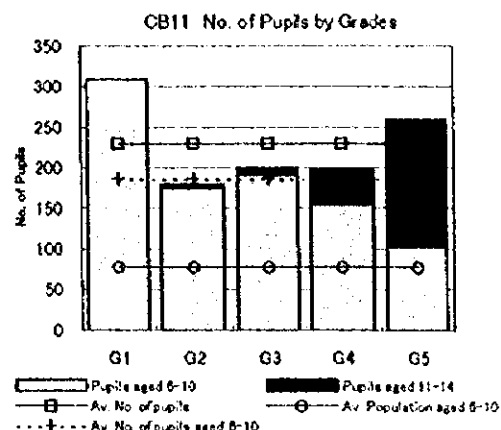
**Planning Concepts**

- The main school is large and the severe deterioration of its facilities makes their urgent improvement through replacement necessary.
- The satellite school has a newly constructed classroom building. As this building is located in the catchment area of the main school, the introduction of new facilities for higher grade pupils at the main school will be more efficient.





Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	4.68	No. of Pupils	1,145
Population (heads)	3,860	No. of Teachers	43
Density (h/km <sup>2</sup> )	824.8		
Average Family Size	4.16	Net Enrollment Ratio	142%
Ethnic Minorities	90%	Average Dropout Ratio	7%
Major Ethnic Groups	Tay(60%)	Average Repetition Ratio	20%
	Nung(30%)	Pupils over Age 11	19%
	Kinh(10%)	Female Pupils	50.0%



**Description of Commune**

- T.T. Trung Khanh is the capital of Trung Khanh District and is located 65 km from the provincial capital.
- The geographical area of the town is small and is fairly urbanised. The topography is flat and the transport conditions are favourable.
- Tay people and Nung people dominate the local population.

**State of School Management**

- The town has one main school and two satellite schools. The main school is very large with more than 1,000 pupils and many of the pupils (approximately 40%) come from neighbouring communes.
- The two satellite schools use temporary and leased classrooms. They only teach Grade 1 and Grade 4 and act as supplementary schools of the main school.

**Efficiency of Education**

- The enrollment ratio is high. There is room for improvement in regard to the drop-out ratio. The number of pupils drastically declines from Grade 1 to Grade 2 and is particularly high in Grade 5 which also has a high ratio of over-aged pupils. The large number of Grade 5 pupils is presumably caused by pupils coming from neighbouring communes and/or many repeaters.
- Improvement of both the drop-out ratio and the promotion rate to improve the internal efficiency poses a major task.

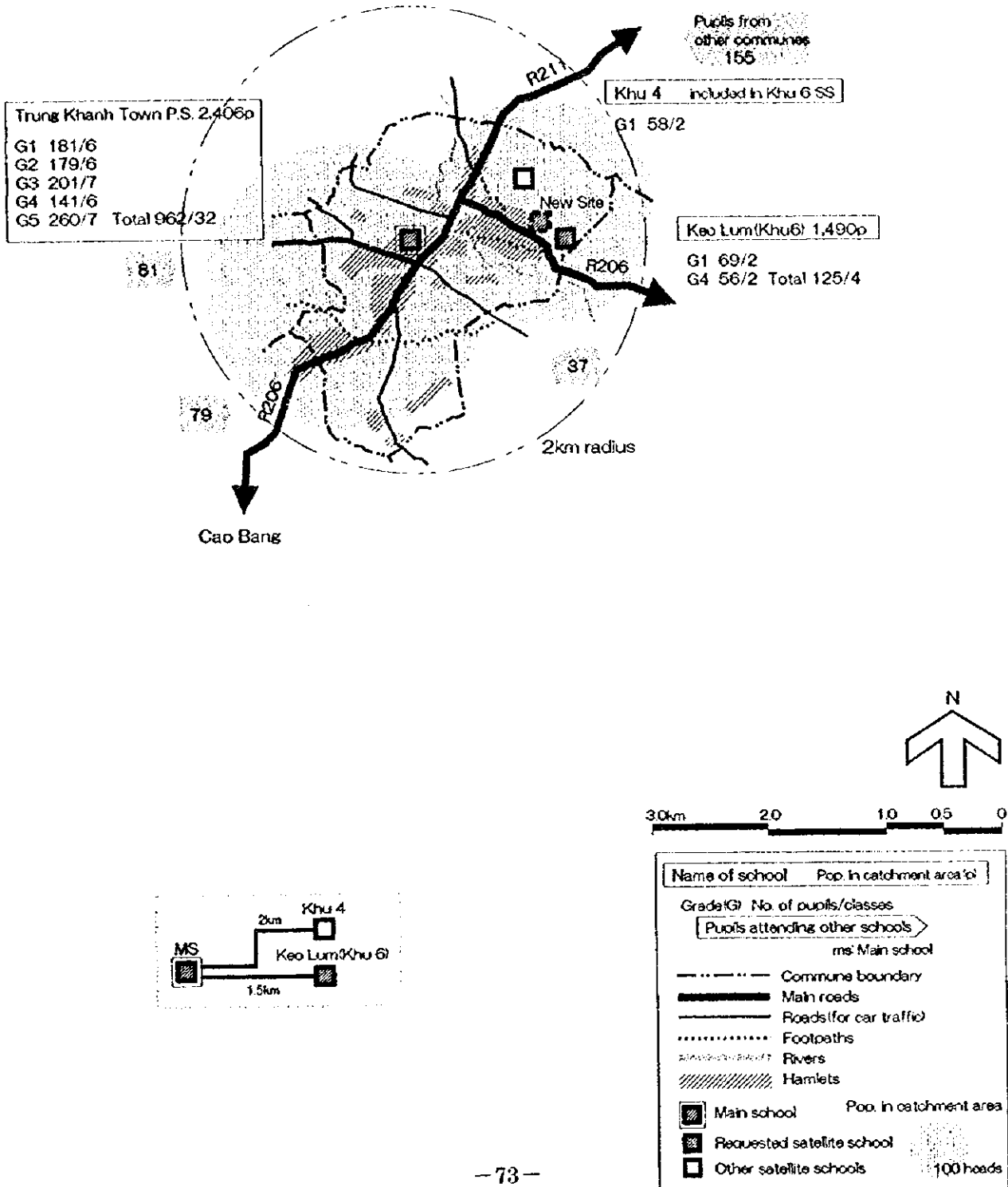
**Site Conditions**

- Most of the main school's brick or stone masonry classroom buildings are deteriorated. The site is flat and has good access.
- Integration of the subject satellite school with another satellite school through relocation to a new site has been required. The new site is flat and has good access.

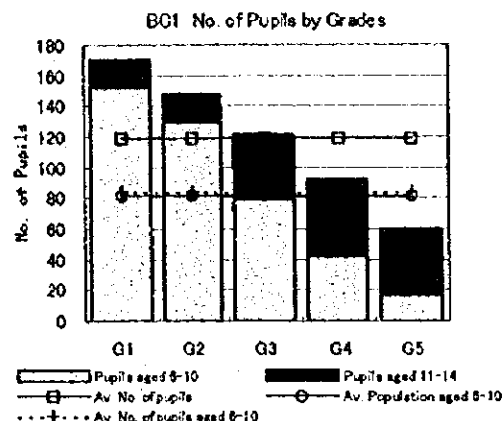
**Planning Concepts**

- As the geographical area of the town is small, concentration of the improvement work at the main school will be more effective than separately improving the main school and the satellite school.
- All of the main school facilities are highly deteriorated, making their urgent improvement through replacement necessary.

CB11 Trung Khanh Town P.S.



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	59.76	No. of Pupils	592
Population (heads)	3,071	No. of Teachers	27
Density (h/km <sup>2</sup> )	51.4		
Average Family Size	5.36	Net Enrollment Ratio	104%
Ethnic Minorities	over 84%	Average Dropout Ratio	4%
Major Ethnic Groups	Tay(57%)	Average Repetition Ratio	7%
	Dao(27%)	Pupils over Age 11	29%
	Nung	Female Pupils	48.6%



**Description of Commune**

- The commune is located 60 km from the provincial capital in the central part of Ba Be District.
- The geographical area of the commune stretches lengthways in the north-south direction and mainly consists of steep mountain land. A national road runs east-west in the southern part of the commune, leaving most parts of the commune with poor transport conditions. Hamlets are scattered throughout the mountain land with poor transport access instead of being concentrated along the national road.
- Tay people and Dao people are the dominant ethnic groups.

**State of School Management**

- The commune has one main school and nine satellite schools. Although the main school is small, higher grade pupils from all of the satellite schools attend the main school or lodge at the dormitory.
- All of the satellite schools are incomplete. The subject satellite school (Na Nieng) used to be a main school and now functions as a quasi-main school with one satellite school.

**Efficiency of Education**

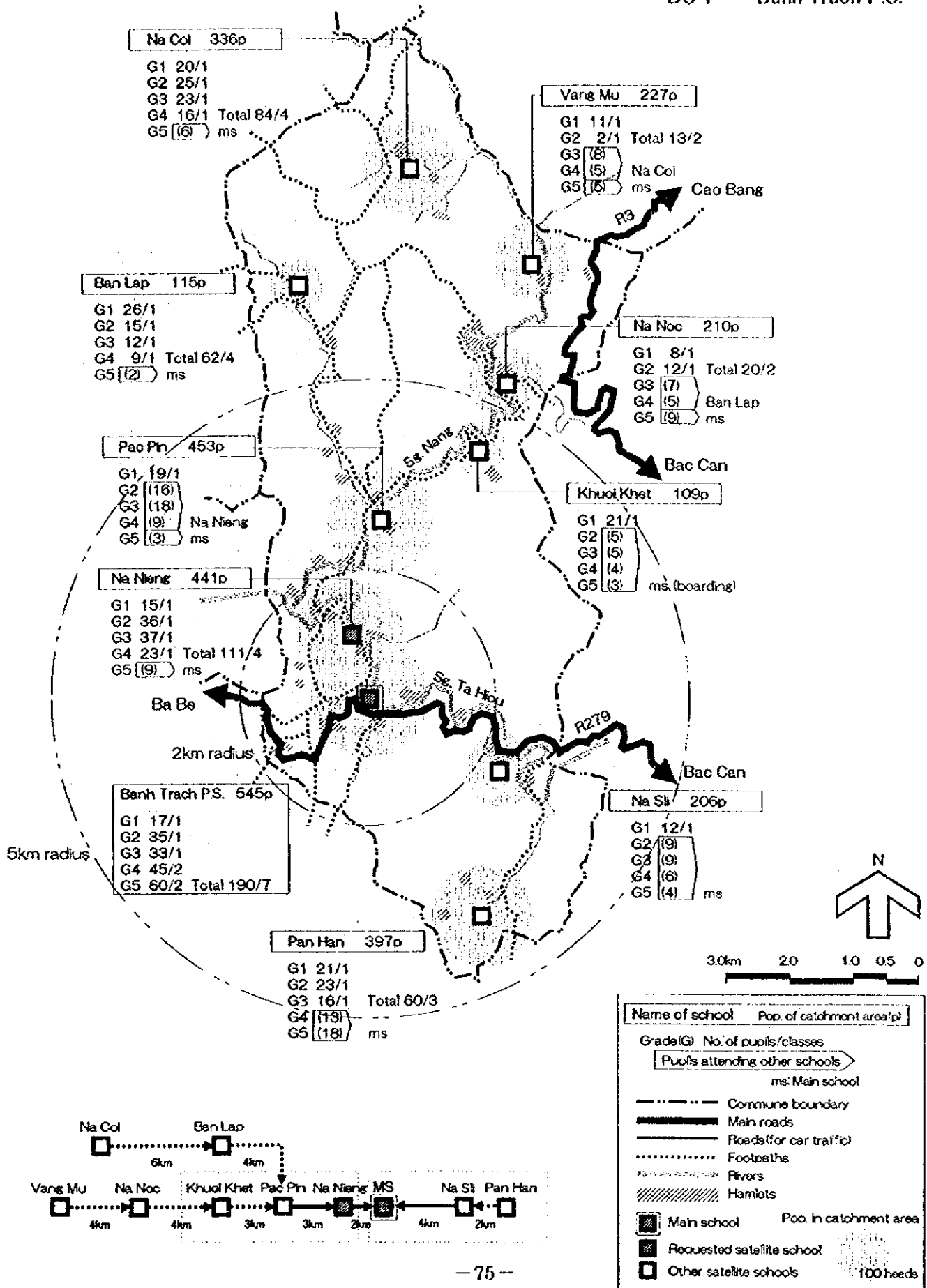
- The enrollment ratio is high and the drop-out ratio is low. The number of pupils significantly declines in the higher grades to the extent that the number of Grade 5 pupils is approximately one-third of the number of Grade 1 pupils. However, it should start to level off in the coming years.
- The ratio of over-aged pupils is high and is even observed in the case of the lower grades.
- Lowering of the high initial enrollment age to improve the conditions of promotion to higher grades poses a major task.

**Site Conditions**

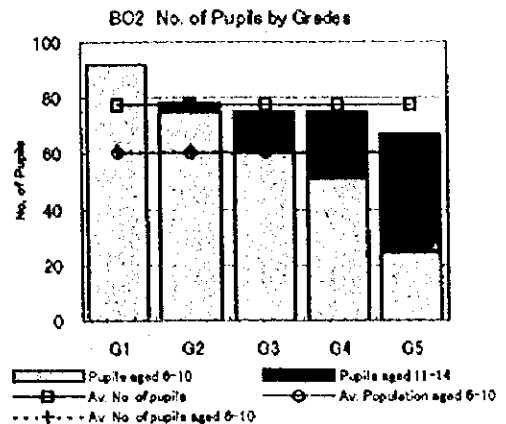
- Temporary wooden classroom buildings with bamboo walls are dotted around the main school site. The entire site is sloping and the buildings are distributed on gently sloping terraces of different levels. Access to the school is good.
- The brick classroom buildings at the subject satellite school are highly deteriorated. Even though the entire site is sloping, ground preparation work will be unnecessary. Access to the site is good.

**Planning Concepts**

- All of the main school facilities are temporary buildings and their urgent improvement is necessary.
- The construction of additional facilities at the subject satellite school site is necessary in order for it to properly function as a quasi-main school in addition to replacement of the deteriorated facilities.



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	72.07	No. of Pupils	387
Population (heads)	2,023	No. of Teachers	22
Density (h/km <sup>2</sup> )	28.1		
Average Family Size	na	Net Enrollment Ratio	95%
Ethnic Minorities	97%	Average Dropout Ratio	2%
Major Ethnic Groups	Tay(43%)	Average Repetition Ratio	13%
	H'mong(30%)	Pupils over Age 11	22%
	Dao(15%)	Female Pupils	41.6%



**Description of Commune**

- The commune is located 70 km from the provincial capital in the southern part of Cho Don District.
- The geographical area of the commune mainly consists of steep mountain land. A national road runs in the east-west direction in the northern part of the commune and the local population is mostly concentrated in hamlets along this national road.
- Tay people and H'mong people are the leading ethnic groups.

**State of School Management**

- The commune has one main school and four satellite schools. Higher grade pupils from one of the satellite schools attend the main school.
- Three of the four satellite schools are located in the remote southern mountain area, one of which (Ban Peo) is a complete school and acts as a quasi-main school for the others. (Ban Peo satellite school was originally the subject school of the Project but was dropped because of its impossible access.)

**Efficiency of Education**

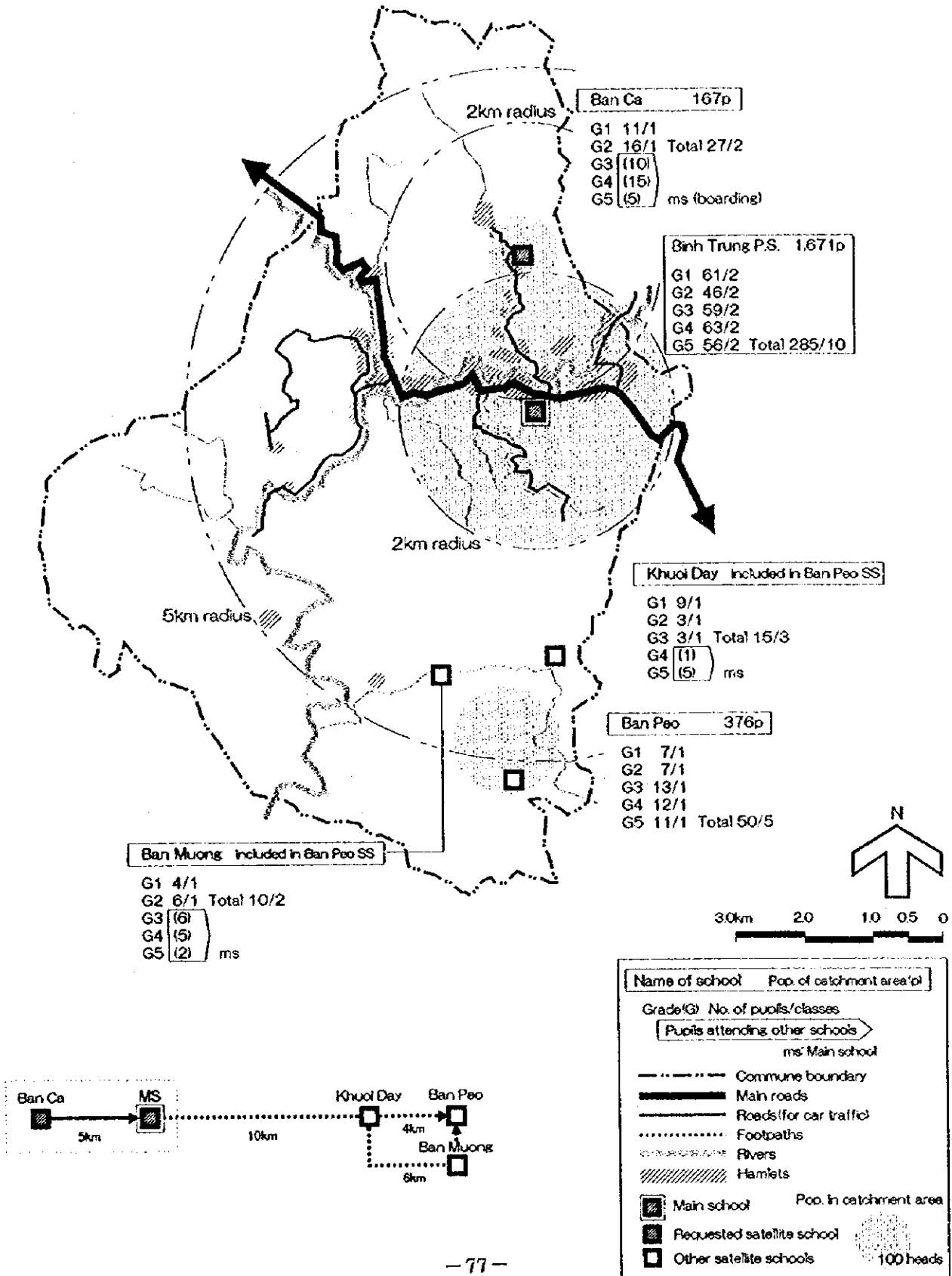
- The enrollment ratio is relatively high and the drop-out ratio is low. The number of pupils gradually declines from Grade 1 to Grade 5 and a certain proportion of the higher grade pupils is over-aged.
- Further improvement of both the enrollment ratio and the promotion ratio poses an important task to improve the internal efficiency.

**Site Conditions**

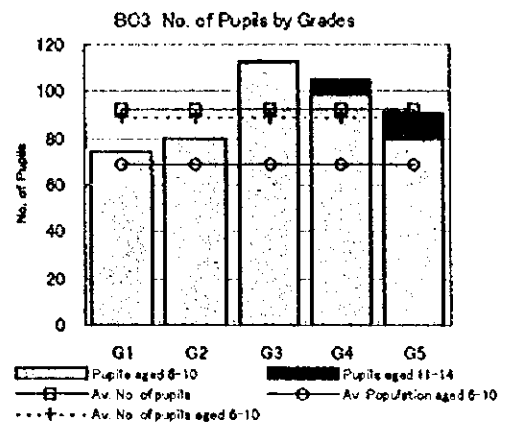
- Wooden temporary classrooms with bamboo walls and a thatched roof are dotted around the main school site. The site is not level and is terraced. The only access to the site is via a suspension bridge.
- The subject satellite school has a brick classroom building which was newly constructed in 1998.

**Planning Concepts**

- All of the main school facilities are temporary buildings and their urgent improvement is necessary.
- The subject satellite school has newly constructed classrooms. Given the distance from the main school and the current attendance situation, however, improvement of the facilities for higher grade pupils at the main school should prove more efficient.



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	39.40	No. of Pupils	463
Population (heads)	2,352	No. of Teachers	23
Density (h/km <sup>2</sup> )	59.7		
Average Family Size	4.34	Net Enrollment Ratio	129%
Ethnic Minorities	over 75%	Average Dropout Ratio	7%
Major Ethnic Groups	Tay(59%)	Average Repetition Ratio	3%
	Dao(16%)	Pupils over Age 11	5%
	Kinh	Female Pupils	49.2%



**Description of Commune**

- The commune is located 40 km from the provincial capital in the southern part of Cho Moi District.
- The geographical area of the commune mainly consists of steep mountain land. The access road to the commune from the national road has no bridge over a river which must be crossed on foot or by other means.
- A provincial road runs east-west along the river in the southern part of the commune and hamlets are concentrated along this road with most of the local population living in these hamlets.
- This provincial road links the western part of the commune where the people’s committee office and the main school, etc. are located to the eastern part where the subject satellite school is located. While there are some hamlets in the northern part of the commune, access to this remote area is poor.
- Tay people and Dao people are the dominant ethnic groups.

**State of School Management**

- The commune has one main school and two satellite schools. The main school and the subject satellite school are of a similar size, are run independently and have their own catchment areas. The main school is currently a combined primary and secondary school and their separation by means of splitting the site has been requested.
- The catchment area of the subject satellite school is very wide with the furthest distance of 8 km. It functions as a quasi-main school and is attended by higher grade pupils from the other satellite school.

**Efficiency of Education**

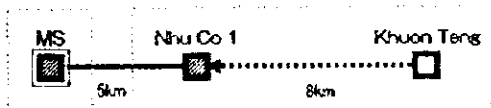
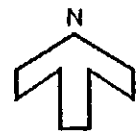
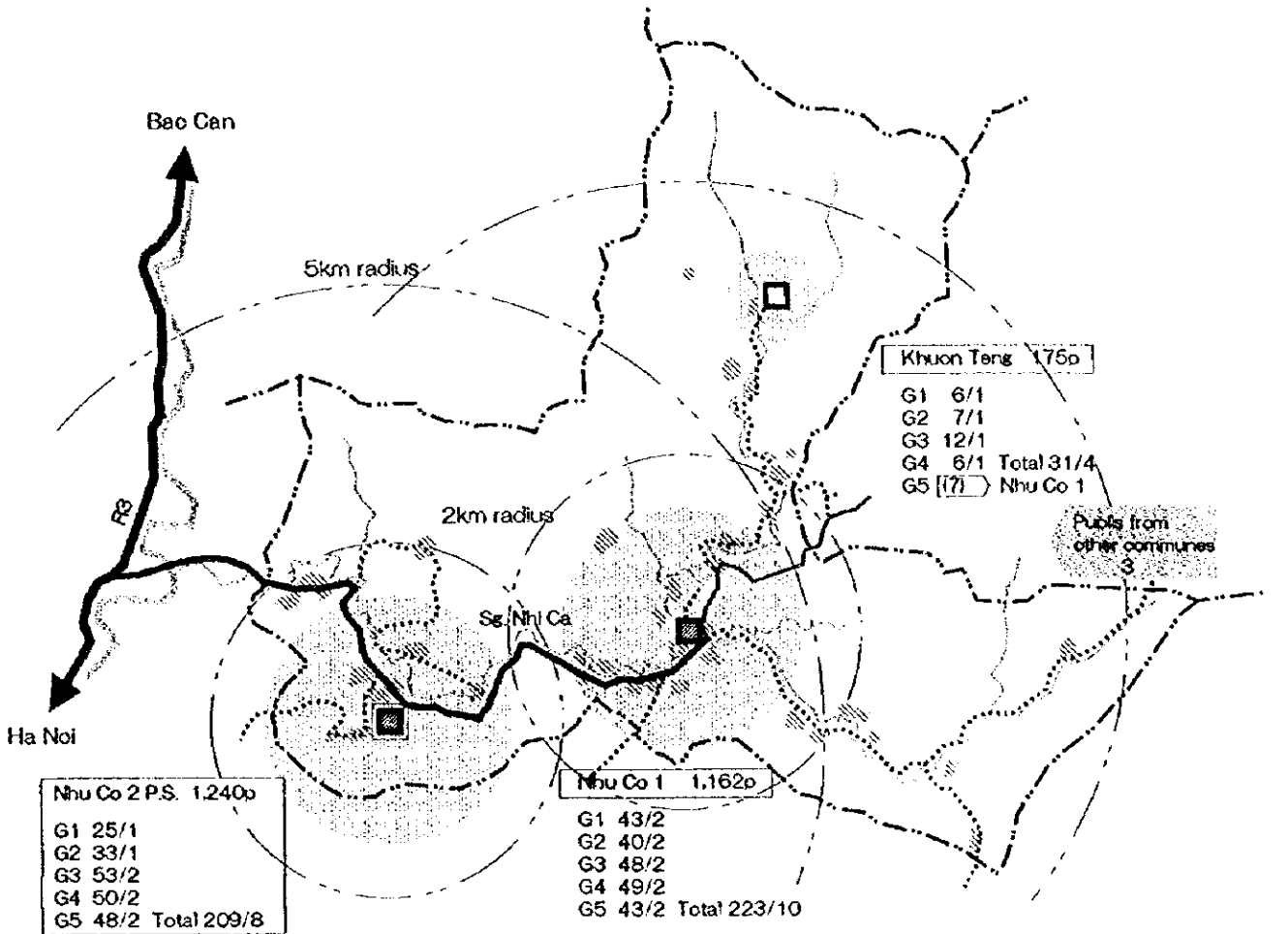
- The enrollment ratio is high and most of the pupils are standard age children (6 - 10 years old).
- The fluctuation of the number of pupils from one grade to another presumably reflects the fluctuation of the number of local children.
- The pupil composition appears stable although further improvement of the internal efficiency is hoped for.

**Site Conditions**

- The main school site is adjacent to the people’s committee office and a health centre. The temporary wooden classroom buildings are situated on flat ground.
- The subject satellite school has brick and wooden classroom buildings, both of which are quite aged.

**Planning Concepts**

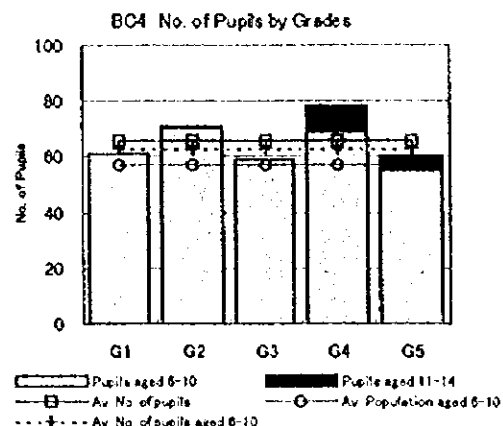
- All of the main school facilities are temporary buildings and are highly deteriorated, making their urgent improvement necessary.
- While the subject satellite school is already functioning as a quasi-main school, the poor conditions of the facilities require urgent improvement.



Name of school	Pop. in catchment area/cl
Grade/G/ No. of pupils/classes	
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
= Main roads	
- Roads (for car traffic)	
... Footpaths	
~ Rivers	
// Hamlets	
MS Main school	Pop. in catchment area
Requested satellite school	
Other satellite schools	100 heads



Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	26.50	No. of Pupils	329
Population (heads)	2,257	No. of Teachers	15
Density (h/km <sup>2</sup> )	85.2		
Average Family Size	na	Net Enrollment Ratio	111%
Ethnic Minorities	over 86%	Average Dropout Ratio	3%
Major Ethnic Groups	Tay(70%)	Average Repetition Ratio	5%
	Dao(16%)	Pupils over Age 11	5%
	Kinh	Female Pupils	42.9%



### Description of Commune

- The commune is located 25 km from the provincial capital in the northern part of Bach Thong District.
- The geographical area of the commune stretches lengthways in the east-west direction and mainly consists of steep mountain land. A provincial road runs along the commune border and an unpaved road runs along a river in the central part of the commune. This unpaved road is the only means of transport in the commune and the main hamlets are situated along this road.
- Tay people and Dao people are the dominant ethnic groups.

### State of School Management

- The commune has one main school and one satellite school. The main school is large with more than 300 pupils and some Grade 1 through Grade 5 pupils attend the main school from the subject satellite school.
- The subject satellite school receives some pupils from a neighbouring commune.

### Efficiency of Education

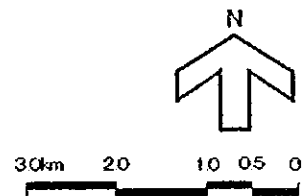
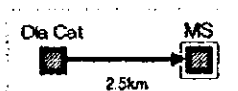
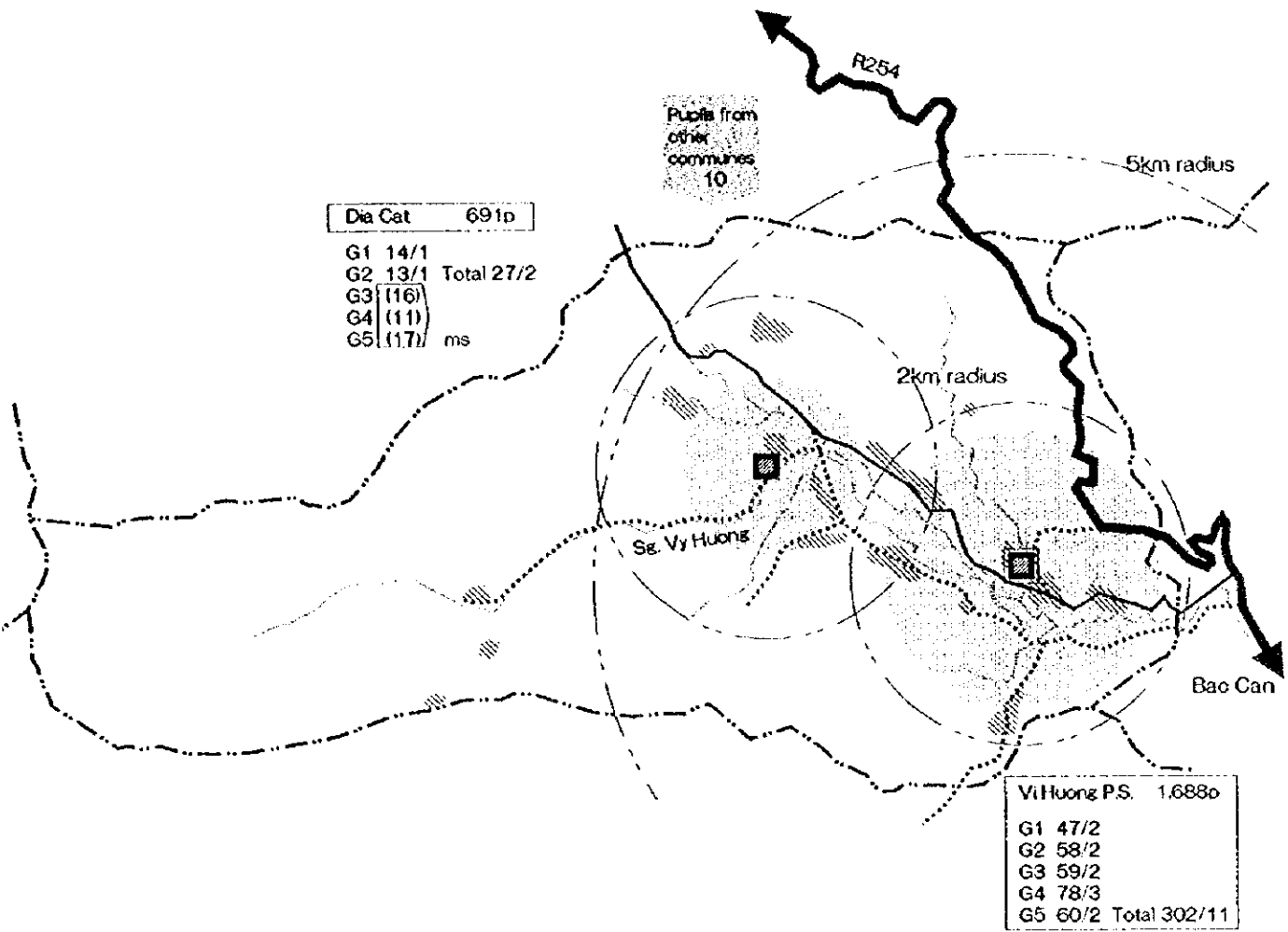
- The enrollment ratio is high and most of the enrolled pupils are standard age children (6 - 10 years old).
- Although minor fluctuations of the number of pupils in each grade exist, the general picture is stable with an almost level number of pupils in each grade.
- Further improvement of the internal efficiency is hoped for.

### Site Conditions

- The main school is located on flat tableland above the surrounding area and has temporary wooden classroom buildings with earth walls.
- The subject satellite school has temporary wooden classrooms. The site is small and cannot be extended to a sufficient size to accommodate new facilities.

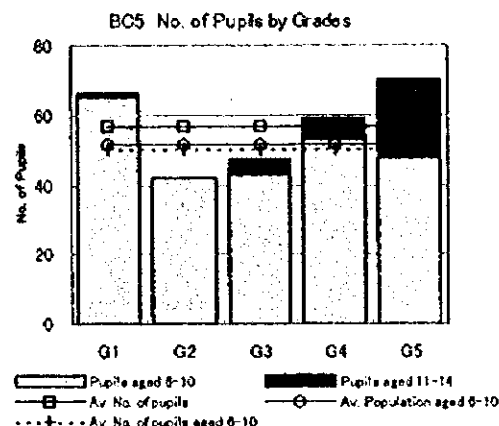
### Planning Concepts

- All of the main school facilities are highly deteriorated temporary buildings, making their urgent replacement necessary.
- The site conditions of the subject satellite school are unpromising. Given its distance from the main school and the current attendance situation, improvement of the facilities for higher grade pupils at the main school should prove more efficient.



Name of school	Pop. in catchment area/p
Grade/Gl	No. of pupils/classes
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
= Main roads	
= Roads for car traffic	
..... Footpaths	
~~~~~ Rivers	
////// Hamlets	
■ Main school	Pop. in catchment area
■ Requested satellite school	100 heads
□ Other satellite schools	

Commune		School (Total of main/satellite schools)	
Area (km <sup>2</sup> )	50.57	No. of Pupils	284
Population (heads)	2,220	No. of Teachers	14
Density (h/km <sup>2</sup> )	43.9		
Average Family Size	4.25	Net Enrollment Ratio	98%
Ethnic Minorities	85%	Average Dropout Ratio	3%
Major Ethnic Groups	Tay(69%)	Average Repetition Ratio	3%
	Dao(16%)	Pupils over Age 11	12%
	Kinh(15%)	Female Pupils	51.0%



**Description of Commune**

- The commune is located 10 km from the centre of Bac Can.
- The commune area mainly consists of mountain land and national roads crisscross the commune between the mountains. Hamlets in which most of the local population live are situated along these national roads and the transport conditions are generally good.
- Because of the proximity to an urban area, infrastructure is relatively developed.
- Tay people are dominant among the local population, followed by Dao and Kinh people.

**State of School Management**

- The commune has one main school and one satellite school. The main school is currently a combined primary and secondary school and the separation of these schools by means of splitting the premises has been requested. The catchment area extends some 4 km along the national roads and Grade 2 through Grade 5 pupils from the subject satellite school attend the main school.
- The subject satellite school is situated in the mountain area and only teaches Grade 1. Higher grade pupils attend the main school and the good access to the main school has resulted in a low drop-out ratio.

**Efficiency of Education**

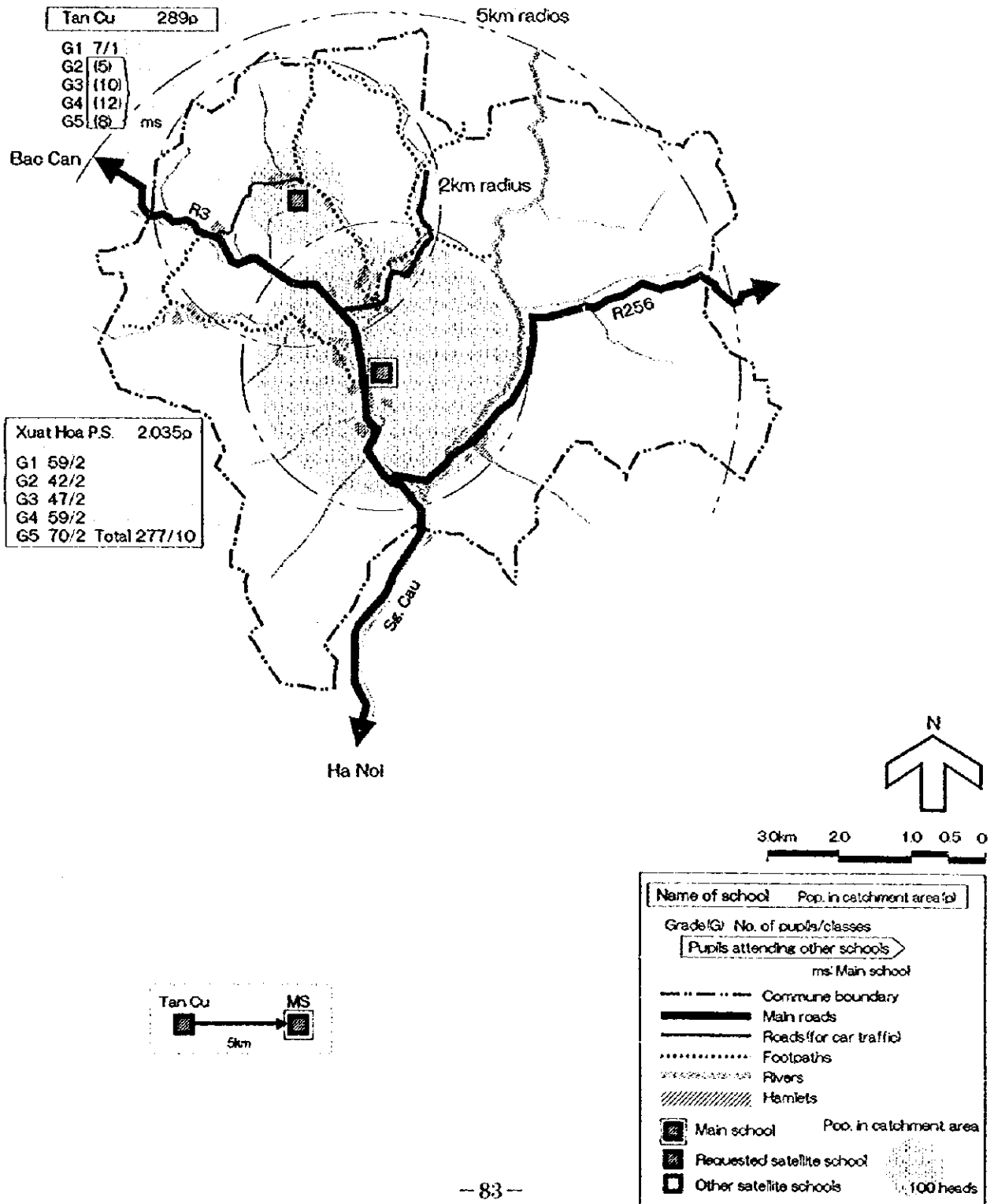
- The enrollment ratio is high while the ratio of over-age pupils is low.
- The number of pupils declines from Grade 1 to Grade 2 and increases from Grade 2 to Grade 5.
- The educational efficiency is relatively high but the pupil composition suggests a certain level of repetition. Improvement of the promotion ratio to further improve the internal efficiency is an important task.

**Site Conditions**

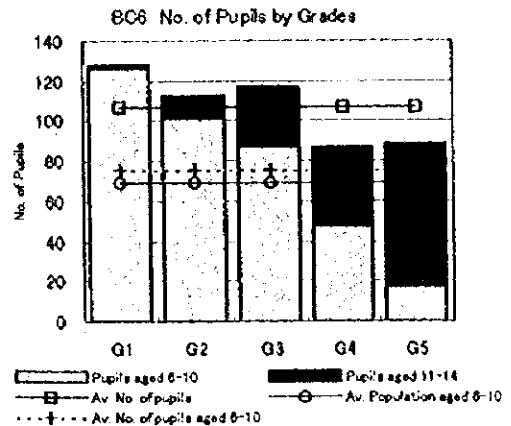
- The main school site is only accessible on foot via a suspension bridge and has temporary wooden classrooms with earth walls. The entire site is sloping and the ground is partially terraced to accommodate the buildings. Minor ground preparation work will be required.
- The subject satellite school site has a new brick classroom building which was constructed in 1998.

**Planning Concepts**

- All of the main school facilities are highly deteriorated temporary buildings, making their urgent replacement necessary.
- The subject satellite school has a recently constructed classroom building. Given its distance from the main school and the current attendance conditions, the introduction of new facilities for higher grade pupils at the main school should prove more efficient.



Commune		School (total of main/satellite schools)	
Area (km <sup>2</sup> )	66.01	No. of Pupils	532
Population (heads)	2,295	No. of Teachers	22
Density (h/km <sup>2</sup> )	34.8		
Average Family Size	4.86	Net Enrollment Ratio	108%
Ethnic Minorities	over 98%	Average Dropout Ratio	7%
Major Ethnic Groups	Nung(43%)	Average Repetition Ratio	24%
	Tay(31%)	Pupils over Age 11	29%
	Dao(17%)	Female Pupils	47.0%



**Description of Commune**

- The commune is located 70 km from the provincial capital in the eastern part of Ngan Son District. It is on the provincial border in the direction of Cao Bang City.
- A national road runs in the north-south direction in the central part of the commune and many hamlets are situated along this road in the southern part of the commune. Most areas other than those along the national road are mountain land without any means of transportation.
- Nung people and Tay people are the two dominant ethnic groups.

**State of School Management**

- The commune has one main school and three satellite schools. The main school is currently a combined primary and secondary school and its separation by splitting the premises has been requested. Hamlets in the southern part of the commune within a 2 km range of the main school comprise the catchment area but higher grade pupils from the satellite schools also attend the main school.
- All of the satellite schools are incomplete. The subject satellite school teaches upto Grade 3 and hamlets along the national road form its catchment area. It functions as a quasi-main school and Grade 2 and Grade 3 pupils attend this school from another satellite school.

**Efficiency of Education**

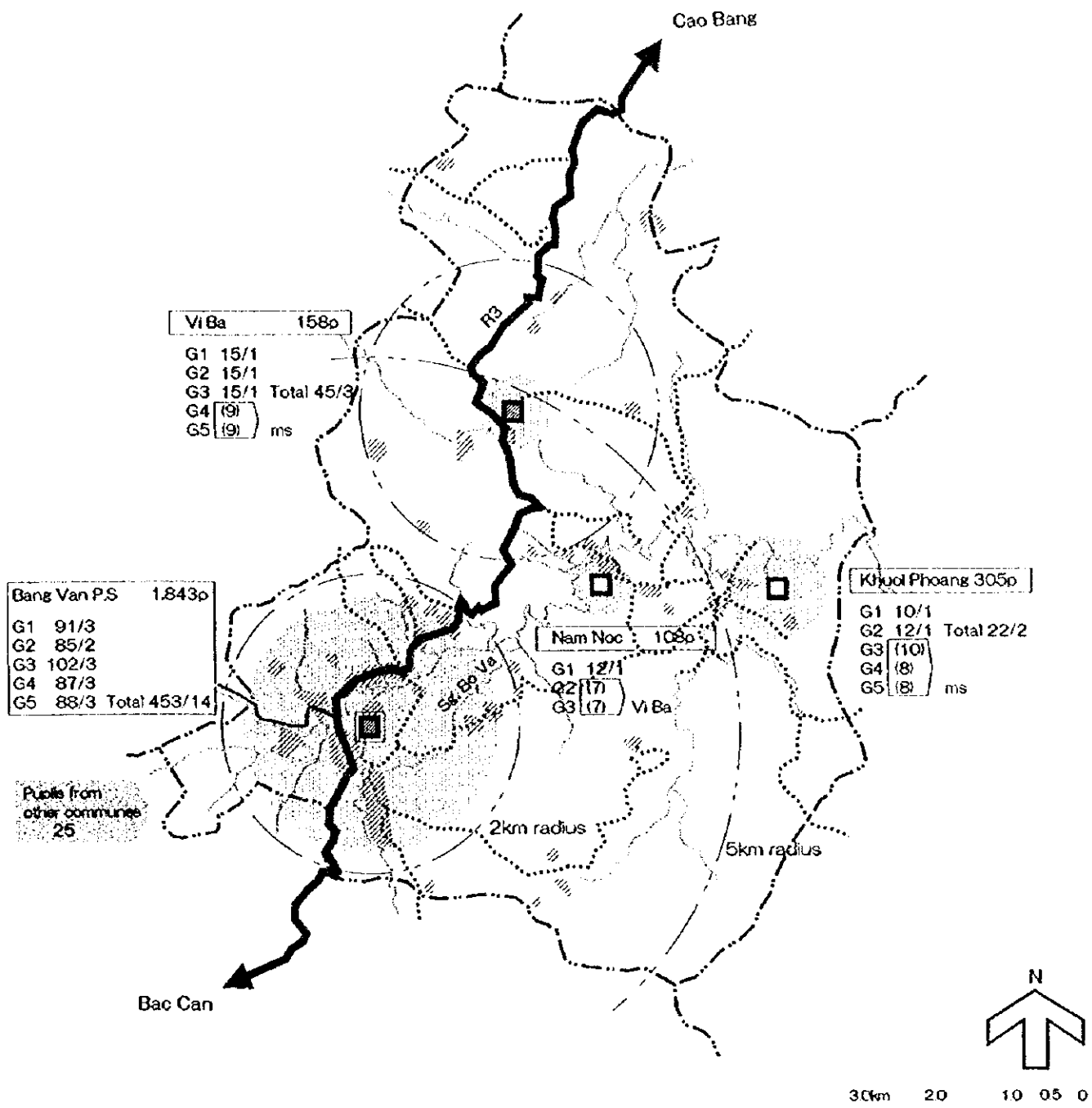
- The enrollment ratio is high and the drop-out ratio is low. The proportion of over-age pupils is high in the higher grades, suggesting late enrollment and/or a certain level of repetition.
- The number of pupils declines in Grade 4 and Grade 5, mainly because of the lack of teaching facilities for these grades at the remote satellite schools.
- Improvement of the school environment to encourage promotion to higher grades is a major task to improve the internal efficiency.

**Site Conditions**

- The main school site is gently sloping and is sufficiently large. The existing brick classroom buildings are highly deteriorated. Ground preparation work will be unnecessary.
- The subject satellite school has only temporary wooden classroom buildings with bamboo walls. The central area of the site rises much higher than the surrounding area and, therefore, minor ground preparation work will be required.

**Planning Concepts**

- The highly deteriorated main school facilities make their urgent replacement necessary.
- In the case of the subject satellite school, the deteriorated facilities also require improvement. Improvement of the promotion ratio to higher grades can be expected with the improvement and extension of the school as a complete school.



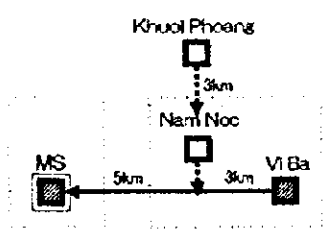
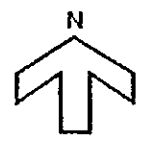
Vi Ba	158p
G1	15/1
G2	15/1
G3	15/1
Total 45/3	
G4	(9)
G5	(9)
ms	

Bang Van P.S.	1.843p
G1	91/3
G2	85/2
G3	102/3
G4	87/3
G5	88/3
Total 453/14	

Pupils from other communes  
25

Khuol Phoang	305p
G1	10/1
G2	12/1
Total 22/2	
G3	(10)
G4	(8)
G5	(8)
ms	

Nam Noc	108p
G1	12/1
G2	(17)
G3	(7)
Vi Ba	



Name of school	Pop. in catchment area (p)
Grade (G)	No. of pupils/classes
Pupils attending other schools	
ms: Main school	
--- Commune boundary	
— Main roads	
— Roads (for car traffic)	
..... Footpaths	
~~~~~ Rivers	
////// Hamlets	
■	Main school Pop. in catchment area
▨	Requested satellite school
□	Other satellite schools 100 heads

## **2.2.2 Selection of Schools Subject to the Project**

The target schools of a survey designated by the Ministry of Education and Training were 36 pairs of main schools and satellite schools and 2 main schools selected as high priority sites in four provinces, i.e. Ha Giang, Lai Chau, Cao Bang and Bac Can, in the Northern Mountain Region. The field survey was carried out at these schools and in addition at the schools which are additionally designated as alternative sites. However, as site accessibility for construction purposes is also taken into consideration in the selection of the satellite school sites, the improvement effects of some of the selected satellite school sites in terms of them becoming quasi-main schools are not necessarily as high as those of other satellite school sites. In general, many of the satellite school sites are small and some lack space for additional classrooms given the site shape and conditions of the surrounding area.

The selection criteria for the subject schools are (1) schools requiring urgent facility improvement due to conspicuous deterioration and a shortage of classrooms, (2) schools in high demand of enlargement because a stilted increase of the design number of pupils of the targeted grades that is estimated based on the number of pupils at the age between 6 and 10 inclusive and the total number of pupils in the catchment is expected, (3) schools with strong improvement effects in terms of the school enrolment and completion rates due to an increased school capacity and an increase of the number of children who can attend school, in turn due to the improved conditions for school attendance in the catchment area by providing all five grades classes at the incomplete satellite schools as quasi-main schools where the higher grade pupils have hitherto found it difficult to attend main schools because of the prohibitive distance and (4) schools without difficulties in access to the site and in the site itself in terms of construction. Among the schools that meet the above criteria, priority will be given to those which the design number of pupils is large.

### **(1) Selection Criteria and Judgement Indices**

Seven indices are used to objectively represent the above selection criteria and to judge the preferability of the candidate schools.

### **1) Distance between Main School and Satellite School**

The possible school attendance distance for lower grade pupils (first and second grades) is 2 to 2.5 km and that for higher grade pupils is 5 km. The fact that higher grade pupils living more than 5 km distant from the main school in the catchment area of an incomplete satellite school where only lower grade classes are available can not attend main school providing higher grade classes constitutes an obstacle to improvement of primary education completion rate. The more distant is a satellite school subject to the Project from the main school in the area, the greater effect on the improvement of school enrolment rate and completion rate in the catchment area of the satellite school. Moreover, when there is no overlaps between the catchment area of the satellite school and that of the main school, the greater effect on the improvement of school attending condition. The following categories of distances between satellite schools and main schools are used to evaluate the situation.

- A : 5 km or more
- B : between 2 km and 5 km
- C : less than 2 km

### **2) Complete or Incomplete School**

In the case of incomplete satellite schools which only teach lower grades, their improved status to a complete school will greatly improve the attendance prospect of higher grade pupils. As the degree of anticipated improvement of incomplete schools under the Project varies depending on whether or not higher grade pupils actually attend the main school already, the following categories are used to evaluate the situation.

- A : incomplete satellite school of which higher grade pupils cannot attend the main school
- B : incomplete satellite school of which higher grade pupils attend the main school
- C : complete satellite school

### **3) Distribution of Nearby Satellite Schools**

When an incomplete satellite school is improved to a complete school, the attendance conditions, including those in the nearby area, of any other



(incomplete) satellite school located within attending distance are also improved. The following three categories are used to evaluate the situation.

- A :existence of another satellite school within a 4 km radius
- B :existence of another satellite school within a 4 - 8 km radius
- C :non-existence of another satellite school nearby

#### **4) Degree of Deterioration and Replacement Urgency**

Priority is given to those schools with a high proportion of classrooms requiring replacement based on the following three categories.

- A :75% or more
- B :50% - 74%
- C :up to 49%

#### **5) Shortage of Classrooms**

Evaluation of the shortage of classrooms should be based on the class-classroom categorized as follows. The urgency of solving the classroom shortage is very acute if the class-classroom ratio exceeds 2.0, meaning a three shift teaching system.

Those schools which currently share facilities with secondary schools are offering classes of the secondary school mornings and classes of the primary school afternoons. Such schools are judged as operated on the two-shift system in real terms though each of the schools is operated on the one-shift system, therefore judged to have a class-classroom ratio of 2.0 or higher.

- A :borrowed classrooms or shared classrooms with a secondary school or a class-classroom ratio of 2.0 or higher
- B :class-classroom ratio of more than 1.5 but less than 2.0
- C :class-classroom ratio of up to 1.5

#### **6) Size of Design Number of Pupils**

Candidate main schools and satellite schools vary in the size of design

number of pupils from a few tens to upwards of a thousand. Among these the most frequent are about 250. To maximise the number of beneficiaries, the evaluation will be based on the following categories of design number of pupils giving priority to those schools with larger design number.

- AAA :700 or more
- AA :between 500 and 700
- A :between 300 and 500
- B :between 100 and 300
- C :up to 99

### **7) Increase of School Capacity**

By comparing the present number of pupils in the school catchment area with the design number of pupils based on the potential number of pupils (number of children of 6 - 10 years of age), schools with a higher increase of the design number of pupils are given higher priority and are classified in three categories.

- A: increase of 50 pupils or more
- B: increase of 20 - 49 pupils
- C: increase of up to 19 pupils

### **8) Other indices**

In addition to the indices described above, the following indices are noted as useful indices for project evaluation in relation to the general conditions of each subject school.

- Whether or not the commune in which the subject school is located is listed as one of the 1,000 poorest communes identified by the Government of Vietnam
- Ratio of children of ethnic minorities in the total number of pupils increase of 20 - 49 pupils
- Ratio of female pupils of main school or satellite school
- Current level of teacher shortage
- Gross enrolment rate and net enrolment rate

- Estimated drop-out rate
- Ratio of 11 - 14 year old pupils in the total number of pupils
- Estimated rate of increase/decrease of school age children in five years time in the catchment area

In addition, possible problems and their degree relating to the site conditions are compared as items to be noted for project implementation.

- Feasibility of construction work in view of the site shape
- Existence of land tenure
- Difficulty of delivering equipment and materials to the site by work vehicles
- Completed ground clearance work
- Necessity to remove existing facilities
- Availability of alternative classrooms during the construction period

Table 2-1 shows the evaluation/judgement results for each site based on the criteria described above.

As a result of this evaluation/judgement exercise, 61 sites consisting of 37 main school sites and 24 satellite school sites are judged to be suitable for selection as the subject sites for cooperation. One of the 38 investigated main schools is omitted because a greater effect is expected when it is closed down or integrated into satellite schools. These sites are characterised by their urgency and necessity for improvement and promising positive effects of project implementation and are feasible sites for the planned work in view of their site conditions. Moreover, their suitability for grant aid cooperation can be verified. Table 2-2 lists the selected main schools and satellite schools for grant aid cooperation under the Project.



Table 2-1: Site Evaluation/ Judgement Results (1/3)

No.	School Name	1 School Location			2 Urgency		3	Screening For Satellite School *O: Adoption, X Not adoption	4 Beneficial Effects	5 Urgency	Screening For Main School *O: Adoption, X Not adoption				
		Distance Between Main and Satellite Schools (A: 5 km or more; 2 - 5 km; C: 2 km or less)	Higher Grade Classes (A: none; B: attend main school; C: available)	Nearby Satellite School (A: within 4 km radius; B: within 4 - 8 km radius; C: none)	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: less than 50%)	Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)	Site Conditions (O: no problems; X: small and impossible to extend)	Design Number of Pupils (AAA: 700 or more, AA: 500-699, A: 300 - 499; B: 100 - 299; C: upto 99)	Increase/Decrease of Capacity (figures for main schools are those when their satellite schools are selected for) (A: 50 or more; B: 20 - 49; C: upto 49)	Ratio of Increase/Decrease of Capacity (A: 75% deterioration; B: 50% - 74%; C: upto 19%)	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: upto 19%)	A: one of the 1,000 poorest communes Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)			
<b>Ha Giang Province</b>															
HG 1	1-5 Vi Xuyen							830	AAA	90	A	B	O	The number of students is extremely large and the increase in the number of students is large too.	
	Km 23 Vi Xuyen	C	B	C	A	B	X						X		
HG 2	Dao Duc							324	A	132	A	A	O	New site relocation in line with division of the primary and junior schools.	
	Km 9 Lang Nung	B	C	A	A	A	O	235	B	91	A		O		
HG 3	Tan Nam							519	AA	62	A	B	O	Both the number of students and increase in the number of students are large.	
	Ngoi Ham	B	B	C	A	B	O	135	B	59	A		O	The commuter radius of the satellite school is large and commuting conditions will be improved.	
HG 4	Vinh Phuc							880	AAA	127	A	B	O	The number of students is extremely large and the increase in the number of students is large too.	
	Vinh Thanh	A	C	C	A	B	O	510	AA	4	C		O	Since facilities are large (similar to the main school), the effect of improving deteriorated facilities will be great.	
HG 5	Quang Ba							304	A	59	A	B	O	The increase in the number of students is large and the rate of increase is high.	
	Bao An	B	B	A	A	C	O	127	B	44	B		O		
HG 6	Minh Son							203	B	63	A	C	A	O	The increase in the number of students is large and the rate of increase is high.
	Bo Peng	A	A	A	A	C	O	82	C	47	B		Δ	The planned number of students is small, but the rate of increase is high.	
HG 7	Mau Due							336	A	16	C	A	O	The site will be divided up following separation of the primary and junior schools.	
	Ngam Sooc	B	A	A	A	C	O	124	B	68	A		O		
HG 8	Xa Phin							162	B	73	A	C	A	O	The increase in the number of students is large and the rate of increase is high.
	Lung Hoa A	B	A	A	A	C	O	161	B	101	A		O		
HG 9	Po Lo							167	B	68	A	C	A	O	The increase in the number of students is large and the rate of increase is high.
	Coc Sooc	B	B	A	A	C	O	118	B	77	A		O		
HG 10	Then Phang							367	A	212	A	C	A	O	The increase in the number of students is large and the rate of increase is high.
	Khau Tao	B	B	C	C	C	X						X	The existing classrooms can be used.	
<b>Lai Chau Province</b>															
LC 1	Moung Te Town							490	A	193	A	B	A	O	New site relocation in line with division of the primary and junior schools.
	Nam Cau A	B	B	A	A	C	O	110	B	40	B		O		
LC 2	Binh Minh							537	AA	28	B	C	O	The number of students is large.	
	Ban Vanh	C	B	C	A	A	X						X		
LC 3	Muong Bang							919	AAA	86	A	C	O	The number of students is extremely large and the increase in the number of students is large too.	
	Phieng Bung	A	A	B	C	A	X						X		
LC 4	Noong Het							775	AAA	4	C	B	O	The number of students is extremely large.	
	Ban Phu	B	C	C	A	B	O	610	AA	4	C		O	Since facilities are large (similar to the main school), the effect of improving deteriorated facilities will be great.	

Table 2-1: Site Evaluation/ Judgement Results(2/3)

No	School Name	1. School Location			2. Urgency			3. Site Conditions (O: no problems; X: small and impossible to extend)	Screening For Satellite School *O: Adoption, X: Not adoption	4. Beneficial Effects				5. Urgency			Screening For Main School *O: Adoption, X: Not adoption		
		Distance Between Main and Satellite Schools (A: 5 km or more; B: 2 - 5 km; C: 2 km or less)	Higher Grade Classes (A: none; B: attend main school; C: available)	Nearby Satellite School (A: within 4 km radius; B: within 4 - 8 km radius; C: none)	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: less than 50%)	Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: upto 1.5)			Ratio of Increase/Decrease of Capacity	Increase/Decrease of Capacity (figures for main schools are those when their satellite schools are selected for)	Design Number of Pupils	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: upto 1.5)	Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)	A: one of the 1,000 poorest communes				
LC.5	Thanh Hung Pa Pe	C	C	C	C	B	O	X	A new school building has been built by another	825	AAA	2	C	0%	A	A	-	O	The number of students is extremely large.
LC.6	Tam Duong									520	AA	21	B	4%	B	A	-	O	New site relocation in line with division of the primary and junior schools
	Doi 6 Nong Truong	B	B	C	A	C	O	X	This school is located within commuting distance of the main school. Facilities are deteriorated. It will be combined with the main school.								-	X	
LC.7	Binh Lu									665	AA	270	A	68%	B	A	-	O	New site relocation in line with division of the primary and junior schools.
LC.8	Hoa Van Quai Nua	B	C	A	A	A	O	O		329	A	43	B	15%			-	O	
										438	A	139	A	16%	A	A	-	O	The increase in the number of students is large and the rate of increase is high.
LC.9	Ban Tra Muong Muon (m.)	B	C	A	A	C	O	O		230	B	77	A	50%			-	O	
	Muong Muon (b.)	B	A	A	A	A	O	O		306	A	51	A	20%	A	A	-	O	The increase in the number of students is large.
	Na Sang	B	A	A	A	A	O	O		90	C	47	A	109%			-	△	The planned number of students is small, but the rate of increase is high.
LC.10	Ta Ngao									264	B	102	A	63%	A	A	A	O	The increase in the number of students is large and the rate of increase is high.
LC.11	Phan Xu Lin									211	B	93	A	79%	A	A	A	O	The increase in the number of students is large and the rate of increase is high.
Cao Bang Province															Main Sites---11, Satellite Sites---6				
CB.1	Soc Giang									300	A	20	B	7%	A	A	-	O	Site division in line with division into primary and junior schools.
	Truc Long	B	B	A	A	A	O	O		67	C	29	B	76%			-	△	The planned number of students is small, but the rate of increase is high.
CB.2	Nguyen Binh Town Na Con	C	C	A	A	A	O	O	The effect of improving deteriorated facilities at the existing semi-main school will be large.	375	A	35	B	10%	A	B	-	O	The rate of increase in the number of students is high.
										124	B	32	B	35%			-	O	
CB.3	Lang Mon									190	B	4	C	2%	A	A	-	O	Site division in line with division into primary and junior schools.
	Na Bao	B	C	A	A	A	O	O		236	B	9	C	4%			-	O	
CB.4	Nuoc Hai	C	C	C	C	A	O	X	This school is located within commuting distance of the main school. Priority development will be carried out here together with the main school.								-	X	
	Khu May Keo									755	AAA	612	A	428%	C	A	-	O	Site division in line with division into primary and junior schools.
CB.5	Be Trieu									589	AA	30	B	5%	B	A	-	O	Site division in line with division into primary and junior schools.
	Tan Hong	C	B	C	A	A	O	X	This school is located within commuting range of the main school. Upper grade students will be taught at the main school.								-	X	
CB.6	Cao Chuong									337	A	7	C	2%	A	A	-	O	Site division in line with division into primary and junior schools.
	Lung Hang	B	A	C	A	C	O	X	This school is located within commuting range of the main school. Upper grade students will be taught at the main school.								-	X	

Table 2-1: Site Evaluation/ Judgement Results (3/3)

No.	School Name	1. School Location			2. Urgency		3. Site Conditions	Screening For Satellite School	4. Beneficial Effects				5. Urgency			Screening For Main School		
		Distance Between Main and Satellite Schools (A: 5 km or more; B: 2 - 5 km; C: 2 km or less)	Higher Grade Classes (A: none; B: attend main school; C: available)	Nearby Satellite School (A: within 4 km radius; B: within 4 - 8 km radius; C: none)	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: less than 50%)	Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)	Site Conditions (O: no problems; X: small and impossible to extend)	*O: Adoption, X: Not adoption	Design Number of Pupils	Increase/Decrease of Capacity (figures for main schools are those when their satellite schools are selected for)	Ratio of Increase/Decrease of Capacity	Urgency for Replacement of Old Building (A: 75% deterioration; B: 50% - 74%; C: upto 19%)	Classroom Shortage (A: borrowed or shared or class-classroom ratio of 2.0 or higher; B: 1.6 - 1.9; C: upto 1.5)	A: one of the 1,000 poorest communes	*O: Adoption, X: Not adoption			
CB.7	Quang Han																	
	Ban Mac	B	B	C	A	B	O	O	309	A	-35	C	-10%	A	A	O	Site division in line with division into primary and junior schools.	
CB.8	Phuc Sen								135	B	51	A	61%			O		
	Ban Gao	B	B	C	A	A	O	O	310	A	-110	C	-26%	B	A	O	New site relocation in line with division into primary and junior schools.	
CB.9	Lac Giao								145	B	113	A	353%			O		
	Chi Thao	A	C	C	A	C	O	O	275	B	26	B	10%	A	A	O	The rate of increase in the number of students is	
CB.1	Thong Hue								260	B	0	C	0%			O		
	Coc Chia	B	B	C	C	C	O	X	568	AA	60	A	12%	B	A	O	Both the number of students and increase in the number of students are large.	
CB.1	Trung Khanh Town								1,145	AAA	183	A	19%	C	A	O	The number of students is extremely large and the increase in the number of students is large too.	
	Keo Lum	C	B	C	A	C	O	X								X		
Bac Can Province															Main Sites...10, Satellite Sites...7			
BC.1	Banh Trach								201	B	11	C	6%	A	A	A	O	Site division in line with division into primary and junior schools.
	Na Nieng	B	B	A	A	C	O	O	143	B	32	B	29%			O		
BC.2	Binh Trung								291	B	6	C	2%	A	A	A	O	Site division in line with division into primary and junior schools.
	Ban Ca	A	B	C	C	C	O	X								X		
BC.3	Nhu Co 2								210	B	1	C	0%	C	A	O	Site division in line with division into primary and junior schools.	
	Nhu Co 1	A	C	B	A	C	O	O	236	B	13	C	6%			O		
BC.4	Vi Huong								335	A	33	B	11%	A	A	A	O	The rate of increase in the number of students is high, and there is an urgent need to improve deteriorated facilities.
	Dia Cat	B	B	A	A	C	X	X								X		
BC.5	Xuat Hoa								281	B	4	C	1%	B	A	O	Site division in line with division into primary and junior schools.	
	Tan Cu	A	B	C	C	C	O	X								X		
BC.6	Bang Van								446	A	-7	C	-2%	B	A	O	Site division in line with division into primary and junior schools.	
	Vi Ba	A	B	A	A	C	O	O	74	C	29	B	64%			Δ	The planned number of students is small, but the rate of increase is high.	
															Main Sites...6, Satellite Sites...3			
															Total Main Sites...37, Satellite Sites...24			









Table 2-2 List of Subject Schools for Cooperation

No.	District	Main School	Satellite School
Ha Giang Province		10 main schools	8 satellite schools
HG.1	Vi Xuyen	1-5 Vi Xuyen	
HG.2	Vi Xuyen	Dao Duc	Km 9 Nung commune
HG.3	Bac Quang	Tan Nam	Ngoi Ham
HG.4	Bac Quang	Vinh Phuc	Vinh Thanh
HG.5	Quan Ba	Quang Ba Town	Bao An
HG.6	Bac Me	Minh Son	Bo Peng
HG.7	Yen Minh	Mau Due	Ngam Sooc
HG.8	Dong Van	Xa Phin	Lung Hoa A
HG.9	Hoan Su Phi	Po Lo	Coc Sooc
HG.10	Xin Man	Then Phang	
Lai Chau Province		11 main schools	6 satellite schools
LC.1	Muong Te	Muong Te Town	Nam Cau A
LC.2	Tuan Giao	Binh Minh	
LC.3	Tuan Chua	Muong Bang	
LC.4	Dien Bien	Noong Het	Ban Phu
LC.5	Dien Bien	Thanh Hung	
LC.6	Phong Tho	Tam Duong	
LC.7	Phong Tho	Binh Lu	Hoa Van
LC.8	Tuan Giao	Quai Nua	Ban Tra
LC.9	Muong Lay	Muong Muon	Muong Muon Na Sang
LC.10	Shin Ho	Ta Ngao	
LC.11	Shin Ho	Phan Xu Lin	
Cao Bang Province		10 main schools	7 satellite schools
CB.1	Ha Quang	Soc Giang	Truc Long
CB.2	Nguyen Binh	Nguyen Binh Town	Na Con
CB.3	Nguyen Binh	Lang Mon	Na Bao
CB.4	Hoa An		Khu May Keo
CB.5	Hoa An	Be Trieu	
CB.6	Tra Linh	Cao Chuong	
CB.7	Tra Linh	Quang Han	Ban Mac
CB.8	Quang Hoa	Phuc Sen	Ban Gao
CB.9	Quang Hoa	Lac Giao	Chi Thao
CB.10	Trung Khanh	Thong Hue	
CB.11	Trung Khanh	Trung Khanh Town	
Bac Can Province		6 main schools	3 satellite schools
BC.1	Ba Be	Banh Tranh	Na Nieng
BC.2	Cho Don	Binh Trung	
BC.3	Cho Moi	Nhu Co 2	Nhu Co 1
BC.4	Bach Thong	Vi Huong	
BC.5	Bac Can Town	Xuat Hoa	
BC.6	Ngan Son	Bang Van	Vi Ba
total		37 main schools	24 satellite schools

## **2.2.3 Details and Size of Planned Facilities**

### **(1) Examination of Contents of the Request**

The facilities originally requested were classrooms, headmasters' rooms, administration/meeting rooms, teaching aid rooms and sanitation facilities. The following facilities will be introduced under the Project at 37 main school sites and 24 satellite school sites to improve the pupil attendance rate and the facility conditions.

#### **1) Classrooms**

The necessary number of classrooms, which will be determined based on the management and pupil attendance conditions, facility layout and facility conditions at each school, will be introduced. The classrooms size will be capable of accommodating 36 pupils (maximum: 40 pupils) in accordance with the relevant standard set by the Ministry of Education and Training. In the case of satellite schools, etc. with a relatively small number of pupils in each grade, the maximum capacity will be set at 30 pupils. If the number of pupils in a grade is between 15 and 19, a 40 pupil classroom will be divided to accommodate two classes. Similarly, if the number of pupils in a grade is less than 15, a 30 pupil classroom will be divided to accommodate two classes. The method to calculate the required number of classrooms at each school is described in (2) below.

#### **2) Headmaster's Room**

A headmaster is assigned the control of both a main school and a satellite school(s) and, therefore, no satellite school has its own headmaster. Accordingly, a headmaster's room will only be introduced at main schools. However, as a deputy headmaster is assigned to a satellite school of a size rivalling the main school, a deputy headmaster's room will be introduced at such satellite schools.

#### **3) Administration/Meeting Room**

The administrative work of a school, ranging from general administration and accounting to the control of textbooks and other teaching materials and administrative work for pioneers, is mainly conducted by the headmaster and deputy headmaster (head teacher). As the scale of the subject schools is generally small, independent administration space will not be introduced

and the headmaster's room will instead be used for administration purposes. In the case of a meeting room, a classroom will be used for large meetings involving all teachers or many people while the teaching aid room will be used for regular small meetings.

#### **4) Teaching Aid Room**

A teaching aid room is necessary to store textbooks and other teaching materials to be loaned by the school to pupils. At present, main schools have a textbook and equipment store room but the poor conditions of such rooms makes it difficult to store textbooks, etc. in good condition. As conditions of most of satellite schools are much worse, and there are no rooms to be used for the storage of borrowed equipment. It will, therefore, be essential under the Project to introduce a teaching aid room at both main and satellite schools together with the provision of basic teaching materials, etc. The planned fixtures will include bookshelves and equipment storage shelves. In addition, a work table will be provided for the preparation of teaching materials by teachers and for small, simple meetings.

#### **5) Sanitation Facilities**

Only a small number of the schools currently surveyed have sanitation facilities. Even when sanitation facilities are provided, a field simply enclosed with a poor fence is used in most cases. As the sanitation facilities at the homes of pupils are of similar conditions in the Project Area, the provision of sanitary toilet facilities will be necessary to improve the educational environment and to promote a general awareness of public hygiene.

### **(2) Calculation of Required Number of Classrooms**

#### **1) Calculation of Design Number of Pupils**

The design number of pupils is calculated in the following manner based on the catchment area of each main or satellite school as determined by the school map and the findings of the survey on the school attendance situation.

**●Totalisation of Number of Pupils in Each Catchment Area**  
**<Current Need>**

Based on the current number of pupils, the number of pupils in each catchment area of a main or satellite school is established. As the number of pupils of the main school's catchment area includes those of higher grades from the of satellite school catchment areas, these pupils of higher grades from the satellite school catchment area should be excluded from the number of present needs. Consequently, the number of satellite school pupils comprises the current number of pupils plus those of higher grades currently attending the main school.

**<Potential Need>**

The population of 6 - 10 year old children in each catchment area of a main or satellite school is defined as the potential need in the said catchment area.

At present, most schools have many pupils of 11 - 14 years of age who are actually past the primary school age. Therefore, the present situation shows a state of transition where the current need exceeds the potential need. In the long run, however, the current need will converge with the potential need with gradual improvement of the net enrolment rate, promotion rate and completion rate and with increase of the rate of pupils of primary school age (6 - 10 years old) and decrease of the number of pupils who past the primary school age. Under the Project, the design number of pupils will be which ever is the larger between the current need and potential need as basis of evaluation of necessary number of classrooms to also meet the transitional needs during the conversion of preset need with potential need.

**●Calculation of Standard Number of Pupils of Each Grade**

At present, many schools have a pyramidal structure where the number of pupils declines towards the higher grades. Given the relatively high net enrolment rate, it is thought that there is an over-concentration of school age children (6 - 10 years old) in lower grades. This situation is expected to improve as improvement of the enrolment rate of six year olds and improvement of the educational efficiency in the long run and accordingly the number of pupils of each grade is

expected to evenly distribute. Therefore, under the Project, one-fifth of the design number of pupils in each catchment area is set as the standard number of pupils per grade.

### ● Calculation of Number of Pupils of Each Grade

The number of pupils of each lower grade is set at the same as the standard number of pupils per grade in each catchment area for both main and satellite schools. As of the number of pupils of higher grades at main schools, the number of pupils is calculated by adding the standard number of pupils in the satellite school catchment area to the number of pupils in the main school catchment area for which pupils from the satellite school catchment area currently attend the main school. The number of pupils at the subject satellite schools is calculated by adding the standard number of pupils of the third through fifth grades for other satellite schools within attendance distance to their own number of pupils.

## 2) Calculation of Appropriate Number of Classes

The number of classes per grade is calculated based on a maximum class size of 40 pupils in accordance with the relevant standard set by the Ministry of Education and Training. When the number of pupils is less than 20 per grade, the number of classes is calculated to be 0.5. In principle, when the design number of pupils is less than 200, the class size is set at 30 pupils/class, and when the number of pupils per grade is less than 15, the number of classes is calculated to be 0.5.

## 3) Calculation of Appropriate Number of Classrooms

The number of classrooms required to accommodate the number of classes determined in 2) above is firstly calculated based on a two shift teaching system. The number of appropriate classrooms is then calculated, taking the rate of increase/decrease of the potential number of pupils in five years estimated based on the present number of pre-school age children (1 - 5 years) in the catchment area into consideration. In the case of the catchment areas of remote satellite schools where a single shift teaching system is currently employed, the number of shifts is set at 1.5.

The design number of classrooms is to be the required number of classrooms minus existing classrooms which can still be used.

Fig. 2-1 Flow to Calculate Required Number of Classrooms

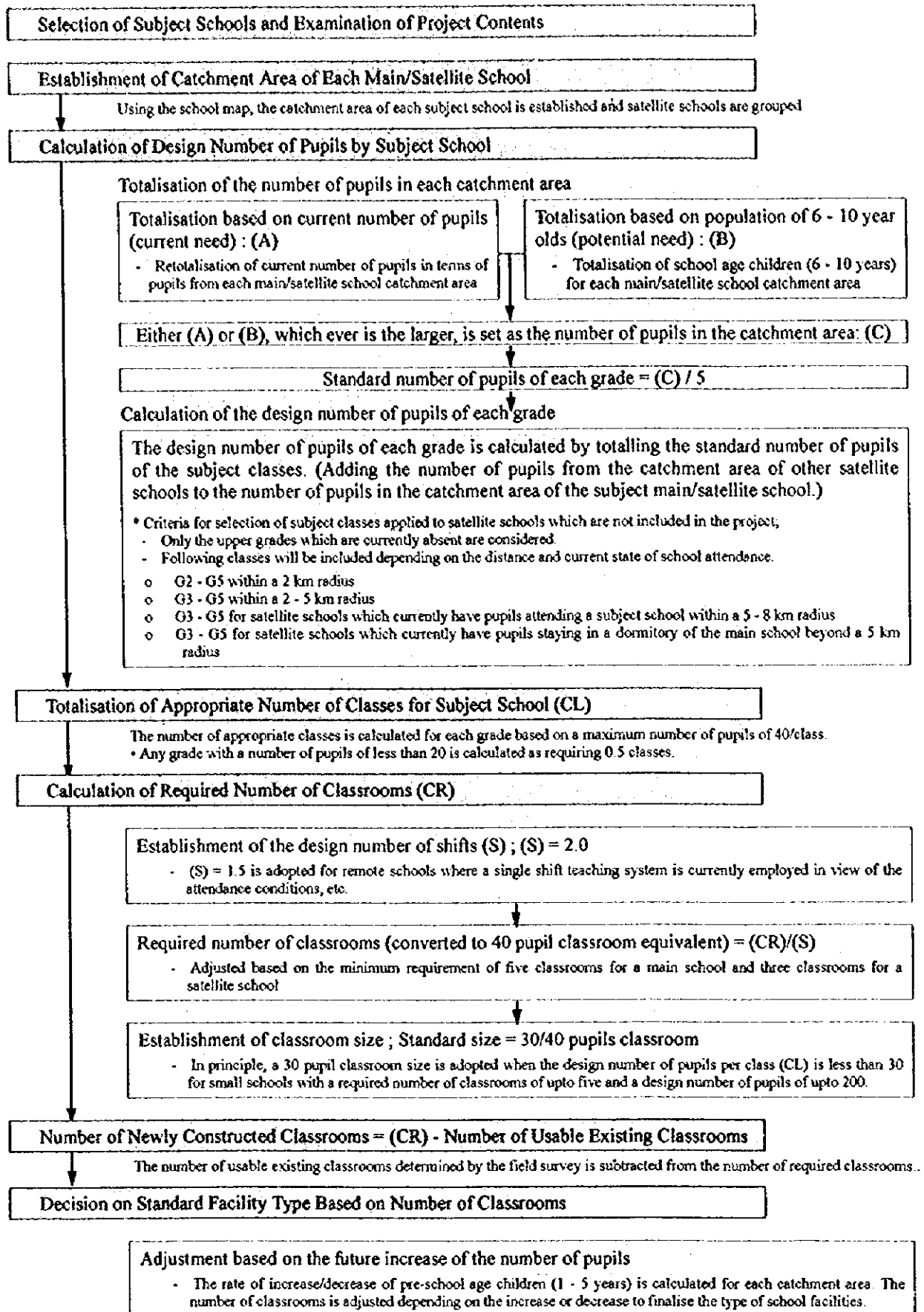




Fig. 2-2 Concept for Scope of the Project

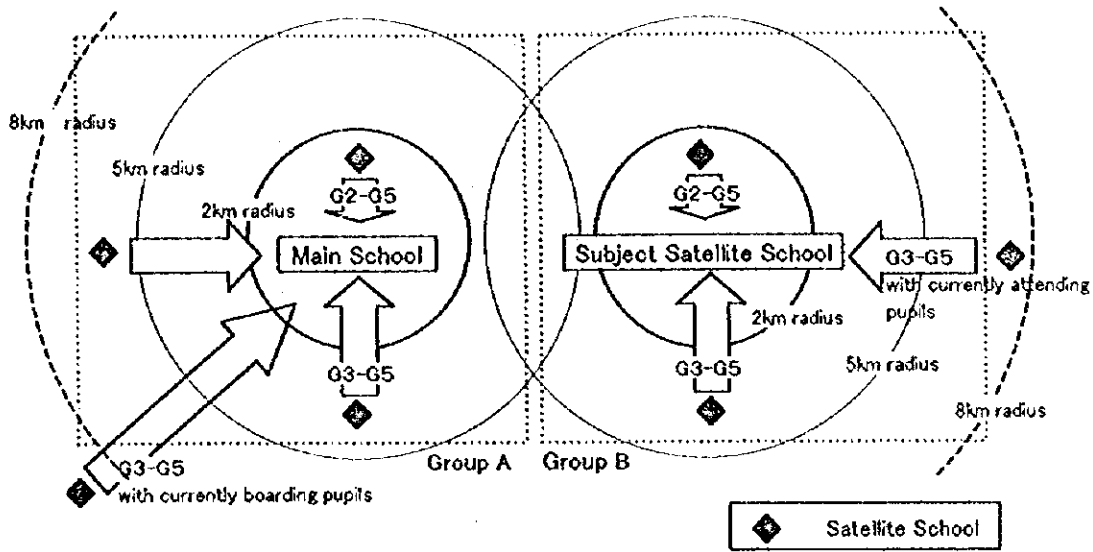
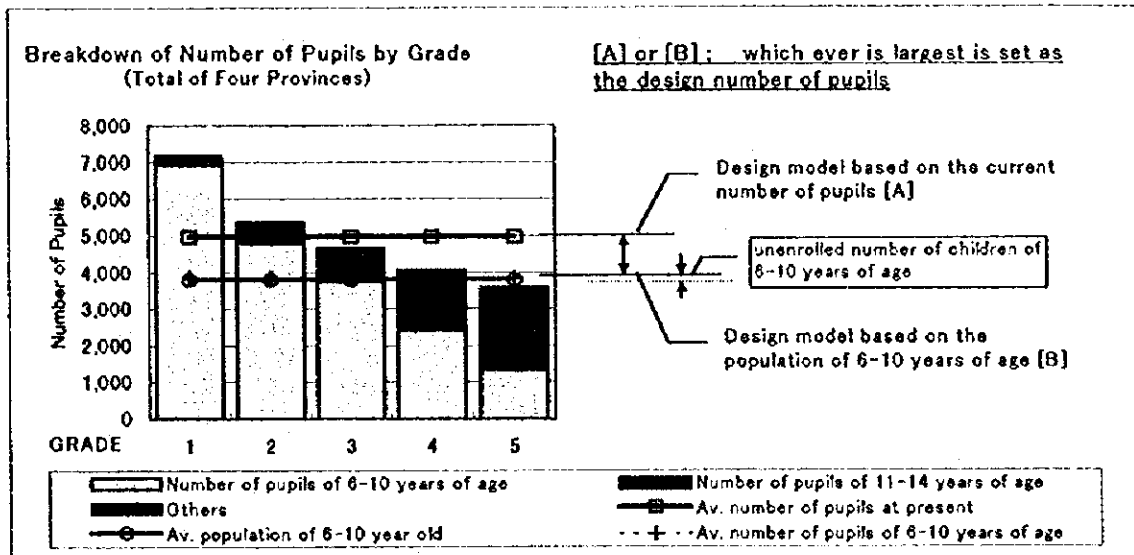


Fig. 2-3 Concept for Design Number of Pupils



The current number of pupils is considered to show the state of transition vis-a-vis the future model based on the number of school age children (6-10 years) which is adjusted by the following factors.

1. Over-aged pupils (+)
2. Unenrolled children (-)
3. Repeaters (+)
4. Drop-Outs (-)
5. Inflow of pupils from outside the catchment area(+)

With improvement of the net enrollment rate and education efficiency, the future number of pupils, excepting those under factor 5. above, will level off to move towards the design model (B). The selection of (A) or (B), which ever is the larger, will provide an adequate response for the immediate demand as well as the future demand.













Table 2-3 (4) Calculation Details of Required Number of New Classrooms by Subject School (Total)

Province	Current No. of Pupils										Calculation: No. of Classes Required										Calculation: No. of Classrooms to be Constructed								
	Current					Complemented					Design No. of Pupils					No. of Classes Required					No. of Classrooms Required								
	G1	G2	G3	G4	G5	Total	Pupils in Classroom- nt/Area	per Grade	per Grade	per Grade	per Grade	per Grade	per Grade	G1	G2	G3	G4	G5	Total	G1	G2	G3	G4	G5	Total	URS	CLAS	Other	
HA GIANG	Main Schools	565	583	618	733	800	3,308	2,379	480	2,557	516	588	799	994	1,056	3,954	17	19	27	32	33	32	33	127	70	60	10	6	64
	Satellite Schools	314	249	194	150	101	1,011	1,067	218	1,167	239	239	300	357	357	1,492	9	9	12	12	12	12	12	54	33	11	22	1	32
	Total	879	842	812	886	901	4,320	3,446	698	3,724	755	828	1,099	1,351	1,413	5,446	26	28	39	44	45	45	45	181	103	71	32	7	96
LAI CHAU	Main Schools	1,228	1,208	1,156	937	847	5,376	5,234	1,051	5,304	1,065	1,065	1,265	1,265	1,265	5,925	33	33	37	37	37	37	37	177	94	94	0	5	89
	Satellite Schools	312	350	272	245	146	1,325	1,301	263	1,352	273	273	361	389	389	1,685	10	10	12	13	13	13	57	31	12	19	2	28	
	Total	1,540	1,558	1,428	1,182	993	6,701	6,535	1,314	6,656	1,338	1,338	1,626	1,654	1,654	7,610	43	43	49	50	50	50	234	125	106	19	7	117	
CAO BANG	Main Schools	1,081	995	1,029	1,037	834	4,976	4,850	974	4,851	974	822	828	903	929	4,319	25	25	25	27	28	28	130	68	62	0	7	60	
	Satellite Schools	182	154	182	123	235	876	1,124	227	1,153	233	326	348	348	374	1,722	11	11	12	12	12	12	57	32	13	19	4	28	
	Total	1,263	1,149	1,211	1,160	1,069	5,852	5,974	1,201	6,004	1,207	1,154	1,154	1,251	1,303	6,041	36	36	37	39	40	40	187	100	81	19	11	88	
BAC CAN	Main Schools	300	299	353	382	382	1,716	1,453	292	1,465	295	304	351	370	414	1,734	12	12	12	13	14	14	62	33	33	0	0	32	
	Satellite Schools	73	91	100	72	43	379	342	70	342	70	76	97	97	113	453	3	3	4	4	4	4	17	11	8	3	0	11	
	Total	373	390	453	454	425	2,095	1,795	362	1,807	365	380	448	467	527	2,187	15	15	16	17	18	18	79	44	41	3	0	43	
TOTAL	Main Schools	3,174	3,056	3,156	3,088	2,863	15,377	13,916	2,797	14,177	2,850	2,898	2,786	3,252	3,532	15,932	87	89	101	109	112	112	496	265	255	10	18	245	
	Sub Schools	861	844	748	593	525	3,591	3,894	778	4,014	815	908	914	1,106	1,191	5,352	33	33	40	41	41	41	185	107	44	63	7	99	
	Total	4,035	3,900	3,904	3,682	3,388	18,968	17,750	3,575	18,191	3,665	3,606	3,700	4,358	4,723	21,284	120	122	141	150	153	153	681	372	299	73	25	344	



The required number of classrooms calculated in the manner described above is shown in Table 2-4.

**Table 2-4 Required Number of New Classrooms**

Province	Type of School	Number of Sites	Number of Classrooms
Ha Giang	Main	10	64
	Satellite	8	32
	Sub-total	18	96
Lai Chau	Main	11	89
	Satellite	6	28
	Sub-total	17	117
Cao Bang	Main	10	54
	Satellite	7	34
	Sub-total	17	88
Bac Can	Main	6	32
	Satellite	3	11
	Sub-total	9	43
Total	Main	37	245
	Satellite	24	99
	Sub-total	61	344